Colorado WATER RESOURCES

BASIC-DATA RELEASE NO. 35

HYDROLOGIC AND GEOPHYSICAL DATA FROM THE PICEANCE BASIN, COLORADO

1974

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HYDROLOGIC AND GEOPHYSICAL DATA FROM THE PICEANCE BASIN, COLORADO

Compiled by
John B. Weeks and Frank A. Welder

Prepared by the
U.S. GEOLOGICAL SURVEY
in cooperation with the
COLORADO DEPARTMENT OF NATURAL RESOURCES

COLORADO DEPARTMENT OF NATURAL RESOURCES
1845 Sherman Street
Denver, Colorado 80203
1974

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HYDROLOGIC AND GEOPHYSICAL DATA FROM THE PICEANCE BASIN, COLORADO

Compiled by John B. Weeks and Frank A. Welder

INTRODUCTION

Potential oil-shale development and the need for information on the water resources of the Piceance basin led to a cooperative project between the Colorado Department of Natural Resources and the U.S. Geological Survey. The 2-year investigation began in 1972. One of the principal objectives of the study was to provide the data needed to evaluate the effects of future development on the hydrology of the Piceance basin. To meet this objective, all of the basic hydrologic data collected and compiled by the project through December 1972 were published in "Hydrologic Data from the Piceance Basin, Colorado," by John F. Ficke, John B. Weeks, and Frank A. Welder, Colorado Water Resources Basic-Data Release No. 31, and all of the basic data collected between January 1973 and July 1974 are contained in this report (Basic-Data Release No. 35). Basic-Data Releases Nos. 31 and 35 are companion volumes which provide all of the public data collected during the cooperative study. The two reports contain data from 97 wells, 6 springs, and 37 continuing surface-water stations. Miscellaneous measurements of discharge and specific conductance in streams are also contained in both reports.

Included in this report are ground-water and surface-water data collected by the U.S. Geological Survey in cooperation with private companies. The companies that provided data for this report are: AMOCO Production Co., Atlantic Richfield Co., CER Geonuclear, Equity Oil Co., Mobil Oil Corp., Shell Oil Co., Superior Oil Co., The Oil Shale Co., and Wright Water Engineers; their cooperation is deeply appreciated. Sincere thanks also are given to the Colorado Division of Water Resources and the Colorado Water Conservation Board, who furnished some of the discharge and stream water-quality data included in this report. Some of the data included in this report were collected in cooperation with the U.S. Atomic Energy Commission, the U.S. Bureau of Mines, the U.S. Bureau of Land Management, the Colorado River Water Conservation District, and the Colorado Water Conservation Board.

For those readers interested in using the metric system, the English units used in this report may be converted to metric units by the following conversion factors:

From		Multiply by	To obtain	
Unit	*Abbreviation*		*Unit*	*Abbreviation*
inch	(in.)	2.54	centimetre	(cm)
		.0254	metre	(m)
foot	(ft)	.3048	metre	(m)
square foot	(sq ft)	.0929	square metre	(m^2)
acre	(acre)	4047	square metre	(m^2)
		.4047	hectare	(ha)
acre-foot	(acre-ft)	1233	cubic metre	(m^3)
mile	(mi)	1.609	kilometre	(km)
square mile	(sq mi)	2.590	square kilometre	(km^2)
gallons per minute	(gpm)	.06309	litres per second	(l/s)
cubic feet per second	(cfs;ft^3/s)	28.32	litres per second	(l/s)
		.02832	cubic metres per second	(m^3/s)

GROUND WATER

Ground-water data from 97 wells are included in Basic-Data Releases 31 and 35. The well locations are shown in figure 1. Data from 69 wells are contained in this report. The wells are listed in table 1 which gives the well location, name, and U.S. Geological Survey identification number. The wells listed in table 1 can be easily located by finding the well number given in table 1 on the location map in figure 1. The well numbers shown in figure 1 are the same as those used in Basic-Data Release 31 which contains data from wells numbered 1-52. This report includes additional data collected from several of the wells contained in Basic-Data Release 31 and are given the same well number herein. In addition, data for wells numbered 53-97 are presented in this report.

Table 2 summarizes the types of hydrologic and geophysical data contained in this report. For the 69 wells, the following data are presented: transmissivity data from 10 wells, geophysical logs from 5 wells, temperature data from 11 wells, vertical-flow data from 5 wells, specific conductance data from 10 wells, and water-quality data from 55 wells. Except for those wells that have only water-quality data included, the data indicated in table 2 are presented in tabular or graphical form in well-number order, using figures 2-17 and tables 3-23. Water-quality data for the remaining wells are given in tables 24 and 25. In addition, water-quality data from six springs shown in figure 18 are given in table 26.

The geophysical logs are reproduced on plates 1-5 contained in the pocket at the back of this report. For the five wells with geophysical logs, the following logs are presented: resistivity logs from five wells, caliper logs from four wells, gamma-gamma logs from three wells, and acoustic velocity logs from two wells.

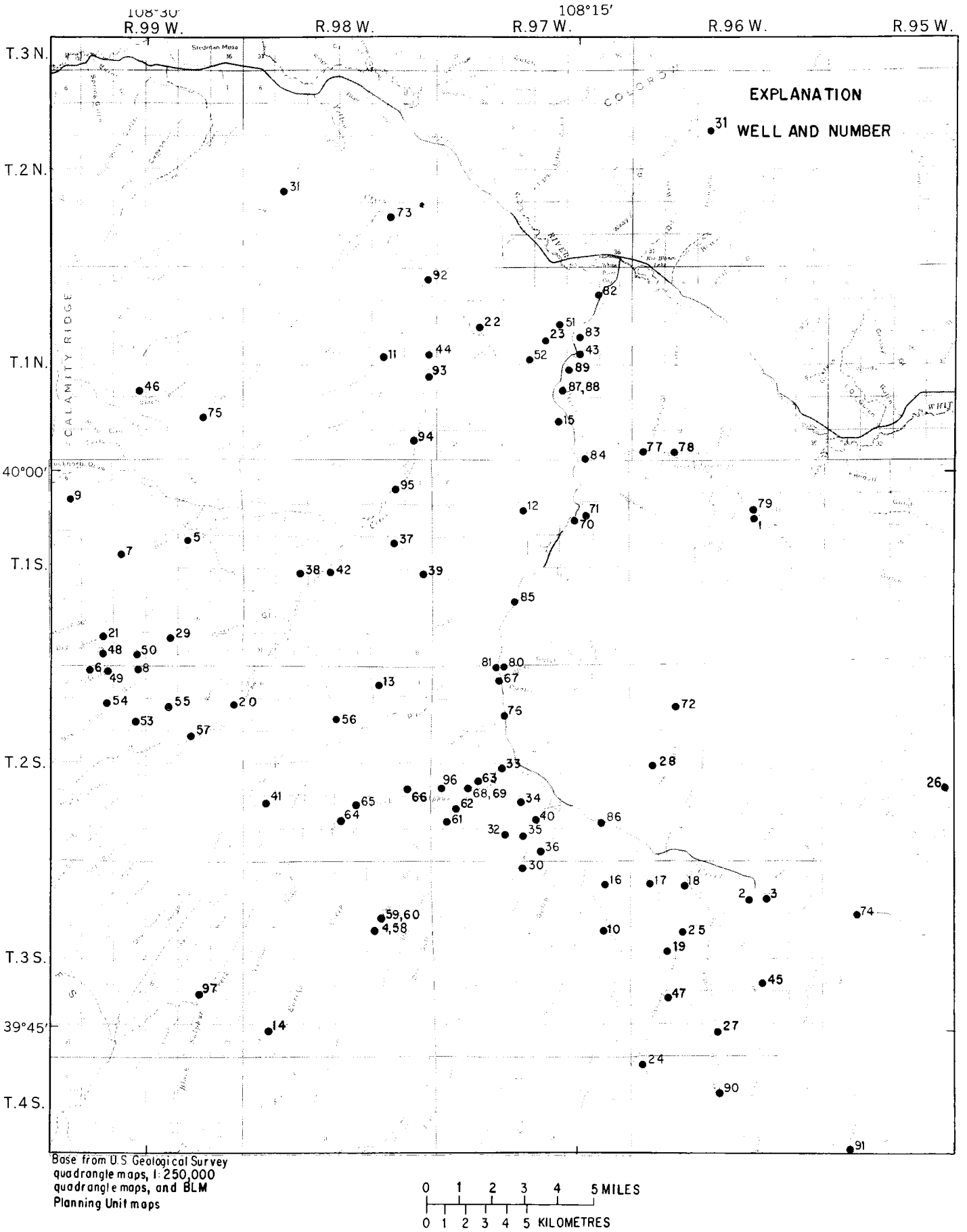


Figure 1.--Locations and numbers of wells in the Piceance basin, Colorado, included in Basic-Data Releases 31 and 35.

Table 1.--*Wells for which ground-water data are presented, Piceance basin, Colorado*

Well number	Well name	Land-line location (Sixth principal meridian)				U.S. Geological Survey identification number
		¼ Section	Section	Township	Range	
1	Colorado Division of Wildlife	SE	10	1 S	96 W	395844108084500
2	Oldland No. 3	NE	10	3 S	96 W	394835108084900
6	Cameron 703	NW	5	2 S	99 W	395423108315500
7	Cameron 704C	SW	16	1 S	99 W	395749108303800
12	Shell 41-9	NE	9	1 S	97 W	395904108164600
13	Shell 23X-2	SW	2	2 S	98 W	395420108214400
14	Arco-Mobil fig. 4 31-1	NE	31	3 S	98 W	394444108255400
16	TOSCO Cb-1	SW	1	3 S	97 W	394852108135800
17	TOSCO Cb-2	SE	6	3 S	96 W	394857108122100
19	TOSCO Cb-4	SW	17	3 S	96 W	394711108115100
20	Occidental Stake Spring Draw No. 1	NE	12	2 S	99 W	395348108265800
29	Cameron 702	NE	34	1 S	99 W	395524108290300
30	Shell Greeno 4-4	NE	4	3 S	97 W	394926108163900
31	Barodynamics 72-1	SW	20	2 N	98 W	400725108250400
43	Superior CH-6-PC	SW	14	1 N	97 W	400302108145000
48	Cameron 707	SE	32	1 S	99 W	395457108312100
50	Cameron 709	SE	33	1 S	99 W	395525108301400
52	Superior CH-4-PC	SE	16	1 N	97 W	400301108165000
53	AMOCO CH-2A	SE	9	2 S	99 W	395303108300300
54	AMOCO CH-3	NE	8	2 S	99 W	395338108311900
55	AMOCO CH-4	NE	10	2 S	99 W	395336108291500
56	BLM RG	SE	9	2 S	98 W	395327108232000
57	BLM SSD	NW	14	2 S	99 W	395238108284400
58	CER RB-S-03	NW	14	3 S	98 W	394737108215901
59	CER RB-D-02	SW	11	3 S	98 W	394747108214900
60	CER RB-D-03	SW	11	3 S	98 W	394747108214901
61	CER RB-W-2	SE	30	2 S	97 W	395028108192700
62	CER RB-W-3	NE	30	2 S	97 W	395105108185400
63	CER RB-W-4	SW	20	2 S	97 W	395136108183000
64	CER RB-W-5	SW	27	2 S	98 W	395034108231300
65	CER RB-W-6	NE	27	2 S	98 W	395053108223900
66	CER RB-W-7	SW	23	2 S	98 W	395118108220100
67	CER RB-W-8	NW	4	2 S	97 W	395424108174200
68	CER RB-W-9E	SW	20	2 S	97 W	395131108183800
69	CER RB-W-9W	SW	20	2 S	97 W	395130108184000
70	Dean Burke	SW	11	1 S	97 W	395841108151000
71	Dick Burke	NE	11	1 S	97 W	395849108144700
72	El Paso Natural Gas	NW	8	2 S	96 W	395349108112900
73	Flowing well YC	NE	26	2 N	98 W	400655108212900
74	General Petroleum 17X8-G	SW	8	3 S	95 W	394800108051100
75	General Petroleum 88-26	SE	26	1 N	99 W	400113108274700
76	Humble	SW	9	2 S	97 W	395327108173500
77	Little Hills CG	SW	31	1 N	96 W	400033108123400
78	Little Hills HQ	SW	32	1 N	96 W	400019108112500
79	Little Hills IR	SE	10	1 S	96 W	395852108084400
80	Marathon 1	NW	4	2 S	97 W	395445108173900
81	Marathon 1-A	NW	4	2 S	97 W	395445108174300
82	P73-1	SE	2	1 N	97 W	400439108141000
83	P73-2	NW	14	1 N	97 W	400334108150200
84	P73-3	SW	35	1 N	97 W	400030108145000
85	P73-4	NE	28	1 S	97 W	395630108170600
86	P73-5	SW	25	2 S	97 W	395029108140400
87	Superior NFW	SE	22	1 N	97 W	400210108153000
88	Superior SFW	SE	22	1 N	97 W	400210108153001
89	Superior CH-20-PC	NE	22	1 N	97 W	400226108152700
90	TOSCO Butte 25	NE	9	4 S	96 W	394304108100200
91	TOSCO Liberty Bell 12	SE	18	4 S	95 W	394153108052400
92	Y73-1	NE	1	1 N	98 W	400508108202000
93	Y73-2	NE	24	1 N	98 W	400246108200800
94	Y73-3	NW	36	1 N	98 W	400103108203000
95	Y73-4	SE	2	1 S	98 W	395935108211600
96	Equity-Boies No. 1	SW	19	2 S	97 W	395126108193800
97	Equity S. Sulphur 1-A	NE	26	3 S	99 W	394551108280100

Table 2.--*Types of data from wells in the Piceance basin, Colorado, included in this report*

Well number	Transmissivity	Geophysical logs	Temperature	Vertical flow	Specific conductance	Common ions	Trace elements	Well number	Transmissivity	Geophysical logs	Temperature	Vertical flow	Specific conductance	Common ions	Trace elements
1						X	X	67						X	X
2						X	X	68						X	X
6	X	X			X	X	X	69						X	X
7	X	X				X	X	70						X	X
12		X						71						X	X
13	X	X						72						X	X
14	X					X	X	73						X	X
16			X		X			74						X	X
17			X		X			75						X	X
19			X		X			76						X	X
20						X	X	77						X	X
29	X	X	X	X	X	X	X	78						X	X
30	X					X	X	79						X	X
31	X					X	X	80					X	X	X
43	X		X		X	X	X	81						X	X
48			X	X				82						X	X
50			X		X			83						X	X
52	X		X	X		X	X	84						X	X
53						X	X	85						X	X
54						X	X	86						X	X
55						X	X	87						X	X
56						X	X	88						X	X
57						X	X	89						X	X
58						X	X	90						X	X
59			X	X		X	X	91	X					X	X
60						X	X	92						X	X
61						X	X	93						X	X
62						X	X	94						X	X
63						X	X	95						X	X
64						X	X	96			X		X		
65						X	X	97			X		X		
66						X	X								

Well number 6

Cameron 703

Location: NW¼ sec. 5, T. 2 S., R. 99 W.

Approximate lat 39°54'23" N., long 108°31'55" W.

Altitude at land surface = 7,005 feet above mean sea level

Drilled December 1971 by the air-rotary method

Data by U.S. Geological Survey

See plate 1 for geophysical logs

Table 3.--*Transmissivity and related data from well No. 6*

[Well location given in table 1]

Test number	1	2	3
Transmissivity, gallons per day per foot	1,060	14	NM[1]
Transmissivity, square feet per day	140	2	---
Depth to static water level, feet	---	---	---
Depth to top of interval open to well, feet	660	357	206
Depth to bottom of interval open to well, feet	1,315	364	213
Test date	June 1973	June 1973	June 1973

[1]Not measurable.

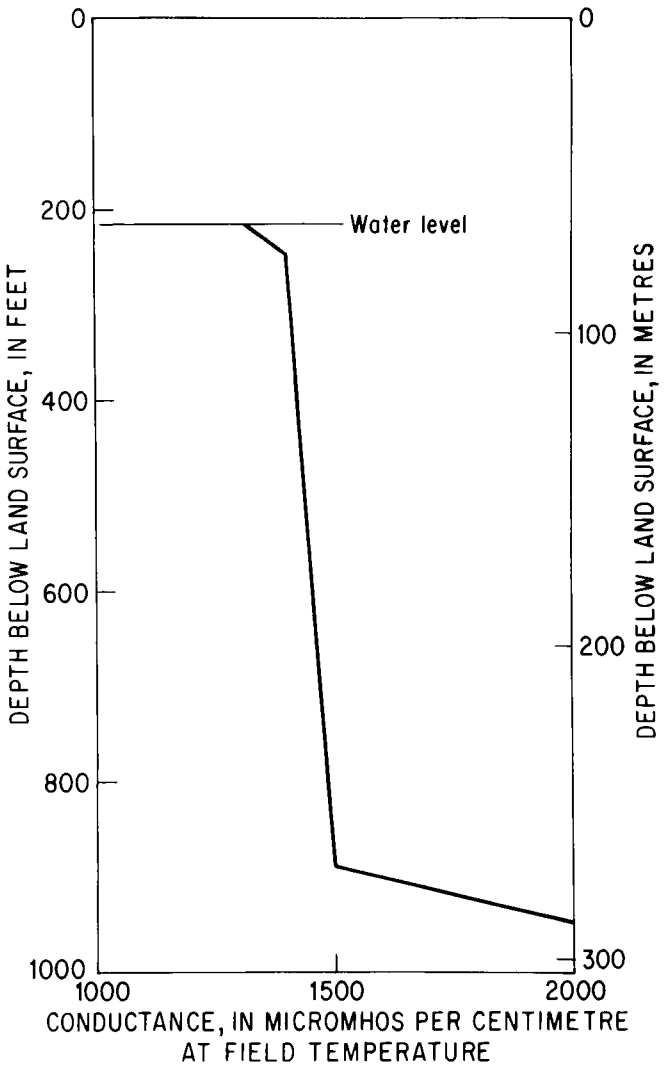


Figure 2.--Conductance in well No. 6, logged May 30, 1973.

Table 4.--*Chemical analyses of water samples from well No. 6*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
JUNE, 1973										
06...	300	1315	1140	756	340	32	10	230	10	32
07...	660	1315	1580	1070	529	27	30	1100	30	81
08...	720	1315	1520	1050	517	29	20	2000	50	86

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)
JUNE, 1973									
06...	36	170	.6	414	0	270	10	1.1	.020
07...	55	220	1.6	645	0	350	11	1.4	.070
08...	57	200	1.3	630	0	350	10	2.6	.060

DATE	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
JUNE, 1973									
06...	.01	.00	0	10	160	100	70	7	3400
07...	.04	.00	29	--	150	100	--	--	--
08...	.12	.02	32	0	110	100	20	72	2100

Well number 7

Cameron 704 C

Location: SW¼ sec. 16, T. 1 S., R. 99 W.

Approximate lat 39°57'49" N., long 108°30'38" W.

Altitude at land surface = 6,741 feet above mean sea level

Drilled December 1971-January 1972 by the air-rotary method

Data by U.S. Geological Survey

See plate 2 for geophysical logs

Table 5.--*Transmissivity and related data from well No. 7*

[Well location given in table 1]

Test number----	1	2	3	4	5	6
Transmissivity, gallons per day per foot-	58	760	4,160	213	NM[1]	NM[1]
Transmissivity, square feet per day------	8	102	560	28	---	---
Depth to static water level, feet---------	117	117	---	---	---	---
Depth to top of interval open to well, feet	115	115	695	685	1,044	1,195
Depth to bottom of interval open to well, feet---------	238	705	1,946	705	1,064	1,215
Test date------	June 1973	June 1973	June 1973	June 1973	June 1973	June 1973

[1]Not measurable.

Table 6.--*Chemical analyses of water samples from well No. 7*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
JUNE, 1973										
25...	115	238	1690	1180	484	34	20	710	50	97
25...	218	1946	1350	882	427	21	20	260	20	31
25...	685	1946	1130	727	322	17	20	200	20	15
25...	115	705	1130	725	315	17	20	290	20	14
26...	1195	1946	2210	1380	1100	15	30	750	10	10

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)
JUNE, 1973									
25...	93	180	1.4	590	0	470	13	.4	.090
25...	43	220	.8	521	0	300	8.0	.4	.030
25...	22	210	.7	392	0	260	6.0	2.5	.030
25...	21	210	.5	384	0	270	.0	2.1	.100
26...	14	540	1.4	1340	0	130	.0	11	.070

DATE	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
JUNE, 1973									
25...	.00	.01	5	--	150	100	60	20	--
25...	.02	.00	2	0	200	50	80	6	4000
25...	.01	.02	2	0	160	<50	70	--	3000
25...	.01	.02	9	0	160	<50	60	--	2500
26...	.01	.02	1	300	520	<50	30	6	1600

Well number 12

Shell 41-9

Location: NE¼ sec. 9, T. 1 S., R. 97 W.

Approximate lat 39°59'04" N., long 108°16'46" W.

Altitude at land surface = 6,547 feet above mean sea level

Drilled November 1971 by the air-rotary method

Data by U.S. Geological Survey

See plate 3 for geophysical logs

Well number 13

Shell 23X-2

Location: SW¼ sec. 2, T. 2 S., R. 98 W.

Approximate lat 39°54'20" N., long 108°21'44" W.

Altitude at land surface = 6,520 feet above mean sea level

Drilled December 1968 by the air-rotary method

Data by U.S. Geological Survey

See plate 4 for geophysical logs

Table 7.--*Transmissivity and related data from well No. 13*

[Well location given in table 1]

Test number	1	2	3	4	5
Transmissivity, gallons per day per foot	6,040	1,800	NM[1]	NM[1]	NM[1]
Transmissivity, square feet per day	808	240	---	---	---
Depth to static water level, feet	---	335	---	---	---
Depth to top of interval open to well, feet	1,041	757	880	1,041	1,407
Depth to bottom of interval open to well, feet	1,560	1,048	888	1,049	1,415
Test date	July 1973	July 1973	July 1973	July 1973	July 1973

[1]Not measurable.

Well number 14

Arco-Mobil fig. 4 31-1

Location: NE¼ sec. 31, T. 3 S., R. 98 W.

Approximate lat 39°44'44" N., long 108°25'54" W.

Altitude at land surface = 7,814 feet above mean sea level

Drilled June-July 1970 by the rotary-water method

Data by U.S. Geological Survey

Table 8.--*Transmissivity and related data from well No. 14*

[Well location given in table 1]

Test number	1	2	3	4	5
Transmissivity, gallons per day per foot	40	600	712	29	130
Transmissivity, square feet per day	5	80	95	4	17
Depth to static water level, feet	---	---	---	---	---
Depth to top of interval open to well, feet	920	920	819	960	1,180
Depth to bottom of interval open to well, feet	960	1,940	1,940	1,001	1,221
Test date	July 1973	July 1973	July 1973	July 1973	July 1973

Table 9.--*Chemical analyses of water samples from well No. 14*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
JULY, 1973										
04...	53	960	1270	840	281	18	40	590	40	36
06...	920	2389	1260	829	279	18	20	590	30	38
12...	53	960	1250	861	275	19	10	360	50	33
12...	53	1221	1340	895	327	19	20	290	50	30

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
JULY, 1973										
04...	29	200	.5	342	0	380	6.4	.3	.000	.00
06...	29	200	.4	340	0	370	4.8	.4	.020	.06
12...	28	230	.5	335	0	380	4.9	.2	.020	.00
12...	27	210	.5	399	0	390	20	.4	.060	.04

DATE	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
JULY, 1973									
04...	.01	6	0	140	<50	40	52	3	7300
06...	.00	8	0	140	<50	40	49	1	7400
12...	.03	2	0	130	<50	40	--	1	7200
12...	.02	0	0	550	<50	100	--	0	7100

Well number 16

TOSCO Cb-1

Location: SW¼ sec. 1, T. 3 S., R. 97 W.

Approximate lat 39°48'52" N., long 108°13'58" W.

Altitude at land surface = 6,760 feet above mean sea level

Drilled October-November 1972 by the air-rotary method

Data by U.S. Geological Survey

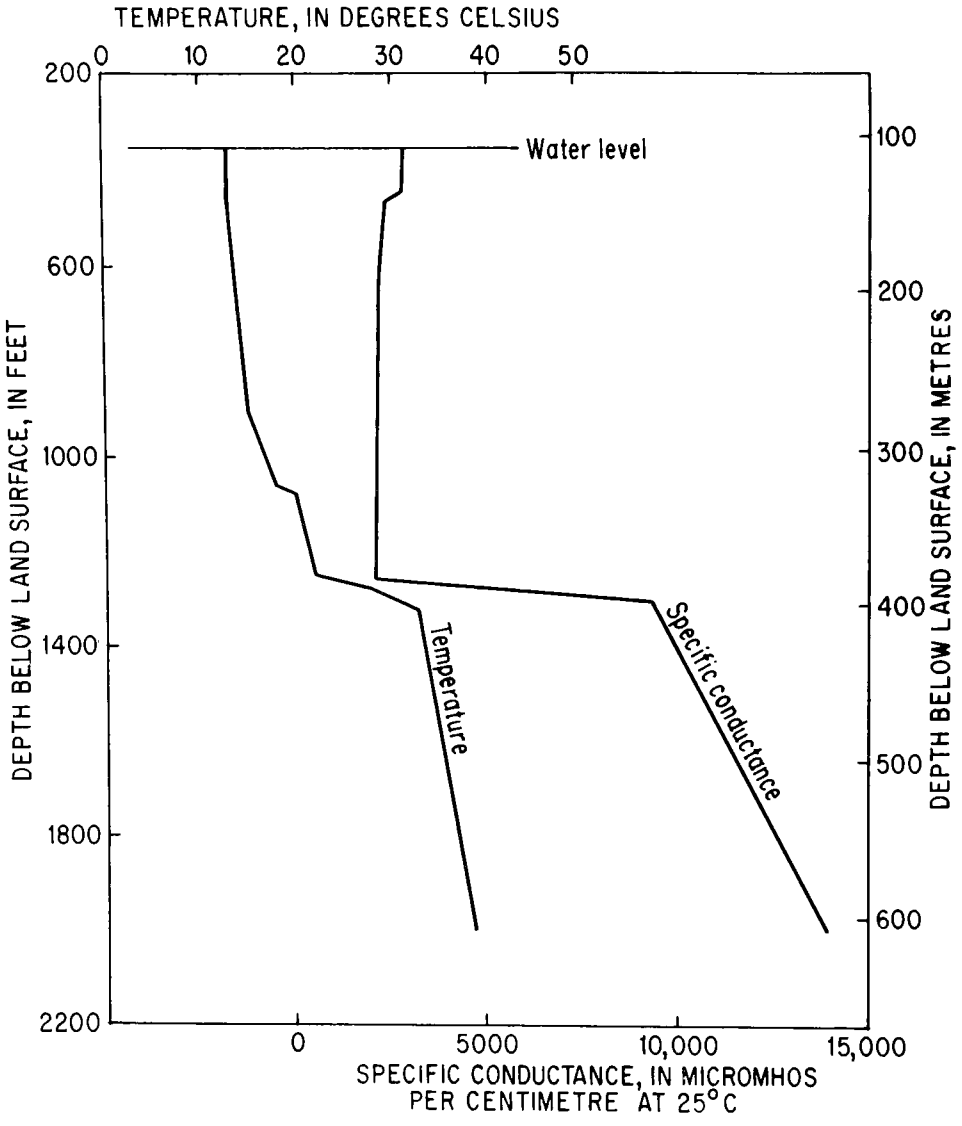


Figure 3.--Temperature and specific conductance in well No. 16, logged July 20, 1973.

Well number 17

TOSCO Cb-2

Location: SE¼ sec. 6, T. 3 S., R. 96 W.

Approximate lat 39°48'57" N., long 108°12'21" W.

Altitude at land surface = 6,737 feet above mean sea level

Drilled October-November 1972 by the air-rotary method

Data by U.S. Geological Survey

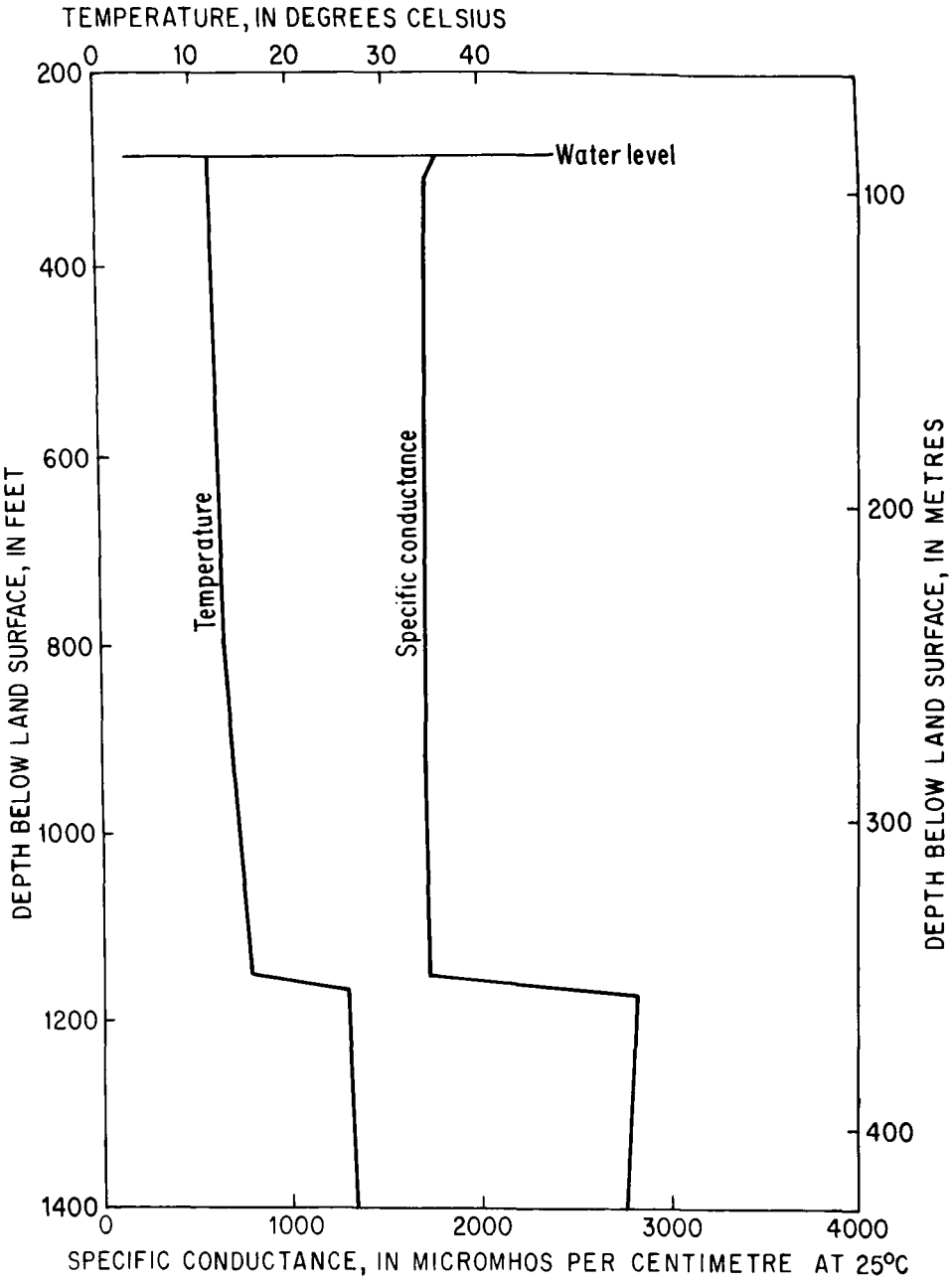


Figure 4.--Temperature and specific conductance in well No. 17, logged July 21, 1973.

Well number 19

TOSCO Cb-4

Location: SW¼ sec. 17, T. 3 S., R. 96 W.

Approximate lat 39°47'11" N., long 108°11'51" W.

