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WATER-QUALITY DATA FOR THE SOUTHERN UTE INDIAN RESERVATION, SOUTHWESTERN COLORADO

By E. Carter Hutchinson and Robert E. Brogden

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[Plates are in pocket]

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METRIC CONVERSION FACTOR

For the use of those readers who may prefer to use metric units rather than English units, the conversion factor for the term used in this report is given below:

Multiply English unit	*By*	*To obtain metric unit*
miles	1.609	kilometers

MANDATORY AND RECOMMENDED LIMITS FOR DISSOLVED CONSTITUENTS IN DRINKING WATER

[Adapted from the Colorado Department of Health, 1971, and the U.S. Public Health Service, 1962]

Constituent	Concentration, in milligrams per liter	Concentration, in micrograms per liter
Recommended limits:		
Arsenic (As)	0.01	10
Chloride (Cl)	250	
Dissolved solids	500	
Iron (Fe)	.30	300
Magnesium (Mg)[1]	125	
Manganese (Mn)	.05	50
Nitrate (NO_3)	45	
Nitrite-plus-nitrate as nitrogen (N)[2]	10	
Sulfate (SO_4)	250	
Mandatory limits:		
Arsenic (As)	.05	50
Fluoride (Fl)	1.3	
Selenium (Se)	.01	10

[1]Colorado Department of Health only.
[2]U.S. Public Health Service only.

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ABSTRACT

This report contains basic water-quality data from a study by the U.S. Geological Survey on the Southern Ute Indian Reservation in southwestern Colorado. Data collected during 1973-76 from 338 ground-water and surface-water samples are presented in two tables. All of the samples were analyzed for major cations and anions, and selenium and arsenic. Data presented in the tables are keyed by numbers to maps showing the locations of the sampling sites. Many of the samples contained arsenic, chloride, dissolved solids, fluoride, iron, magnesium, manganese, nitrate, nitrite-plus-nitrate as nitrogen, selenium, and sulfate in concentrations exceeding recommended or mandatory standards for drinking water established by the Colorado Department of Health and the U.S. Public Health Service.

INTRODUCTION

Information on the chemical quality of ground water and surface water on the Southern Ute Indian Reservation (fig. 1) is presented in this report. The basic data were collected by the U.S. Geological Survey from 1973 through 1976. The investigation was conducted in cooperation with the Southern Ute Tribal Council, the Four Corners Regional Planning Commission, and the U.S. Bureau of Indian Affairs.

Purpose

The purpose of the investigation was to inventory the chemical characteristics of shallow ground water and surface water on the reservation. Information presented in the water-quality tables can provide present well owners and future water users with data on the chemical characteristics of shallow ground water and streams on the reservation. The information will allow the Tribal Council to better plan their future land use and will assist in determining the suitability of the resource for developing water supplies for municipal, domestic, and agricultural uses.

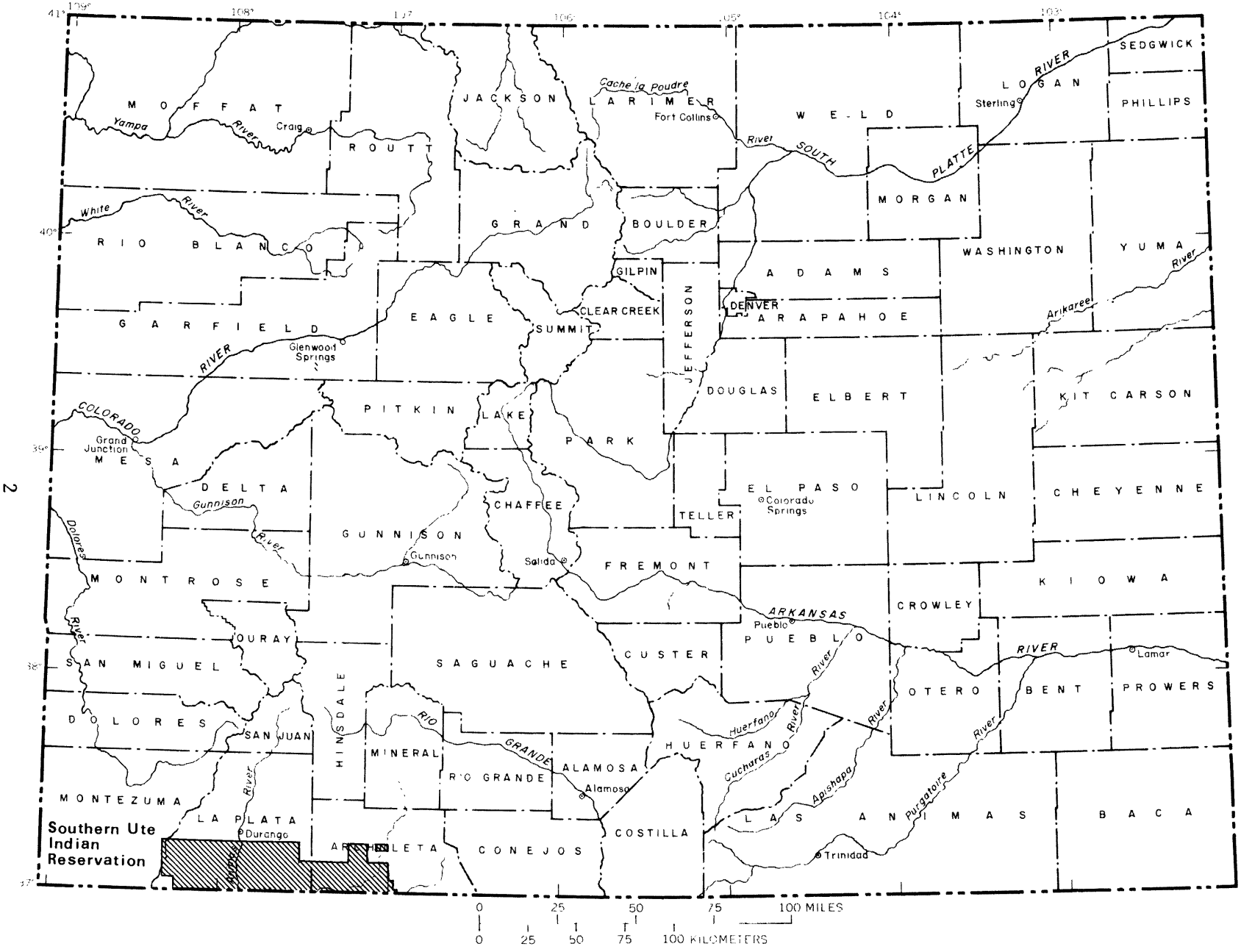

Figure 1. --Location of Southern Ute Indian Reservation, Southwestern Colorado.