Altitude at land surface = 7,054 feet above mean sea level

Drilled November-December 1972 by the air-rotary method

Data by U.S. Geological Survey

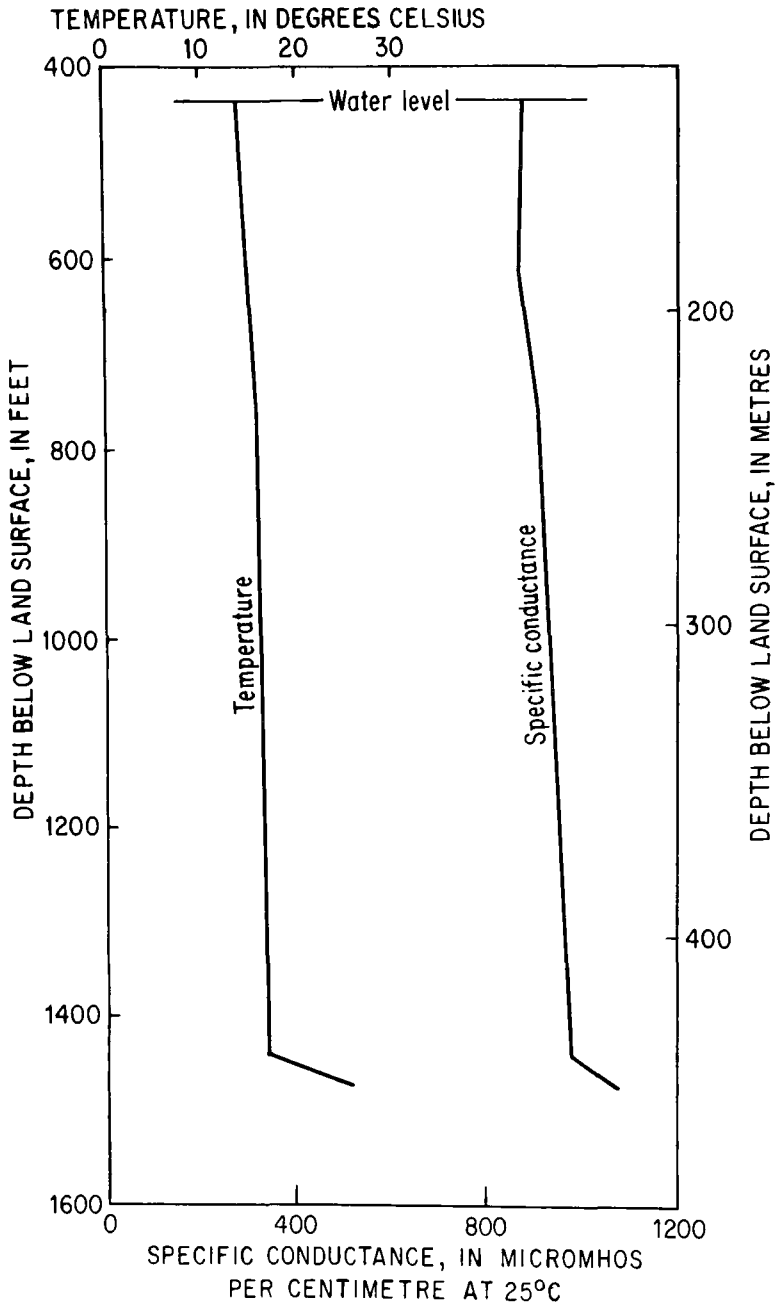


Figure 5.--Temperature and specific conductance in well No. 19, logged July 23, 1973.

Well number 29

Cameron 702

Location: NE¼ sec. 34, T. 1 S., R. 99 W.

Approximate lat 39°55'24" N., long 108°29'03" W.

Altitude at land surface = 6,656 feet above mean sea level

Drilled July-August 1972 by the air-rotary method

Data by U.S. Geological Survey

See plate 5 for geophysical logs

Table 10.--*Transmissivity and related data from well No. 29*

[Well location given in table 1]

Test number---------	1	2	3	4	5	6	7	8
Transmissivity, gallons per day per foot----------	330	750	NM[1]	NM[1]	NM[1]	NM[1]	NM[1]	NM[1]
Transmissivity, square feet per day----------	44	100	---	---	---	---	---	---
Depth to static water level, feet-	35	---	---	---	---	---	---	---
Depth to top of interval open to well, feet--------	117	577	118	619	1,329	1,446	1,477	1,496
Depth to bottom of interval open to well, feet--------	617	1,808	126	627	1,337	1,454	1,485	1,504
Test date----------	Aug. 1973	Aug. 1973	Aug. 1973	Aug. 1973	Aug. 1973	Aug. 1973	Aug. 1973	Aug. 1973

[1]Not measurable.

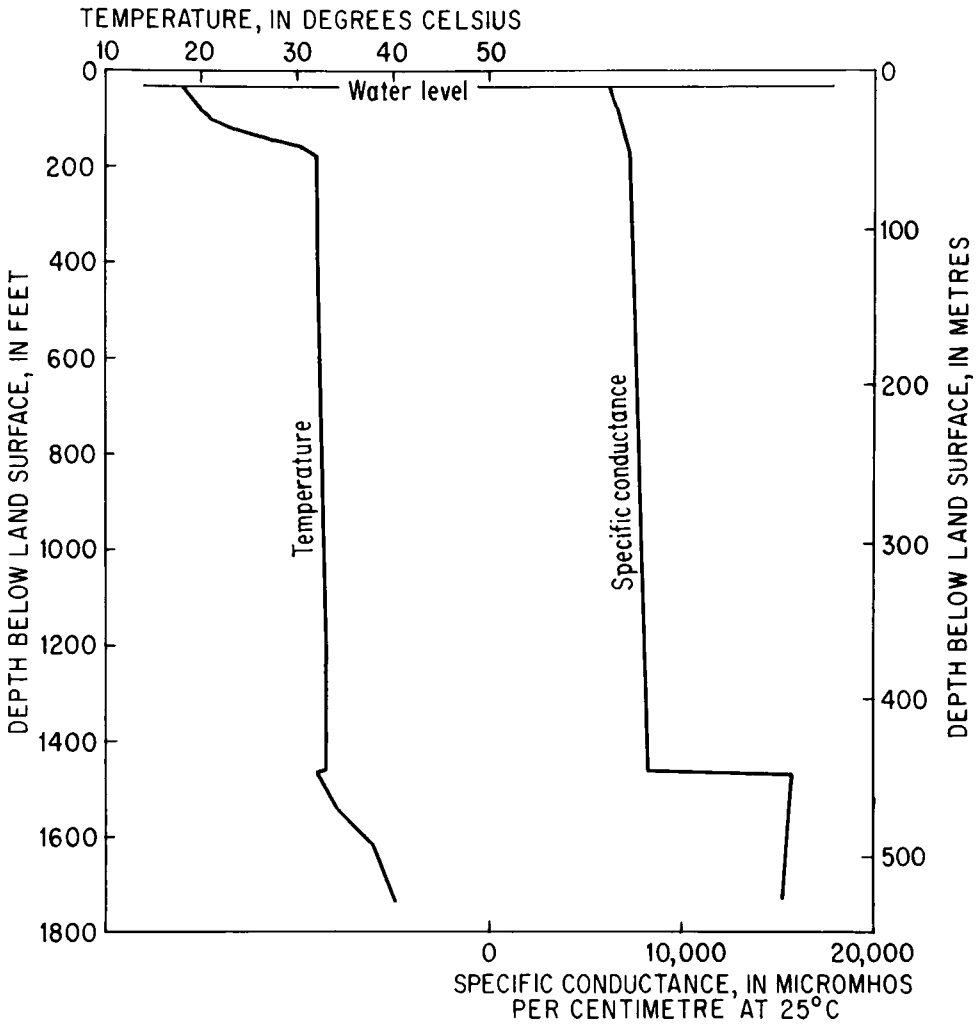


Figure 6.--Temperature and specific conductance in well No. 29, logged June 13, 1973.

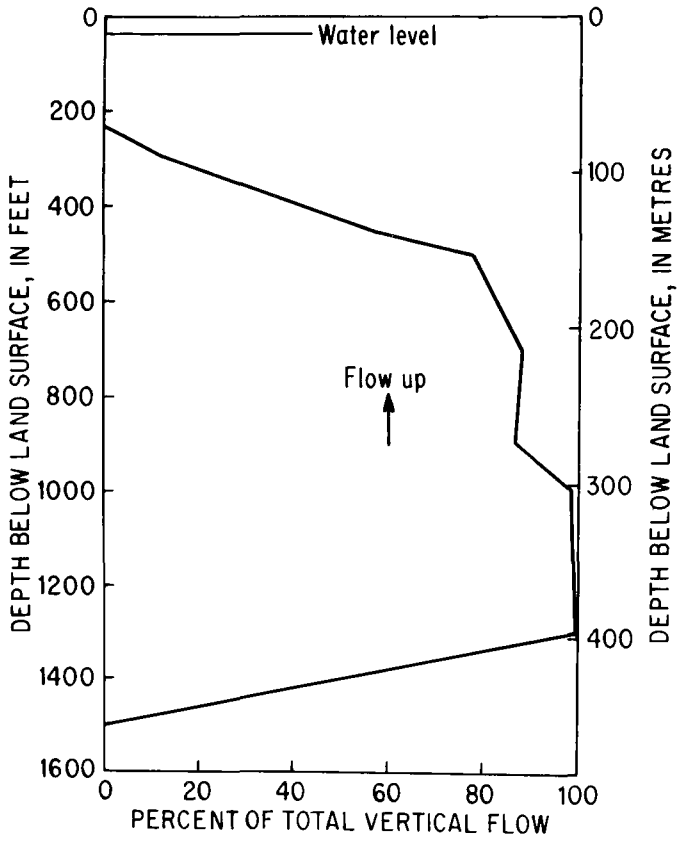


Figure 7.--Vertical flow in well No. 29, measured June 13, 1973.

Table 11.--*Chemical analyses of water samples from well No. 29*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
AUG., 1973										
08...	1650	1651	46300	52000	49500	7.4	0	--	30	3.3
09...	117	617	3880	2890	2590	12	--	190	10	4.3
09...	577	1808	4080	2900	2610	15	0	110	10	3.6

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
AUG., 1973										
08...	2.9	22000	9.2	60400	0	120	53	28	2.5	.00
09...	4.4	1200	2.4	3160	0	7.9	59	30	.300	.24
09...	3.4	1200	1.9	3180	0	19	52	34	.070	.33

DATE	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
AUG., 1973									
08...	1.3	17	1400	5500	300	640	10	--	110
09...	.04	2	1000	5600	<50	40	0	5	230
09...	.06	16	--	5600	50	30	1	5	--

Well number 30

Shell Greeno 4-4

Location: NE¼ sec. 4, T. 3 S., R. 97 W.

Approximate lat 39°49'26" N., long 108°16'39" W.

Altitude at land surface = 6,411 feet above mean sea level

Drilled January 1963 by the rotary-mud method

Data by U.S. Geological Survey

Table 12.--*Transmissivity and related data from well No. 30*

[Well location given in table 1]

Test number	1
Transmissivity, gallons per day per foot	NM[1]
Transmissivity, square feet per day	---
Depth to static water level, feet	---
Depth to top of interval open to well, feet	1,482
Depth to bottom of interval open to well, feet	1,490
Test date	Aug. 1973

[1]Not measurable.

Table 13.--*Chemical analyses of water samples from well No. 30*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
AUG., 1973										
14...	670	725	990	615	519	16	10	90	40	11
14...	670	1105	1240	769	651	14	30	240	40	16
14...	1085	2074	1260	778	660	13	0	90	40	15

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
AUG., 1973										
14...	5.7	240	1.2	633	0	3.6	12	13	.200	.00
14...	4.4	300	1.4	794	0	6.7	18	16	.060	.03
14...	4.2	310	.9	805	0	5.7	14	17	.020	.03

DATE	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
AUG., 1973									
14...	.00	8	500	410	<50	30	2	5	890
14...	.02	2	--	590	<50	10	2	6	760
14...	.03	4	900	570	50	10	2	4	720

Well number 31

Barodynamics 72-1

Location: SW¼ sec. 20, T. 2 N., R. 98 W.

Approximate lat 40°07'25" N., long 108°25'04" W.

Altitude at land surface = 5,956 feet above mean sea level

Drilled January 1972 by the air-rotary method

Data by U.S. Geological Survey

Table 14.--*Transmissivity and related data from well No. 31*

[Well location given in table 1]

Test number	1
Transmissivity, gallons per day per foot	140
Transmissivity, square feet per day	19
Depth to static water level, feet	40
Depth to top of interval open to well, feet	194
Depth to bottom of interval open to well, feet	1,025
Test date	June 1973

Table 15.--*Chemical analyses of water samples from well No. 31*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
JUNE, 1973										
21...	194	1025	10900	7560	6090	17	20	570	90	11
21...	194	1025	23600	18300	14100	20	20	--	20	7.7
21...	194	1025	23000	17300	13900	15	20	--	40	8.5

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)
JUNE, 1973									
21...	21	3100	1.5	7430	0	45	690	9.3	1.3
21...	20	7900	13	17200	0	90	1700	18	.100
21...	21	7100	12	16900	0	110	1700	18	2.0

DATE	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
JUNE, 1973									
21...	.04	.42	4	8900	3200	100	700	2	--
21...	.00	--	13	13000	6600	100	1400	2	3200
21...	.00	1.2	150	13000	6500	350	1400	4	4200

Well number 43

Superior CH-6-PC

Location: SW¼ sec. 14, T. 1 N., R. 97 W.

Approximate lat 40°03'02" N., long 108°14'50" W.

Altitude at land surface = 5,975 feet above mean sea level

Drilled July 1968 by the air-rotary method

Data by U.S. Geological Survey

Table 16.--*Transmissivity and related data from well No. 43*

[Well location given in table 1]

Test number	1	2	3	4
Transmissivity, gallons per day per foot	47	1,400	100	16
Transmissivity, square feet per day	6	190	13	2
Depth to static water level, feet	---	---	---	---
Depth to top of interval open to well, feet	233	60	722	1,046
Depth to bottom of interval open to well, feet	240	1,044	1,392	1,392
Test date	June 1973	June 1973	June 1973	June 1973

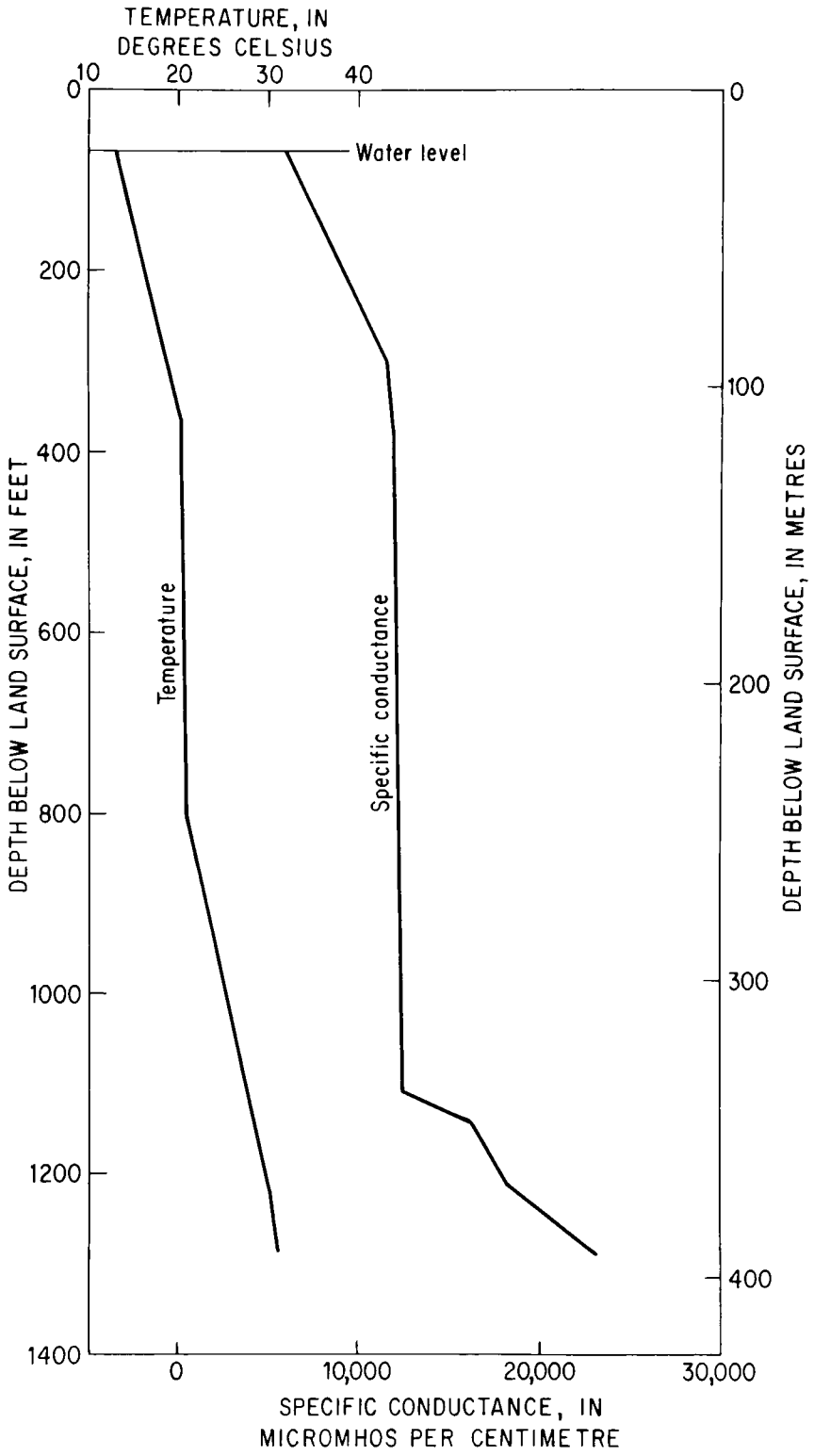


Figure 8.--Temperature and specific conductance in well No. 43, logged July 18, 1973.

Table 17.--*Chemical analyses of water samples from well No. 43*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
JUNE, 1973										
14...	60	240	7150	4770	3950	21	40	370	80	28
14...	220	1392	8410	5770	4700	16	50	--	40	14
15...	495	515	9070	6390	5220	14	40	--	30	6.5
18...	60	742	8780	6110	5250	14	50	--	20	6.4
18...	722	1392	8680	6020	5120	14	50	--	0	6.5
19...	938	958	9830	6550	5160	14	50	--	20	7.4

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)
JUNE, 1973									
14...	22	1900	4.3	4810	0	180	200	35	.400
14...	11	2400	5.0	5730	0	77	370	42	.700
15...	4.8	2700	5.4	6360	0	58	300	47	.700
18...	4.7	2500	5.5	6400	0	74	290	46	.700
18...	4.6	2500	5.3	6240	0	55	300	46	.600
19...	5.0	2700	5.7	6290	0	58	600	46	.900

DATE	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
JUNE, 1973									
14...	.00	.01	5	3300	9800	600	910	6	820
14...	.01	.02	0	4200	11000	500	1100	3	--
15...	.02	.04	4	4300	120000	100	1200	2	430
18...	.01	.03	0	3800	12000	50	1200	4	360
18...	.00	.04	4	4200	13000	50	1200	--	380
19...	.00	.06	6	3600	16000	100	1400	2	350

Well number 48

Cameron 707

Location: SE¼ sec. 32, T. 1 S., R. 99 W.

Approximate lat 39°54'57" N., long 108°31'21" W.

Altitude at land surface = 7,182 feet above mean sea level

Drilled August 1972 by the air-rotary method

Data by U.S. Geological Survey

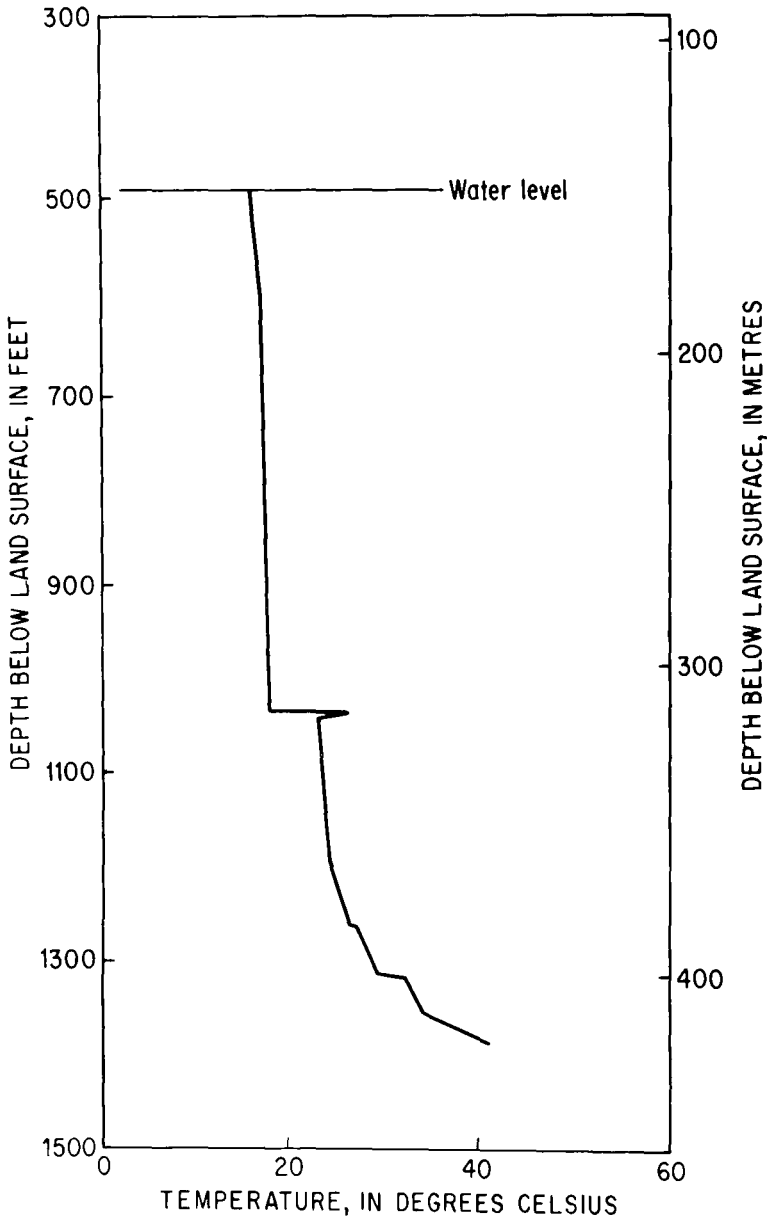


Figure 9.--Temperature in well No. 48, logged June 15, 1973.

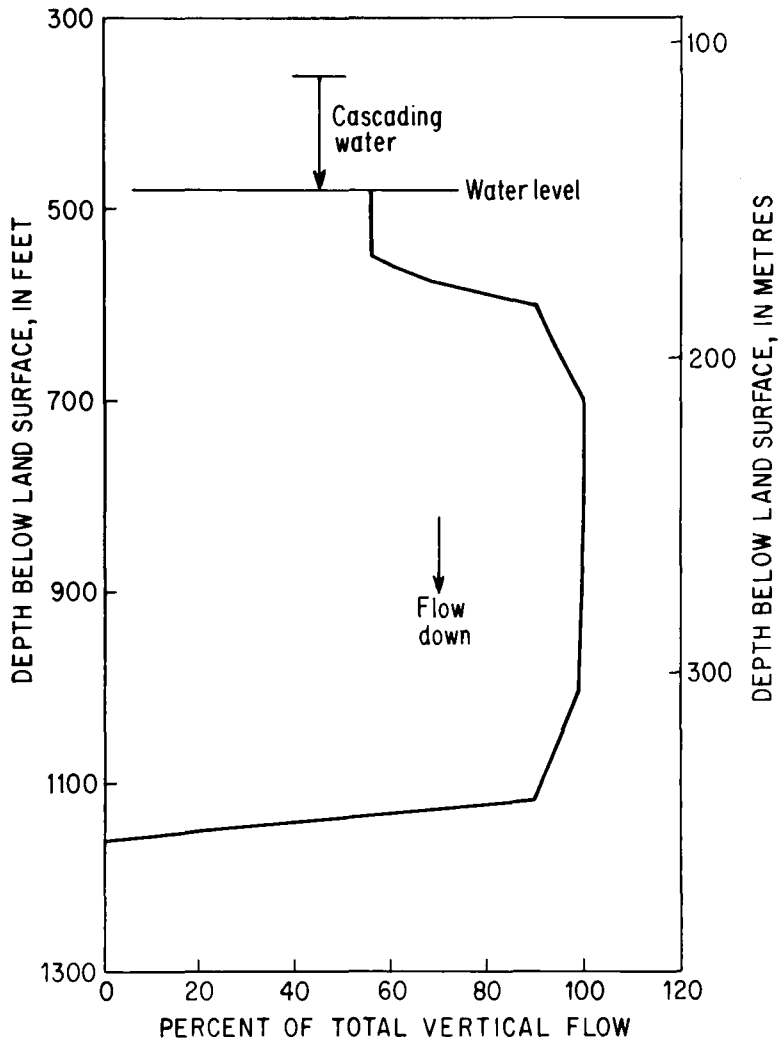


Figure 10.--Vertical flow in well No. 48, measured June 15, 1973.

Well number 50

Cameron 709

Location: SE¼ sec. 33, T. 2 S., R. 99 W.

Approximate lat 39°55'25" N., long 108°30'14" W.

Altitude at land surface = 6,771 feet above mean sea level

Drilled September 1972 by air-rotary method

Data by U.S. Geological Survey

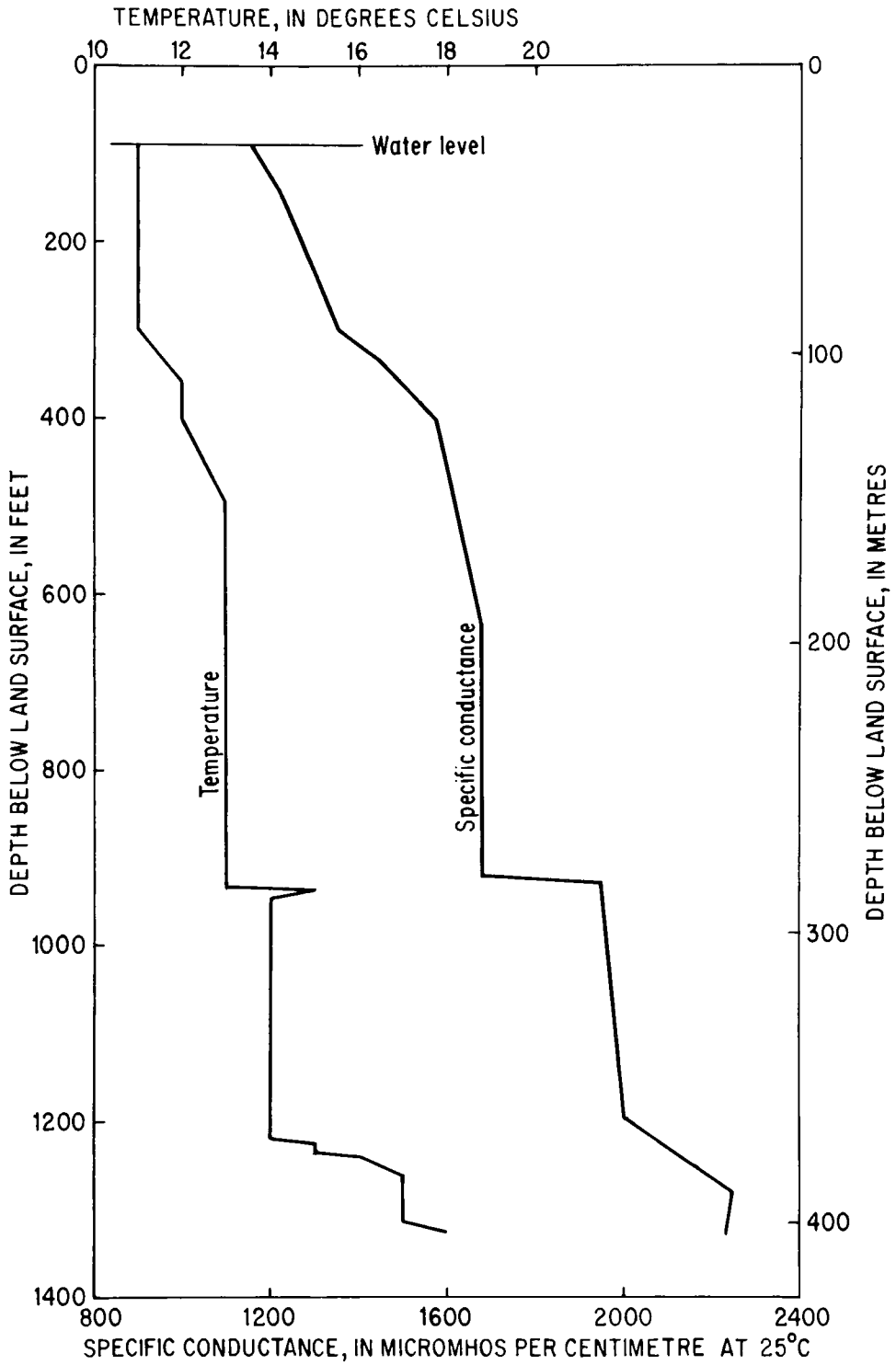


Figure 11.--Temperature and specific conductance in well No. 50, logged July 23, 1973.

Well number 52

Superior CH-4-PC

Location: SE¼ sec. 16, T. 1 N., R. 97 W.

Approximate lat 40°03'01" N., long 108°16'50" W.

Altitude at land surface = 6,176 feet above mean sea level

Drilled June 1968 by the air-rotary method

Data by U.S. Geological Survey

Table 18.--*Transmissivity and related data from well No. 52*

[Well location given in table 1]

Test number	1	2	3	4	5	6	7
Transmissivity, gallons per day per foot	660	100	120	170	NM[1]	NM[1]	NM[1]
Transmissivity, square feet per day	88	13	16	23	---	---	---
Depth to static water level, feet	---	---	---	---	---	---	---
Depth to top of interval open to well, feet	1,000	1,229	965	1,329	1,024	1,224	1,282
Depth to bottom of interval open to well, feet	2,397	1,269	1,369	2,397	1,032	1,232	1,290
Test date	July 1973	July 1973	July 1973	July 1973	Aug. 1973	Aug. 1973	Aug. 1973

[1]Not measurable.

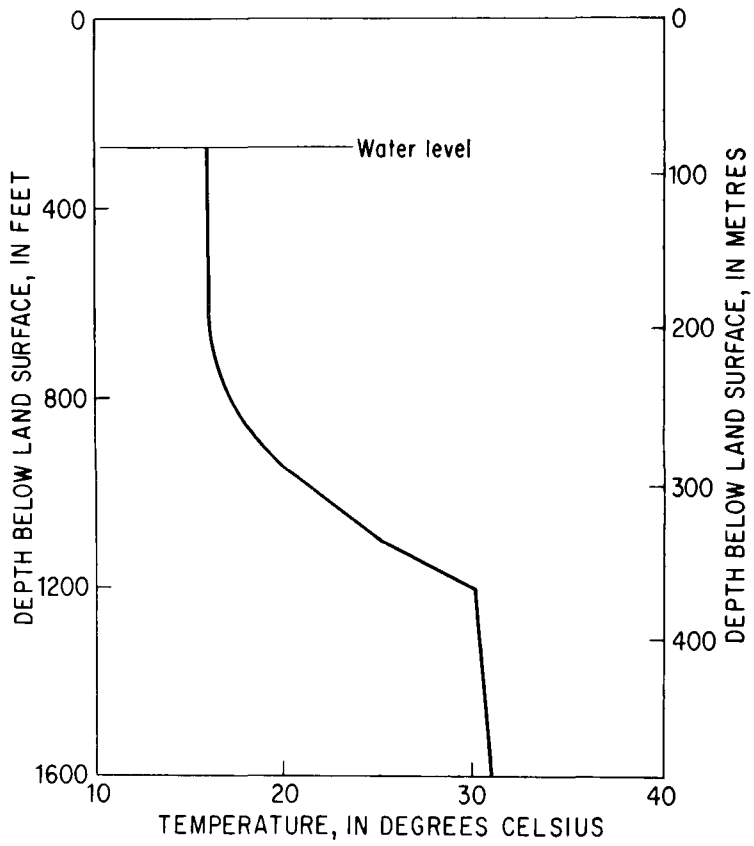


Figure 12.--Temperature in well No. 52, logged July 13, 1973.

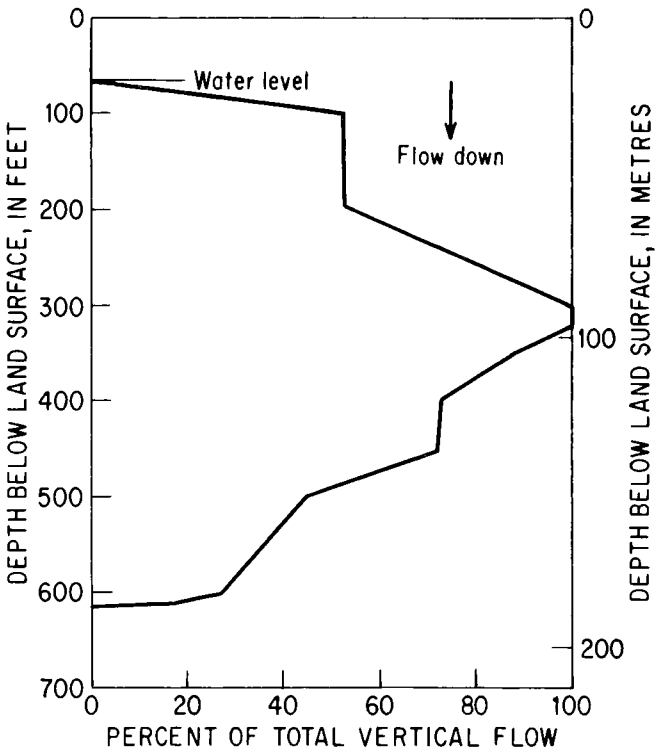


Figure 13.--Vertical flow in well No. 52, logged July 18, 1973.