Scope

All 338 samples collected during the 4-year study were analyzed for major anions, major cations, selenium, and arsenic. Water-quality data in this report are presented in two tables, and are keyed by numbers to site locations on plates 1 and 2. Analyses of ground-water samples, including springs, are summarized in table 1 at the back of the report. Analyses of surface-water samples collected from streams on the reservation are summarized in table 2 at the back of the report.

Acknowledgments

The authors express their appreciation to Mr. Leonard Burch, chairman of the Southern Ute Tribal Council, and to Mr. Chris A. Baker, vice chairman, for providing hydrologic field assistants who aided U.S. Geological Survey personnel in the collection of basic data. Throughout the 4-year investigation, under the general guidance and assistance of Mr. John Williams, who represented the Southern Ute Tribal Council, Messrs. Everett Burch, Roderick Williams, Ivan Red, Elliott Cloud, and Raymond Frost helped obtain well data and sample wells. Their linguistic abilities in English, Ute, and Spanish proved to be of great assistance in discussing the investigation with the many land owners. Messrs. Raymond DeKay, Robert Tsiosdia, and officials and employees of the U.S. Bureau of Indian Affairs at Ignacio, Colo., and Albuquerque, N. Mex., provided administrative support during the investigation; laboratory support was provided by personnel at Gallup, N. Mex.

RELATION OF DATA TO DRINKING-WATER STANDARDS

The potability of ground water and surface water on the reservation can be determined by comparing the chemical data in tables 1 and 2 with the recommended drinking-water-quality standards of the Colorado Department of Health (1971) and the U.S. Public Health Service (1962) presented on page IV at the front of the report and immediately below the column headings in tables 1 and 2. Many of the analyses indicated that some chemical constituents occur in excess of the standards. Although the concentrations of some constituents exceed the standards, they do not necessarily indicate a health hazard. For example, high dissolved-solids concentrations may impart a noticeable taste to the water supply. High iron and manganese concentrations may cause coloring of utensils and fixtures and impart a disagreeable taste to water. High fluoride concentrations can cause permanent discoloration and mottling of children's teeth. However, in proper concentrations, fluoride can prevent tooth decay. Magnesium and sulfate concentrations in excess of the standards may have a laxative effect on people.

Concentrations of selenium, arsenic, nitrate, and nitrite-plus-nitrate as nitrogen in excess of the standards can constitute a health hazard (Colorado Department of Health, 1971, and U.S. Public Health Service, 1962). Selenium

was determined to occur as much as 1,300 times the recommended limit, and arsenic was observed to occur as much as 6 times the recommended limit. Indications of selenium poisoning include nervousness, vomiting, loss of hair and fingernails, and hypertension. High selenium concentrations in plants and water have reportedly caused poisoning of humans and livestock on the reservation (Beath, 1962). Symptoms of arsenic poisoning include fatigue and loss of energy. Standard treatment processes of public water supplies have little or no effect on removing selenium and arsenic. The locations of water samples that contain selenium and arsenic in excess of recommended standards are shown on plates 1 and 2.

Nitrate and nitrite-plus-nitrate as nitrogen in excess of the standards has been determined locally throughout the reservation. Newborn infants can be affected by high nitrate or nitrite-plus-nitrate as nitrogen concentrations in drinking water and milk, resulting in a condition known as "blue babies." Older children and adults are usually not affected by high nitrate or nitrite-plus-nitrate as nitrogen concentrations. Standard treatment processes of public water supplies have no effect on the removal of nitrate and nitrite-plus-nitrate as nitrogen from drinking water.

Individuals with water supplies that contain selenium, arsenic, nitrate, and nitrite-plus-nitrate as nitrogen in excess of health limits need to consider another source of drinking water. Sampling water from newly drilled wells and analyzing the water will indicate whether or not the water is suitable for drinking. If the constituents mentioned above are found to occur in excess of the recommended concentrations, an alternative source of water needs to be considered.

SYSTEM OF WELL NUMBERING

The well numbers in tables 1 and 2 indicate the well locations as shown on plates 1 and 2. The numbers are based on the U.S. Bureau of Land Management system of land subdivision, and show the location of the well by quadrant, township, range, section, and position within the section. A graphic illustration of this method of well location is shown in figure 2. The first letter "N" preceding the location number means that the site is located in the area governed by the New Mexico principal meridian. The second letter indicates that quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian--A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first three-digit numeral indicates the township, the second three-digit numeral the range, and the third two-digit numeral the section in which the well is located. The letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction, beginning with (A) in the northeast quarter. Letters are assigned within each quarter section and within each quarter-quarter section in the