Table 19.--*Chemical analyses of water samples from well No. 52*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
JULY, 1973										
24...	1000	2397	40000	32700	18	40	720	20	7.7	2.4
25...	1228	1268	38700	32200	19	--	660	30	7.5	4.4
25...	965	1369	38700	32500	17	--	860	20	8.1	5.2
25...	1329	2397	38900	32800	19	--	670	20	7.2	4.4

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
JULY, 1973									
24...	17000	5.4	39900	0	110	3100	55	1.0	.06
25...	16000	9.0	39300	0	270	2900	53	3.6	.10
25...	16000	83	39600	0	96	2900	55	2.4	.04
25...	16000	78	40000	0	88	2900	54	1.2	.00

DATE	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
JULY, 1973									
24...	.34	12	5700	12000	150	2000	--	0	480
25...	3.4	10	--	12000	--	1900	2	2	--
25...	3.4	13	6100	12000	250	2100	2	6	510
25...	2.9	8	6100	12000	150	2100	0	0	490

Well number 59

CER RB-D-02

Location: SW¼ sec. 11, T. 3 S., R. 98 W.

Approximate lat 39°47'47" N., long 108°21'49" W.

Altitude at land surface = 6,580 feet above mean sea level

Drilled February 1973 by the mud-rotary method

Data by U.S. Geological Survey

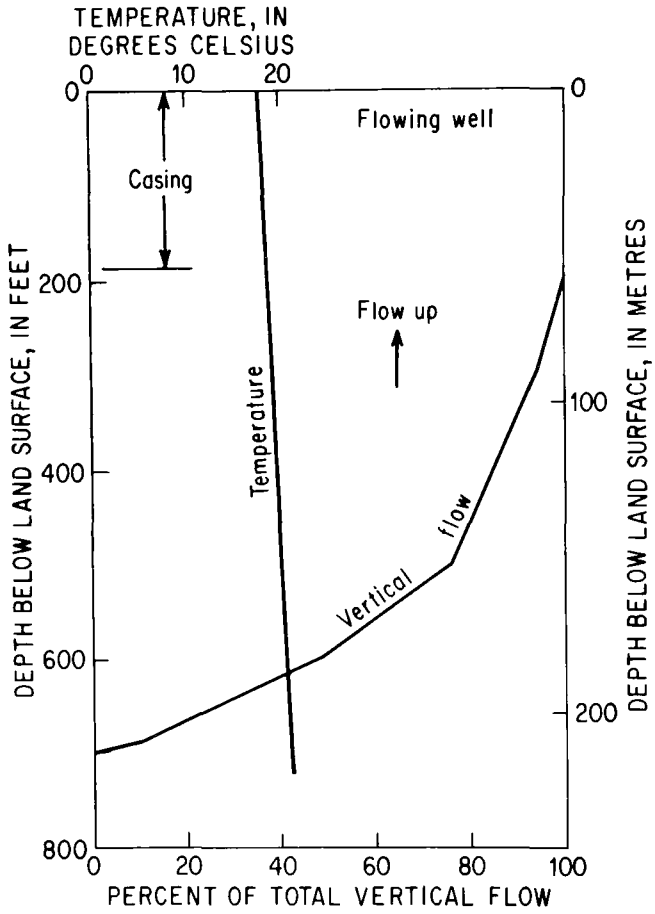


Figure 14.--Temperature and vertical flow in well No. 59, logged July 26, 1973.

Table 20.--*Chemical analyses of water samples from well No. 59*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
JULY, 1973										
12...	236	744	923	563	399	16	70	10	10	13

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
JULY, 1973									
12...	190	.3	486	0	77	7.1	10	.030	.01

DATE	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
JULY, 1973									
12...	.01	0	200	270	<50	30	0	3	1800

Well number 80

Marathon No. 1

Location: NW¼ sec. 4, T. 2 S., R. 97 W.

Approximate lat 39°54'45" N., long 108°17'39" W.

Altitude at land surface = 6,122 feet above mean sea level

Drilled in 1963 by the rotary method

Data by U.S. Geological Survey

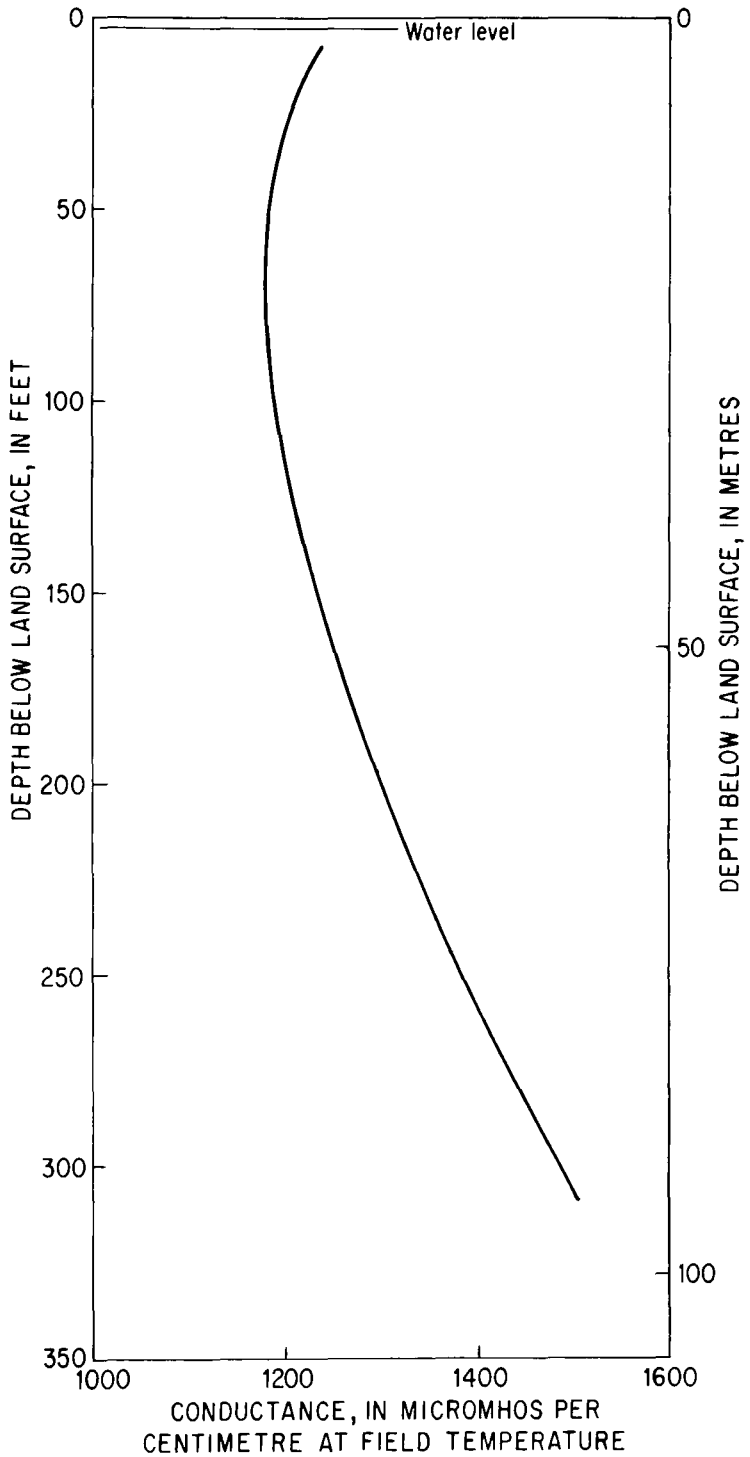


Figure 15.--Conductance in well No. 80, logged June 11, 1973.

Table 21.--*Chemical analyses of water samples from well No. 80*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
JUNE, 1973											
21...	64	2235	14800	11500	10400	12	20	13	26	4800	7.2

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)
JUNE, 1973										
21...	12700	0	64	290	18	.400	.61	2	2600	0

Well number 91

TOSCO Liberty Bell 12

Location: SE¼ sec. 18, T. 4 S., R. 95 W.

Approximate lat 39°41'53" N., long 108°05'24" W.

Altitude at land surface = 7,420 feet above mean sea level

Drilled August 1973 by the air-rotary method

Data by U.S. Geological Survey

Table 22.--*Transmissivity and related data from well No. 91*

[Well location given in table 1]

Test number----------	1	2	3
Transmissivity, gallons per day per foot----	180	280	940
Transmissivity, square feet per day---------	24	37	126
Depth to static water level, feet----------	32	75	102
Depth to top of interval open to well, feet-	109	109	109
Depth to bottom of interval open to well, feet----------	545	743	937
Test date----------	Aug. 1973	Aug. 1973	Sept. 1973

Table 23.--*Chemical analyses of water samples from well No. 91*

DATE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)
AUG., 1973										
13...	109	257	1160	802	427	38	40	80	30	68
17...	109	545	1040	687	320	28	30	40	24	41
29...	109	743	1090	743	365	26	0	20	20	66

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
AUG., 1973										
13...	53	140	.5	521	0	240	4.6	.3	.000	.14
17...	37	150	.3	390	0	230	4.9	2.2	.050	.09
29...	32	160	.4	445	0	230	4.7	3.5	.300	.03

DATE	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
AUG., 1973									
13...	.02	8	0	80	50	40	2	3	5600
17...	.04	60	500	140	50	50	--	4	3400
29...	.04	130	600	150	<50	50	--	9	2900

Well number 96

Equity-Boies No. 1

Location: SW¼ sec. 19, T. 2 S., R. 97 W.

Approximate lat 39°51'26" N., long 108°19'38" W.

Altitude at land surface = 6,284 feet above mean sea level

Drilled June 1964 by the mud-rotary method

Data by U.S. Geological Survey

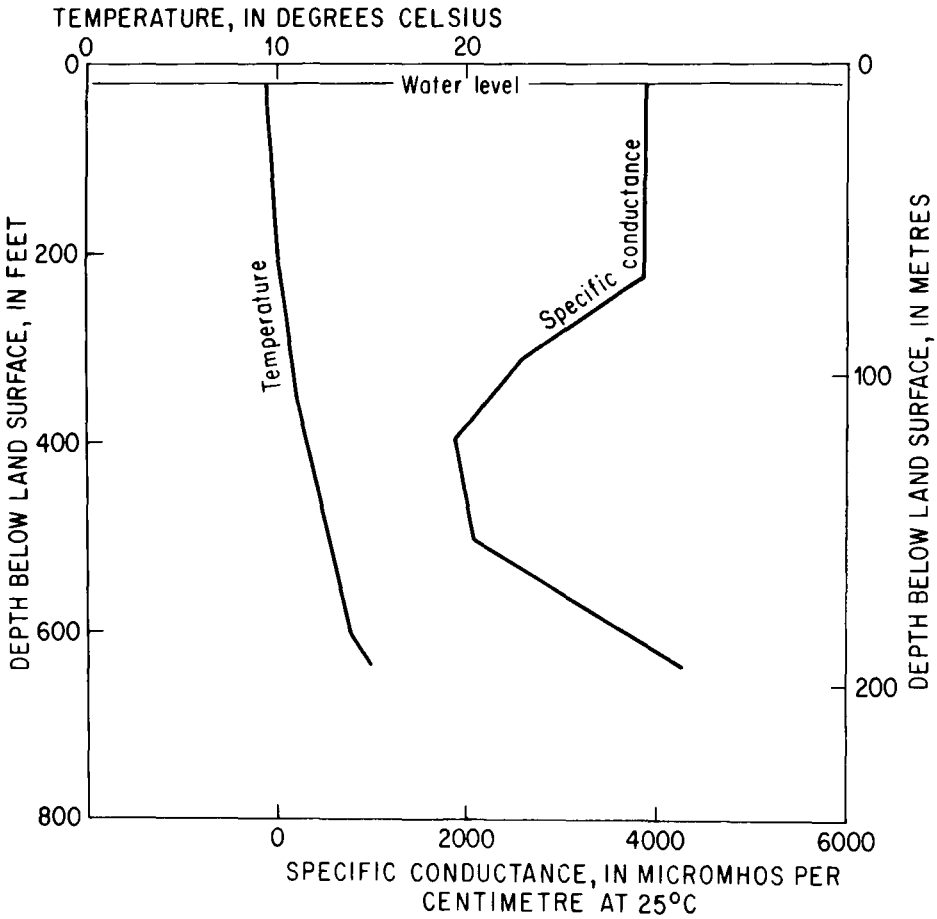


Figure 16.--Temperature and specific conductance in well No. 96, logged July 11, 1973.

Well number 97

Equity S. Sulphur 1-A

Location: NE¼ sec. 26, T. 3 S., R. 99 W.

Approximate lat 39°45'51" N., long 108°28'01" W.

Altitude at land surface = 7,070 feet above mean sea level

Drilled January 1957 by the mud-rotary method

Data by U.S. Geological Survey

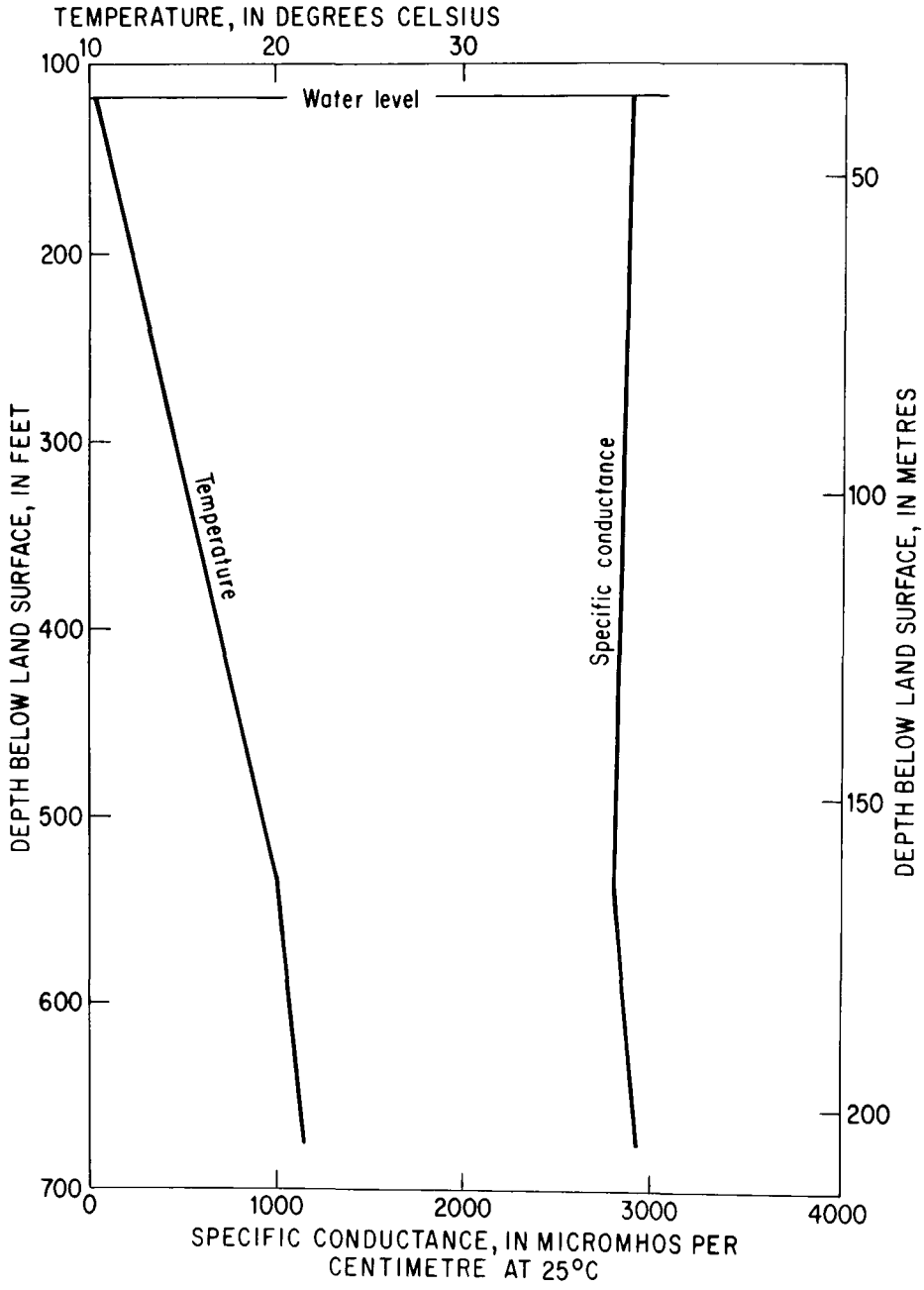


Figure 17.--Temperature and specific conductance in well No. 97, logged July 16, 1973.

WATER-QUALITY DATA FROM OTHER WELLS AND SPRINGS

Table 24.--*Water-quality data from wells in the alluvium, Piceance basin, Colorado*
[Well locations given in table 1]

U.S. GEOLOGICAL SURVEY IDENTIFICATION NUMBER	WELL NUMBER	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
395238108284400	057	73-08-31	--	--	1570	1130	452	27	20	0	240
395028108192700	061	73-05-10	40	56	1660	1180	476	21	--	50	500
	061	73-08-02	40	56	1650	1200	482	22	100	280	530
395105108185400	062	73-05-10	61	78	1800	1270	487	18	--	150	20
	062	73-08-02	61	78	1780	1280	521	17	140	110	60
395136108183000	063	73-05-10	54	70	1140	761	399	17	--	400	500
	063	73-08-02	54	70	1860	1360	659	22	--	250	50
395034108231300	064	73-08-03	65	80	955	685	347	27	--	49000	160
395053108223900	065	73-08-03	62	77	1230	853	429	14	110	470	500
395118108220100	066	73-08-02	66	80	1020	723	462	32	140	80	180
395424108174200	067	73-05-11	63	78	9590	6760	5870	12	--	140	110
	067	73-08-03	63	78	4880	4070	3590	18	10	50	20
395131108183800	068	73-05-10	--	85	1550	1140	709	24	--	850	20
	068	73-08-02	--	85	1480	967	746	22	--	260	10
395130108184000	069	73-05-10	--	85	1430	970	509	26	--	430	40
	069	73-08-02	--	85	1320	942	574	26	100	160	20
395849108144700	071	73-07-11	--	68	1510	991	499	19	30	50	80
400655108212900	073	73-08-30	--	--	2760	1960	869	20	20	70	10
395527108173500	076	73-08-03	--	--	2650	1830	1540	23	370	60	50
400033108123400	077	73-06-27	--	--	1140	722	433	20	20	60	10
400019108112500	078	73-06-27	--	--	1100	714	437	18	20	50	0
395852108084400	079	73-06-27	--	34	1010	627	393	20	20	70	0
395445108174300	081	73-05-11	--	--	5600	4300	1840	1.4	--	530	30
	081	73-08-03	--	--	6000	4390	2040	10	180	110	20
400439108141000	082	73-09-06	.00	21	4236	3200	1170	15	30	70	20
400334108150200	083	73-09-07	.00	42	4664	3350	2670	8.2	10	50	30
400030108145000	084	73-09-06	.00	80	2127	1520	812	24	20	30	480
395630108170600	085	73-09-06	.00	42	8800	6720	5860	13	30	240	30
395029108140400	086	73-09-06	.00	42	1511	994	564	17	20	50	470
400508108202000	092	73-09-13	.00	44	2950	2020	1410	27	40	200	50
400246108200800	093	73-09-12	56	82	669	469	198	8.1	110	30	130
400103108203000	094	73-09-12	61	82	2300	1670	535	9.9	20	70	0
395935108211600	095	73-09-12	21	42	2080	1540	553	17	20	10	160

DATE OF SAMPLE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)
73-08-31	120	90	130	1.4	551	0	480	11	.4	.010	.03	.01
73-05-10	89	92	170	1.2	580	0	510	7.7	.7	--	.01	.00
73-08-02	88	95	190	.9	588	0	490	8.7	.8	.020	.04	3.3
73-05-10	110	99	170	1.8	594	0	570	8.4	.7	--	.01	.02
73-08-02	100	110	170	1.6	635	0	560	8.7	.4	.020	.02	.01
73-05-10	76	51	110	1.8	487	0	230	33	.5	--	.05	.00
73-08-02	80	100	280	1.6	803	0	460	16	1.1	.100	.01	.03
73-08-03	65	52	75	1.0	423	0	200	6.3	.4	.040	.01	.01
73-08-03	79	72	110	1.2	523	0	310	7.5	.4	.020	.01	.00
73-08-02	37	74	120	1.8	464	49	170	7.7	.2	.070	.06	.43
73-05-11	6.8	8.5	2900	4.3	7160	0	70	200	28	--	.20	.14
73-08-03	2.9	3.6	1700	2.7	3560	401	58	98	26	.300	.00	.28
73-05-10	28	51	290	.8	865	0	300	10	4.5	--	.06	1.2
73-08-02	32	50	280	.8	674	116	41	62	30	.200	.00	.00
73-05-10	47	58	210	1.0	621	0	300	20	1.6	--	.01	.00
73-08-02	49	59	230	1.1	700	0	220	9.9	1.5	.100	.00	.02
73-07-11	27	56	240	1.7	608	0	340	5.2	.9	.100	.16	.02
73-08-30	49	150	420	4.9	1060	0	750	39	.8	.200	.21	.03
73-08-03	18	34	680	1.9	1880	0	100	39	9.8	.100	.00	.16
73-06-27	66	53	110	4.8	528	0	190	13	.5	.080	1.0	.03
73-06-27	74	48	120	1.6	533	0	170	10	.6	.200	2.0	.03
73-06-27	76	43	89	1.8	479	0	140	9.0	.5	.070	2.6	.05
73-05-11	2.4	26	1500	1.1	1660	288	1600	62	2.0	--	.02	.01
73-08-03	4.8	81	1500	1.5	2200	142	1500	59	2.0	.400	.02	.82
73-09-06	52	110	940	3.7	1430	0	1100	270	.1	.400	.23	.01
73-09-07	14	67	1300	6.8	2660	295	140	190	13	.300	.13	.04
73-09-06	86	99	310	2.8	990	0	480	31	.6	.200	.13	.04
73-09-06	2.4	8.3	2900	4.6	7140	0	41	190	33	.300	.21	.02
73-09-06	78	73	180	3.2	688	0	280	19	.6	.080	.59	.05
73-09-13	21	86	650	3.0	1720	0	360	26	1.2	.000	.05	.24
73-09-12	32	40	66	2.9	242	0	190	10	.3	.300	.00	.03
73-09-12	77	150	250	4.3	652	0	830	24	.6	.300	.13	.03
73-09-12	80	160	230	3.9	674	0	690	20	.5	.200	1.0	.04

Table 24.--*Water-quality data from wells in the alluvium, Piceance basin, Colorado*--Continued

DATE OF SAMPLE	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYB-DENUM (MO) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL STRON-TIUM (SR) (UG/L)
73-08-31	30	100	140	<50	20	--	2	3400
73-05-10	--	--	--	--	--	--	--	--
73-08-02	5	--	140	--	20	12	0	--
73-05-10	--	--	--	--	--	--	--	--
73-08-02	4	--	140	50	20	10	3	--
73-05-10	--	--	--	--	--	--	--	--
73-08-02	0	--	160	50	30	1	5	9700
73-08-03	7	0	50	<50	10	11	2	2700
73-08-03	4	300	80	100	10	14	3	3300
73-08-02	2	300	110	50	0	1	4	4300
73-05-11	--	--	--	--	--	--	--	--
73-08-03	14	100	1200	100	140	2	7	370
73-05-10	--	--	--	--	--	--	--	--
73-08-02	0	1500	330	<50	50	2	5	5400
73-05-10	--	--	--	--	--	--	--	--
73-08-02	0	300	240	<50	30	2	4	3100
73-07-11	0	0	160	<50	30	4	0	2000
73-08-30	38	--	390	<50	50	--	5	3900
73-08-03	14	0	820	<50	70	1	3	1100
73-06-27	4	0	140	50	10	8	--	1600
73-06-27	0	0	130	<50	10	6	--	1500
73-06-27	0	0	110	<50	0	6	0	1400
73-05-11	--	--	--	--	--	--	--	--
73-08-03	26	0	1300	50	20	20	9	1400
73-09-06	66	800	1000	400	260	39	2	6400
73-09-07	5	400	3100	500	100	--	8	1300
73-09-06	21	0	210	150	0	--	2	2900
73-09-06	1	5900	2600	450	270	--	4	3000
73-09-06	6	0	260	750	0	--	1	2000
73-09-13	5	--	390	150	20	16	6	1600
73-09-12	8	800	100	200	50	--	8	1200
73-09-12	5	0	130	550	20	--	4	3000
73-09-12	5	600	150	350	50	--	6	3900

Table 25.--*Water-quality data from wells in the bedrock, Piceance basin, Colorado*
[Well locations given in table 1]

U.S. GEOLOGICAL SURVEY IDENTIFICATION NUMBER	WELL NUMBER	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
395844108084500	001	73-07-02	1000	3000	1010	606	479	17	--	80	70
394835108084900	002	73-07-19	460	1300	2500	1620	1420	12	--	70	0
395348108265800	020	73-08-02	236	1600	6570	4250	3760	15	0	50	10
395303108300300	053	73-09-17	360	701	1940	1250	510	16	--	80	20
	053	73-09-22	360	1337	1690	1100	575	15	--	20	20
	053	73-09-24	360	1604	3570	2310	1690	9.9	--	50	13
	053	73-09-26	360	1846	3920	2540	1700	11	--	40	33
395338108311900	054	73-10-05	158	440	1170	776	332	26	--	340	30
	054	73-10-06	158	626	1180	770	365	11	--	40	30
	054	73-10-08	158	1035	7770	5080	4610	11	--	70	10
	054	73-10-09	158	1162	7400	4790	3950	11	--	200	10
395336108291500	055	73-08-30	361	732	--	--	--	--	--	--	--
	055	73-09-01	361	921	1449	975	442	27	20	640	45
	055	73-09-02	361	1048	1510	1010	401	27	--	70	27
	055	73-09-03	361	1260	2320	1510	1040	15	--	60	20
	055	73-09-05	361	1473	4720	3060	2450	10	--	140	13
	055	73-09-09	361	1834	4180	2660	2130	12	--	100	13
394737108215901	058	73-04-26	101	631	1010	619	427	16	0	140	30
394747108214901	060	73-08-02	960	1294	2140	1390	1210	13	0	130	50
395841108151000	070	73-07-11	--	--	3260	2180	753	16	30	60	0
395349108112900	072	73-08-29	250	300	669	430	279	24	20	30	10
394800108051100	074	73-07-19	2554	2608	2570	1530	976	12	10	90	10
400113108274700	075	73-09-12	342	1691	2060	1500	692	43	40	260	20
400210108153000	087	72-08-30	--	--	37500	33100	26200	14	--	120	0
	087	73-09-04	--	--	33972	31000	24900	8.1	10	120	20
400210108153001	088	72-08-30	--	--	21300	16200	13200	18	--	6	0
	088	73-09-04	--	--	21730	16300	13500	1.6	0	50	20
400226108152700	089	73-02-10	196	483	31900	26900	23048	21	--	310	20
	089	73-02-20	196	1430	30000	25200	21653	16	--	9	10
394304108100200	090	73-09-05	--	--	827	491	418	12	0	110	20

DATE OF SAMPLE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)
73-07-02	3.4	6.1	230	.6	570	7	43	12	5.0	.040	.00	.07
73-07-19	3.7	3.0	680	1.1	1730	0	8.8	35	25	.070	.02	.03
73-08-02	2.8	4.0	1800	2.5	4590	0	51	70	34	.300	.01	.11
73-09-17	70	90	240	6.0	622	0	510	11	.1	--	.03	.04
73-09-22	27	45	330	.5	701	0	320	13	8.6	--	.00	.04
73-09-24	11	18	950	1.2	1920	68	180	85	35	--	.01	.08
73-09-26	14	17	1000	1.7	2070	0	350	88	35	--	.00	.01
73-10-05	47	40	170	1.5	405	0	280	9.9	1.2	--	.05	.08
73-10-06	42	37	180	.6	413	16	270	7.6	2.0	--	.05	.05
73-10-08	9.6	9.9	2100	4.6	4870	369	64	60	49	--	.00	.02
73-10-09	9.5	11	2000	4.9	4820	0	190	140	47	--	.00	.06
73-08-30	--	--	--	--	--	--	--	--	--	--	--	--
73-09-01	31	60	220	.4	539	0	360	9.0	.5	.050	.02	.01
73-09-02	36	63	220	2.6	489	0	410	9.2	1.0	--	.01	.09
73-09-03	21	40	520	2.5	1270	0	240	23	17	--	.01	.06
73-09-05	6.8	12	1300	5.7	2990	0	100	110	36	--	.02	.05
73-09-09	7.1	11	1100	3.6	2160	217	110	93	42	--	.01	.07
73-04-26	12	18	200	.6	521	0	100	7.0	6.7	--	.01	.01
73-08-02	6.8	5.4	570	1.8	1470	0	6.7	38	21	.200	.00	.00
73-07-11	40	110	650	2.4	918	0	850	57	.9	.300	.87	.09
73-08-29	15	9.8	130	.6	340	0	78	416	.0	.040	.12	.01
73-07-19	14	4.9	600	1.4	1190	0	1.1	280	19	.500	1.1	.05
73-09-12	110	110	240	1.2	844	0	570	13	.0	.030	.03	.12
72-08-30	4.0	6.3	14000	35	27500	2170	160	3000	45	--	19	2.8
73-09-04	4.1	7.0	13000	39	30400	0	200	2700	39	4.8	.27	.03
72-08-30	6.4	18	6500	18	12400	1840	110	1500	25	--	9.0	1.2
73-09-04	5.6	18	6700	17	16400	0	110	1300	24	1.8	.27	.02
73-02-10	6.1	18	11000	25	28100	0	79	1900	38	--	.00	2.3
73-02-20	6.3	14	10000	24	26400	0	360	1700	32	--	.00	2.6
73-09-05	5.4	3.9	200	.8	510	0	4.2	1.3	11	.000	.02	.01

Table 25.--*Water-quality data from wells in the bedrock, Piceance basin, Colorado*--Continued

DATE OF SAMPLE	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYB-DENUM (MO) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL STRON-TIUM (SR) (UG/L)
73-07-02	4	300	920	<100	60	4	0	170
73-07-19	8	--	--	<50	110	1	7	--
73-08-02	4	1900	4100	50	170	1	7	400
73-09-17	--	--	--	--	--	--	--	--
73-09-22	--	--	--	--	--	--	--	--
73-09-24	--	--	--	--	--	--	--	--
73-09-26	--	--	--	--	--	--	--	--
73-10-05	--	--	--	--	--	--	--	--
73-10-06	--	--	--	--	--	--	--	--
73-10-08	--	--	--	--	--	--	--	--
73-10-09	--	--	--	--	--	--	--	--
73-08-30	--	--	--	--	--	--	--	--
73-09-01	13	0	180	50	50	--	2	5000
73-09-02	--	--	--	--	--	--	--	--
73-09-03	--	--	--	--	--	--	--	--
73-09-05	--	--	--	--	--	--	--	--
73-09-09	--	--	--	--	--	--	--	--
73-04-26	--	--	--	--	--	--	--	--
73-08-02	2	600	2200	<50	420	3	7	960
73-07-11	1	0	400	<50	20	14	5	2200
73-08-29	2	100	60	<50	10	--	6	790
73-07-19	1	2900	3000	1200	620	0	0	730
73-09-12	2	0	140	<50	160	--	6	14000
72-08-30	--	--	--	--	--	--	--	--
73-09-04	10	5800	6100	300	1600	--	8	880
72-08-30	--	--	--	--	--	--	--	--
73-09-04	4	5000	3500	150	930	--	3	1000
73-02-10	--	--	--	--	--	--	--	--
73-02-20	--	--	--	--	--	--	--	--
73-09-05	6	400	260	<50	30	--	2	530

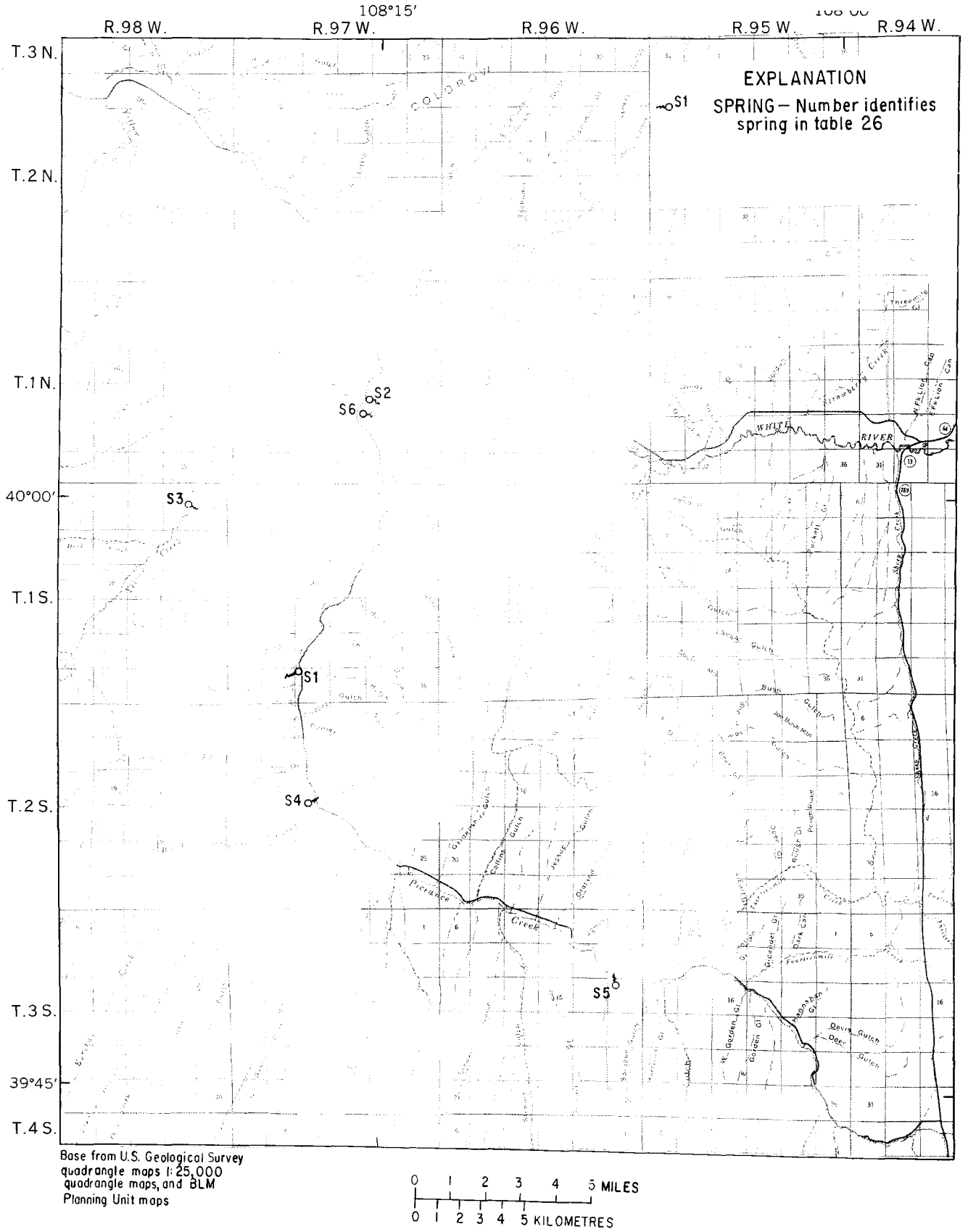


Figure 18.--Locations of springs where water-quality data have been collected.