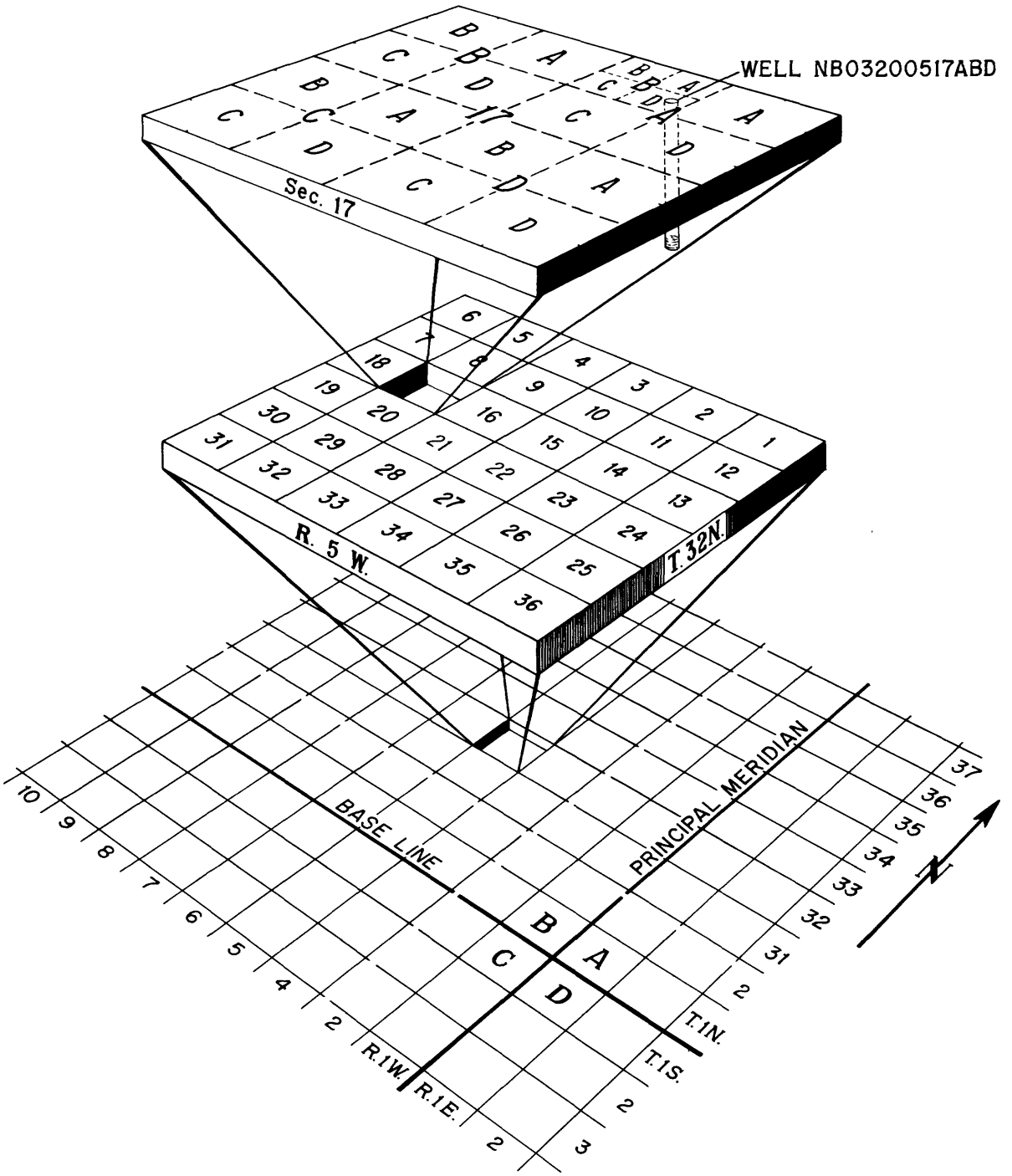

Figure 2. --System of numbering wells.

same manner. Where two or more locations are within the smallest subdivision, consecutive numbers beginning with 1 are added to the order in which the wells were inventoried. For example, NB03200517ABD indicates a well in the southeast quarter of the northwest quarter of the northeast quarter of sec. 17, T. 32 N., R. 5 W.; the "B" indicates the township is north of the baseline and that the range is west of the New Mexico principal meridian.

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Table 1.--*Chemical analyses of ground-water samples*

[The mandatory and recommended limits for drinking water of the Colorado Department of Health (1971) and the U.S. Public Health Service (1962) are listed for each constituent immediately below the column headings. For most ground-water samples, concentrations of dissolved and total constituents are virtually equal. Therefore, the same limits are used for total arsenic and selenium as are used for dissolved arsenic and selenium. NONE indicates that no limit has been established. MG/L = milligrams per liter; UG/L = micrograms per liter; ND = not detectable]

GEOLOGIC UNIT CODE	GEOLOGIC UNIT AND AGE
111ALFP, 111FLDP, 111VLFL	Alluvium, Holocene
111AVMT	Terrace deposits, Holocene
124SNJS	San Jose Formation, Eocene
125ANMS	Animas Formation, Paleocene and Cretaceous
125KRLD	Kirtland Shale, Paleocene and Cretaceous
211CLFH	Cliff House Sandstone, Cretaceous
211FRLD	Fruitland Formation, Cretaceous
211LWIS	Lewis Shale, Cretaceous
211MENF	Menefee Formation, Cretaceous
211MNCS	Mancos Shale, Cretaceous
211MVRD	Mesaverde Group, Cretaceous
211PCCF	Pictured Cliffs Sandstone, Cretaceous