Table 26.--*Chemical analyses of water from springs shown in figure 18*

U.S. GEOLOGICAL SURVEY IDENTIFICATION NUMBER	SPRING NUMBER	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
395529108173300	S1	73-06-02	3840	2610	1340	18	50	590	120	31	120
400226108152800	S2	72-08-30	23800	18200	15800	27	--	330	30	10	22
	S2	73-06-11	27900	22100	18500	26	20	300	190	7.9	33
400001108210100	S3	73-08-27	1990	1470	536	20	30	0	8	89	130
395215108172300	S4	73-07-16	1720	1220	493	21	20	20	0	110	100
394746108065700	S5	73-09-16	1070	703	438	18	20	210	0	75	45
400216108154000	S6	72-08-30	9190	6120	4540	21	--	1100	190	18	64

DATE OF SAMPLE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO, PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)
73-06-02	760	2.0	1630	0	820	46	2.0	.300	.15	.63	21	800
72-08-30	7300	21	17200	1010	150	1100	28	--	7.7	1.7	--	--
73-06-11	9200	5.7	22500	0	110	1600	25	2.9	.88	1.8	24	6300
73-08-27	210	2.3	653	0	670	17	1.2	.070	1.2	.03	15	--
73-07-16	160	2.6	601	0	510	12	.6	.060	.70	.04	0	0
73-09-16	110	2.8	534	0	170	13	.4	.020	1.1	.07	9	--
72-08-30	2300	8.5	4060	727	180	780	7.1	--	1.4	.84	--	--

DATE OF SAMPLE	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
73-06-02	740	50	40	8	--	4600
72-08-30	--	--	--	--	--	--
73-06-11	5500	100	1200	--	1	2200
73-08-27	210	50	30	--	8	3300
73-07-16	230	<50	10	--	0	4100
73-09-16	210	<50	--	7	1	1100
72-08-30	--	--	--	--	--	--

SURFACE WATER

Streamflow and (or) water-quality data are collected on a continuing basis at 37 stations in the Piceance basin. These stations are identified in this report by 3-digit station numbers. Their locations are shown on the map in figure 19, and additional location details, agency number designations, and names are given in table 27. Five of the stations (Nos. 101-105) are operated by the U.S. Geological Survey, and 32 (Nos. 106-137) are operated by the Colorado Division of Water Resources.

Types of surface-water data available at the 37 continuing stations are shown in table 28. Daily streamflow records are available for 4 stations, water-quality data are collected at 4 stations, and measurements of flow on a weekly basis are included for 32 stations. Ten stations are on streams, and 27 stations show discharge from springs. Tables 29-68 include discharge and water-quality data for the 37 continuing stations assembled in station number order.

Table 69 shows miscellaneous measurements of discharge and specific conductance at stations shown on figure 20. These data show areal variations in quality of surface water on several different days. Table 70 presents water-quality data collected at miscellaneous stations on streams shown on figure 21.

This report uses the same station numbers used in Colorado Water Resources Basic-Data Release 31 (1974) to facilitate reference between the reports. Together, Basic-Data Releases 31 and 35 include all surface-water data available except for station 101 (White River below Meeker). Data for this station collected before October 1965 are published by the U.S. Geological Survey in Part 1 of "Water Resources Data for Colorado," and are printed in U.S. Geological Survey Water-Supply Paper 1925, "Surface Water Supply of the United States 1961-65. Part 9. Colorado River Basin, Vol. 2, Colorado River Basin from Green River to Compact Point."

Table 27.--*Stations for which surface-water data are presented*

Station number in this report	Observer's station number	Land-line location (Sixth principal meridian)				Station name
		¼ Section	Section	Township	Range	
101	USGS 09304800	CNTR.	31	1 N	95 W	White R below Meeker
102	USGS 09306200	NE	32	1 S	97 W	Piceance C below Ryan Gulch
103	USGS 09306210	NW	28	1 S	97 W	Piceance C near White R
104	USGS 09306222	SE	2	1 N	97 W	Piceance C at White R
105	USGS 09306255	SW	4	2 N	98 W	Yellow C near White R
106	CDWR P1	SE	16	2 S	97 W	Piceance C below Black Sulphur C
107	CDWR P2	NW	4	3 S	96 W	Piceance C above Stewart Gulch
108	CDWR CER 1	SE	32	1 S	97 W	Spring at Ryan Gulch and Piceance C.
109	CDWR R 2	SW	19	2 S	98 W	Spring at Reigle Ranch
110	CDWR R 3	NW	25	2 S	99 W	Spring at Ryan Gulch above Galloway Gulch
111	CDWR ARCO 1	SW	16	2 S	97 W	Spring at Black Sulphur C above Piceance C
112	CDWR B S	SW	20	2 S	97 W	Black Sulphur C below Dry Gulch
113	CDWR CER 1	SE	19	2 S	97 W	Spring at Black Sulphur C below Eureka C
114	CDWR CER 2	SW	19	2 S	97 W	Spring at Black Sulphur C above Eureka C
115	CDWR CER 3	SW	24	2 S	98 W	Spring at Black Sulphur C above Eureka C
116	CDWR CER 4	NW	26	2 S	98 W	Spring at Black Sulphur C below Yankee Gulch
117	CDWR CER 5	NE	27	2 S	98 W	Spring at Black Sulphur C below Yankee Gulch
118	CDWR B 1	SE	28	2 S	98 W	Spring at Duckett Ranch
119	CDWR B 2	SE	32	2 S	98 W	Spring at Black Sulphur C below Swizer Gulch
120	CDWR B 3	SE	32	2 S	98 W	Spring at Black Sulphur C below Swizer Gulch
121	CDWR ARCO 2	NE	26	3 S	99 W	Black Sulphur C above Canyon C
122	CDWR F 1	NE	30	2 S	97 W	Spring at Fawn C above Little Dry Gulch
123	CDWR F 2	NW	31	2 S	97 W	Spring at Fawn C
124	CDWR F 3	SE	22	3 S	98 W	Spring at Fawn C below E and W Fawn C
125	CDWR Hunter	NE	27	2 S	97 W	Hunter C at Piceance C
126	CDWR H 1	SW	27	2 S	97 W	Spring at Hunter C above Piceance C
127	CDWR H 2	NW	9	3 S	97 W	Spring at Hunter C
128	CDWR H 3	SE	17	3 S	97 W	Spring at Hunter C
129	CDWR H 4	NE	30	3 S	97 W	Spring at Hunter C
130	CDWR H 1A	SW	27	2 S	97 W	Spring at Hunter C above Piceance C
131	CDWR W 1	SE	26	2 S	97 W	Spring at P-L Ranch
132	CDWR W 3	SW	14	3 S	97 W	Spring at Willow C
133	CDWR W 4	CNTR.	27	3 S	97 W	Spring at Willow C
134	CDWR S 1	NE	5	3 S	96 W	Spring at Stewart Gulch and Piceance C
135	CDWR CER 6	NW	9	3 S	96 W	Spring at Stewart Gulch below Middle Fork
136	CDWR CER 7	NE	28	3 S	96 W	Spring at Middle Fork Stewart Gulch
137	CDWR S-1-A	NE	5	3 S	96 W	Spring at Stewart Gulch and Piceance C

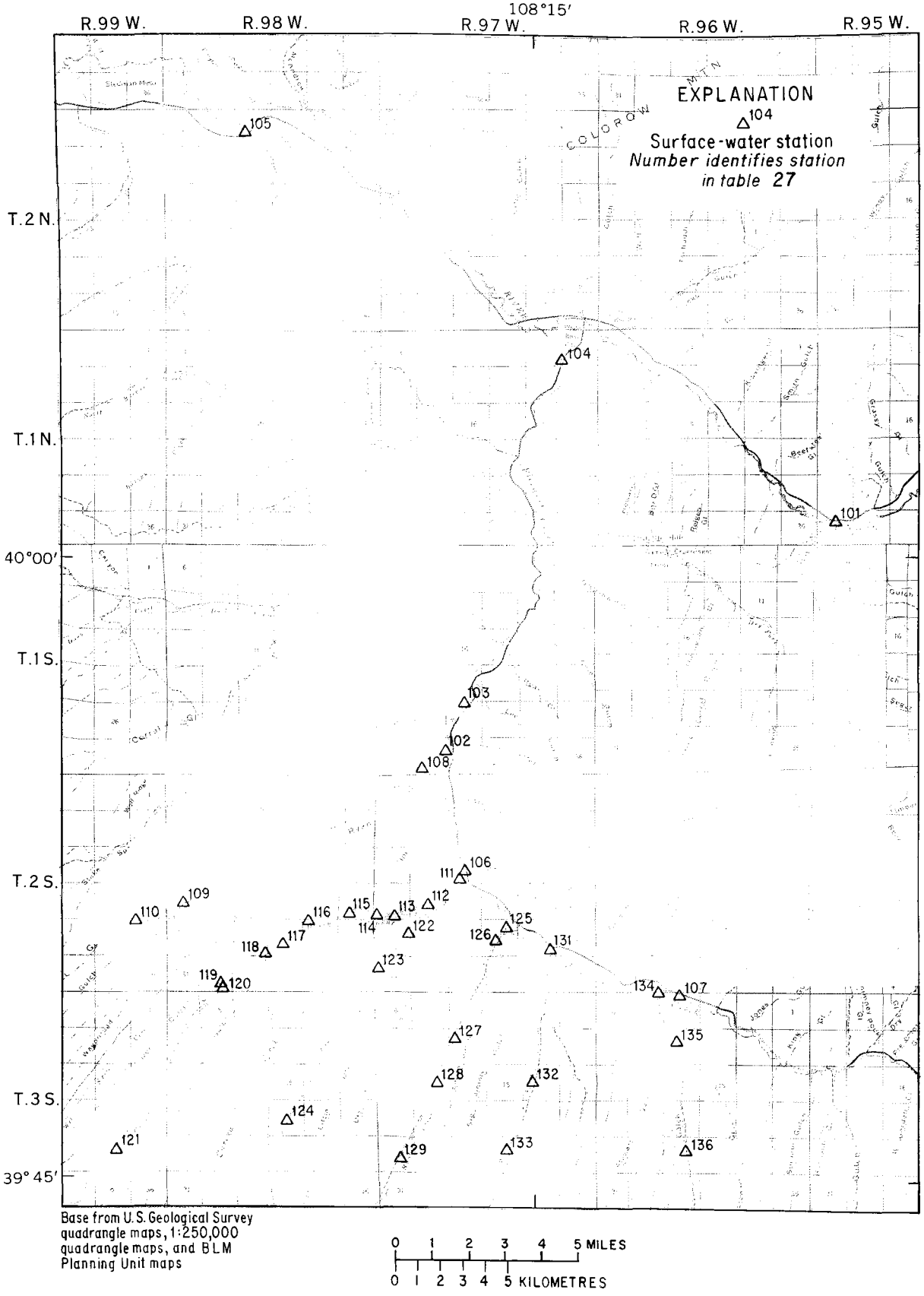


Figure 19.--Stations in the Piceance basin where surface-water data are collected on a regular basis.

Table 28.--*Types of surface-water information available from continuing stations*

Station number	Daily discharge	Weekly discharge	Common ions	Trace elements
101	X			
102	X		X	
103			X	
104	X		X	X
105	X		X	X
106		X		
107		X		
108		X		
109		X		
110		X		
111		X		
112		X		
113		X		
114		X		
115		X		
116		X		
117		X		
118		X		
119		X		
120		X		
121		X		
122		X		
123		X		
124		X		
125		X		
126		X		
127		X		
128		X		
129		X		
130		X		
131		X		
132		X		
133		X		
134		X		
135		X		
136		X		
137		X		

Table 29.--*Discharge at station 101, USGS 09304800*
White River below Meeker, Colo.

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, on left bank 30 ft (9 m) downstream from county bridge, 4.5 mi (7.2 km) downstream from Strawberry Creek, and 10 mi (16 km) west of Meeker.

DRAINAGE AREA.--1,040 mi^2 (2,690 km^2), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft (1,807 m) from topographic map.

AVERAGE DISCHARGE.--12 years, 625 ft^3/s (17.70 m^3/s), 452,800 acre-ft/yr (558 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,660 ft^3/s (104 m^3/s) May 21 (gage height, 3.78 ft or 1.152 m); minimum daily, 300 ft^3/s (8.50 m^3/s) Jan. 28.
Period of record: Maximum discharge, 4,010 ft^3/s (114 m^3/s) June 15, 1965 (gage height, 4.09 ft or 1.247 m); minimum daily, 141 ft^3/s (3.99 m^3/s) July 8, 1966.

REMARKS.--Records good except those for winter period, which are fair. Diversion above station for irrigation of about 22,000 acres (89.0 km^2) above station and a few small hay meadows below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	448	410	375	340	370	380	718	2,180	1,610	466	355
2	400	472	415	375	330	370	380	648	2,320	1,450	466	430
3	390	472	430	380	320	370	375	599	2,200	1,300	436	425
4	395	466	415	400	330	380	350	662	2,200	1,190	420	405
5	442	502	375	410	320	370	365	781	1,890	1,110	496	395
6	442	538	345	380	330	380	405	886	1,700	999	550	395
7	425	460	375	370	330	360	425	870	1,730	902	520	395
8	472	472	400	390	320	350	345	823	2,040	862	490	395
9	496	490	415	400	320	340	370	902	2,440	830	478	385
10	472	430	370	390	370	330	375	1,220	2,920	767	442	390
11	448	425	355	360	350	340	390	1,530	3,270	732	442	425
12	430	442	380	370	340	350	400	1,790	3,300	690	430	454
13	436	448	448	390	330	365	405	2,020	3,140	725	415	442
14	442	410	436	410	310	350	454	2,160	3,110	753	400	425
15	484	454	335	430	310	326	478	2,170	3,410	669	405	420
16	634	430	370	430	320	326	420	2,290	2,970	718	400	420
17	538	420	390	420	340	350	415	2,470	2,440	697	410	410
18	544	430	420	400	360	380	425	2,710	2,230	662	472	405
19	544	430	450	390	360	400	448	3,070	1,980	781	448	390
20	538	410	470	380	360	425	430	3,390	1,860	934	415	380
21	557	410	460	360	340	490	436	3,490	1,930	838	430	370
22	564	385	450	340	350	415	425	3,450	1,890	795	430	355
23	550	360	440	310	360	380	425	3,090	1,960	711	430	345
24	514	380	430	310	370	380	460	2,930	2,020	676	405	400
25	502	415	420	330	360	360	520	2,880	2,040	676	405	415
26	484	410	425	350	350	390	514	2,820	2,070	641	395	436
27	502	415	430	340	350	415	496	2,340	2,170	599	400	425
28	520	390	460	300	360	405	538	1,960	2,130	592	395	430
29	490	385	460	310	------	395	620	1,780	1,930	578	375	425
30	496	410	420	340	------	380	711	1,790	1,760	520	370	425
31	448	------	400	350	------	365	------	1,950	------	490	355	------
TOTAL	15,009	13,009	12,799	11,490	9,530	11,607	13,180	60,189	69,230	25,497	13,391	12,167
MEAN	484	434	413	371	340	374	439	1,942	2,308	822	432	406
MAX	634	538	470	430	370	490	711	3,490	3,410	1,610	550	454
MIN	390	360	335	300	310	326	345	599	1,700	490	355	345
AC-FT	29,770	25,800	25,390	22,790	18,900	23,020	26,140	119,400	137,300	50,570	26,560	24,130

CAL YR 1972 TOTAL 217,538 MEAN 594 MAX 3,070 MIN 235 AC-FT 431,500
WTR YR 1973 TOTAL 267,098 MEAN 732 MAX 3,490 MIN 300 AC-FT 529,800

PEAK DISCHARGE (BASE, 2,000 CFS).--May 21 (1400) 3,660 cfs (3.78 ft); June 15 (1700) 3,600 cfs (3.74 ft).

Table 29.--*Discharge at station 101, USGS 09304800*
White River below Meeker, Colo.--Continued

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, on left bank 30 feet (9 m) downstream from county bridge, 4.5 mi (7.2 km) (revised) downstream from Strawberry Creek, and 10 mi (16 km) west of Meeker.

DRAINAGE AREA.--1,040 mi^2 (2,690 km^2), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft (1,807 m) from topographic map.

AVERAGE DISCHARGE.--11 years, 616 cfs (446,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,390 cfs June 8 (gage height, 3.65 ft); minimum daily, 235 cfs Aug. 16.
Period of record: Maximum discharge, 4,010 cfs June 15, 1965 (gage height, 4.09 ft); minimum daily, 141 cfs July 9, 1966.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversion above station for irrigation of about 22,000 acres above and a few acres below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	496	380	360	330	400	385	662	2,350	606	312	436
2	490	478	395	400	320	370	385	669	2,310	564	330	415
3	478	442	425	410	300	400	395	704	2,380	557	390	442
4	460	478	405	330	320	370	380	802	2,520	550	395	436
5	454	496	365	260	370	360	385	918	2,520	544	385	410
6	454	436	400	300	390	360	405	934	2,510	578	360	442
7	460	436	448	400	380	360	420	974	2,650	655	365	502
8	448	466	410	350	370	350	410	934	3,020	557	345	454
9	430	448	355	400	410	355	425	958	3,070	526	335	420
10	420	430	410	350	370	370	466	966	2,710	502	326	420
11	425	430	430	340	340	390	478	999	2,370	484	281	415
12	420	430	420	410	360	400	599	934	2,230	472	269	390
13	420	460	442	380	370	405	599	854	2,070	450	261	385
14	420	460	430	330	370	425	550	802	1,810	425	265	380
15	415	454	472	350	370	415	508	838	1,670	395	249	380
16	420	454	466	380	410	395	472	990	1,500	375	235	415
17	508	448	425	420	400	390	484	1,130	1,400	365	245	390
18	564	420	520	410	380	395	508	1,330	1,440	326	257	390
19	502	380	690	400	380	410	508	1,470	1,390	290	290	405
20	484	415	627	390	400	415	496	1,530	1,300	281	321	557
21	484	466	571	380	420	405	502	1,740	1,220	294	308	496
22	484	442	585	370	420	405	520	1,720	1,060	312	299	460
23	466	420	613	360	420	425	557	1,460	1,040	303	299	436
24	466	390	655	350	400	425	634	1,400	1,010	317	317	425
25	472	415	760	340	380	415	760	1,450	918	321	326	420
26	466	405	599	350	350	420	781	1,640	854	340	326	410
27	490	415	478	360	360	405	704	1,770	795	385	312	405
28	484	415	380	350	370	400	641	1,930	725	365	312	410
29	490	405	430	310	380	380	641	2,020	669	335	390	420
30	466	405	395	280	------	380	690	2,070	627	321	454	415
31	478	------	375	310	------	400	------	2,290	------	317	410	------
TOTAL	14,402	13,135	14,756	11,130	10,840	12,195	15,688	38,888	52,138	13,092	9,969	12,781
MEAN	465	438	476	359	374	393	523	1,254	1,738	422	322	426
MAX	564	496	760	420	420	425	781	2,290	3,070	655	454	557
MIN	415	380	355	260	300	350	380	662	627	281	235	380
AC-FT	28,570	26,050	29,270	22,080	21,500	24,190	31,120	77,130	103,400	25,970	19,770	25,350

CAL YR 1971 TOTAL 256,469 MEAN 703 MAX 2,760 MIN 290 AC-FT 508,700
WTR YR 1972 TOTAL 219,014 MEAN 598 MAX 3,070 MIN 235 AC-FT 434,400

PEAK DISCHARGE (BASE, 2,000 CFS).--June 8 (1730) 3,390 cfs (3.65 ft).

NOTE.--No gage-height record Jan. 3 to Mar. 6.

Table 30.--*Discharge at station 102, USGS 09306200*
Piceance Creek below Ryan Gulch, near Rio Blanco, Colo.

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--485 mi^2 (1,256 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft (1,850 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 16.6 ft^3/s (0.470 m^3/s), 12,030 acre-ft/yr (14.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 100 ft^3/s (2.83 m^3/s) May 26 (gage height, 4.21 ft or 1.283 m); minimum daily, 3.7 ft^3/s (0.10 m^3/s) Oct. 12.
Period of record: Maximum discharge, 400 ft^3/s or 11 m^3/s (estimated) Mar. 9, 1966 (gage height, 6.23 ft or 1.899 m); minimum daily, 0.21 ft^3/s (0.006 m^3/s) May 21, 1972.
REVISIONS.--The maximum discharge for the water year 1972 has been revised to 105 ft^3/s (2.97 m^3/s) Feb. 23, 1972 (gage height, 4.26 ft or 1.298 m), superseding figure published in WRD Colo. 1972.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	19	18	9.0	11	27	19	46	61	26	45	51
2	6.0	18	19	9.0	11	27	19	41	73	25	43	52
3	5.5	17	17	10	12	22	15	35	69	26	43	52
4	6.9	18	17	11	14	21	15	33	75	26	44	51
5	7.7	19	19	10	15	21	13	37	76	26	46	50
6	9.4	19	17	10	14	19	11	49	69	23	47	49
7	8.6	18	17	11	15	18	12	60	65	21	45	50
8	9.0	18	19	11	15	18	14	57	65	21	43	49
9	9.0	18	16	11	15	19	14	54	61	21	42	48
10	6.3	17	11	11	15	19	15	63	59	23	42	46
11	5.1	19	11	10	16	20	12	76	58	25	42	46
12	3.7	18	11	11	16	25	11	82	51	26	42	46
13	3.9	18	11	12	15	27	11	89	44	30	41	42
14	4.3	17	10	11	15	21	13	91	44	32	42	36
15	5.5	18	11	11	14	20	20	85	45	31	42	35
16	6.0	16	11	11	14	21	18	86	38	34	42	38
17	5.7	16	12	11	13	28	17	88	36	34	48	39
18	5.7	17	12	10	12	31	19	90	34	34	51	40
19	5.7	18	11	11	12	28	21	83	33	45	58	39
20	5.5	18	12	11	13	31	18	93	33	46	56	37
21	5.5	18	11	9.0	13	35	10	89	33	46	58	35
22	5.7	18	12	9.0	15	26	9.4	83	32	47	61	30
23	5.7	18	12	9.0	21	24	11	82	33	45	64	31
24	5.7	19	11	9.0	24	22	12	79	33	47	58	32
25	5.7	19	11	10	19	22	17	83	33	53	57	34
26	5.5	18	10	11	19	22	21	96	29	60	55	36
27	6.3	19	11	11	20	22	19	95	28	58	53	38
28	7.7	17	11	9.0	22	21	21	84	28	55	53	35
29	9.0	16	11	10	------	21	22	81	28	54	52	35
30	12	19	10	11	------	20	32	73	26	54	51	35
31	17	------	10	12	------	19	------	67	------	47	52	------
TOTAL	211.3	537	402	322.0	430	717	481.4	2,250	1,392	1,141	1,518	1,237
MEAN	6.82	17.9	13.0	10.4	15.4	23.1	16.0	72.6	46.4	36.8	49.0	41.2
MAX	17	19	19	12	24	35	32	96	76	60	64	52
MIN	3.7	16	10	9.0	11	18	9.4	33	26	21	41	30
AC-FT	419	1,070	797	639	853	1,420	955	4,460	2,760	2,260	3,010	2,450

CAL YR 1972 TOTAL 3,610.74 MEAN 9.87 MAX 68 MIN .21 AC-FT 7,160
WTR YR 1973 TOTAL 10,638.70 MEAN 29.1 MAX 96 MIN 3.7 AC-FT 21,100

Table 30.--*Discharge at station 102, USGS 09306200*
Piceance Creek below Ryan Gulch, near Rio Blanco, Colo.--Continued

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--485 mi^2 (1,256 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft (1,850 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 15.0 cfs (10,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 121 cfs Feb. 23 (gage height, 4.26 ft); maximum gage height, 4.81 ft, about Jan. 16, from recorded range in stage (backwater from ice); minimum daily discharge, 0.21 cfs May 21.
Period of record: Maximum discharge, 400 cfs (estimated) Mar. 9, 1966 (gage height, 6.23 ft); minimum daily, 0.21 cfs May 21, 1972.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	20	18	11	17	29	4.3	1.7	9.4	3.4	10	6.9
2	9.0	20	19	10	16	21	3.0	1.6	9.0	4.3	11	6.9
3	9.0	19	19	9.0	14	24	3.7	1.5	12	4.1	9.0	6.0
4	11	18	20	8.0	15	49	3.4	1.2	29	3.5	7.4	5.1
5	16	17	17	9.0	16	25	3.7	3.4	19	3.9	5.5	4.7
6	14	19	17	9.0	17	25	4.1	4.9	13	4.9	5.5	5.5
7	13	19	14	9.0	20	24	4.5	2.5	7.7	5.1	5.7	6.0
8	12	18	11	9.2	20	20	4.1	5.1	7.2	4.7	5.7	5.5
9	12	19	10	10	22	16	4.7	6.3	7.4	6.0	6.3	3.9
10	13	19	11	10	21	13	4.5	7.4	8.3	5.7	5.7	3.9
11	15	20	11	11	26	9.7	3.7	14	7.7	5.3	5.5	4.1
12	16	19	9.7	12	21	7.7	3.9	5.7	6.0	5.7	4.9	4.3
13	14	20	11	13	18	6.6	2.8	4.1	5.3	6.6	4.1	4.3
14	15	20	9.5	12	14	7.2	1.4	3.4	4.1	6.0	4.1	4.7
15	18	20	10	12	14	6.6	1.9	3.5	2.5	6.0	4.1	4.9
16	18	21	9.5	13	14	6.3	2.5	3.7	2.3	6.6	3.7	3.9
17	20	21	9.0	16	15	6.0	3.2	3.2	3.7	6.6	3.5	3.7
18	20	21	9.0	15	17	5.7	4.1	1.7	6.9	6.0	3.7	4.5
19	24	21	9.5	15	22	4.9	4.3	.56	9.7	5.3	3.7	4.5
20	23	21	10	17	29	5.1	3.4	.28	8.3	8.6	3.0	5.1
21	25	20	11	18	38	5.1	3.5	.21	6.0	8.0	3.0	5.1
22	26	19	12	19	50	3.5	3.7	.49	4.7	7.4	3.0	4.7
23	25	19	14	16	68	3.9	3.5	1.4	3.5	5.3	3.2	3.4
24	25	19	15	14	43	3.9	4.1	4.3	3.2	7.2	4.3	3.2
25	25	19	15	16	33	4.1	3.9	3.7	3.7	9.0	6.0	3.4
26	24	19	15	18	23	3.9	5.5	4.3	3.7	11	6.3	3.7
27	25	19	14	20	22	3.9	5.3	4.7	3.7	11	6.6	4.1
28	24	19	13	18	27	3.9	3.7	4.1	3.7	11	7.2	4.5
29	23	19	11	17	47	3.9	2.7	5.3	2.3	11	7.7	5.1
30	21	18	10	14	------	4.1	2.5	6.9	3.4	10	8.3	5.5
31	21	------	11	15	------	4.5	------	8.3	------	9.4	6.9	------
TOTAL	564.0	582	395.2	415.2	719	356.5	109.6	119.44	216.4	208.6	174.6	141.1
MEAN	18.2	19.4	12.7	13.4	24.8	11.5	3.65	3.85	7.21	6.73	5.63	4.70
MAX	26	21	20	20	68	49	5.5	14	29	11	11	6.9
MIN	8.0	17	9.0	8.0	14	3.5	1.4	.21	2.3	3.4	3.0	3.2
AC-FT	1,120	1,150	784	824	1,430	707	217	237	429	414	346	280

CAL YR 1971 TOTAL 5,564.10 MEAN 15.2 MAX 153 MIN 1.9 AC-FT 11,040
WTR YR 1972 TOTAL 4,001.64 MEAN 10.9 MAX 68 MIN .21 AC-FT 7,940

Table 31.--*Water quality at station 102, USGS 09306200*
Piceance Creek below Ryan Gulch, near Rio Blanco, Colo.

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, at gaging station, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--485 mi^2 (1,256 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1970 to September 1973.
Sediment records: October 1972 to September 1973.