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*
1	370040107164900	NB03200416DDD	JOE ENRIQUEZ	17	16	75-10-28	111ALFP	14.0	7.0	700
2	370148107362100	NB03200709DAA	DRILL HOLE 1, LINE 5, LOS PINOS	15	3	75-06-06	111ALFP	11.0	7.3	860
3	370214107115200	NB03200308ABC	FELIX GOMEZ	95	12	75-08-21	111ALFP	14.0	7.7	900
4	370217107114600	NB03200308ABB	PAGOSA JUNCTION WATER TANK	15	5	75-08-20	111ALFP	12.0	6.4	1000
5	370357107242900	NB03300532AAD	ALLEN SMITH	36	10	75-03-19	111ALFP	11.0	7.2	860
6	370520107030600	NB03300222DBA	HARVEY MC FATRIDGE	12	2	75-10-22	111ALFP	14.0	7.2	1225
7	370537107233600	NB03300521ACA	JOE PENA	50	7	75-03-27	111ALFP	5.0	7.7	480
8	370639107023B00	NB03300214BBB	P W BIRDSALL	28	9	75-10-21	111ALFP	14.5	7.7	575
9	370744107214000	NB03300502CDA	JOHN GALLEGOS JR. 2	21	19	75-05-13	111ALFP	10.0	8.2	675
10	370750107465900	NB03300901CBD	HOLLEY BARNES	12	2	75-08-23	111ALFP	13.0	7.2	950
11	371021107344100	NB03400723CDA	DRILL HOLE 1, LINE 2, LOS PINOS	16	4	75-06-05	111AVFP	14.0	8.6	460
12	371211107350600	NB03400711UCBC	DRILL HOLE 1, LINE 1, LOS PINOS	33	11	75-06-07	111AVFP	13.0	7.7	345
13	370148107122700	NB03200307DAD1	SOPHIA MARTINEZ 1	28	27	75-08-22	111AVMT	13.0	8.1	1025
14	370534108100200	NB03301220ADB	WAYNE HARRIS	20	8	75-11-12	111AVMT	11.5	6.3	1150
15	370638108072B00	NB03301214BBA	LA PLATA COUNTY MARVEL	80	36	75-11-12	111AVMT	12.0	6.6	555
16	370703107515600	NB03300907DBB	WILLIAM A SHORT	80	63	75-11-25	111AVMT	10.0	6.4	760
17	370730107524000	NB03301012AAB2	MARY MC CULLOCH 2	50	35	75-11-25	111AVMT	12.0	6.6	925
18	370757107380000	NB03300705CAA	U.S. BUREAU INDIAN AFFAIRS, AGENCY 2	35	9	74-05-06	111AVMT	8.0	7.5	1040
19	370757107380300	NB03300705CAB	U.S. BUREAU INDIAN AFFAIRS, AGENCY 1	70	7	73-08-09	111AVMT	13.0	7.4	951
19			U.S. BUREAU INDIAN AFFAIRS, AGENCY 1			74-05-06	111AVMT	9.0	7.5	917
20	370810107511200	NB03300905BDB	JACK KROEGER	100	66	75-11-25	111AVMT	11.5	6.5	610
21	370841107511800	NB03400932CBD	A L CANNON	74	50	75-11-24	111AVMT	10.0	6.5	575
22	370842107444300	NB03400832CBD	RONALD REA	12	7	75-06-12	111AVMT	14.5	8.7	1350
22			RONALD REA			75-08-23	111AVMT	17.0	7.2	1290
23	370845108071300	NB03401235CAD	FORT LEWIS SCHOOL	170	104	75-07-24	111AVMT	17.0	7.7	645
24	370926107451500	NB03400830DDB	LA PLATA AIRPORT SPRING	--	--	75-08-27	111AVMT	16.0	7.2	950
25	371001107493400	NB03400928ABD	WALTER WALKER	167	128	75-03-26	111AVMT	11.0	7.2	615
26	371005107351400	NB03400727AAA	SAM BEAN PLACE	130	12	75-05-02	111AVMT	10.0	8.3	540
27	371010107470000	NB03400924CCD	ARLENE MILLICH	258	62	74-06-10	111AVMT	12.0	7.6	1030
28	371011107481400	NB03400923CCC	ANTONIO PICCOLI	127	84	75-03-24	111AVMT	11.0	7.2	585
29	371039107495500	NB03400921BDD	VESTA JO SITTNER	195	162	75-03-25	111AVMT	12.0	7.1	530
30	371043108030100	NB03401121BDB	J J KIKEL	122	46	75-11-14	111AVMT	11.0	5.7	320
31	371045107470700	NB03400924BCB	RAYMOND ANDREWS	110	31	75-08-23	111AVMT	15.0	7.1	790
32	371058107452300	NB03400819ABA	WAYNE LUNT SPRING	--	--	75-05-14	111AVMT	12.5	8.3	675
33	371101107490200	NB03400922BAB	STEVEN SIMON	137	99	75-03-25	111AVMT	11.5	7.0	460
34	371123107451700	NB03400818UDBA	SPRING HIGHWAY 172	--	--	74-05-01	111AVMT	--	7.3	719
35	371126107471100	NB03400914DAA	RALPH COLESCOTT	90	59	75-05-14	111AVMT	12.0	7.9	650
36	371133107473200	NB03400914ACD	GLEN BAKER	83	42	75-03-24	111AVMT	6.0	7.3	600
37	371146108042000	NB03401117BBB	ART ISGAR 1	76	--	75-11-14	111AVMT	10.0	6.2	600
38	371206107474400	NB03400911UCDA	RAY BELGER	114	31	75-03-26	111AVMT	10.0	7.4	460

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) *500*	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) *500*	BICAR-BONATE (HCO3) (MG/L) *NONE*	CAR-BONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKA-LINITY AS CACO3 (MG/L) *NONE*	HARD-NESS (CA,MG) (MG/L) *NONE*	NON-CAR-BONATE HARD-NESS (MG/L) *NONE*	DIS-SOLVED CAL-CIUM (CA) (MG/L) *NONE*	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) *125*	DIS-SOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM AD-SORP-TION RATIO *NONE*	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) *NONE*	DIS-SOLVED CHLO-RIDE (CL) (MG/L) *250*
75-10-28	--	442	305	31	59	303	210	<0	64	12	94	2.8	3.1	3.5
75-06-06	--	415	4064	23	340	371	235	0	76	10	115	3.2	1.5	36
75-08-21	--	600	301	--	9.6	247	280	33	96	9.7	108	2.8	.7	3.5
75-08-20	--	699	318	ND	202	261	415	154	112	32	75	1.6	2.7	24
75-03-19	--	706	286	8	31	248	440	206	138	23	45	.9	2.3	14
75-10-22	--	913	225	26	28	229	570	341	124	63	80	1.4	4.6	10
75-03-27	--	334	198	12	7.1	175	225	70	76	8.5	18	.5	1.1	15
75-10-21	--	310	234	21	8.9	229	190	<0	60	9.7	62	1.9	3.1	12
75-05-13	--	538	227	48	3.3	267	320	53	96	19	24	.6	39	47
75-08-23	--	550	352	26	41	332	365	33	88	35	84	1.9	.3	7.0
75-06-05	--	206	216	15	1.0	203	210	7	78	3.6	16	.5	1.5	16
75-06-07	--	148	165	9	5.9	151	151	ND	56	2.4	13	.4	1.5	4.6
75-08-22	--	727	275	36	4.4	285	320	35	100	17	124	3.0	3.9	30
75-11-12	--	870	460	<0	369	377	605	228	152	54	52	.9	.3	35
75-11-12	--	355	190	24	96	196	255	59	74	17	30	.8	1.5	19
75-11-25	--	308	456	<0	291	374	355	ND	106	21	52	1.2	1.9	24
75-11-25	--	562	455	<0	183	373	450	77	130	30	52	1.0	14	39
74-05-06	642	--	485	0	25	398	330	0	100	19	110	2.6	1.0	36
73-08-09	608	--	508	0	32	417	280	0	89	14	120	3.1	1.2	25
74-05-06	540	--	462	0	23	379	270	0	85	15	100	2.6	1.2	25
75-11-25	--	297	356	<0	180	292	290	<0	96	12	32	.8	1.9	26
75-11-24	--	360	329	<0	166	270	285	15	96	10	27	.7	3.9	28
75-06-12	--	756	273	21	1.0	260	150	ND	40	12	237	8.4	.3	249
75-08-23	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-07-24	--	412	192	36	8.5	219	315	96	104	13	20	.5	4.3	9.5
75-08-27	--	508	381	29	44	360	295	ND	104	8.5	111	2.8	1.5	76
75-03-26	--	398	244	9	27	216	310	110	100	14	21	.5	1.1	26
75-05-02	--	422	247	--	2.0	248	130	ND	40	7.3	75	2.9	1.1	14
74-06-10	552	--	228	0	9.2	187	350	160	110	18	62	1.4	1.4	170
75-03-24	--	404	266	ND	27	218	275	57	90	12	29	.8	.7	26
75-03-25	--	348	295	17	42	271	280	38	84	17	15	.4	1.1	21
75-11-14	--	205	164	<0	522	134	135	1	40	8.5	13	.5	1.1	7.0
75-08-23	--	468	299	268	107	289	310	21	100	14	58	1.4	1.1	79
75-05-14	--	362	285	48	3.1	314	290	ND	96	12	34	.8	1.1	7.0
75-03-25	--	295	232	19	43	223	235	45	78	9.7	12	.4	1.1	14
74-05-01	416	--	399	0	32	327	310	0	100	14	32	.8	.6	16
75-05-14	--	389	275	51	7.6	310	280	0	92	12	33	.8	1.1	10
75-03-24	--	358	317	14	28	285	295	35	76	25	27	.7	.7	24
75-11-14	--	388	264	19	305	248	255	7	80	13	34	.9	1.9	15
75-03-26	--	293	249	14	18	228	195	ND	70	.4	29	1.0	.7	3.5

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) *250*	DIS-SOLVED FLUO-RIDE (F) (MG/L) *1.3*	DIS-SOLVED SILICA (SIO2) (MG/L) *NONE*	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DIS-SOLVED NITRATE (NO3) (MG/L) *45*	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) *NONE*	DIS-SOLVED IRON (FE) (UG/L) *300*	DIS-SOLVED MAN-GANESE (MN) (UG/L) *50*	DIS-SOLVED BORON (B) (UG/L) *NONE*	DIS-SOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *10*	DIS-SOLVED SELE-NIUM (SE) (UG/L) *10*	TOTAL SELE-NIUM (SE) (UG/L) *10*
75-10-28	105	.3	--	--	3.1	--	20	--	<0	1	--	3	--
75-06-06	62	.5	--	--	.62	--	0	--	120	1	--	0	--
75-08-21	268	.4	--	--	--	--	--	--	40	2	--	1	--
75-08-20	266	.3	--	--	4.9	--	ND	--	300	0	--	3	--
75-03-19	234	.4	--	--	1.8	--	ND	--	ND	1	--	8	--
75-10-22	464	.3	--	--	2.4	--	40	--	50	1	--	4	--
75-03-27	56	.2	--	--	6.2	--	ND	--	ND	0	--	2	--
75-10-21	81	.2	--	--	.12	--	<0	--	50	1	--	0	--
75-05-13	105	.2	--	--	3.1	--	ND	--	ND	0	--	3	--
75-08-23	152	.4	--	--	18	--	ND	--	120	0	--	0	--
75-06-05	27	.4	--	--	.25	--	ND	--	540	4	--	0	--
75-06-07	28	.3	--	--	1.2	--	ND	--	--	1	--	0	--
75-08-22	229	.6	--	--	15	--	ND	--	150	0	--	58	--
75-11-12	302	.7	--	--	1.2	--	20	--	<0	2	--	3	--
75-11-12	77	6.0	--	--	12	--	<0	--	150	1	--	9	--
75-11-25	53	.1	--	--	2.4	--	40	--	90	0	--	7	--
75-11-25	117	.5	--	--	6.8	--	10	--	90	0	--	2	--
74-05-06	120	1.0	13	.48	--	.00	350	40	40	--	4	--	8
73-08-09	92	.7	14	.43	--	.02	30	10	60	--	2	--	6
74-05-06	76	1.1	4.7	.71	--	.10	210	20	50	--	2	--	12
75-11-25	26	.2	--	--	6.2	--	20	--	50	0	--	4	--
75-11-24	21	.2	--	--	3.7	--	10	--	50	1	--	3	--
75-06-12	76	.5	--	--	12	--	ND	--	120	0	--	310	--
75-08-23	--	--	--	--	--	--	--	--	--	0	--	300	--
75-07-24	113	.2	--	--	13	--	ND	--	50	1	--	9	--
75-08-27	75	.2	--	--	7.7	--	ND	--	50	1	--	130	--
75-03-26	97	.1	--	--	4.9	--	ND	--	ND	1	--	4	--
75-05-02	40	.5	--	--	.62	--	ND	--	ND	0	--	2	--
74-06-10	33	.4	16	6.3	--	.01	150	0	1100	--	0	--	110
75-03-24	75	.2	--	--	3.1	--	0	--	ND	1	--	4	--
75-03-25	29	.1	--	--	4.9	--	0	--	6	0	--	3	--
75-11-14	20	.1	--	--	1.2	--	<0	--	<0	1	--	2	--
75-08-23	21	.3	--	--	6.2	--	ND	--	120	0	--	92	--
75-05-14	28	.1	--	--	2.4	--	ND	--	ND	0	--	3	--
75-03-25	34	.1	--	--	1.8	--	ND	--	ND	0	--	2	--
74-05-01	37	.9	14	1.0	--	.01	70	0	10	--	0	--	2
75-05-14	44	.1	--	--	3.7	--	ND	--	ND	0	--	2	--
75-03-24	30	.1	--	--	8.6	--	30	--	ND	0	--	3	--
75-11-14	31	.1	--	--	22	--	20	--	50	1	--	2	--
75-03-26	38	.2	--	--	1.8	--	ND	--	ND	0	--	1	--