EXTREMES, 1972-73.--Sediment concentrations: Maximum daily, 4,000 mg/l May 14; minimum daily, 65 mg/l Oct. 3.
Sediment loads: Maximum daily, 1,430 tons (1,300 t) May 26; minimum daily, 0.97 tons (0.88 t) Oct. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.												
05...	8.3	17	40	63	73	93	220	3.8	671	0	550	420
NOV.												
10...	17	18	30	70	85	81	170	3.1	620	0	509	350
DEC.												
07...	17	17	50	70	80	75	160	3.1	637	0	522	320
JAN.												
16...	11	19	70	40	79	84	200	3.0	697	4	578	390
FEB.												
08...	15	19	40	30	80	77	180	3.1	658	0	540	350
MAR.												
08...	18	16	80	30	81	77	160	3.4	634	0	520	340
APR.												
05...	13	15	60	50	84	90	180	2.6	635	0	521	420
MAY												
24...	82	18	30	10	79	66	120	3.5	523	0	429	290
JUNE												
14...	43	16	30	40	89	90	190	3.1	664	0	545	400
JULY												
12...	26	20	40	70	100	110	210	3.4	750	0	615	500
AUG.												
30...	51	20	30	20	86	78	150	2.5	554	0	454	370

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
05...	25	1.0	.00	.03	1180	26.4	560	15	4.0	1691	8.1	9.5
NOV.												
10...	17	.8	.26	.01	1030	47.3	550	37	3.2	1510	8.0	2.5
DEC.												
07...	16	.9	.39	.01	987	45.3	510	0	3.1	1450	7.7	.0
JAN.												
16...	16	.8	.41	.04	1140	33.9	540	0	3.7	1610	8.4	.0
FEB.												
08...	13	.8	.50	.05	1050	42.5	520	0	3.4	1510	8.2	.0
MAR.												
08...	15	.8	.42	.04	1010	49.1	520	0	3.1	1480	8.0	1.0
APR.												
05...	14	.6	.28	.03	1120	39.3	580	59	3.3	1350	7.9	6.5
MAY												
24...	12	.6	.87	.05	851	188	470	40	2.4	1230	8.0	10.0
JUNE												
14...	13	.9	.44	.02	1130	131	590	48	3.4	1630	8.1	11.5
JULY												
12...	17	.8	.31	.05	1330	93.4	700	87	3.4	1910	8.2	14.0
AUG.												
30...	12	.4	.70	.02	995	137	540	81	2.8	1440	8.0	13.5

Table 31.--*Water quality at station 102, USGS 09306200*
Piceance Creek below Ryan Gulch, near Rio Blanco, Colo.--Continued

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, at gaging station, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--485 mi^2 (1,256 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1970 to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.												
20...	24	18	30	80	78	82	190	3.3	643	0	527	390
DEC.												
01...	18	18	10	0	80	73	160	2.5	578	0	474	330
15...	10	19	10	20	86	77	160	3.1	632	0	518	330
JAN.												
27...	18	18	160	10	85	75	160	3.5	587	0	481	330
FEB.												
24...	46	13	50	30	51	34	81	3.6	327	0	268	170
MAR.												
22...	3.4	21	40	42	89	100	230	4.0	795	0	652	490
APR.												
19...	3.7	18	70	190	78	110	300	4.8	870	0	714	510
MAY												
17...	4.1	18	40	250	77	110	310	3.7	933	0	765	550
JUNE												
21...	6.0	19	100	110	77	98	260	4.1	841	0	690	490
JULY												
26...	11	16	60	42	73	84	190	2.9	634	0	520	380
AUG.												
30...	8.6	16	30	30	72	76	180	3.3	598	0	490	360
SEP.												
25...	3.5	17	30	70	72	98	220	3.0	725	0	595	470

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
20...	16	.6	.32	.03	1100	71.3	530	5	3.6	1570	7.9	4.0
DEC.												
01...	15	.8	.55	.03	967	47.0	500	26	3.1	1420	7.9	1.5
15...	15	.7	.71	.03	1000	27.0	530	13	3.0	1500	8.1	.0
JAN.												
27...	15	.8	.53	.04	979	47.6	520	40	3.1	1390	8.1	1.0
FEB.												
24...	11	.4	.51	.01	527	65.5	270	0	2.2	809	7.7	1.5
MAR.												
22...	20	1.0	.35	.04	1350	12.4	630	0	4.0	1920	8.2	4.5
APR.												
19...	22	1.1	.01	.14	1470	14.7	650	0	5.1	2080	8.3	14.0
MAY												
17...	25	1.2	.04	.05	1550	17.2	640	0	5.3	2240	8.3	10.5
JUNE												
21...	20	1.0	.08	.04	1380	22.4	600	0	4.6	1980	7.6	12.5
JULY												
26...	17	.8	.03	.02	1080	32.1	530	8	3.6	1590	7.5	12.0
AUG.												
30...	15	.8	.03	.03	1020	23.7	490	2	3.5	1490	7.9	11.0
SEP.												
25...	18	1.0	.00	.01	1260	11.9	580	0	4.0	1870	8.1	9.0

Table 31.--*Water quality at station 102, USGS 09306200*
Piceance Creek below Ryan Gulch, near Rio Blanco, Colo.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.0	147	2.4	19	200	12	18	180	8.7
2	6.0	81	1.3	18	180	8.7	19	200	10
3	5.5	65	.97	17	160	7.3	17	160	7.3
4	6.9	110	2.0	18	180	8.7	17	160	7.3
5	7.7	130	2.7	19	200	10	19	200	10
6	9.4	95	2.4	19	200	10	17	160	7.3
7	8.6	131	3.0	18	180	8.7	17	160	7.3
8	9.0	137	3.3	18	180	8.7	19	200	10
9	9.0	134	3.3	18	180	8.7	16	140	6.0
10	6.3	138	2.3	17	160	7.3	11	130	3.9
11	5.1	120	1.7	19	200	10	11	130	3.9
12	3.7	100	1.0	18	180	8.7	11	130	3.9
13	3.9	129	1.4	18	180	8.7	11	130	3.9
14	4.3	95	1.1	17	160	7.3	10	120	3.2
15	5.5	110	1.6	18	180	8.7	11	130	3.9
16	6.0	200	3.2	16	180	7.8	11	130	3.9
17	5.7	252	3.9	16	180	7.8	12	130	4.2
18	5.7	220	3.4	17	160	7.3	12	130	4.2
19	5.7	190	2.9	18	180	8.7	11	130	3.9
20	5.5	170	2.5	18	180	8.7	12	130	4.2
21	5.5	145	2.2	18	180	8.7	11	130	3.9
22	5.7	150	2.3	18	180	8.7	12	130	4.2
23	5.7	150	2.3	18	180	8.7	12	130	4.2
24	5.7	150	2.3	19	200	10	11	130	3.9
25	5.7	155	2.4	19	200	10	11	130	3.9
26	5.5	175	2.6	18	180	8.7	10	120	3.2
27	6.3	275	4.7	19	200	10	11	130	3.9
28	7.7	265	5.5	17	160	7.3	11	130	3.9
29	9.0	268	8.1	16	140	6.0	11	130	3.9
30	12	280	11	19	200	10	10	120	3.2
31	17	292	14	--	--	--	10	120	3.2

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9.0	120	2.9	11	130	3.9	27	380	35
2	9.0	120	2.9	11	130	3.9	27	300	22
3	10	120	3.2	12	130	4.2	22	230	14
4	11	130	3.9	14	140	5.3	21	210	12
5	10	120	3.2	15	150	6.1	21	210	12
6	10	120	3.2	14	140	5.3	19	200	10
7	11	130	3.9	15	150	6.1	18	180	8.7
8	11	130	3.9	15	140	5.7	18	180	8.7
9	11	130	3.9	15	140	5.7	19	200	10
10	11	130	3.9	15	140	5.7	19	200	10
11	10	120	3.2	16	150	6.5	20	210	11
12	11	130	3.9	16	150	6.5	25	370	29
13	12	130	4.2	15	140	5.7	27	420	37
14	11	130	3.9	15	140	5.7	21	359	20
15	11	130	3.9	14	140	5.3	20	294	16
16	11	130	3.9	14	140	5.3	21	309	18
17	11	130	3.9	13	140	4.9	28	430	49
18	10	120	3.2	12	130	4.2	31	262	22
19	11	130	3.9	12	130	4.2	28	300	23
20	11	130	3.9	13	140	4.9	31	450	47
21	9.0	120	2.9	13	140	4.9	35	689	65
22	9.0	120	2.9	15	150	6.1	26	400	28
23	9.0	120	2.9	21	250	17	24	386	25
24	9.0	120	2.9	24	280	23	22	332	20
25	10	120	3.2	19	200	10	22	347	21
26	11	130	3.9	19	200	10	22	370	22
27	11	130	3.9	20	220	12	22	399	24
28	9.0	120	2.9	22	230	14	21	276	16
29	10	120	3.2	--	--	--	21	270	15
30	11	130	3.9	--	--	--	20	260	14
31	12	130	4.2	--	--	--	19	202	10

Table 31.--*Water quality at station 102, USGS 09306200 Piceance Creek below Ryan Gulch, near Rio Blanco, Colo.*--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	19	189	9.7	46	2000	430	61	1000	165
2	19	169	8.7	41	1530	169	73	1800	480
3	15	120	4.9	35	1070	101	69	1200	250
4	15	86	3.5	33	550	49	75	780	158
5	13	82	2.9	37	700	70	76	859	176
6	11	80	2.4	49	945	187	69	705	131
7	12	110	3.6	60	1900	308	65	649	114
8	14	120	4.5	57	1500	231	65	600	105
9	14	120	4.5	54	1000	146	61	542	89
10	15	130	5.3	63	2500	425	59	505	80
11	12	110	3.6	76	3500	1000	58	450	70
12	11	110	3.3	82	2800	770	51	417	57
13	11	110	3.3	89	3400	1100	44	450	53
14	13	120	4.2	91	4000	1200	44	518	62
15	20	250	18	85	2480	569	45	410	50
16	18	160	7.8	86	2800	650	38	462	47
17	17	150	6.9	88	3050	725	36	440	43
18	19	190	9.7	90	3200	778	34	421	39
19	21	210	12	83	1800	403	33	421	38
20	18	170	8.3	93	2240	562	33	421	38
21	10	110	3.0	89	2300	553	33	421	38
22	9.4	100	2.5	83	2210	495	32	421	36
23	11	110	3.3	82	1950	432	33	421	38
24	12	110	3.6	79	1330	284	33	421	38
25	17	140	6.4	83	1470	329	33	421	38
26	21	210	15	96	3800	1430	29	406	32
27	19	190	9.7	95	3000	770	28	279	21
28	21	210	12	84	2400	544	28	307	23
29	22	220	13	81	2000	437	28	320	24
30	32	650	78	73	1500	296	26	331	23
31	--	--	--	67	1300	235	--	--	--

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	26	253	18	45	646	78	51	461	63
2	25	270	18	43	596	69	52	434	61
3	26	213	15	43	568	66	52	381	53
4	26	251	18	44	520	62	51	365	50
5	26	232	16	46	500	62	50	357	48
6	23	263	16	47	460	58	49	322	43
7	21	206	12	45	420	51	50	303	41
8	21	218	12	43	469	54	49	309	41
9	21	200	11	42	498	56	48	302	39
10	23	243	15	42	510	58	46	377	47
11	25	232	16	42	494	56	46	317	39
12	26	243	17	42	500	57	46	278	35
13	30	498	46	41	663	73	42	260	29
14	32	354	31	42	500	57	36	242	24
15	31	475	40	42	500	57	35	254	24
16	34	399	37	42	500	57	38	243	25
17	34	381	35	48	1300	190	39	230	24
18	34	504	46	51	1040	143	40	220	24
19	45	536	65	58	668	121	39	240	25
20	46	545	68	56	637	96	37	258	26
21	46	631	78	58	603	94	35	212	20
22	47	480	61	61	625	103	30	229	19
23	45	559	68	64	700	130	31	241	20
24	47	833	121	58	490	77	32	230	20
25	53	945	169	57	512	79	34	240	22
26	60	770	156	55	390	58	36	260	25
27	58	629	99	53	357	51	38	280	29
28	55	610	91	53	380	54	35	210	20
29	54	596	87	52	410	58	35	210	20
30	54	498	73	51	438	60	35	210	20
31	47	545	69	52	460	65	--	--	--

Table 32.--*Water quality at station 103, USGS 09306210*
Piceance Creek near White River, Colo.

LOCATION.--Lat 39°56'21", long 108°17'19", in NE¼NW¼ sec.28, T.1 S., R.97 W., Rio Blanco County, 0.5 mi (0.8 km) downstream from Hutch Gulch, 11 mi (18 km) southwest of White River and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--495 mi^2 (1,282 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1970 to September 1973.

REMARKS.--Records of discharge are given for 09306200 Piceance Creek below Ryan Gulch, near Rio Blanco.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.												
05...	7.4	17	70	45	68	81	240	3.1	715	0	586	430
NOV.												
10...	17	18	60	70	81	83	180	3.3	650	0	533	350
DEC.												
07...	17	18	70	50	79	78	180	2.9	668	0	548	350
JAN.												
16...	11	18	80	50	79	88	220	3.4	729	4	605	410
FEB.												
08...	15	19	60	30	77	77	190	3.4	682	0	559	350
MAR.												
08...	18	16	50	30	79	81	190	3.8	678	0	556	370
APR.												
05...	13	15	60	40	81	90	210	2.7	674	0	553	450
MAY												
24...	91	18	30	10	76	67	140	3.7	546	0	448	300
JUNE												
14...	45	19	30	20	86	91	210	3.3	685	0	562	420
JULY												
12...	25	20	70	40	94	110	250	3.7	802	0	658	570
AUG.												
30...	52	20	30	20	85	74	160	2.8	561	0	460	410

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
05...	20	1.0	.00	.04	1210	24.2	500	0	4.7	1784	8.2	8.5
NOV.												
10...	18	.7	.25	.02	1060	48.7	540	11	3.4	1570	8.2	1.5
DEC.												
07...	18	1.0	.46	.03	1060	48.7	520	0	3.4	1560	7.7	.0
JAN.												
16...	19	.8	.48	.04	1200	35.6	560	0	4.0	1700	8.4	.0
FEB.												
08...	14	.9	.52	.06	1070	43.3	510	0	3.7	1570	8.2	.0
MAR.												
08...	16	.8	.38	.05	1090	53.0	530	0	3.6	1560	8.2	1.0
APR.												
05...	17	.7	.16	.03	1200	42.1	570	20	3.8	1650	8.0	3.5
MAY												
24...	14	.7	.77	.06	892	219	470	18	2.8	1310	8.0	10.0
JUNE												
14...	14	.6	.52	.05	1180	143	590	28	3.8	1680	8.2	12.0
JULY												
12...	19	.8	.26	.05	1460	98.5	690	30	4.2	2040	8.2	14.0
AUG.												
30...	13	.4	.65	.02	1040	146	520	57	3.1	1450	8.1	13.0

Table 32.--*Water quality at station 103, USGS 09306210*
Piceance Creek near White River, Colo.--Continued

LOCATION.--Lat 39°56'21", long 108°17'19", in NE¼NW¼ sec.28, T.1 S., R.97 W., Rio Blanco County, 0.5 mi (0.8 km) downstream from Hutch Gulch, 11 mi (18 km) southwest of White River and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--495 mi^2 (1,282 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1970 to September 1972.

REMARKS.--Records of discharge are given for 09306200 Piceance Creek below Ryan Gulch, near Rio Blanco.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.												
20...	24	18	20	70	78	83	200	3.6	666	0	546	400
DEC.												
01...	18	17	10	30	78	76	170	2.6	602	0	494	360
15...	10	19	10	20	86	81	180	3.0	666	0	546	360
JAN.												
27...	18	18	20	20	83	79	180	3.2	618	0	507	360
FEB.												
24...	46	13	70	20	47	34	85	3.5	327	0	268	170
MAR.												
22...	3.4	21	40	150	83	100	280	3.9	865	0	709	530
APR.												
19...	3.7	17	40	150	72	110	360	4.7	920	24	795	570
MAY												
17...	4.1	18	50	210	68	120	440	4.7	1080	0	886	710
JUNE												
21...	6.0	19	80	9	68	110	360	4.7	983	0	806	580
JULY												
26...	11	9.9	70	17	72	83	240	3.0	681	0	559	420
AUG.												
30...	8.6	16	20	10	68	79	200	3.3	629	0	516	380
SEP.												
25...	3.5	17	50	50	65	100	270	2.6	781	0	641	500

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
20...	16	.6	.31	.03	1130	73.2	540	0	3.8	1620	7.9	4.0
DEC.												
01...	17	.8	.55	.03	1020	49.6	510	14	3.5	1480	7.9	1.0
15...	16	.7	.65	.04	1080	29.2	550	2	3.5	1600	8.1	.0
JAN.												
27...	16	.8	.52	.04	1050	51.0	530	26	3.4	1490	8.2	.5
FEB.												
24...	13	.5	.52	.01	529	65.7	260	0	2.5	812	7.6	1.5
MAR.												
22...	23	1.0	.37	.05	1470	13.5	620	0	4.9	2080	8.2	3.0
APR.												
19...	30	.9	.04	.15	1640	16.4	630	0	6.2	2310	8.4	15.0
MAY												
17...	32	1.1	.02	.05	1930	21.4	660	0	7.4	2740	8.3	10.5
JUNE												
21...	27	1.1	.04	.07	1650	26.7	620	0	6.3	2360	7.9	13.0
JULY												
26...	23	.8	.02	.00	1190	35.3	520	0	4.6	1710	7.4	12.0
AUG.												
30...	17	.8	.01	.03	1070	24.8	490	0	3.9	1580	8.0	11.0
SEP.												
25...	21	1.0	.05	.02	1360	12.9	570	0	4.9	2030	8.1	11.0

Table 33.--*Discharge at station 104, USGS 09306222*
Piceance Creek at White River, Colo.

LOCATION.--Lat 40°04'39", long 108°14'09", in SE¼SE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, on left bank 100 ft (30 m) downstream from county highway bridge, 1.0 mi (1.6 km) southwest of White River City, 1.3 mi (2.1 km) upstream from mouth and 17 mi (27 km) west of Meeker. Prior to Nov. 15, 1972, at site 100 ft (30 m) upstream.

DRAINAGE AREA.--629 mi^2 (1,629 km^2).

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (1,747 m) from topographic map. Oct. 1, 1964, to Sept. 30, 1966, at site 15 ft (5 m) upstream at datum 1.00 ft (0.305 m) higher. Oct. 1, 1970, to Nov. 14, 1972, at site 100 ft (30 m) upstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--5 years, 19.3 ft^3/s (0.547 m^3/s), 13,980 acre-ft/yr (17.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 284 ft^3/s (8.04 m^3/s) July 20 (gage height, 3.88 ft or 1.183 m); minimum daily, 3.6 ft^3/s (0.10 m^3/s) Oct. 1.
Period of record: Maximum discharge, 407 ft^3/s (11.5 m^3/s) Mar. 9, 1966 (gage height, 4.20 ft or 1.280 m, from floodmarks, site and datum then in use); minimum daily, 0.50 ft^3/s (0.014 m^3/s) July 21, 22 1966.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 5,500 acres (22.3 km^2) above station. One small diversion above station for irrigation of hay meadow below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	19	19	10	12	29	23	56	57	27	51	52
2	3.9	22	20	10	12	28	23	59	69	26	48	52
3	4.1	21	18	11	11	26	20	43	66	26	49	52
4	4.5	21	18	12	14	26	18	38	81	25	50	50
5	7.5	23	20	11	16	29	18	42	81	24	54	51
6	8.9	24	18	11	14	27	16	52	73	20	57	51
7	9.6	22	18	12	17	26	14	71	65	20	54	52
8	9.3	21	19	12	16	26	16	71	64	21	52	52
9	10	21	17	12	15	25	16	65	58	21	51	49
10	9.3	21	12	12	16	27	17	72	54	19	50	48
11	9.3	22	12	11	18	28	16	97	56	19	50	52
12	7.5	22	12	12	18	29	13	95	50	19	50	52
13	7.5	21	12	13	16	29	13	111	45	24	49	47
14	7.2	20	11	12	16	27	15	115	48	33	49	41
15	7.9	23	12	12	14	24	20	101	55	36	48	38
16	9.3	22	12	12	13	25	23	99	49	40	48	40
17	8.2	21	13	12	15	29	20	92	43	41	52	40
18	8.2	22	13	11	15	31	22	93	43	37	60	42
19	8.6	23	12	12	15	31	26	81	43	67	64	42
20	8.6	22	13	12	15	32	25	86	42	113	65	39
21	7.5	21	12	10	14	34	20	83	41	66	68	38
22	7.5	20	13	10	15	38	13	79	37	60	67	34
23	7.9	18	13	10	17	33	15	74	38	58	68	34
24	7.9	18	12	10	19	29	16	75	40	54	60	38
25	7.9	19	12	11	21	28	21	79	40	71	57	41
26	7.5	23	11	12	22	29	25	93	37	70	55	42
27	8.2	21	12	12	24	29	25	98	35	65	53	43
28	8.6	16	12	10	27	28	24	90	31	60	51	41
29	12	18	12	11	------	27	28	79	33	59	48	40
30	12	20	11	12	------	26	36	78	27	62	49	39
31	18	------	11	13	------	26	------	66	------	56	50	------
TOTAL	258.0	627	432	353	457	881	597	2,433	1,501	1,339	1,677	1,332
MEAN	8.32	20.9	13.9	11.4	16.3	28.4	19.9	78.5	50.0	43.2	54.1	44.4
MAX	18	24	20	13	27	38	36	115	81	113	68	52
MIN	3.6	16	11	10	11	24	13	38	27	19	48	34
AC-FT	512	1,240	857	700	906	1,750	1,180	4,830	2,980	2,660	3,330	2,640

CAL YR 1972 TOTAL 4,266.84 MEAN 11.7 MAX 100 MIN .84 AC-FT 8,460
WTR YR 1973 TOTAL 11,887.00 MEAN 32.6 MAX 115 MIN 3.6 AC-FT 23,580

Table 33.--*Discharge at station 104, USGS 09306222*
Piceance Creek at White River, Colo.--Continued

LOCATION.--Lat 49°04'39", long 108°14'08", in SE¼SE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, on right bank at downstream side of county highway bridge, 1.0 mi (1.6 km) southwest of White River City, 1.3 mi (2.1 km) upstream from mouth and 17 mi (27 km) west of Meeker.

DRAINAGE AREA.--629 m^2 (1,629 km^2).

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (1,747 m) from topographic map. Prior to Oct. 1, 1970, at site 85 ft downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 150 cfs (estimated) Feb. 23; minimum daily, 0.84 cfs May 24, 25. Period of record: Maximum discharge, 407 cfs Mar. 9, 1966 (gage height, 4.20 ft, from floodmarks); minimum daily, 0.50 cfs July 21, 22, 1965.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions for irrigation of about 5,500 acres above station. One small diversion above station for irrigation of hay meadow below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	25	25	18	26	45	5.2	2.4	1.4	2.0	2.4	4.7
2	7.9	24	25	18	28	33	3.9	2.0	1.3	2.0	4.5	4.3
3	7.5	23	26	14	24	34	3.9	2.1	2.2	2.0	7.5	4.3
4	7.5	23	25	14	25	67	4.1	1.8	4.7	2.0	7.2	4.3
5	8.6	23	21	15	25	39	4.1	1.7	12	2.0	6.7	4.9
6	10	20	23	15	26	36	3.9	2.0	5.7	2.0	5.9	4.9
7	10	20	25	15	26	35	4.1	2.1	4.3	1.5	4.9	4.7
8	11	23	18	15	27	27	4.1	2.1	4.5	1.4	4.7	5.4
9	11	23	17	16	28	22	4.1	2.1	4.7	1.3	5.2	5.7
10	10	29	18	17	29	19	4.7	2.1	3.0	1.3	6.5	4.7
11	11	29	18	19	30	15	3.9	6.2	2.8	1.4	6.5	4.7
12	11	28	16	21	29	12	4.1	8.2	2.8	1.7	7.9	4.3
13	12	30	18	22	27	10	3.9	6.5	2.5	1.3	7.2	4.1
14	11	29	16	21	25	11	4.3	5.4	2.2	1.3	7.5	4.1
15	12	27	16	20	23	10	4.3	3.2	2.1	1.3	7.2	4.3
16	14	30	16	22	23	9.6	3.6	2.4	2.1	1.3	6.7	3.6
17	16	29	15	24	23	8.9	3.4	2.2	2.1	1.3	5.4	3.4
18	16	24	14	27	25	8.6	3.0	2.1	2.1	1.3	4.7	3.4
19	17	21	16	25	29	8.6	3.0	1.8	2.2	1.3	4.7	4.3
20	17	24	17	27	40	8.2	3.2	1.1	2.2	1.3	4.7	4.3
21	17	27	18	30	52	7.9	3.0	.98	2.2	1.3	3.9	4.3
22	21	27	20	32	74	7.2	2.8	.91	2.1	1.2	3.6	5.4
23	20	26	23	29	90	6.7	2.7	.91	2.0	1.2	3.6	4.7
24	20	26	25	25	100	6.7	2.5	.84	1.8	1.2	3.6	4.1
25	21	26	25	26	70	6.7	2.4	.84	2.0	1.3	3.4	4.1
26	20	27	25	29	56	7.0	3.4	.98	2.0	1.3	3.9	3.6
27	20	27	24	32	40	6.7	2.8	.98	1.7	1.5	3.4	3.6
28	22	27	21	32	35	6.5	2.7	1.1	1.7	2.0	3.4	3.4
29	23	26	19	29	62	6.5	2.7	1.1	1.8	2.0	3.6	3.4
30	22	25	17	28	------	5.9	2.5	1.1	1.7	2.1	3.5	3.6
31	27	------	17	25	------	6.5	------	1.1	------	2.2	4.3	------
TOTAL	462.1	768	619	702	1,117	533.2	106.3	70.34	85.9	48.3	158.2	128.6
MEAN	14.9	25.6	20.0	22.6	38.5	17.2	3.54	2.27	2.86	1.56	5.10	4.29
MAX	27	30	26	32	100	67	5.2	8.2	12	2.2	7.9	5.7
MIN	7.5	20	14	14	23	5.9	2.4	.84	1.3	1.2	2.4	3.4
AC-FT	917	1,520	1,230	1,390	2,220	1,060	211	140	170	96	314	255

CAL YR 1971 TOTAL 5,921.21 MEAN 16.2 MAX 165 MIN .70 AC-FT 11,740
WTR YR 1972 TOTAL 4,798.94 MEAN 13.1 MAX 100 MIN .84 AC-FT 9,520

NOTE.--No gage-height record Dec. 9 to Feb. 29.

Table 34.--*Water quality at station 104, USGS 09306222*
Piceance Creek at White River, Colo.

LOCATION.--Lat 40°04'39", long 108°14'08", in SE¼SE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, at gaging station, on bridge on county highway, 1 mi (2 km) southwest of White River, 1.3 mi (2.1 km) upstream from mouth, and 17 mi (27 km) west of Meeker.

DRAINAGE AREA.--629 mi^2 (1,629 km^2).

PERIOD OF RECORDS.--Chemical analyses: December 1970 to September 1973.
Water temperatures: January 1971 to September 1973.

EXTREMES, 1972-73.--Specific conductance: Maximum daily, 5,800 micromhos Feb. 15; minimum daily, 1,330 micromhos May 11, 12, 13, 14.
Water temperatures: Maximum, 21°C Oct. 3, July 26, 27, 28; minimum, freezing point on many days during November to march.
Period of record.--Specific conductance: Maximum daily, 9,500 micromhos July 16, 1972; minimum daily, 687 micromhos Mar. 23, 1971.
Water temperatures: Maximum, 26°C June 6, 1972; minimum, freezing point on many days during the winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.												
05...	8.6	14	60	8	34	80	810	4.4	1540	143	1500	510
NOV.												
10...	20	17	70	50	68	84	360	3.6	1050	15	886	380
DEC.												
07...	18	18	70	50	59	92	690	3.9	1790	0	1470	450
JAN.												
16...	12	17	120	40	71	79	480	4.1	1210	55	1080	400
FEB.												
08...	16	18	60	30	76	74	200	3.1	708	0	581	350
MAR.												
06...	27	15	60	20	34	79	400	6.2	1080	0	886	370
APR.												
05...	18	15	40	0	67	88	380	3.0	1020	0	837	450
MAY												
24...	75	17	50	10	69	66	210	4.0	701	0	575	300
JUNE												
14...	47	19	50	20	68	88	390	4.5	1040	0	853	460
JULY												
12...	19	16	150	20	58	100	580	4.8	1460	0	1200	580
17...	42	20	100	10	74	110	460	4.5	1070	0	878	580
27...	63	20	120	20	77	89	290	3.3	802	0	658	420
AUG.												
30...	49	20	40	10	68	82	300	3.4	788	0	646	440

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
05...	110	7.0	.01	.08	2470	57.4	410	0	17	3531	8.7	8.5
NOV.												
10...	50	1.2	.30	.03	1500	81.0	520	0	6.9	2240	8.5	.0
DEC.												
07...	120	2.2	.55	.08	2320	113	530	0	13	3360	7.9	.0
JAN.												
16...	69	1.6	.50	.07	1770	57.3	500	0	9.3	2570	8.4	.0
FEB.												
08...	16	.8	.58	.05	1090	47.1	490	0	3.9	1640	8.2	.0
MAR.												
06...	53	1.4	.45	.06	1490	109	410	0	8.6	2200	8.1	5.0
APR.												
05...	55	1.3	.29	.06	1560	75.8	530	0	7.2	2210	8.1	1.0
MAY												
24...	27	.8	.65	.03	1040	211	440	0	4.3	1460	8.0	12.0
JUNE												
14...	41	1.3	.40	.09	1590	202	530	0	7.4	2280	8.3	14.5
JULY												
12...	75	1.7	.13	.06	2140	110	560	0	11	3070	8.3	15.0
17...	46	1.3	.27	.05	1830	208	640	0	7.9	2500	8.2	20.0
27...	31	.8	.79	.03	1330	226	560	0	5.3	1900	8.1	17.0
AUG.												
30...	35	.9	.71	.05	1340	177	510	0	5.8	1860	8.1	13.0

Table 34.--*Water quality at station 104, USGS 09306222 Piceance Creek at White River, Colo.*--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5000	2000	2100	3300	3200	2200	3000	1900	2000	3000	---	---
2	4750	3000	2300	3300	3150	1900	3000	1800	2000	3100	---	---
3	4250	3000	2450	3400	3150	2200	2800	1800	2050	3000	---	---
4	4200	2750	2400	3400	3100	2300	2400	1700	2100	3000	2420	---
5	4000	3000	3000	3400	3100	2850	2600	1790	2100	3250	2280	---
6	4000	3000	3200	3300	3000	2800	3500	1850	2300	3100	2300	---
7	4000	3250	2400	3400	2800	3000	3000	1600	2520	3500	2300	---
8	3750	3000	2400	3400	2700	2900	3000	1450	2280	3250	2300	---
9	3500	3250	2700	3300	2800	2950	2950	1400	2300	3500	2300	---
10	3000	3500	2700	3300	2700	3000	3000	1380	2300	3500	2300	---
11	3750	3500	3500	3200	2900	2900	3100	1330	2350	3300	2300	---
12	3750	2750	3000	3300	4100	2900	3400	1330	2480	3000	2300	---
13	4000	2700	3000	3200	5000	2800	3500	1330	2600	3250	2300	---
14	4000	2700	3000	3200	5200	3000	3400	1330	2650	3500	2300	---
15	3750	2950	3000	3200	5800	2950	3100	1380	2700	3500	2300	---
16	4200	2950	3000	3300	5600	2950	3000	1400	2850	3500	2300	---
17	4000	2800	3000	3250	5500	2900	2900	1400	2900	3500	2300	---
18	4000	2700	3000	3200	4000	2000	2700	1500	2900	3250	2300	---
19	4250	2800	3000	3300	3500	2800	2700	1500	2780	2900	2300	---
20	4000	2600	3000	3300	3800	2600	2600	1550	2800	2400	2250	---
21	4500	2600	3000	3200	4600	2600	2800	1600	2800	2800	2250	---
22	3750	2550	3100	3200	3500	2600	3000	1700	2800	2800	---	---
23	4000	2400	3200	3200	3400	2900	3500	1750	2900	2400	---	---
24	3750	2000	3500	3200	3300	3000	3600	1800	2850	2400	---	---
25	3000	2500	3750	3300	2000	3100	3100	1700	2850	2400	---	---
26	3250	2600	4000	3300	2200	3100	3000	1750	2800	2400	---	1600
27	3000	2550	4100	3200	2700	2900	3000	1800	2800	2300	---	1600
28	3250	2800	4000	3200	2400	3000	2700	1800	3000	2200	---	2000
29	3200	2350	4200	3200	---	2900	2800	1950	3000	2280	---	2000
30	3200	2000	4100	3250	---	2950	2000	2000	3000	2300	---	2080
31	1750	---	4200	3200	---	3000	---	2000	---	2300	---	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.5	2.0	0.0	1.0	0.0	0.0	10.0	6.0	11.0	14.0	---	---
2	11.0	5.0	0.0	1.0	0.0	0.0	10.0	7.0	11.0	16.0	---	---
3	21.0	5.0	0.0	1.0	0.0	0.0	10.0	10.0	12.0	15.0	---	---
4	14.0	5.0	0.0	1.0	0.0	0.0	10.0	10.0	13.0	16.0	14.0	---
5	15.0	5.0	0.0	1.0	0.0	0.0	10.0	10.0	8.0	16.0	16.0	---
6	12.0	5.0	0.0	0.0	0.0	0.0	4.0	8.0	12.0	17.0	13.0	---
7	14.0	6.0	1.0	0.0	0.0	0.0	4.0	8.0	17.0	15.0	14.0	---
8	17.0	5.0	2.5	1.0	0.0	0.0	2.0	8.0	13.0	15.0	14.0	---
9	12.0	6.5	0.0	1.0	0.0	0.0	3.0	9.0	15.0	15.0	15.0	---
10	14.0	7.0	1.0	0.0	0.0	1.0	4.0	10.0	13.0	15.0	15.0	---
11	16.0	6.0	0.0	0.0	0.0	5.0	5.0	11.0	12.0	15.0	14.0	---
12	17.0	5.0	0.0	1.0	0.0	3.0	3.0	13.0	13.0	14.0	13.0	---
13	15.0	5.5	0.0	0.0	0.0	1.0	4.0	15.0	13.0	14.0	15.0	---
14	15.0	5.5	0.0	0.0	0.0	1.0	4.0	17.0	13.0	13.0	13.0	---
15	17.0	6.5	0.0	1.0	0.0	0.0	4.0	11.0	12.0	14.0	13.0	---
16	14.0	6.5	1.0	0.0	0.0	0.0	4.0	10.0	18.0	14.0	14.0	---
17	12.0	5.0	2.0	0.0	0.0	0.0	5.0	11.0	11.0	14.0	14.0	---
18	14.0	6.0	6.0	0.0	0.0	5.0	5.0	18.0	11.0	14.0	13.0	---
19	15.0	7.0	1.0	0.0	0.0	2.0	1.0	18.0	8.0	14.0	15.0	---
20	16.0	4.5	2.0	0.0	0.0	3.0	3.0	18.0	11.0	14.0	14.0	---
21	17.0	4.5	1.0	0.0	0.0	3.0	4.0	16.0	11.0	15.0	13.0	---
22	14.0	3.5	1.0	0.0	0.0	3.0	6.0	16.0	11.0	13.0	---	---
23	12.0	1.5	2.0	0.0	0.0	2.0	7.0	16.0	12.0	13.0	---	---
24	10.0	1.0	1.0	0.0	0.0	2.0	8.0	15.0	13.0	14.0	---	---
25	11.5	4.0	2.0	0.0	0.0	1.0	10.0	13.0	13.0	14.0	---	---
26	12.0	4.5	2.0	0.0	0.0	1.0	17.0	13.0	14.0	21.0	---	14.0
27	9.5	6.0	2.0	0.0	0.0	2.0	16.0	12.0	15.0	21.0	---	13.0
28	6.0	0.0	1.0	0.0	0.0	3.0	8.0	12.0	14.0	21.0	---	6.0
29	3.0	0.0	1.0	0.0	---	9.0	8.0	11.0	15.0	16.0	---	7.0
30	3.0	0.0	0.0	1.0	---	6.0	7.0	11.0	16.0	15.0	---	10.0
31	1.0	---	1.0	0.0	---	6.0	---	12.0	---	15.0	---	---

Table 34.--*Water quality at station 104, USGS 09306222 Piceance Creek at White River, Colo.*--Continued

LOCATION.--Lat 40°04'39", long 108°14'08", in SE¼SE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, at gaging station, on bridge on county highway, 1 mi (2 km) southwest of White River, 1.3 mi (2.1 km) upstream from mouth, and 17 mi (27 km) west of Meeker.