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*
39	371253107474800	NB03400902UCDA	BERNERD COOPER	49	40	75-06-20	111AVMT	7.5	7.1	660
40	371307107454300	NB03400818UBAB	LEROY CUNDIFF	31	19	75-08-23	111AVMT	11.0	6.9	645
41	370312107070600	NB03200301AAA	ADOLPH CHAVEZ	10	9	75-10-24	111FLDP	12.0	6.4	775
42	370345107244600	NB03300532ACD	DRILL HOLE 1, LINE 3, PIEDRA	27	6	75-06-03	111FLDP	17.0	7.5	660
43	370416107243700	NB03300529DDB	CHARLES DUNAGAN	33	20	75-06-09	111FLDP	8.5	7.8	650
44	370450107530700	NB03301025BAA	DON PAXTON	50	48	76-02-03	111FLDP	8.0	6.9	1100
45	370537107234200	NB03300521ACB	DRILL HOLE 1, LINE 2, PIEDRA	31	4	75-06-03	111FLDP	10.0	7.4	460
46	370749107214300	NB03300502CAD	DRILL HOLE 1, LINE 1, PIEDRA	31	3	75-06-04	111FLDP	10.0	7.9	445
47	370754107373200	NB03300705DAB	DRILL HOLE 2, LINE 3, LOS PINOS	17	3	75-06-04	111FLDP	9.0	7.0	800
48	370427107363300	NB03300728DAB	DRILL HOLE 1, LINE 4, LOS PINOS	16	2	75-06-07	111VLFL	12.0	7.8	925
49	370549107370400	NB03300716CDC	R JEFFERSON	78	5	74-05-24	111VLFL	13.0	7.5	620
50	370556107330200	NB03300713DDA	ISABEL KENT	177	7	74-06-11	111VLFL	13.0	7.8	1530
51	370652107372500	NB03300708DDA	GENEVIEVE GUNN	54	13	74-05-23	111VLFL	13.0	7.3	318
52	370701107373300	NB03300708DAB	RALPH CLOUD	60	--	74-06-20	111VLFL	13.0	8.4	559
53	370702107373300	NB03300708DAB	BENNETT THOMPSON	51	17	74-05-23	111VLFL	11.5	7.3	815
54	370713107372500	NB03300708ADD	WALTER SCOTT	45	38	74-06-20	111VLFL	--	7.5	720
55	370717107373900	NB03300708ACA	FLORA HOWE	45	12	74-06-20	111VLFL	17.0	8.2	496
56	370728107414500	NB03300810AAA	J B WARFORD	15	4	74-06-17	111VLFL	12.5	7.8	584
57	370759107372000	NB03300705ADD	DON GOSNEY	100	7	74-06-13	111VLFL	12.0	7.5	592
58	370927107352400	NB03400727DDB	JERRY ROMERO	43	11	74-05-29	111VLFL	13.0	7.8	280
59	371037107342500	NB03400723ACD	VINCENT GROVE	46	10	74-05-22	111VLFL	11.0	7.7	306
60	371118107343900	NB03400714UCAD	J WILLIAMS	28	4	74-06-10	111VLFL	12.0	7.8	310
61	371122107343400	NB03400714UDBB	EVERETT BURCH	47	12	74-05-22	111VLFL	12.0	7.6	359
62	371142107344700	NB03400714UBAC	JOE LUCERO	60	11	74-05-21	111VLFL	12.0	7.4	525
63	370033107243500	NB03200520AAB3	COLORADO PARKS 3	150	--	75-08-20	124SNJS	21.0	7.0	860
64	370033107244300	NB03200520ABA2	COLORADO PARKS 2	230	48	73-08-07	124SNJS	21.0	7.3	1130
64			COLORADO PARKS 2			75-06-09	124SNJS	13.0	7.3	1025
65	370043107294300	NB03200615CCB	CARL RAINWATER	60	14	74-06-13	124SNJS	--	7.7	801
66	370113107252400	NB03200517ADA4	COLORADO PARKS 4	150	--	75-08-20	124SNJS	18.0	7.2	900
67	370115107244800	NB03200517ACB	WILLARD SEIBEL	92	--	75-10-23	124SNJS	12.0	5.4	855
68	370116107241900	NB03200516BCB	COLORADO PARKS 5	206	25	75-11-11	124SNJS	13.0	5.9	990
69	370119107254300	NB03200517ABD	HOWARD B MASSEY	120	41	75-08-20	124SNJS	14.0	7.2	1000
69			HOWARD B MASSEY			75-10-02	124SNJS	14.0	6.4	1050
70	370125107195800	NB03200418BBC	ERNEST HERRERA	85	54	75-08-25	124SNJS	14.5	7.8	1200
71	370128107301500	NB03200616ABB	LES SUTTON	158	4	74-06-13	124SNJS	14.0	8.4	1180
72	370128107362400	NB03200709DDD	ELLA WATTS	121	17	74-05-24	124SNJS	12.0	8.5	609
73	370129107311500	NB03200608DCD	ABE MUNOZ	100	5	75-06-09	124SNJS	14.0	7.7	1450
74	370132107251400	NB03200508CCD	C A BOWEN	165	74	75-08-02	124SNJS	14.5	6.6	1675
74			C A BOWEN			75-11-24	124SNJS	12.0	--	1900
75	370141107363300	NB03200709DCA	CLIFTON BAKER	158	5	74-06-11	124SNJS	--	7.6	522

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) *500*	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) *500*	BICAR-BONATE (HCO3) (MG/L) *NONE*	CAR-BONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKA-LINITY AS CACO3 (MG/L) *NONE*	HARD-NESS (CA,MG) (MG/L) *NONE*	NON-CAR-BONATE HARD-NESS (MG/L) *NONE*	DIS-SOLVED CAL-CIUM (CA) (MG/L) *NONE*	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) *125*	DIS-SOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM AD-SORP-TION RATIO *NONE*	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) *NONE*	DIS-SOLVED CHLO-RIDE (CL) (MG/L) *250*
75-06-20	--	425	331	3	43	278	300	29	100	12	42	1.1	1.1	24
75-08-23	--	424	325	26	76	310	305	ND	108	8.5	26	.6	.7	14
75-10-24	--	453	302	39	244	314	290	<0	94	13	80	2.0	2.3	7.0
75-06-03	--	414	156	14	9.3	127	260	109	84	12	30	.8	3.1	.0
75-06-09	--	295	219	12	6.2	199	255	56	86	9.7	23	.6	1.1	5.3
76-02-03	--	700	415	0	84	340	375	35	103	29	96	2.1	2.3	56
75-06-03	--	232	123	9	9.1	100	155	0	56	3.6	18	.6	1.9	3.5
75-06-04	--	338	182	14	4.3	149	225	52	70	12	27	.8	1.5	.0
75-06-04	--	393	281	24	53	230	225	0	68	13	57	1.6	2.7	10
75-06-07	--	550	290	19	8.4	269	235	ND	78	9.7	120	3.4	2.7	52
74-05-24	384	--	281	0	14	230	220	0	68	11	56	1.7	2.3	8.4
74-06-11	985	--	608	0	15	499	140	0	43	8.8	310	11	1.1	12
74-05-23	198	--	174	0	14	143	130	0	43	6.1	18	.7	1.0	3.4
74-06-20	333	--	310	0	2.0	254	53	0	20	.8	110	6.6	.7	11
74-05-23	499	--	436	0	35	358	210	0	65	11	110	3.3	1.1	15
74-06-20	444	--	398	0	20	326	180	0	55	9.4	100	3.3	1.4	13
74-06-20	298	--	270	0	2.7	221	65	0	22	2.4	88	4.8	1.1	9.9
74-06-17	334	--	330	0	8.4	271	140	0	41	9.8	73	2.7	.9	11
74-06-13	354	--	317	0	16	260	200	0	64	9.5	51	1.6	3.3	7.2
74-05-29	161	--	163	0	4.1	134	140	6	50	3.5	3.6	.1	1.2	1.1
74-05-22	179	--	182	0	5.8	149	150	2	53	4.5	6.5	.2	1.1	1.6
74-06-10	181	--	181	0	4.6	148	150	0	50	5.4	9.8	.4	1.2	1.7
74-05-22	210	--	217	0	8.7	178	150	0	47	7.8	19	.7	1.2	2.2
74-05-21	308	--	315	0	20	258	210	0	66	11	30	.9	1.2	2.0
75-08-20	--	588	324	51	68	350	335	ND	100	20	101	2.4	2.3	19
73-08-07	756	--	501	0	40	411	400	0	120	25	110	2.4	3.3	30
75-06-09	--	661	371	24	34	344	330	0	110	13	113	2.7	2.3	19
74-06-13	490	--	254	0	8.1	208	130	0	40	7.9	120	4.5	3.6	19
75-08-20	--	564	339	38	42	342	235	ND	72	13	129	3.6	3.1	37
75-10-23	--	523	256	26	1980	255	215	<0	76	6.0	124	3.6	1.9	19
75-11-11	--	558	409	8	858	349	430	81	128	26	85	1.7	4.6	19
75-08-20	--	677	287	43	38	307	390	83	88	41	113	2.4	1.9	60
75-10-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-08-25	--	790	377	38	12	373	460	87	142	25	98	2.0	3.5	19
74-06-13	690	--	319	2	2.1	265	36	0	14	.2	240	17	.8	22
74-05-24	372	--	291	5	1.5	247	16	0	6.2	.1	140	15	.7	7.4
75-06-09	--	898	395	90	18	474	115	ND	38	4.8	310	12	1.9	40
75-08-02	--	1133	133	41	87	178	155	0	60	1.2	333	11	3.5	101
75-11-24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
74-06-11	313	--	255	0	10	209	110	0	36	5.1	74	3.1	1.6	6.8

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) *250*	DIS-SOLVED FLUO-RIDE (F) (MG/L) *1.3*	DIS-SOLVED SILICA (SIO2) (MG/L) *NONE*	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DIS-SOLVED NITRATE (NO3) (MG/L) *45*	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) *NONE*	DIS-SOLVED IRON (FE) (UG/L) *300*	DIS-SOLVED MAN-GANESE (MN) (UG/L) *50*	DIS-SOLVED BORON (B) (UG/L) *NONE*	DIS-SOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *10*	DIS-SOLVED SELE-NIUM (SE) (UG/L) *10*	TOTAL SELE-NIUM (SE) (UG/L) *10*
75-06-20	56	.1	--	--	9.3	--	ND	--	ND	0	--	2	--
75-08-23	27	.1	--	--	6.2	--	ND	--	ND	0	--	1	--
75-10-24	127	.2	--	--	1.8	--	40	--	<0	1	--	5	--
75-06-03	155	.2	--	--	.12	--	0	--	0	1	--	0	--
75-06-09	98	.3	--	--	6.8	--	0	--	120	0	--	3	--
76-02-03	160	.6	--	--	19	--	20	--	0	0	--	19	--
75-06-03	68	.1	--	--	.62	--	0	--	0	0	--	1	--
75-06-04	114	.1	--	--	.31	--	0	--	0	1	--	2	--
75-06-04	83	.2	--	--	.19	--	0	--	0	1	--	0	--
75-06-07	161	.8	--	--	.62	--	ND	--	--	2	--	1	--
74-05-24	88	.6	10	.25	--	.01	320	30	30	--	0	--	9
74-06-11	300	1.4	6.7	.44	--	.00	--	--	40	--	0	--	1
74-05-23	21	.1	18	.24	--	.14	50	30	30	--	61	--	0
74-06-20	28	.6	8.0	.21	--	.01	40	0	40	--	3	--	0
74-05-23	63	.4	13	1.3	--	.02	70	40	30	--	0	--	24
74-06-20	54	.4	12	.65	--	.01	50	20	50	--	0	--	31
74-06-20	29	.9	9.7	.44	--	.01	20	0	40	--	2	--	4
74-06-17	24	.9	8.8	.37	--	.09	70	300	30	--	2	--	0
74-06-13	39	.2	11	2.8	--	.02	40	10	40	--	0	--	2
74-05-29	9.2	.2	8.9	.60	--	.01	60	0	8	--	1	--	1
74-05-22	12	.2	8.6	.35	--	.03	40	10	10	--	0	--	1
74-06-10	12	.3	9.8	.31	--	.02	140	40	6	--	1	--	3
74-05-22	13	.3	11	.33	--	.03	20	60	10	--	0	--	0
74-05-21	24	.4	14	.95	--	.02	50	10	30	--	0	--	6
75-08-20	188	.4	--	--	1.8	--	ND	--	80	0	--	7	--
73-08-07	140	.6	27	12	--	.02	30	30	330	--	0	120	120
75-06-09	155	.4	--	--	75	--	0	--	260	1	--	89	--
74-06-13	150	.5	7.1	3.8	--	.01	40	0	30	--	1	--	45
75-08-20	144	.5	--	--	4.3	--	ND	--	80	0	--	48	--
75-10-23	195	.8	--	--	1.2	--	<0	--	50	1	--	9	--
75-11-11	233	.4	--	--	3.7	--	320	--	<0	1	--	24	--
75-08-20	193	.9	--	--	8.6	--	ND	--	80	0	--	220	--
75-10-02	--	--	--	--	--	--	0	--	--	0	--	160	--
75-08-25	305	.3	--	--	.25	--	ND	--	50	1	--	9	--
74-06-13	240	5.4	7.9	.08	--	.02	100	10	50	--	1	--	0
74-05-24	57	2.5	9.3	.03	--	.01	120	30	80	--	0	--	1
75-06-09	154	.9	--	--	75	--	ND	--	600	0	--	9	--
75-08-02	511	2.0	--	--	.62	--	0	--	0	0	--	1	--
75-11-24	--	--	--	--	--	--	1900	--	--	--	--	--	--
74-06-11	51	3.6	8.4	.08	--	.00	20	40	60	--	15	--	1