DRAINAGE AREA.--629 mi^2 (1,629 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1970 to September 1972.
Water temperatures: January 1971 to September 1972.

EXTREMES, 1971-72.--Specific conductance: Maximum daily, 9,500 micromhos July 16; minimum daily, 950 micromhos Feb. 20, 21.
Water temperatures: Maximum, 26°C June 6; minimum, freezing point on many days during December to March.
Period of record.--Specific conductance: Maximum daily, 9,500 micromhos July 16, 1972; minimum daily, 687 micromhos Mar. 23, 1971.
Water temperatures: Maximum, 26°C June 6, 1972; minimum, freezing point on many days during the winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.												
20...	17	15	80	40	55	94	490	3.6	1190	0	976	510
DEC.												
01...	26	17	50	300	68	79	370	3.0	1050	0	861	390
15...	16	18	10	0	72	84	500	3.7	1290	0	1060	410
JAN.												
27...	32	17	20	10	71	76	390	4.6	1010	0	828	360
FEB.												
24...	100	14	80	40	62	47	180	4.4	583	0	478	240
MAR.												
22...	7.8	19	70	75	57	96	650	5.7	1600	0	1310	500
APR.												
19...	3.0	8.8	40	20	37	83	1000	5.2	2140	172	2040	420
MAY												
17...	2.2	9.4	90	40	36	95	1400	8.3	3200	75	2750	510
JUNE												
21...	2.2	9.3	70	10	31	88	1300	6.2	3110	0	2550	570
JULY												
26...	1.3	6.1	100	8	18	83	2000	7.1	4690	0	3847	480
AUG.												
30...	4.3	11	80	10	27	83	950	5.1	1500	389	1880	500
SEP.												
25...	4.1	12	60	30	34	90	890	4.4	1920	107	1750	520

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
20...	53	1.0	.14	.04	1810	83.1	520	0	9.3	2570	8.1	3.0
DEC.												
01...	47	1.2	.58	.07	1500	105	490	0	7.2	2110	8.0	.5
15...	68	1.6	.62	.10	1790	77.3	530	0	9.5	2650	8.1	.0
JAN.												
27...	49	1.2	.54	.07	1470	127	490	0	7.7	2040	8.2	.0
FEB.												
24...	31	.7	.77	.01	869	235	350	0	4.2	1330	8.0	.5
MAR.												
22...	96	2.0	.59	.07	2220	46.8	540	0	12	3170	8.3	1.0
APR.												
19...	180	4.0	.10	.20	2960	24.0	430	0	21	4530	8.6	15.0
MAY												
17...	280	3.4	.04	.07	3990	23.7	480	0	28	5960	8.6	9.0
JUNE												
21...	230	4.3	.01	.06	3770	22.4	440	0	27	5550	8.2	12.0
JULY												
26...	370	6.5	.00	.09	5280	18.5	390	0	44	7240	8.3	11.0
AUG.												
30...	150	2.9	.02	.07	2860	33.2	410	0	20	4180	8.5	11.0
SEP.												
25...	140	4.7	.47	.04	2750	30.4	460	0	18	4110	8.6	13.5

Table 34.--*Water quality at station 104, USGS 09306222 Piceance Creek at White River, Colo.*--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3000	2350	2050	2050	1900	1600	3500	5250	8000	5600	6000	4500
2	2900	2400	2100	2000	1900	1700	4000	5500	8000	6000	6000	4750
3	3000	2350	2200	2000	1800	2100	4000	8000	8000	6500	4500	5250
4	3100	2300	2150	2100	1750	1450	4250	8000	6000	5600	3500	5000
5	3200	2450	2100	2050	1700	1700	4500	8000	6000	6500	3500	4750
6	2900	2350	2000	2000	1700	1600	5000	8000	5000	6500	4250	5000
7	2800	2000	2200	1900	1730	1450	5000	8000	6000	6500	4750	4500
8	2850	2200	2300	2100	1730	1800	5000	8000	6000	7500	4750	4250
9	2950	2100	1800	2000	1800	2050	5600	8000	4600	8000	4500	4500
10	2900	2050	2400	2100	1850	2200	5500	8000	5600	9000	4250	4500
11	3000	---	2100	2100	1900	2200	5250	8000	5600	8000	4000	4500
12	2550	---	2000	2100	1900	2400	4800	8000	6000	7300	3750	5000
13	2950	---	1900	2000	1700	2900	4800	8000	6500	6500	3500	3500
14	3000	---	2100	2000	1700	3100	4600	6000	6500	6500	3000	5000
15	2900	---	2100	2050	1700	2600	4800	8000	5600	7000	3500	4750
16	2950	---	2050	2200	1250	3100	5500	8000	6500	9500	4000	4500
17	2800	---	2100	2300	1000	3250	4500	8000	6500	8000	4250	4750
18	2750	---	2050	2100	1000	3500	5100	8000	7000	7500	3750	5250
19	2700	---	2000	2000	1030	3500	5000	8000	5600	7000	4000	5000
20	2600	---	2100	2000	950	3250	5000	8000	4800	8500	4750	5000
21	1650	---	2150	2200	950	3600	5800	8000	6000	9000	4750	4500
22	2200	---	2100	2050	1000	3600	6000	8000	5400	8500	4500	4750
23	2400	---	2000	2000	950	3600	6000	8000	6000	7000	4750	5250
24	2350	---	2000	1900	1400	3600	5250	8000	7000	8500	5250	5000
25	2100	---	2100	1700	1550	3900	5300	8000	6500	8500	5500	4750
26	1900	---	2050	1900	1300	3500	3750	8000	6500	9000	5000	4500
27	2500	---	2000	2000	1400	3500	4500	8000	6000	8500	3750	4750
28	2600	---	2100	1950	1700	3600	5000	8000	6000	9000	5000	4750
29	2450	---	2100	1900	1400	3200	4800	8000	6500	7500	5000	4750
30	2400	---	2000	1800	---	3000	4600	8000	6000	6500	4500	4500
31	2550	---	2100	1900	---	3500	---	8000	---	6500	4750	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

Table 35.--*Discharge at station 105, USGS 09306255*
Yellow Creek near White River, Colo.

LOCATION.--Lat 40°10'07", long 108°24'02", in NE¼SW¼ sec.4, T.2 N., R.98 W., Rio Blanco County, on left bank 160 ft (49 m) downstream from bridge on State Highway 64, 0.3 mi (0.5 km) upstream from mouth, and 10 mi (16 km) northwest of White River City.

DRAINAGE AREA.--262 mi^2 (679 km^2).

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 5,535 ft (1,687 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 468 ft^3/s (13.3 m^3/s) Aug. 21 (gage height, 7.66 ft or 2.335 m, from floodmarks), from rating curve extended above 1.9 ft^3/s (0.05 m^3/s) on basis of step-backwater method; minimum daily, 0.02 ft^3/s (0.001 m^3/s) Feb. 8.
Flood of July 25, 1965, reached a discharge of 1,050 ft^3/s (29.7 m^3/s), by slope-area measurement of peak flow.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Diversions for irrigation of about 300 acres (1.21 km^2) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.80	1.0	.06	.20	2.1	2.6	1.7	2.0	.40	.68	1.4
2	.70	1.2	1.2	.06	.20	1.8	2.6	1.5	2.1	.40	.68	1.4
3	.60	1.1	1.3	.06	.16	1.8	2.4	1.4	2.1	.35	.54	1.2
4	.60	1.1	1.4	.08	.13	1.5	2.4	1.4	2.0	.35	.54	1.0
5	.60	1.3	1.7	.08	.16	1.5	2.3	1.5	1.7	.40	.68	1.0
6	.80	1.4	1.4	.08	.16	1.4	2.3	2.1	1.5	.82	.68	1.2
7	.80	1.3	1.0	.08	.13	1.1	2.1	1.8	1.4	.68	.54	.82
8	.70	1.2	1.2	.08	.02	1.4	1.5	1.7	1.1	.82	.54	.68
9	.80	1.1	1.4	.08	.03	1.5	1.5	1.7	.96	.68	.35	.40
10	1.0	1.0	1.0	.08	.20	1.4	1.8	1.5	.96	.54	.35	.82
11	.80	1.2	.40	.08	.54	1.5	2.0	1.4	.82	.54	.35	2.1
12	.70	1.2	.20	.08	1.4	2.7	2.0	1.4	.82	.54	.35	1.5
13	.50	1.3	.20	.08	1.7	3.7	1.8	1.4	1.1	.96	.30	1.1
14	.40	1.0	.10	.06	2.3	2.3	1.8	1.4	1.7	.82	.30	.96
15	.60	1.2	.10	.06	3.3	2.1	1.8	1.4	2.1	.82	.30	.82
16	.80	1.1	.10	.06	3.7	2.1	1.5	1.4	1.5	.96	.35	.82
17	.90	1.4	.20	.06	4.0	4.0	1.4	1.2	1.4	.82	.35	.82
18	.60	1.5	.30	.06	4.2	5.1	1.5	1.2	1.5	.96	.40	.82
19	.50	1.5	.40	.06	6.1	5.3	1.7	1.4	1.5	1.1	.60	.82
20	.60	1.5	.20	.06	4.4	5.7	1.5	1.4	1.4	1.2	15	.82
21	.50	1.4	.40	.08	3.7	6.1	1.5	1.5	1.2	1.1	90	.96
22	.40	1.1	.30	.08	4.7	4.2	1.4	1.7	1.1	1.1	10	.96
23	.60	.68	.40	.13	5.1	3.3	1.4	1.5	1.1	1.1	.60	1.2
24	.60	1.7	.30	.10	5.1	3.0	1.4	1.5	1.1	.96	.35	1.4
25	.50	1.5	.20	.10	6.7	2.9	1.7	1.8	1.1	.96	.35	1.6
26	.40	2.1	.05	.13	5.5	3.0	1.4	2.3	.96	.82	.40	1.7
27	.60	2.0	.05	.13	4.7	3.0	1.4	2.0	.82	.82	1.2	1.8
28	.80	1.7	.05	.16	2.9	2.7	1.4	1.8	.82	.82	1.7	1.4
29	1.0	1.4	.06	.16	------	2.6	1.5	1.7	.68	.82	1.8	1.2
30	.80	.90	.06	.16	------	2.6	2.1	1.7	.54	.96	1.7	1.2
31	.70	------	.06	.20	------	2.6	------	1.7	------	.82	1.4	------
TOTAL	20.60	38.88	16.73	2.83	71.43	86.0	53.7	49.1	39.08	24.44	133.38	33.92
MEAN	.66	1.30	.54	.091	2.55	2.77	1.79	1.58	1.30	.79	4.30	1.13
MAX	1.0	2.1	1.7	.20	6.7	6.1	2.6	2.3	2.1	1.2	90	2.1
MIN	.40	.68	.05	.06	.02	1.1	1.4	1.2	.54	.35	.30	.40
AC-FT	41	77	33	5.6	142	171	107	97	78	48	265	67

WTR YR 1973 TOTAL 570.09 MEAN 1.56 MAX 90 MIN .02 AC-FT 1,130

PEAK DISCHARGE (BASE, 100 CFS).--Aug. 21 (time unknown) 468 cfs (7.66 ft).

NOTE.--No gage-height record Oct. 1 to Nov. 16, Aug. 18-23.

Table 36.--*Water quality at station 105, USGS 09306255 Yellow Creek near White River, Colo.*

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
MAY , 1972												
16...	3920	--	--	--	--	--	--	10	0	--	--	--
AUG., 1973												
01...	3900	3070	1920	2.9	20	20	140	120	30	10	120	1000

DATE	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)
MAY , 1972												
16...	2	.0	2	0	10	--	--	--	--	--	--	--
AUG., 1973												
01...	--	--	--	--	--	0	920	<50	180	26	4	2800

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
MAY , 1972												
16...	--	--	--	660	--	--	--	--	--	4	0	2
AUG., 1973												
01...	4.6	1690	323	590	180	3.0	.400	.01	.00	8	--	--

Table 37.--*Discharge at station 106, CDWR P1, Piceance Creek below Black Sulphur Creek*

LOCATION.--In SW¼SE¼ sec.16, T.2 S., R.97 W., Rio Blanco County, on right bank about 300 feet downstream from Black Sulphur Creek.

PERIOD OF RECORD.--March 1968 through March 1974.

GAGE.--Staff in stilling well read weekly.

REMARKS.--Data by Colorado Division of Water Resources. Gage-height records for January-September 1972 available from Colorado Division of Water Resources, Office of the State Engineer.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
October 1972		*Jan. 1973*--Con.		*May 1973*--Con.		*Aug. 1973*--Con.		*Dec. 1973*--Con.	
5------	6.1	23------	10	8------	56	28------	54	10------	32
11------	2.0	30------	9.8	16------	105	*September 1973*		20------	[a]30
17------	2.0	*February 1973*		23------	93	5------	54	26------	28
25------	2.0	6------	12	29------	83	12------	47	*January 1974*	
November 1972		13------	11	*June 1973*		18------	44	2------	[a]28
1------	20	20------	13	5------	70	25------	34	10------	[a]28
8------	16	27------	16	12------	49	*October 1973*		18------	29
15------	16	*March 1973*		21------	34	2------	34	23------	33
22------	15	8------	14	27------	27	10------	38	29------	32
29------	20	16------	15	*July 1973*		17------	28	*February 1974*	
December 1972		22------	22	3------	34	23------	30	6------	32
5------	15	30------	16	12------	24	30------	32	12------	30
16------	13	*April 1973*		17------	32	*November 1973*		19------	32
22------	13	4------	13	25------	52	6------	32	26------	32
28------	13	11------	7.5	*August 1973*		15------	28	*March 1974*	
January 1973		17------	14	3------	70	20------	29	5------	34
3------	10	24------	11	8------	44	27------	27	12------	38
9------	11	*May 1973*		16------	44	*December 1973*		19------	48
16------	16	2------	34	22------	62	4------	25	26------	29

[a]No gage-height reading.

Table 38.--*Discharge at station 107, CDWR P2, Piceance Creek above Stewart Gulch*

LOCATION.--In NE¼NW¼ sec.4, T.3 S., R.96 W., Rio Blanco County, about 2.2 miles downstream from Gerald Oldland Ranch and 0.1 mile south of Stewart School.

PERIOD OF RECORD.--June 1968 through March 1974.

GAGE.--Staff read weekly.

REMARKS.--Data by Colorado Division of Water Resources. Gage-height records for January-September 1972 available from Colorado Division of Water Resources, Office of the State Engineer.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
October 1972		*Jan. 1973*--Con.		*May 1973*--Con.		*Aug. 1973*--Con.		*Dec. 1973*--Con.	
5------	5.1	24------	[a]4.0	9------	63	30------	16	10------	[b]12
11------	3.1	31------	[a]4.0	18------	69	*September 1973*		20------	[a]11
17------	3.0	*February 1973*		24------	43	5------	14	27------	[a]11
25------	3.6	7------	[a]5.0	30------	32	12------	10	*January 1974*	
November 1972		14------	[a]5.0	*June 1973*		18------	11	4------	[a]10
2------	4.4	21------	[a]5.0	6------	35	25------	11	9------	[a]9.0
9------	4.0	28------	[a]5.0	12------	14	*October 1973*		18------	[a]8.0
17------	4.2	*March 1973*		20------	14	2------	9.0	25------	[a]8.0
21------	5.3	8------	[a]5.0	26------	9.2	10------	8.5	30------	[a]8.0
28------	[a]5.3	16------	[a]5.0	*July 1973*		17------	6.5	*February 1974*	
December 1972		22------	6.2	6------	7.1	23------	7.6	8------	[b]7.1
6------	[a]5.0	30------	6.5	10------	7.6	30------	7.8	13------	7.1
17------	[a]5.0	*April 1973*		18------	7.1	*November 1973*		20------	5.6
23------	[a]5.0	4------	4.2	26------	8.3	6------	7.6	27------	7.4
29------	[a]5.0	11------	2.8	*August 1973*		15------	7.1	*March 1974*	
January 1973		18------	12	3------	6.9	22------	12	6------	7.6
4------	[a]4.0	26------	28	8------	8.0	28------	[b]11	13------	7.8
10------	[a]4.0	*May 1973*		16------	11	*December 1973*		20------	15
17------	[a]4.0	2------	42	22------	20	5------	[b]12	27------	7.6

[a]No gage-height reading.
[b]Ice affected.

Table 39.--*Discharge at station 108, CDWR CER 1, spring at Ryan Gulch and Piceance Creek*

LOCATION.--In NE¼SE¼ sec.32, T.1 S., R.97 W., Rio Blanco County, on right bank about 0.75 mile from Piceance Creek.

PERIOD OF RECORD.--July 1972 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.19	3------	0.28	3------	0.39	2------	0.25	2------	0.31
9------	.20	10------	.29	12------	.31	10------	.20	10------	.31
16------	.25	17------	.29	17------	.36	17------	.23	16------	.31
23------	.23	24------	.28	25------	.32	23------	.29	23------	.36
30------	.25	*May 1973*		*August 1973*		30------	.36	29------	.36
February 1973		1------	.29	2------	.29	*November 1973*		*February 1974*	
6------	.28	8------	.29	7------	.29	6------	.32	6------	.36
13------	.28	16------	.31	14------	.25	15------	.31	12------	.38
20------	.31	21------	.39	21------	.23	20------	.32	19------	.38
27------	.29	24------	.39	28------	.22	27------	.23	26------	.36
March 1973		29------	.39	*September 1973*		*December 1973*		*March 1974*	
6------	.29	*June 1973*		4------	.23	4------	.23	5------	.39
13------	.43	5------	.39	11------	.22	11------	.32	12------	.41
20------	.32	12------	.39	18------	.20	19------	.28	19------	.41
27------	.32	21------	.39	25------	.22	26------	.31	26------	.41
		27------	.36						

Table 40.--*Discharge at station 109, CDWR R2, spring at Reigle Ranch*

LOCATION.--In NE¼SW¼ sec.19, T.2 S., R.98 W., Rio Blanco County, at Reigle Ranch.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.117	3------	0.154	3------	0.350	2------	0.299	2------	0.196
9------	.124	10------	.154	12------	.361	10------	.329	10------	.196
16------	.124	17------	.154	17------	.361	17------	.309	16------	.196
23------	.124	24------	.154	25------	.382	23------	.309	23------	.196
30------	.131	*May 1973*		*August 1973*		30------	.299	29------	.205
February 1973		1------	.154	2------	.361	*November 1973*		*February 1974*	
6------	.131	8------	.154	7------	.339	6------	.319	6------	.205
13------	.131	16------	.154	14------	.329	15------	.187	12------	.187
20------	.131	21------	.382	21------	.329	20------	.187	19------	.196
27------	.138	24------	.371	30------	.329	27------	.187	26------	.205
March 1973		29------	.371	*September 1973*		*December 1973*		*March 1974*	
6------	.138	*June 1973*		4------	.329	4------	.187	5------	.205
13------	.138	5------	.404	11------	.309	11------	.196	12------	.213
20------	.146	12------	.382	18------	.309	19------	.196	19------	.231
27------	.146	21------	.299	25------	.309	26------	.196	26------	.222
		27------	.361						

Table 41.--*Discharge at station 110, CDWR R3, spring at Ryan Gulch above Galloway Gulch*

LOCATION.--In NW¼NW¼ sec.25, T.2 S., R.99 W., Rio Blanco County, about 0.7 mile above ditch forks and 1.7 miles above Reigle Ranch.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*May 1973*		*July 1973*--Con.		*October 1973*		*Dec. 1973*--Con.	
25------	0.154	1------	0.146	12------	0.260	2------	[a]0.450	19------	0.179
February 1973		8------	.138	17------	.269	10------	[a].485	26------	.179
27------	.154	16------	.154	25------	.289	17------	[a].462	*January 1974*	
March 1973		21------	.299	*August 1973*		23------	[a].462	2------	.187
6------	.146	24------	.299	2------	.269	30------	.154	10------	.205
13------	.146	29------	.289	7------	.260	*November 1973*		*February 1974*	
20------	.154	*June 1973*		14------	.260	6------	.146	12------	.187
27------	.162	5------	.299	21------	.260	15------	.146	19------	.179
April 1973		12------	.289	28------	.260	20------	.154	26------	.196
3------	.154	21------	.299	*September 1973*		27------	.162	*March 1974*	
10------	.154	27------	.289	4------	.269	*December 1973*		5------	.187
17------	.146	*July 1973*		11------	.250	4------	.170	12------	.187
24------	.138	3------	.289	18------	.289	11------	.170	19------	.196
				25------	[a].415			26------	.179

[a]Indicated discharge probably too great.

Table 42.--*Discharge at station 111, ARCO 1, spring at Black Sulphur Creek above Piceance Creek*

LOCATION.--In SE¼SW¼ sec.16, T.2 S., R.97 W., Rio Blanco County, at switchback in road and on right bank of Black Sulphur Creek about 0.25 mile west of Rock School.

PERIOD OF RECORD.--August 1971 to March 1974.

GAGE.--Nine-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.30	6------	0.32	3------	0.81	2------	0.37	2------	0.32
9------	.28	11------	.35	12------	.90	10------	.39	10------	.32
16------	.28	17------	.35	17------	.94	17------	.35	16------	.30
23------	.28	24------	.22	25------	.76	23------	.37	23------	.30
30------	.28	*May 1973*		*August 1973*		30------	.37	29------	.30
February 1973		1------	.28	2------	.54	*November 1973*		*February 1974*	
6------	.26	8------	.24	8------	.49	6------	.41	6------	.28
13------	.30	18------	.32	16------	.46	15------	.35	12------	.30
20------	.28	24------	.71	21------	.41	20------	.35	19------	.32
27------	.32	29------	.54	28------	.49	27------	.35	26------	.32
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
6------	.30	5------	.87	4------	.46	4------	.44	5------	.37
16------	.30	12------	.78	12------	.44	11------	.37	12------	.37
22------	.35	21------	.64	18------	.41	19------	.35	19------	.35
30------	.37	27------	.81	25------	.41	26------	.35	26------	.32

Table 43.--*Discharge at station 112, CDWR Black Sulphur, Black Sulphur Creek below Dry Gulch*

LOCATION.--In NE¼SW¼ sec.20, T.2 S., R.97 W., Rio Blanco County, about 0.4 mile downstream from mouth of Dry Gulch.

PERIOD OF RECORD.--April 1972 to March 1974.

GAGE.--Staff read weekly.

REMARKS.--Gage-height readings available from Colorado Division of Water Resources, Office of the State Engineer, for the period April-October 1972.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
October 1972		*Jan. 1973*--Con.		*May 1973*--Con.		*Aug. 1973*--Con.		*Dec. 1973*--Con.	
5------	0.76	23------	*(a)*	8------	1.60	28------	24.0	10------	[ab]11.0
11------	.76	30------	*(a)*	18------	28.0	*September 1973*		19------	[ab]10.0
17------	.90	*February 1973*		23------	48.0	4------	20.0	26------	9.3
25------	1.2	6------	*(a)*	29------	46.0	11------	17.0	*January 1974*	
November 1972		13------	*(a)*	*June 1973*		18------	17.0	2------	[ab]9.0
1------	3.20	20------	*(a)*	5------	43.0	25------	20.0	10------	[ab]9.0
8------	3.10	27------	*(a)*	12------	26.0	*October 1973*		18------	10.0
15------	3.00	*March 1973*		21------	26.0	2------	16.0	23------	9.3
22------	1.70	8------	*(a)*	27------	26.0	10------	16.0	29------	9.5
29------	2.00	16------	*(a)*	*July 1973*		17------	14.0	*February 1974*	
December 1972		22------	4.90	3------	20.0	23------	11.0	6------	8.6
5------	*(a)*	27------	4.40	12------	22.0	30------	12.0	12------	8.6
16------	*(a)*	*April 1973*		17------	26.0	*November 1973*		19------	8.4
22------	*(a)*	4------	3.42	25------	26.0	6------	12.0	26------	8.0
28------	*(a)*	10------	1.98	*August 1973*		15------	11.0	*March 1974*	
January 1973		17------	1.88	3------	31.0	20------	11.0	5------	8.4
3------	*(a)*	24------	1.11	8------	30.0	27------	10.0	12------	12.0
9------	*(a)*	*May 1973*		14------	27.0	*December 1973*		19------	9.2
16------	*(a)*	2------	1.20	21------	24.0	4------	11.0	26------	8.6

[a]Frozen over.
[b]Estimated.

Table 44.--*Discharge at station 113, CDWR CER 1, spring at Black Sulphur Creek below Eureka Creek*

LOCATION.--In SW¼SE¼ sec.19, T.2 S., R.97 W., Rio Blanco County, on right bank of Black Sulphur Creek about 0.25 mile downstream from mouth of Eureka Creek.

PERIOD OF RECORD.--July 1972 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*March 1973*--Con.		*May 1973*--Con.		*August 1973*		*Oct. 1973*--Con.	
3------	0.20	13------	0.22	24------	1.20	2------	1.23	10------	1.10
9------	.19	20------	.22	29------	1.12	7------	1.23	17------	1.10
16------	.18	27------	.22	*June 1973*		14------	1.17	23------	1.04
23------	.19	*April 1973*		5------	1.12	21------	1.17	30------	1.04
30------	.20	3------	.23	12------	1.12	28------	1.20	*November 1973*	
February 1973		10------	.22	21------	1.45	*September 1973*		6------	1.02
6------	.20	17------	.23	27------	1.36	4------	1.12	15------	*(a)*
13------	.20	24------	.22	*July 1973*		11------	1.10	*March 1974*	
20------	.20	*May 1973*		3------	2.22	18------	1.07	12------	*(a)*
27------	.20	1------	.25	12------	2.93	25------	1.10	19------	.69
March 1973		8------	.29	17------	1.36	*October 1973*		26------	*(a)*
6------	.20	18------	1.10	25------	1.26	2------	1.07		

[a]Flume washed out.

Table 45.--*Discharge at station 114, CDWR CER 2, spring at Black Sulphur Creek above Eureka Creek*

LOCATION.--In SW¼SW¼ sec.19, T.2 S., R.97 W., Rio Blanco County, about 0.3 mile upstream from Eureka Creek and 400 feet south of Black Sulphur Creek.

PERIOD OF RECORD.--July 1972 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*June 1973*--Con.		*September 1973*		*Nov. 1973*--Con.		*Jan. 1974*--Con.	
3------	0.038	27------	0.41	4------	0.14	15------	0.10	23------	0.05
9------	*(a)*	*July 1973*		11------	.11	20------	.08	29------	.05
May 1973		3------	[b].36	18------	.10	27------	.07	*February 1974*	
1------	.038	12------	[b]2.93	25------	.11	*December 1973*		6------	.05
8------	[b].038	17------	[b]1.23	*October 1973*		4------	.08	12------	.05
18------	.92	25------	.43	2------	.10	11------	.05	19------	.07
24------	.71	*August 1973*		10------	.10	19------	.06	26------	.08
29------	.26	2------	.16	17------	.10	26------	.05	*March 1974*	
June 1973		7------	.15	23------	.09	*January 1974*		5------	.06
5------	.22	14------	.12	30------	.10	2------	.05	12------	.07
12------	.23	21------	.14	*November 1973*		10------	.06	19------	.05
21------	[b]1.31	28------	.14	6------	.09	16------	.06	26------	.05

[a]Flume washed out.
[b]Indicated discharge too large.

Table 46.--*Discharge at station 115, CDWR CER 3, spring at Black Sulphur Creek above Eureka Creek*

LOCATION.--In SE¼SW¼ sec.24, T.2 S., R.98 W., Rio Blanco County, about 1 mile upstream from Eureka Creek and 400 feet south of Black Sulphur Creek.

PERIOD OF RECORD.--July 1972 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.38	3------	0.29	3------	[a]2.93	2------	0.69	2------	0.36
9------	.38	10------	.28	12------	1.23	10------	.73	10------	.31
16------	.39	17------	.31	17------	1.31	17------	.73	16------	.31
23------	.34	24------	.38	25------	1.23	23------	.71	23------	.31
30------	.31	*May 1973*		*August 1973*		30------	.69	29------	.25
February 1973		1------	.43	2------	1.23	*November 1973*		*February 1974*	
6------	.39	8------	.52	7------	1.17	6------	.65	6------	.29
13------	.34	18------	1.04	14------	1.04	15------	.61	12------	.28
20------	.34	24------	1.56	21------	1.02	20------	.58	19------	.28
27------	.32	29------	1.45	28------	.97	27------	.58	26------	.31
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
6------	.31	5------	1.34	4------	.94	4------	.48	5------	.29
13------	.31	12------	1.26	11------	.92	11------	.39	12------	.32
20------	.38	21------	1.45	18------	.76	19------	.39	19------	.34
27------	.31	27------	1.50	25------	.80	26------	.39	26------	.29

[a]Indicated discharge probably too small.

Table 47.--*Discharge at station 116, CDWR CER 4, spring at Black Sulphur Creek below Yankee Gulch*

LOCATION.--In NW¼NW¼ sec.26, T.2 S., R.98 W., Rio Blanco County, on right bank about 1.5 miles below Yankee Gulch and Duckett Ranch.

PERIOD OF RECORD.--July 1972 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*(b)*		*May 1973*--Con.		*March 1974*		*March 1974*--Con.	
3------	*(a)*	*May 1973*		8------	0.350	5------	*(a)*	19------	*(a)*
9------	*(a)*	1------	0.361	16------	*(a)*	12------	*(a)*	26------	*(a)*

[a]Flume washed out.
[b]No readings January 1973 to March 1974, except in May 1973.

Table 48.--*Discharge at station 117, CDWR CER 5, spring at Black Sulphur Creek below Yankee Gulch*

LOCATION.--In SW¼NE¼ sec.27, T.2 S., R.98 W., Rio Blanco County, on right bank about 0.9 mile below Yankee Gulch and Duckett Ranch.

PERIOD OF RECORD.--July 1972 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.154	3------	0.138	3------	0.462	2------	0.260	2------	0.196
9------	.146	10------	.138	12------	.462	10------	.241	10------	.213
16------	.138	17------	.146	17------	.558	17------	.241	16------	.213
23------	.138	24------	.131	25------	.509	23------	.231	23------	.205
30------	.154	*May 1973*		*August 1973*		30------	.231	29------	.187
February 1973		1------	.138	2------	.450	*November 1973*		*February 1974*	
6------	.124	8------	.146	7------	.450	6------	.162	6------	.205
13------	.117	18------	.534	14------	.393	15------	.196	12------	.196
20------	.109	24------	.623	21------	.361	20------	.196	19------	.196
27------	.117	29------	.571	28------	.339	27------	.205	26------	.187
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
6------	.131	5------	.610	4------	.329	4------	.196	5------	.196
13------	.146	12------	.546	11------	.299	11------	*a*	12------	.213
20------	.162	21------	.462	18------	.279	19------	.222	19------	.213
27------	.146	27------	.485	25------	.269	26------	.205	26------	.196

[a]Flume washed out.

Table 49.--*Discharge at station 118, CDWR B1, spring at Duckett Ranch*

LOCATION.--In SE¼SE¼ sec.28, T.2 S., R.98 W., Rio Blanco County, on right bank about 200 feet upstream from Yankee Gulch at Duckett Ranch.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Nine-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*March 1973*		*May 1973*--Con.		*Nov. 1973*--Con.		*Jan. 1974*--Con.	
3------	0.90	6------	1.00	8------	1.51	27------	1.66	29------	1.66
9------	.94	13------	1.10	16------	*(a)*	*December 1973*		*February 1974*	
16------	1.00	20------	1.20	24------	*(a)*	4------	1.66	6------	1.59
23------	.94	27------	1.06	29------	*(a)*	11------	1.74	12------	1.51
30------	1.00	*April 1973*		*June 1973*		19------	1.66	19------	1.44
February 1973		3------	.90	5------	*(a)*	26------	1.70	26------	1.44
6------	.97	10------	.81	12------	*(a)*	*January 1974*		*March 1974*	
13------	.87	17------	.76	21------	*(a)*	2------	1.66	5------	1.40
20------	.84	24------	.76	27------	*(b)*	10------	1.78	12------	1.40
27------	.76	*May 1973*		*November 1973*		16------	1.78	19------	1.40
		1------	.78	20------	1.66	23------	1.78	26------	1.37

[a]Flume submerged.
[b]Flume washed out.

Table 50.--*Discharge at station 119, CDWR B2, spring at Black Sulphur Creek below Swizer Gulch*

LOCATION.--In SW¼SE¼ sec.32, T.2 S., R.98 W., Rio Blanco County, on left bank of ditch and 0.7 mile downstream from mouth of Swizer Gulch.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	*(a)*	3------	0.15	3------	0.19	2------	0.22	2------	*(a)*
9------	*(a)*	10------	.16	12------	.19	10------	.26	10------	*(a)*
16------	*(a)*	17------	.12	17------	.25	17------	.23	16------	*(a)*
23------	*(a)*	24------	.12	25------	.23	23------	.23	23------	*(a)*
30------	*(a)*	*May 1973*		*August 1973*		30------	.25	29------	*(a)*
February 1973		1------	.19	2------	.22	*November 1973*		*February 1974*	
6------	*(a)*	8------	.15	7------	.23	6------	.28	6------	No reading
13------	*(a)*	16------	2.06	14------	.20	15------	.22	12------	Do.
20------	*(a)*	24------	.36	21------	.19	20------	*(a)*	19------	Do.
27------	*(a)*	29------	.34	28------	.22	27------	*(a)*	26------	Do.
March 1973		*June 1974*		*September 1973*		*December 1973*		*March 1974*	
6------	*(a)*	5------	.52	4------	.16	4------	*(a)*	5------	Do.
13------	*(a)*	12------	.23	11------	.36	11------	*(a)*	12------	Do.
20------	*(a)*	21------	.25	18------	.18	19------	*(a)*	19------	0.15
27------	*(a)*	27------	.39	25------	.50	26------	*(a)*	26------	.29

[a]Frozen over.

Table 51.--*Discharge at station 120, CDWR B3, spring at Black Sulphur Creek below Swizer Gulch*

LOCATION.--In SW¼SE¼ sec.32, T.2 S., R.98 W., Rio Blanco County, on right bank 0.6 mile below mouth of Swizer Gulch.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.109	3------	0.131	3------	0.462	2------	0.584	2------	0.427
9------	.102	10------	.124	12------	.450	10------	.558	10------	.371
16------	.102	17------	.117	17------	.509	17------	.584	16------	.371
23------	.095	24------	.124	25------	.509	23------	.584	23------	.415
30------	.089	*May 1973*		*August 1973*		30------	.339	29------	.427
February 1973		1------	[a].170	2------	.497	*November 1973*		*February 1974*	
6------	.117	8------	[a].339	7------	.497	6------	.289	6------	.415
13------	.109	16------	*(b)*	14------	.485	15------	.415	12------	.404
20------	.117	24------	*(b)*	21------	.485	20------	.546	19------	.404
27------	.117	29------	*(b)*	28------	.485	27------	.546	26------	.393
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
6 ------	.117	5------	.485	4------	.485	4------	.546	5------	.361
13------	.117	12------	.522	11------	.546	11------	.534	12------	.404
20------	.179	21------	.509	18------	.509	19------	.450	19------	.427
27------	.187	27------	.522	25------	.571	26------	.427	26------	.404

[a]Indicated discharge probably too great.
[b]Flume submerged.

Table 52.--*Discharge at station 121, CDWR ARCO 2, Black Sulphur Creek above Canyon Creek*

LOCATION.--In SW¼NE¼ sec.26, T.3 S., R.99 W., Rio Blanco County, about 150 feet above Canyon Creek.

PERIOD OF RECORD.--July 1972 to March 1974.

GAGE.--Two-foot Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	No reading	3------	No reading	3------	6.00	2------	1.72	2------	No reading
9------	----do----	10------	1.05	12------	5.12	10------	1.86	10------	Do.
16------	----do----	17------	2.40	17------	4.40	17------	1.50	16------	Do.
23------	----do----	24------	3.53	25------	3.62	23------	1.44	23------	Do.
30------	----do----	*May 1973*		*August 1973*		30------	1.50	29------	Do.
February 1973		1------	8.25	2------	2.90	*November 1973*		*February 1974*	
6------	----do----	8------	10.60	7------	No reading	6------	2.48	6------	Do.
13------	----do----	16------	*(a)*	14------	2.24	15------	1.37	12------	Do.
20------	----do----	24------	*(a)*	21------	2.32	20------	*(b)*	19------	Do.
27------	----do----	29------	*(a)*	28------	2.40	27------	*(b)*	26------	Do.
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
6------	----do----	5------	12.40	4------	2.01	4------	*(b)*	5------	Do.
13------	----do----	12------	11.30	11------	2.16	11------	No reading	12------	Do.
20------	----do----	21------	9.45	18------	1.64	19------	----do----	19------	Do.
27------	----do----	27------	7.39	25------	2.01	26------	----do----	26------	1.24

[a]Flume submerged.
[b]Frozen over.

Table 53.--*Discharge at station 122, CDWR F1, spring at Fawn Creek above Little Dry Gulch*

LOCATION.--In SE¼NE¼ sec.30, T.2 S., R.97 W., Rio Blanco County, on right bank about 0.4 mile above Little Dry Gulch and 0.7 mile above Black Sulphur Creek.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.52	3------	0.45	3------	2.93	2------	1.77	2------	0.65
9------	.52	10------	.43	10------	2.93	10------	1.31	10------	.71
16------	.50	17------	.41	17------	2.93	17------	1.04	16------	1.04
23------	.54	24------	.39	25------	2.06	23------	.92	23------	.82
30------	.56	*May 1973*		*August 1973*		30------	.87	29------	.64
February 1973		1------	.36	2------	2.22	*November 1973*		*February 1974*	
6------	.56	8------	.31	7------	2.16	6------	.85	6------	.65
13------	.56	16------	.31	14------	2.03	15------	.80	12------	.67
20------	.61	21------	.89	21------	1.93	20------	.76	19------	.69
27------	.69	24------	1.12	28------	1.81	27------	.73	26------	.69
March 1973		29------	1.42	*September 1973*		*December 1973*		*March 1974*	
6------	.56	*June 1973*		4------	1.65	4------	.73	5------	.89
13------	.56	5------	1.93	11------	1.74	11------	.71	12------	.73
20------	.54	12------	1.59	18------	2.93	19------	.69	19------	.78
27------	.50	21------	2.06	25------	1.74	26------	.69	26------	.75
		27------	2.93						

Table 54.--*Discharge at station 123, CDWR F2, spring at Fawn Creek*

LOCATION.--In SW¼NW¼ sec.31, T.2 S., R.97 W., Rio Blanco County, about 1.8 miles above Little Dry Gulch and 2.1 miles above Black Sulphur Creek.

PERIOD OF RECORD.--June 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.38	3------	0.43	3------	1.90	2------	1.39	2------	1.04
9------	.36	10------	.47	10------	1.74	10------	1.36	10------	*(a)*
16------	.39	17------	.45	17------	1.71	17------	1.39	16------	*(a)*
23------	.48	24------	.43	25------	1.97	23------	1.26	23------	*(a)*
30------	.47	*May 1973*		*August 1973*		30------	1.28	29-----	*(a)*
February 1973		1------	.43	2------	1.65	*November 1973*		*February 1974*	
6------	.48	8------	.43	7------	1.59	6------	1.23	6-----	1.02
13------	.48	16------	.92	14------	1.74	15------	1.15	12------	1.04
20------	.50	21------	2.93	21------	1.68	20-----	1.15	19------	1.04
27------	.48	24------	2.93	28------	1.62	21------	1.15	26------	.99
March 1973		29------	2.93	*September 1973*		*December 1973*		*March 1974*	
6------	.48	*June 1973*		4------	1.56	4------	1.15	5------	.94
13------	.48	5------	1.87	11------	1.53	11------	1.07	12------	.97
20------	.65	12------	1.74	18------	1.31	19------	1.07	19------	*(a)*
27------	.47	21------	2.06	25------	1.50	26------	1.07	26------	*(a)*
		27------	2.16						

[a]Flume washed out.

Table 55.--*Discharge at station 124, CDWR F3, spring at Fawn Creek below East and West Fawn Creeks*

LOCATION.--In NW¼SE¼ sec.22, T.3 S., R.98 W., Rio Blanco County, about 0.4 mile below junction of East and West Fawn Creeks and at road crossing of Fawn Creek.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
3------	0.41	3------	0.41	3------	[a]2.93	2------	2.93	2------	1.45
9------	.41	10------	.41	10------	[a]2.93	10------	2.86	10------	1.42
16------	.39	17------	.41	17------	[a]2.93	17------	2.57	16------	1.36
23------	.39	24------	.43	25------	[a]2.93	23------	2.40	23------	1.34
30------	.39	*May 1973*		*August 1973*		30------	2.22	29------	1.28
February 1973		1------	.43	2------	[a]2.93	*November 1973*		*February 1974*	
6------	.39	8------	.39	7------	[a]2.93	6------	2.12	6------	1.28
13------	.39	16------	.39	14------	[a]2.93	15------	1.90	12------	1.31
20------	.43	21------	2.06	21------	[a]2.93	20------	1.90	19------	1.28
27------	.41	24------	.99	28------	[a]2.93	27------	1.77	26------	1.26
March 1973		29------	1.39	*September 1973*		*December 1973*		*March 1974*	
6------	.41	*June 1973*		4------	[a]2.93	4------	1.65	5------	1.28
13------	.41	5------	[a]2.93	11------	[a]2.93	11------	1.59	12------	1.26
20------	.47	12------	[a]2.93	18------	[a]2.93	19------	1.74	19------	1.23
27------	.45	21------	[a]2.93	25------	[a]2.93	26------	1.74	26------	1.20
		27------	[a]2.93						

[a]Indicated discharge too small.

Table 56.--*Discharge at station 125, CDWR, Hunter Creek at Piceance Creek*

LOCATION.--In SW¼SE¼ sec.27, T.2 S., R.97 W., Rio Blanco County, about 400 feet upstream from Piceance Creek.

PERIOD OF RECORD.--March 1968 to March 1974.

GAGE.--Twelve-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	*(a)*	6------	0.99	6------	1.03	2------	0.01	4------	3.07
10------	*(a)*	11------	.99	10------	.49	10------	.43	9------	2.85
17------	*(a)*	18------	.99	18------	.54	17------	No reading	18------	2.90
24------	*(a)*	26------	.29	26------	.35	23-----	----do----	25------	3.12
31------	0.64	*May 1973*		*August 1973*		30------	2.33	30------	3.07
February 1973		3------	.29	3------	.35	*November 1973*		*February 1974*	
7------	.88	9------	.29	8------	1.15	6------	2.33	8------	3.12
14------	.88	18------	.35	16------	2.13	15------	2.03	13------	3.12
21------	*(a)*	24------	.49	22------	2.38	20------	2.03	19------	3.12
28------	1.11	30------	.64	30------	.64	27------	2.08	27------	3.07
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	.95	6------	.49	5------	.61	5------	2.08	6------	3.29
16------	1.75	12------	.49	12------	.68	13------	2.58	13------	3.70
22------	1.23	20------	1.11	18------	.01	20------	3.02	20------	3.02
30------	.95	26------	.35	25------	.03	27------	3.07	27------	2.85

[a]Frozen over.

Table 57.--*Discharge at station 126, CDWR H1, spring at Hunter Creek above Piceance Creek*

LOCATION.--In NE¼SW¼ sec.27, T.2 S., R.97 W., Rio Blanco County, on right bank near roadway and about 0.65 mile upstream from Piceance Creek.

PERIOD OF RECORD.--March 1968 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*--Con.		*October 1973*		*January 1974*	
4------	0.99	4------	[a]1.81	10------	0	2------	[a]1.62	4------	No reading
10------	.97	11------	[a]1.81	18------	[a]2.22	10------	[a]2.00	9------	Do.
17------	.94	18------	[a]1.81	26------	.19	17------	No reading	18------	Do.
24------	.92	26------	0	*August 1973*		23------	----do----	25------	Do.
31------	.89	*May 1973*		3------	.19	30------	2.06	30------	Do.
February 1973		2------	0	8------	1.62	*November 1973*		*February 1974*	
7------	.92	9------	0	16------	[a]1.50	6------	2.10	8------	Do.
14------	.99	18------	0	22------	[a]1.50	15------	2.26	13------	*(b)*
21------	1.02	*June 1973*		30------	[a]1.50	20------	2.26	20------	*(b)*
28------	1.17	6------	0	*September 1973*		27------	2.43	27------	*(b)*
March 1973		12------	[a]1.90	5------	[a]1.50	*December 1973*		*March 1974*	
8------	1.42	20------	0	12------	[a]1.59	5------	2.40	6------	*(b)*
16------	1.45	26------	0	18------	[a]1.59	13------	No reading	13------	*(b)*
22------	1.74	*July 1973*		25------	[a]1.74	20------	----do----	20------	*(b)*
30------	1.87	6------	0			27------	----do----	27------	*(b)*

[a]Indicated discharge probably too great.
[b]No discharge record.

Table 58.--*Discharge at station 127, CDWR H2, spring at Hunter Creek*

LOCATION.--In SW¼NW¼ sec.9, T.3 S., R.97 W., Rio Blanco County, on right bank about 1.8 miles above Enoch Gulch and near road crossing.

PERIOD OF RECORD.--June 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	0.23	6------	0.23	6------	1.31	2------	2.06	4------	1.04
10------	.25	11------	.25	10------	.92	10------	1.74	9------	.92
17------	.23	18------	.25	18------	.71	17------	No reading	18------	.82
24------	.25	26------	.34	26------	.65	23------	----do----	25------	.69
31------	.25	*May 1973*		*August 1973*		30------	2.29	30------	.69
February 1973		3------	.36	3------	.73	*November 1973*		*February 1974*	
7------	.23	9------	.36	8------	1.07	6------	2.36	8------	.58
14------	.23	18------	.48	16------	1.65	15------	1.45	13------	.52
21-----	.26	24------	1.07	22------	2.40	20------	1.45	20------	.80
28------	.23	30------	.71	30------	2.57	27------	1.39	27------	1.04
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	.22	6------	.52	5------	2.06	5------	1.31	6------	1.23
16------	.22	12------	.47	12------	1.84	13------	1.28	13------	1.23
22------	.20	20------	.69	18------	1.87	20------	1.20	20------	1.23
30------	.26	26------	1.17	25------	2.12	27------	1.04	27------	1.17

Table 59.--*Discharge at station 128, CDWR H3, spring at Hunter Creek*

LOCATION.--In NW¼SE¼ sec.17, T.3 S., R.97 W., Rio Blanco County, about 3.0 miles above Enoch Gulch and 0.6 mile above pond on stream.

PERIOD OF RECORD.--June 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	0.92	6------	0.92	6------	2.75	2------	[a]2.93	4------	2.89
10------	.92	11------	.92	10------	2.75	10------	[a]2.93	9------	2.75
17------	.94	18------	.92	18------	[a]2.93	17------	No reading	18------	2.75
24------	.92	26------	.92	26------	[a]2.93	23-----	----do----	25------	2.71
31------	.92	*May 1973*		*August 1973*		30------	[a]2.93	30------	2.64
February 1973		3------	.94	3------	[a]2.93	*November 1973*		*February 1974*	
7------	.92	9------	.92	8------	[a]2.93	6------	[a]2.93	8------	2.57
14------	.92	18------	1.68	16------	[a]2.93	15------	[a]2.93	13------	2.53
21------	.94	24------	1.90	22------	[a]2.93	20------	[a]2.93	20------	2.57
28------	.92	30------	2.00	30------	[a]2.93	27------	[a]2.93	27------	2.57
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	.94	6------	2.06	5------	[a]2.93	5------	[a]2.93	6------	2.50
16------	.92	12------	2.75	12------	[a]2.93	13------	[a]2.93	13------	2.53
22------	.92	20------	2.40	18------	[a]2.93	20------	[a]2.93	20------	2.53
30------	.94	26------	2.57	25------	[a]2.93	27------	[a]2.93	27------	2.57

[a]Indicated discharge too small.

Table 60.--*Discharge at station 129, CDWR H4, spring at Hunter Creek*

LOCATION.--In SW¼NE¼ sec.30, T.3 S., R.97 W., Rio Blanco County, on left bank about 1.5 miles downstream from junction of East and West Hunter Creeks and next to roadway.

PERIOD OF RECORD.--June 1968 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	No reading	6------	0.415	6------	[a]3.00	2------	*(b)*	4------	0.872
10------	----do----	11------	.427	10------	[a]3.00	10------	*(b)*	9------	.902
17------	----do----	18------	.415	18------	[a]3.00	17------	*(b)*	18------	.902
25------	0.382	26------	.415	26------	[a]3.00	23------	*(b)*	25------	.916
31------	No reading	*May 1973*		*August 1973*		30------	*(b)*	31------	.946
February 1973		3------	.404	3------	[a]3.00	*November 1973*		*February 1974*	
7------	----do----	9------	.393	8------	[a]3.00	6------	*(b)*	8------	.916
14------	----do----	18------	.546	16------	[a]3.00	15------	1.07	13------	.902
21------	----do----	24------	.597	22------	[a]3.00	20------	1.07	20------	.916
28------	----do----	30------	.689	30------	[a]3.00	27------	.961	27------	.946
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	----do----	6------	.800	5------	[a]3.00	5------	1.07	6------	.992
16------	----do----	12------	[a]3.00	12------	[a]3.00	13------	.992	13------	.992
22------	----do----	20------	[a]3.00	18------	[a]3.00	20------	.827	20------	.992
30------	----do----	26------	[a]3.00	25------	[a]3.00	27------	.887	27------	.992

[a]Estimated.
[b]Flume washed out.

Table 61.--*Discharge at station 130, CDWR H1A, spring at Hunter Creek above Piceance Creek*

LOCATION.--In NE¼SW¼ sec.27, T.2 S., R.97 W., Rio Blanco County, on right bank about 200 feet north of roadway and about 0.65 mile upstream from Piceance Creek.

PERIOD OF RECORD.--May 1970 to March 1974.

GAGE.--Two-foot rectangular flume.

REMARKS.--Miscellaneous data available. Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	0	4------	0	6------	*(a)*	2------	0	4------	0
10------	0	11------	0	10------	*(a)*	10------	0	9------	0
17------	0	18------	0	18------	0	17------	No reading	18------	0
24------	0	26------	*(a)*	26------	*(a)*	23------	----do----	25------	0
31------	0	*May 1973*		*August 1973*		30------	0	30------	0
February 1973		2------	0.56	3------	*(a)*	*November 1973*		*February 1974*	
7------	0	9------	*(a)*	8------	0	6------	0	8------	0
14------	0	18------	*(a)*	16------	0	15------	0	13------	0
21------	0	24------	*(a)*	22------	0	20------	0	20------	0
28------	0	30------	*(a)*	30------	0	27------	0	27------	0
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	0	6------	*(a)*	5------	0	5------	0	6------	0
16------	0	12------	0	12------	0	13------	0	13------	0
22------	0	20------	*(a)*	18------	0	20------	0	20------	0
30------	0	26------	*(a)*	25------	0	27------	0	27------	0

[a]Gage-height record only.

Table 62.--*Discharge at station 131, CDWR W1, spring at P-L Ranch*

LOCATION.--In SW¼SE¼ sec.26, T.2 S., R.97 W., Rio Blanco County, 900 feet west from mouth of Willow Creek.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	0.54	6------	0.50	6------	0.58	2------	0.69	4------	0.61
10------	.54	11------	.50	10------	.58	10------	.58	9------	.58
17------	.56	18------	.34	18------	.58	17------	No reading	18------	.58
24------	.56	26------	.39	26------	.61	23------	----do----	25------	.58
31------	.56	*May 1973*		*August 1973*		30-----	.67	30------	.58
February 1973		3------	.41	3------	.56	*November 1973*		*February 1974*	
7------	.54	9------	.42	8------	.54	6------	.67	8------	.58
14------	.52	18------	.58	16------	.54	15------	.76	13------	.58
21------	.54	24------	.52	22------	.56	20------	.73	20------	.61
28------	.50	30------	.58	30------	.58	27------	.67	27------	.58
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	.52	6------	.58	5------	.56	5------	.61	6------	.63
16------	.45	12------	.58	12------	.69	13------	.69	13------	.65
22------	.45	20------	.67	18------	.67	20------	.61	20------	No reading
30------	.39	26------	.56	25------	.65	27------	.58	27------	Do.

Table 63.--*Discharge at station 132, CDWR W3, spring at Willow Creek*

LOCATION.--In NW¼SW¼ sec.14, T.3 S., R.97 W., Rio Blanco County, about 2.6 miles above Scandard Gulch near pond and 200 feet from roadway.

PERIOD OF RECORD.--April 1968 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	0.52	6------	0.71	6------	1.02	2------	1.26	4------	0.87
10------	.52	11------	.69	10------	1.07	10------	1.23	9------	.89
17------	.50	18------	.67	18------	1.07	17------	No reading	18------	.89
24------	.52	26------	.69	26------	1.07	23------	----do----	25------	.85
31------	.52	*May 1973*		*August 1973*		30------	1.07	30------	.82
February 1973		3------	.69	3------	1.12	*November 1973*		*February 1974*	
7------	.54	9------	.69	8------	1.10	6------	1.07	8------	.85
14------	.54	18------	.80	16------	1.10	15------	.99	13------	.85
21------	.56	24------	.82	22------	1.10	20------	.97	20------	.82
28------	.58	30------	.85	30------	1.12	27------	.89	27------	.80
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	.61	6------	.92	5------	1.10	5------	.87	6------	.80
16------	.63	12------	.94	12------	1.31	13------	.85	13------	.76
22------	.67	20------	1.04	18------	1.23	20------	.89	20------	.76
30------	.67	26------	1.02	25------	1.20	27------	.87	27------	.69

Table 64.--*Discharge at station 133, CDWR W4, spring at Willow Creek*

LOCATION.--In center sec.27, T.3 S., R.97 W., Rio Blanco County, on left bank about 2.4 miles below junction of East and West Willow Creeks.

PERIOD OF RECORD.--June 1968 to March 1974.

GAGE.--Three-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	0.339	6------	0.371	6------	[a]1.32	2------	0.427	4------	0.404
10------	.339	11------	.350	10------	[a]1.32	10------	.462	9-----	No reading
17------	.339	18------	.371	18------	.636	17------	No reading	18------	.382
24------	.339	26------	.361	25------	.623	23------	----do----	25------	.361
31------	.350	*May 1973*		*August 1973*		30------	.522	30------	.361
February 1973		3------	.371	3------	[a].916	*November 1973*		*February 1974*	
7------	.350	9------	.371	8------	[a].992	6------	.522	8------	.371
14------	.361	18------	.497	16------	.522	15------	.450	13------	.361
21------	.371	24------	.485	22------	.522	20-----	.450	20------	.361
28------	.361	30------	.522	30-----	.485	27------	.415	27------	.339
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	.361	6------	.828	5------	.485	5------	.415	6------	.371
16------	.361	12------	.636	12------	.474	13------	.404	13------	.371
22------	.371	20------	.584	18------	.462	20------	.404	20------	.371
30------	.361	26------	.623	25------	.450	27------	.415	27------	.339

[a]Indicated discharge too great.

Table 65.--*Discharge at station 134, CDWR S1, spring at Stewart Gulch and Piceance Creek*

LOCATION.--In NE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, about 800 feet upstream from mouth of Stewart Gulch and at bend in road, upstream from station 137, CDWR S1A.

PERIOD OF RECORD.--June 1968 to May 1973.

GAGE.--Nine-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*February 1973*		*March 1973*		*April 1973*		*May 1973*	
4------	[a]0.90	7------	*(b)*	8------	*(b)*	6------	1.51	3------	*(b)*
10------	[a].62	14------	*(b)*	16------	*(b)*	11------	1.48	9------	*(b)*
17------	[a].62	21------	*(b)*	22------	*(b)*	18------	.94	18------	*(b)*
31------	[a].62	28------	*(b)*	30------	1.55	26------	1.13	24------	*(b)*
								30------	*(c)*

[a]Indicated discharge probably too small.
[b]Flume washed out.
[c]Flume not repaired as of March 1974.

Table 66.--*Discharge at station 135, CDWR CER 6, spring at Stewart Gulch below Middle Fork*

LOCATION.--In SE¼NW¼ sec.9, T.3 S., R.96 W., Rio Blanco County, on left bank about 0.5 mile below junction of East and Middle Forks of Stewart Gulch.

PERIOD OF RECORD.--August 1972 to March 1974.

GAGE.--Eighteen-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	1.36	6------	1.64	6------	1.82	2------	4.42	4------	3.31
10------	1.36	11------	1.64	10------	2.13	10------	No reading	13------	3.39
17------	1.30	18------	1.64	18------	2.19	17------	3.77	18------	3.62
24------	1.36	26------	1.64	26------	2.25	23------	3.62	25------	3.69
31------	1.41	*May 1973*		*August 1973*		30------	3.46	30------	*(a)*
February 1973		3------	1.64	3------	2.32	*November 1973*		*February 1974*	
7------	1.41	9------	1.53	8------	2.39	6------	3.46	6------	3.62
14------	1.47	18------	1.58	16------	2.66	15------	3.17	13------	3.62
21------	1.47	24------	1.76	22------	3.02	22------	3.09	20------	3.46
28------	1.47	30------	1.76	30------	3.62	28------	3.02	27------	3.46
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	1.53	6------	1.82	5------	4.17	4------	3.02	6------	3.46
16------	1.53	12------	1.94	12------	4.42	13------	2.95	13------	3.54
22------	1.58	20------	2.00	18------	4.67	20------	3.09	20------	3.46
30------	1.64	26------	2.06	25------	4.67	27------	3.17	27------	3.31

[a]Flume washed out.

Table 67.--*Discharge at station 136, CDWR CER 7, spring at Middle Fork Stewart Gulch*

LOCATION.--In SW¼NE¼ sec.28, T.3 S., R.96 W., Rio Blanco County, on right bank about 0.8 mile above East Twin Gulch.

PERIOD OF RECORD.--August 1972 to March 1974.

GAGE.--Six-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*		*October 1973*		*January 1974*	
4------	0.73	6------	*(a)*	6------	1.62	2------	0.67	4------	1.53
10------	No reading	11------	*(a)*	10------	1.87	10------	No reading	9------	1.45
17------	.73	18------	*(a)*	18------	2.16	17------	1.17	18------	1.39
24------	No reading	26------	*(a)*	26------	1.87	23------	No reading	25------	1.36
31------	*(a)*	*May 1973*		*August 1973*		30------	----do----	30------	1.26
February 1973		3------	0.85	3------	1.62	*November 1973*		*February 1974*	
7------	*(a)*	9------	.87	8------	1.68	6------	1.17	8------	*(a)*
14------	*(a)*	18------	1.07	16------	2.29	15------	1.31	13------	*(a)*
21------	*(a)*	24------	1.02	22------	2.00	22------	1.23	20------	*(a)*
28------	*(a)*	30------	1.10	30------	1.45	28------	1.53	28------	*(a)*
March 1973		*June 1973*		*September 1973*		*December 1973*		*March 1974*	
8------	*(a)*	6------	1.17	5------	1.31	4------	1.59	6------	*(a)*
16------	*(a)*	12------	1.34	12------	.73	13------	1.59	13------	1.31
22------	*(a)*	20------	1.45	18------	.52	20------	1.56	20------	1.39
30------	*(a)*	26------	1.42	25------	.54	27------	1.56	27------	1.45

[a]Flume washed out.

Table 68.--*Discharge at station 137, CDWR S1A, spring at Stewart Gulch and Piceance Creek*

LOCATION.--In NE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, about 700 feet upstream from mouth of Stewart Gulch, and downstream from station 134, CDWR S1.

PERIOD OF RECORD.--May 1969 to March 1974.

GAGE.--Nine-inch Parshall flume read weekly.

REMARKS.--Data by Colorado Division of Water Resources.

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
January 1973		*April 1973*		*July 1973*--Con.		*October 1973*		*January 1974*	
4------	0	4------	0	10------	1.59	2------	[a]2.18	4------	0
10------	0	11------	0	18------	No reading	10------	0	9------	0
17------	0	18------	[a].39	26------	----do----	17------	0	18------	0
24-------	0	26------	[a].59	*August 1973*		23------	0	24------	0
31-------	0	*May 1973*		3------	[a]2.98	30------	0	30------	0
February 1973		3------	[a].59	8------	[a]2.98	*November 1973*		*February 1974*	
7------	0	24------	1.40	16------	[a]2.98	6------	0	8------	0
14------	0	30------	1.33	22------	[a]2.98	15------	0	13------	0
21------	0	*June 1973*		30------	3.12	20------	0	20------	0
28------	0	6------	1.40	*September 1973*		28------	0	27------	0
March 1973		12------	1.40	5------	3.55	*December 1973*		*March 1974*	
8------	0	20------	1.44	12------	3.55	5------	0	6------	0
16------	0	26------	1.44	18------	3.55	10------	0	13------	0
22------	0	*July 1973*		25------	3.55	20------	0	20------	0
30------	0	6------	1.55			27------	0	27------	0

[a]Indicated discharge probably too great.

DATA FROM MISCELLANEOUS STATIONS

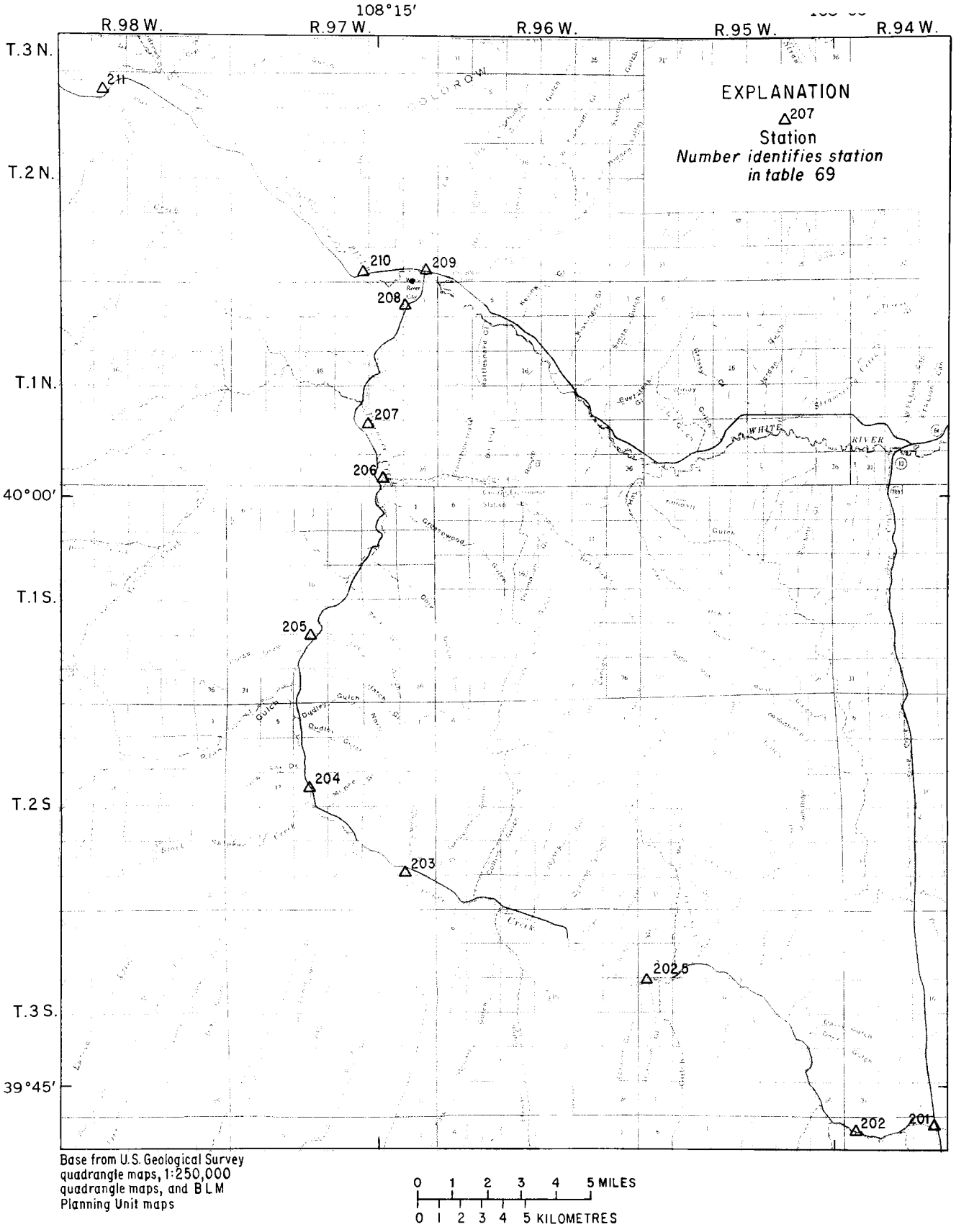


Figure 20.--Specific conductance and estimated discharge stations on Piceance Creek, White River, and Yellow Creek. Data given in table 69.

Table 69.--*Specific conductance, in micromhos per centimeter at 25°C, and estimated discharge, in cubic feet per second, for stations shown in figure 20*

Station number	February 15, 1973		March 26-27, 1973		April 16-18, 1973		May 15, 1973	
	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance
201	---	---	2	850	3.5	775	17	465
202	---	---	2	1,190	8	760	20	610
202.5	---	---	6	865	15	875	75	735
203	15	1,310	14	1,250	13	1,300	85	895
204	15	1,510	22	1,390	15	1,490	95	960
205	---	---	24	1,590	22	1,620	100	1,100
206	25	1,710	25	1,690	18	1,700	85	1,090
207	---	---	30	1,760	25	2,370	90	1,060
208	---	---	33	2,350	25	2,250	98	1,210
209	---	---	395	820	460	680	1,900	315
210	---	---	430	960	490	760	2,000	365
211	---	---	3.6	3,650	---	4,100	2	5,200

Station number	June 21, 1973		July 24, 1973		August 23, 1973		September 28-29, 1973	
	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance
201	0.5	865	0.5	735	0.6	755	0.1	1,050
202	2	1,000	1.5	910	1	915	.7	1,000
202.5	14	845	7.5	1,010	12	1,000	8	950
203	24	1,390	20	1,475	35	1,320	10	1,290
204	30	1,680	42	1,785	60	1,500	23	1,650
205	30	2,125	55	1,975	70	1,560	26	1,675
206	28	2,200	40	2,190	70	1,630	26	1,825
207	35	1,925	45	2,200	70	1,650	28	1,800
208	---	---	45	2,500	70	1,850	29	2,200
209	2,000	360	850	595	525	120	525	675
210	2,050	420	900	725	600	845	560	785
211	2	4,000	.5	3,500	.7	3,300	.7	3,900

Station number	November 14, 1973		January 23-24, 1974		February 26-27, 1974		March 26-27, 1974	
	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance
201	0.8	800	---	---	---	---	1.3	760
202	1.5	980	2.5	785	1	1,040	3.5	1,000
202.5	6.5	990	12	990	8	985	5	990
203	10	1,275	20	1,315	10	1,310	9	1,250
204	30	1,500	30	1,590	30	1,500	20	1,500
205	35	1,500	---	1,650	25	1,525	23	1,625
206	38	1,600	35	1,120	25	1,575	28	1,690
207	40	1,660	---	---	25	1,615	30	1,775
208	43	2,000	---	2,400	---	2,100	38	2,250
209	450	615	---	---	---	660	450	710
210	495	745	---	775	---	750	490	880
211	2.5	3,350	1	600	---	---	3.5	3,500

Station number	April 24-25, 1974		May 23-24, 1974		June 11-12, 1974		July 10, 1974	
	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance	Estimated discharge	Specific conductance
201	6	495	0.5	775	0.5	760	0.2	790
202	7	650	2.5	940	1.8	1,045	.5	1,010
202.5	12	870	5	930	2.5	975	3.5	970
203	18	1,120	6	1,545	7	1,450	4	1,590
204	35	1,465	7	1,900	10.5	1,990	5	1,990
205	40	1,490	9	2,610	8.5	2,400	5	2,800
206	43	1,565	5	2,000	9	2,700	5	2,800
207	50	1,500	10	2,025	10	2,750	3.5	2,700
208	55	1,540	9	3,800	12	3,400	9	4,100
209	850	590	1,800	395	1,500	395	650	640
210	910	680	1,825	375	1,550	450	660	675
211	3.6	3,500	3.5	3,700	1.9	3,650	3	3,600

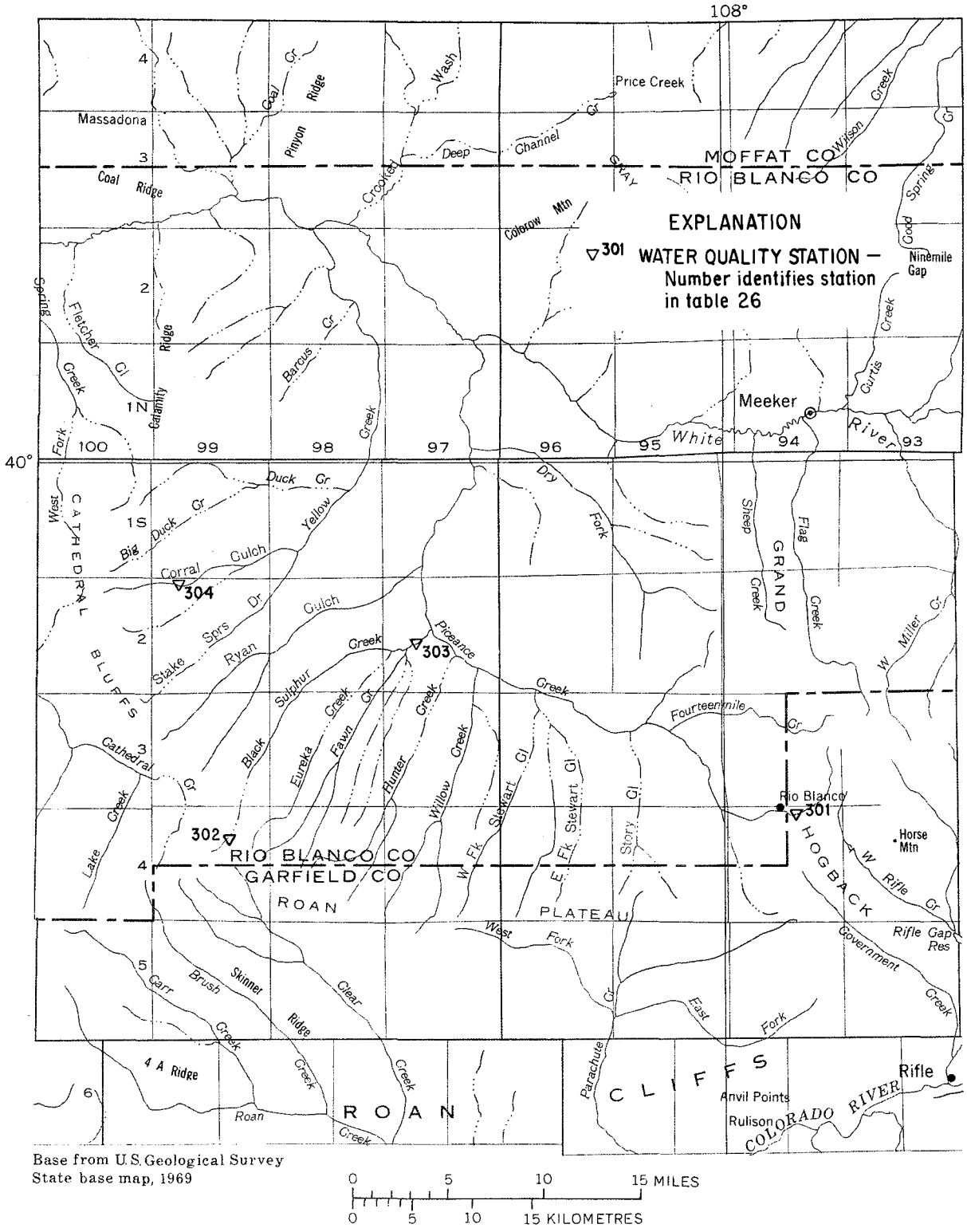


Figure 21.--Miscellaneous water-quality stations on streams.

Table 70.--*Water-quality data from miscellaneous stations shown in figure 21*

STATION NUMBER	DATE OF SAMPLE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)
301	73-07-27	681	439	273	15	40	610	50	60	30
302	73-07-06	668	412	291	18	30	490	20	10	10
303	73-07-16	1680	1210	482	20	10	6900	40	290	70
304	73-07-10	1080	742	325	22	20	2100	40	50	10

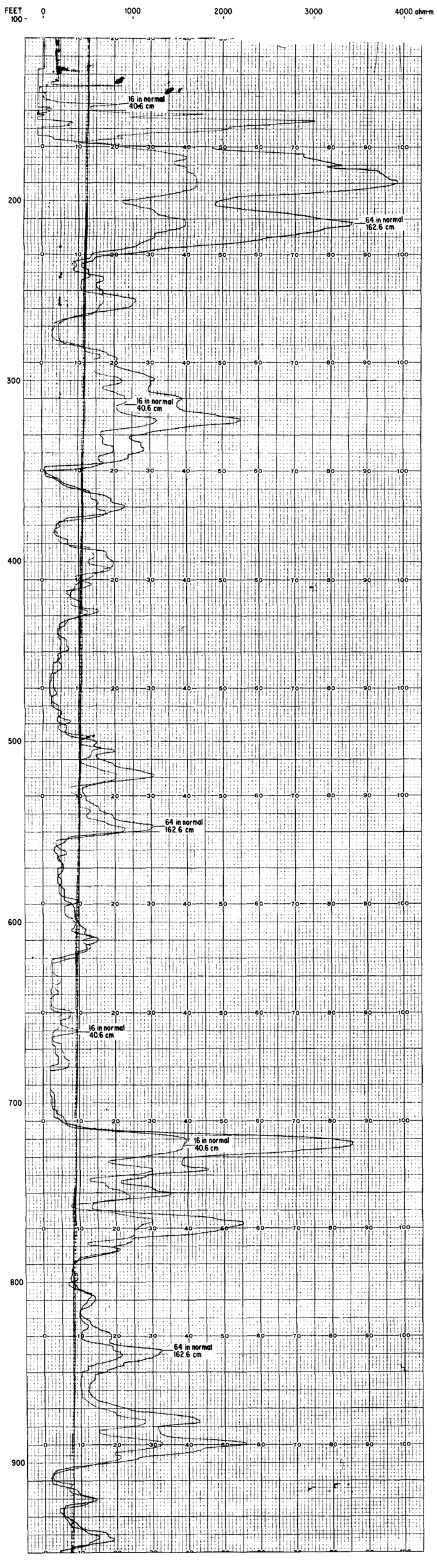
DATE OF SAMPLE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)
73-07-27	67	27	45	2.9	333	0	100	5.1	.4	.020	2.6	.26
73-07-06	74	30	33	.6	355	0	73	3.1	.3	.010	1.1	.01
73-07-16	120	95	150	2.8	588	0	520	11	.6	.050	.66	.04
73-07-10	93	57	78	1.2	396	0	280	8.0	.4	.020	1.5	.01

DATE OF SAMPLE	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MOLYB-DENUM (MO) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL STRON-TIUM (SR) (UG/L)
73-07-27	8	0	70	<50	10	5	0	430
73-07-06	6	0	40	<50	0	8	6	650
73-07-16	0	0	180	<50	10	--	3	3800
73-07-10	9	0	110	<50	10	29	6	1500

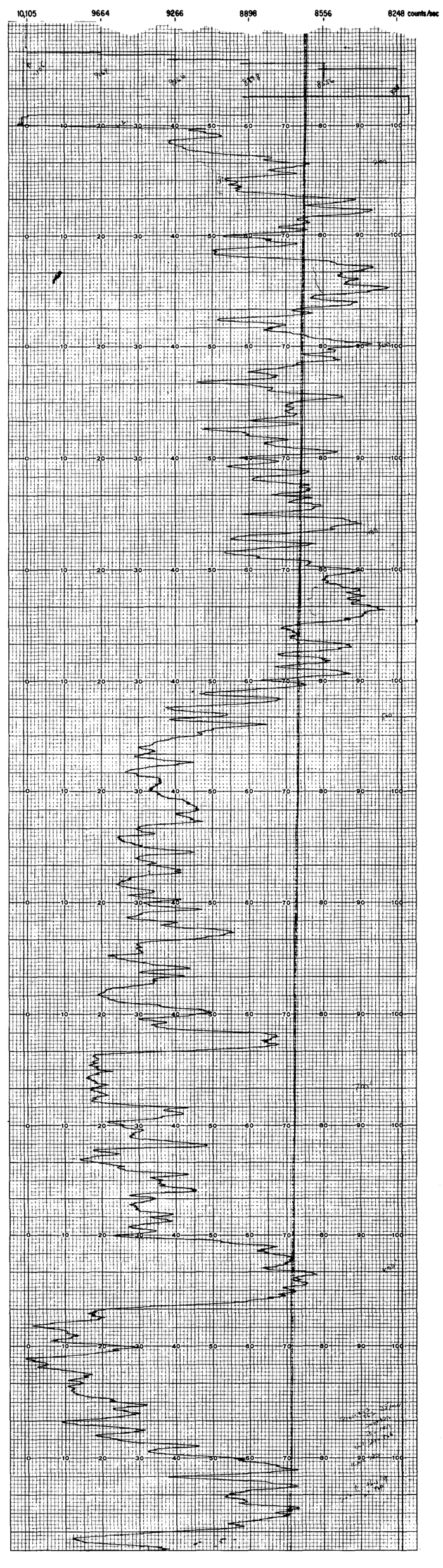
GEOPHYSICAL LOGS

USGS WELL NUMBER: 395423108315500
OWNER: U.S. GOVERNMENT
WELL NAME: CAMERON 703
LOCATION: NW 1/4 SEC. 5, T. 2 S., R. 99 W.
ALTITUDE OF LAND SURFACE: 7,005 FEET ABOVE MEAN SEA LEVEL
MEASURING POINT: 2 FEET BELOW LAND SURFACE

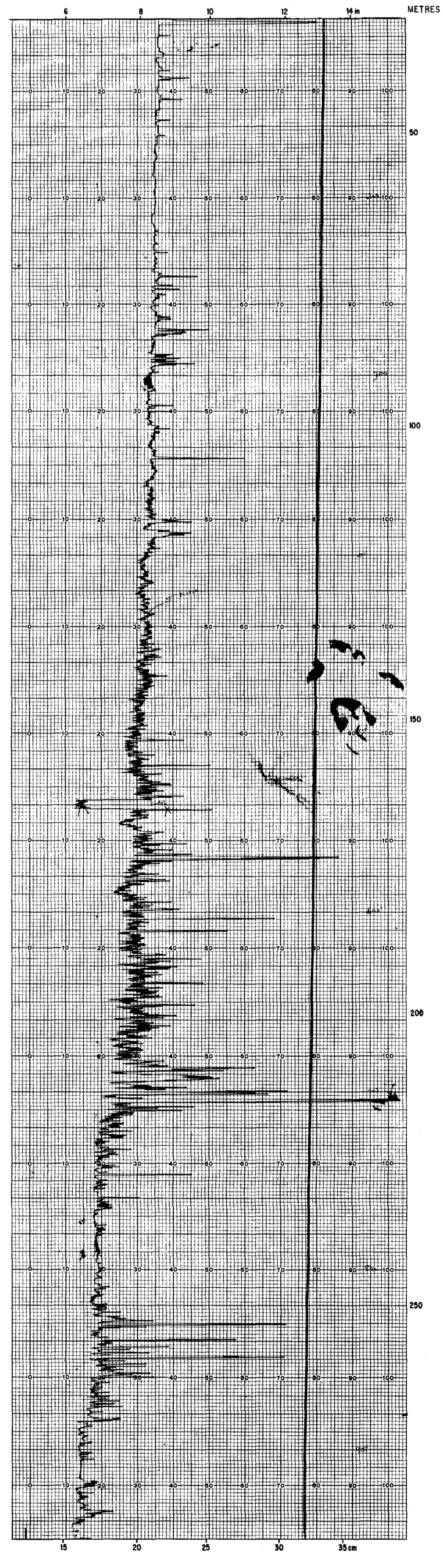
RESISTIVITY LOG
JUNE 10, 1973



GAMMA-GAMMA LOG
MAY 31, 1973



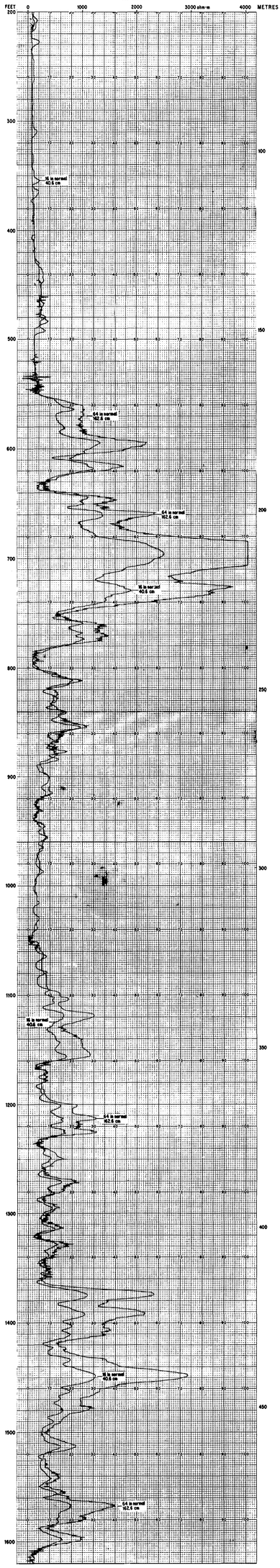
CALIPER LOG
MAY 31, 1973



GEOPHYSICAL LOGS

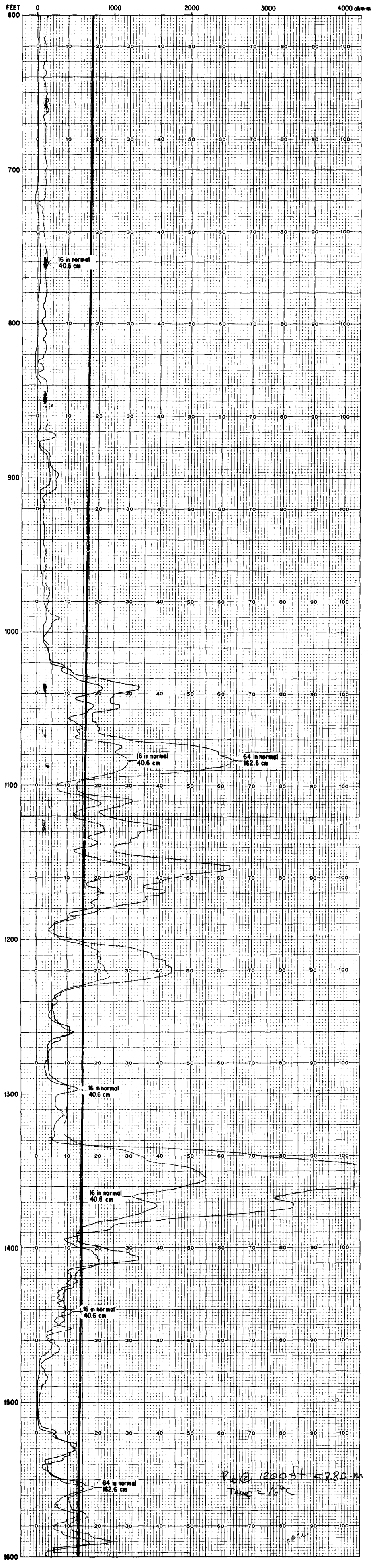
USGS WELL NUMBER: 395745108503800
OWNER: U.S. GOVERNMENT
WELL NAME: CAMERON 704C
LOCATION: SW1/4 Sec. 16, T. 1 S., R. 99 W.
ALTITUDE OF LAND SURFACE: 5,741 FEET ABOVE MEAN SEA LEVEL
MEASURING POINT: 1 FOOT ABOVE LAND SURFACE

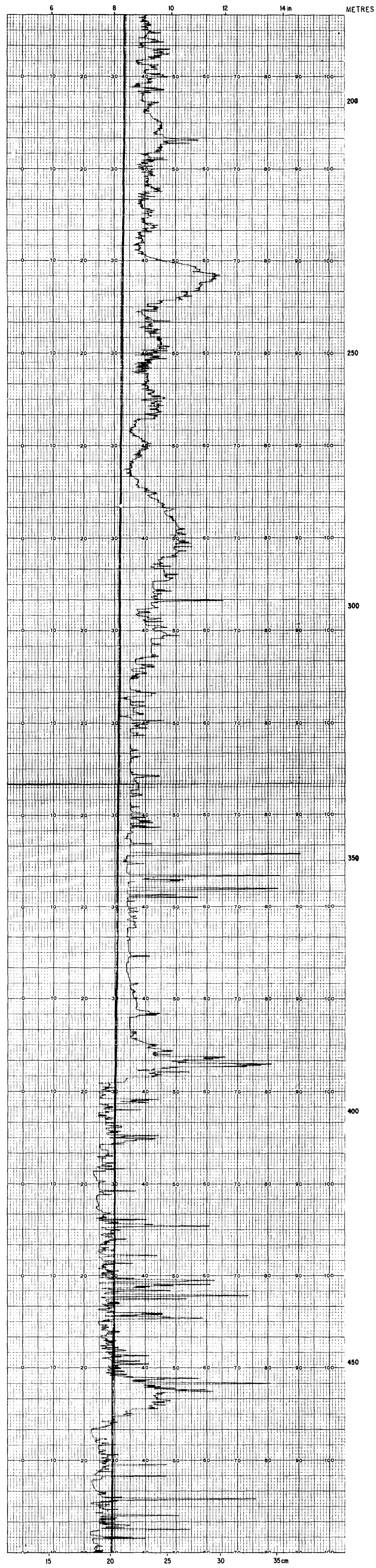
RESISTIVITY LOG
July 12, 1973



GEOPHYSICAL LOGS

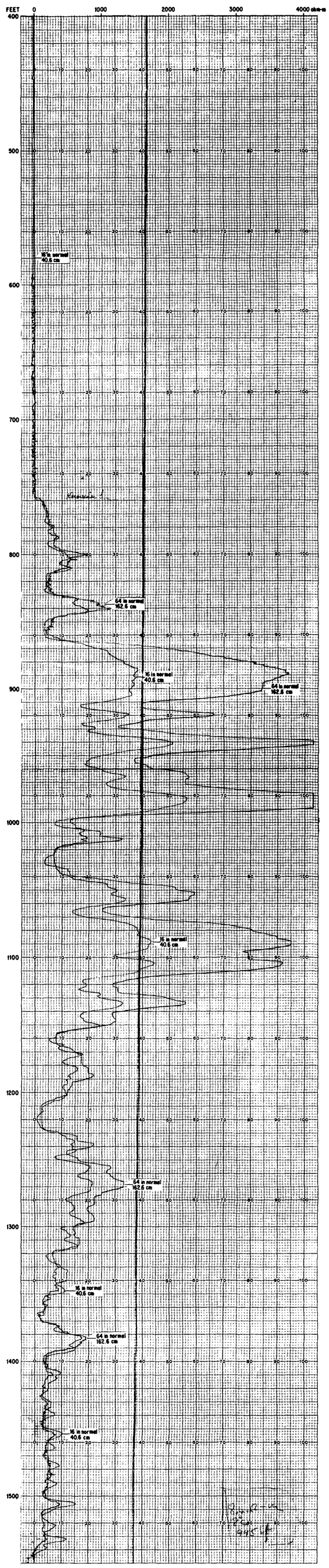
USGS WELL NUMBER: 395904108164600
OWNER: U.S. GOVERNMENT
WELL NAME: SHELL 41-9
LOCATION: NE 1/4 SEC. 9, T. 1 S., R. 97 W.
ALTITUDE OF LAND SURFACE: 6,547 FEET ABOVE MEAN SEA LEVEL
MEASURING POINT: 2 FEET ABOVE LAND SURFACE

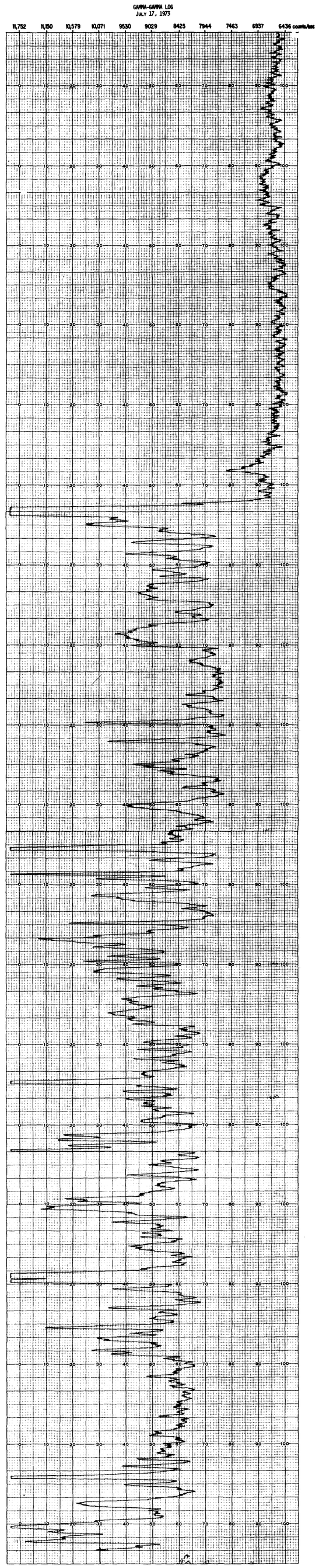


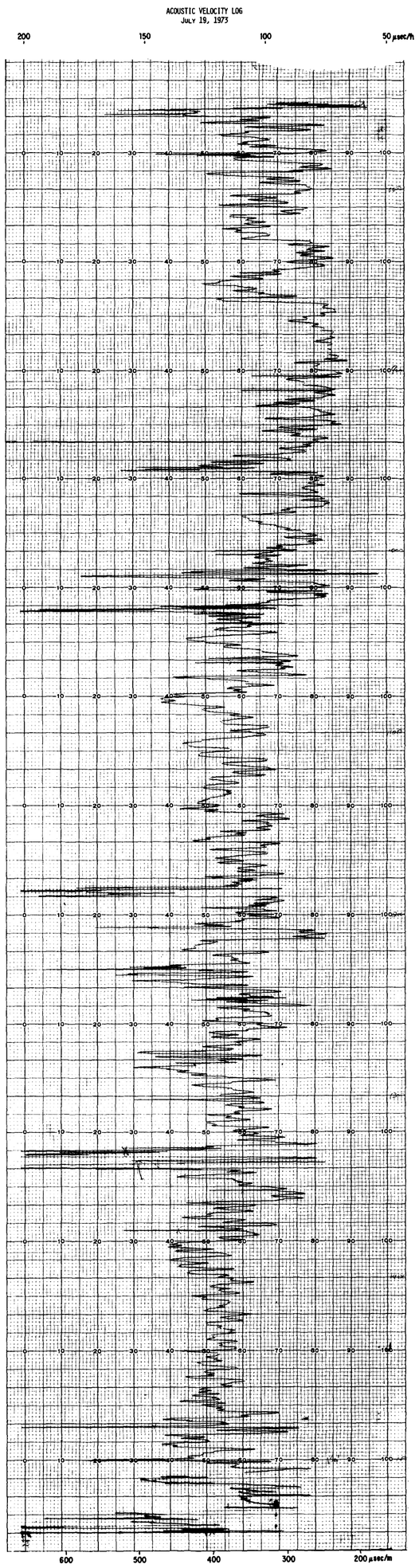


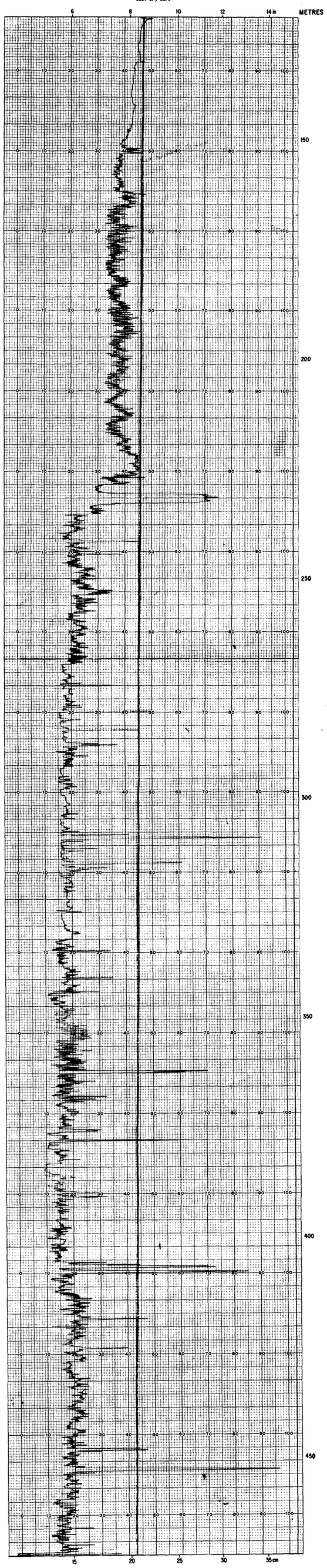
GEOPHYSICAL LOGS

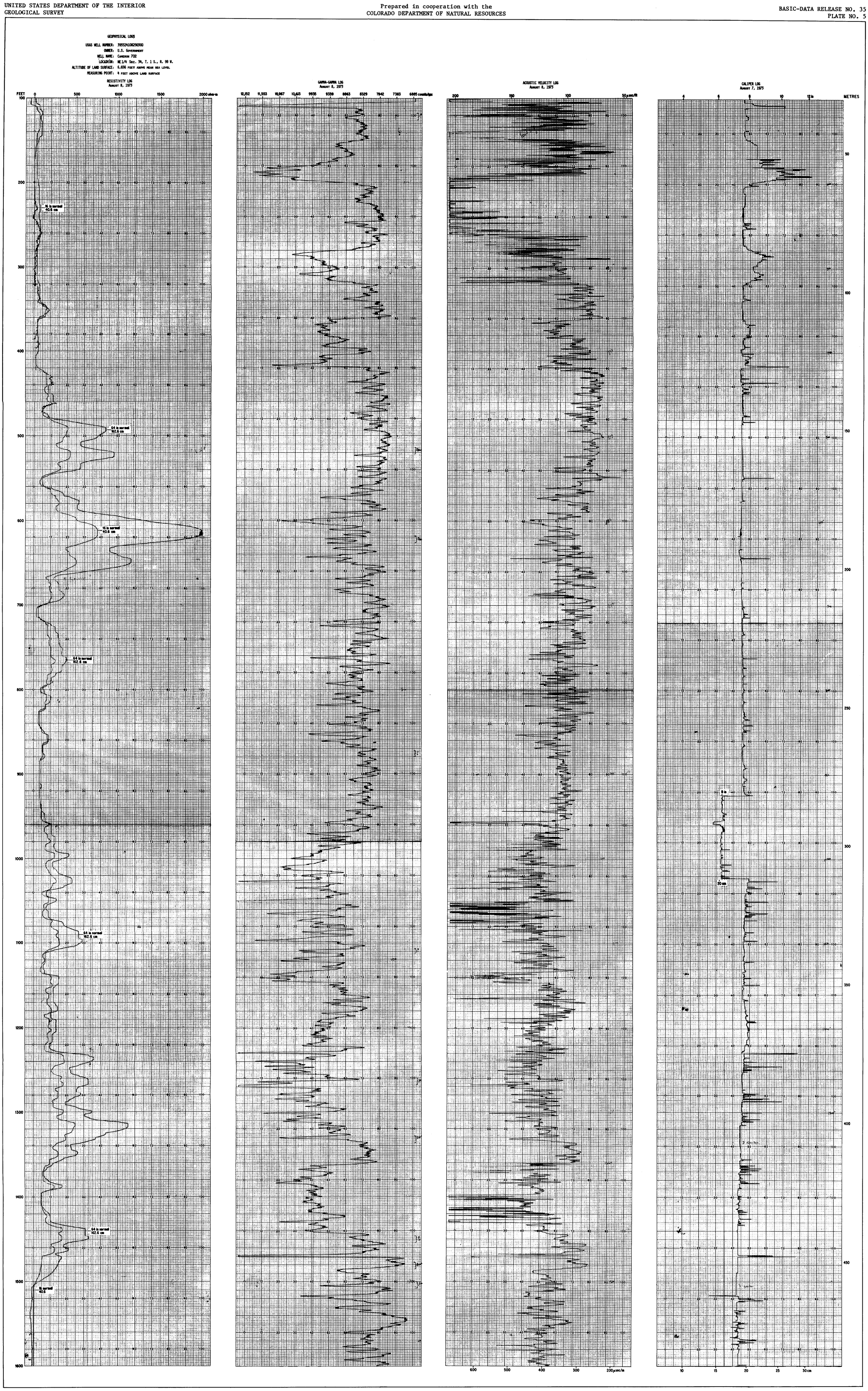
USGS WELL NUMBER: 395420108214400
OWNER: U.S. GOVERNMENT
WELL NAME: SHELL 23X-2
LOCATION: SW 1/4 SEC. 2, T. 2 S., R. 98 W.
ALTITUDE OF LAND SURFACE: 6,520 FEET ABOVE MEAN SEA LEVEL
MEASURING POINT: 1 FOOT ABOVE LAND SURFACE










GEOPHYSICAL LOGS
USGS WELL NUMBER: 395524108290300
OWNER: U.S. GOVERNMENT
WELL NAME: CAMERON 702
LOCATION: NE 1/4 Sec. 34, T. 1 S., R. 99 W.
ALTITUDE OF LAND SURFACE: 6,656 FEET ABOVE MEAN SEA LEVEL
MEASURING POINT: 4 FEET ABOVE LAND SURFACE
RESISTIVITY LOG
August 8, 1973
GAMMA-GAMMA LOG
August 8, 1973
ACOUSTIC VELOCITY LOG
August 8, 1973
CALIPER LOG
August 7, 1973
FEET
METRES
16 in normal 40.6 cm
64 in normal 162.6 cm