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*
76	370147107360100	NB03200710CBD	CARL BAKER	--	--	74-06-13	124SNJS	13.0	7.5	571
77	370155107360400	NB03200710BCD	TOM NEWTON SPRING	--	--	74-05-24	124SNJS	10.5	7.4	623
78	370156107585400	NB03201007CBB	THEIRRY SPRING PICNIC FLATS	--	--	74-05-09	124SNJS	10.0	7.3	350
79	370154107303600	NB03200609CBA	ORIN BEATY	114	10	74-06-11	124SNJS	13.0	8.1	1490
80	370203107234100	NB03200509ACD	JOSE E MARQUEZ	117	--	75-08-25	124SNJS	16.5	8.0	975
81	370219107355400	NB03200710BAB	MAX WATTS	152	15	74-06-12	124SNJS	--	7.8	780
82	370232107241000	NB03200504CCA	FLOYD ANDREWS	187	150	75-11-11	124SNJS	14.0	7.5	900
83	370310107335000	NB03200701BBA	STEVE ALTON	115	27	74-06-20	124SNJS	16.0	7.4	2700
84	370436107013900	NB03300629BDC	L HOPKINS	205	130	74-06-13	124SNJS	15.5	7.6	5660
85	370441107342200	NB03300726ACA	JOE WILLIAMS	199	10	74-06-11	124SNJS	11.5	7.8	768
86	370446107414700	NB03300827AAD	RAYMOND JACQUEZ	269	136	74-06-20	124SNJS	13.0	8.3	1750
87	370620107442700	NB03300817BDD1	CLAUDE HARMON 1	159	50	74-06-18	124SNJS	17.5	8.2	2780
87			CLAUDE HARMON 1	159	--	75-07-24	124SNJS	15.0	8.2	3000
88	370620107442800	NB03300817BDD2	CLAUDE HARMON 2	194	53	75-10-01	124SNJS	12.0	8.7	2600
89	370620107443200	NB03300817BDD3	CLAUDE HARMON 3	300	48	75-10-01	124SNJS	16.0	8.4	2575
90	370625107451000	NB03300818ADB	MILDRED DOLAN	68	43	75-05-02	124SNJS	10.5	8.2	2700
91	370637107434200	NB03300816BBA	ALFREDO VASQUEZ	120	47	74-06-17	124SNJS	13.0	8.9	754
92	370653107435400	NB03300808DDA	ROBERT DICKEY	200	20	75-06-12	124SNJS	13.5	9.6	975
93	370707107462700	NB03300912ACD	RODGER MALSTEAD	103	18	74-06-19	124SNJS	12.0	7.6	1940
94	370728107405500	NB03300802DBA	JOSE QUINTANA	85	65	74-06-17	124SNJS	13.0	7.8	1520
95	370750107435500	NB03300808AAD	LYLE OLSON	180	90	74-06-17	124SNJS	14.0	8.5	1700
96	370801107381600	NB03300705BCD	LEONARD BURCH	40	8	74-05-28	124SNJS	12.0	8.0	751
97	370817107380400	NB03300705BAC	EDDIE BOX JR.	199	38	74-06-10	124SNJS	--	8.2	662
98	370822107384900	NB03300706ABA	JOHN MONTE	--	--	74-06-07	124SNJS	11.0	8.0	714
99	370826107384600	NB03400836CDD	SHIRLEY GOODTRACK	150	16	74-06-13	124SNJS	17.0	8.6	1130
100	370831107403400	NB03400836CCB	CLEM BAKER	98	48	74-06-10	124SNJS	12.0	8.8	659
101	370837107420600	NB03400834DCC	ROBERT KLUSMAN STOCK	160	17	74-06-18	124SNJS	--	7.5	959
102	370839107415900	NB03400834DAC	ROBERT KLUSMAN ARTESIAN	--	F*	74-06-18	124SNJS	17.0	8.1	3430
103	370841107415800	NB03400834DDA	ROBERT KLUSMAN DOMESTIC	90	20	74-06-18	124SNJS	13.0	8.2	1430
104	370932107414900	NB03400827DAD	PINON RIDGE RANCH	196	194	76-02-03	124SNJS	14.5	7.5	1000
105	370933107404100	NB03400826DAD	KAARE EVENSEN	116	23	75-08-01	124SNJS	27.0	7.9	1000
105			KAARE EVENSEN	116	17	75-10-26	124SNJS	11.0	6.7	875
106	370934107404100	NB03400826DAD	OXFORD TEST 1 SAMPLE	35	22	75-07-29	124SNJS	12.5	9.0	660
106			OXFORD TEST 2 SAMPLE	267	128	75-07-30	124SNJS	13.0	9.0	650
106			OXFORD TEST 3 SAMPLE	502	20	75-08-26	124SNJS	13.0	8.3	590
106			OXFORD TEST 3 SAMPLE			75-08-26	124SNJS	13.0	8.3	590
106			OXFORD TEST 4 SAMPLE	502	--	75-08-27	124SNJS	13.0	8.8	600
106			OXFORD TEST 4 SAMPLE			75-08-27	124SNJS	13.0	8.8	600
106			OXFORD TEST 5 SAMPLE	502	17	75-10-02	124SNJS	12.0	7.8	590
106			OXFORD TEST 6 SAMPLE	502	20	75-10-26	124SNJS	13.0	7.9	565

*F INDICATES FLOWING WELL.

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) *500*	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) *500*	BICAR-BONATE (HCO3) (MG/L) *NONE*	CAR-BONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKA-LINITY AS CACO3 (MG/L) *NONE*	HARD-NESS (CA,MG) (MG/L) *NONE*	NON-CAR-BONATE HARD-NESS (MG/L) *NONE*	DIS-SOLVED CAL-CIUM (CA) (MG/L) *NONE*	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) *125*	DIS-SOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM AD-SORP-TION RATIO *NONE*	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) *NONE*	DIS-SOLVED CHLO-RIDE (CL) (MG/L) *250*
74-06-13	346	--	324	0	16	266	200	0	61	11	52	1.6	1.2	8.3
74-05-24	373	--	313	0	20	257	170	0	50	12	72	2.4	1.0	13
74-05-09	194	--	202	0	16	166	170	2	56	6.7	10	.3	2.0	3.2
74-06-11	944	--	697	0	8.9	572	59	0	18	3.3	340	19	2.1	7.2
75-08-25	--	660	371	33	7.0	360	170	ND	56	7.3	181	6.0	1.9	5.3
74-06-12	472	--	416	0	11	341	280	0	79	19	66	1.7	.9	18
75-11-11	--	519	195	26	13	231	20	ND	6.0	1.2	207	20	.7	23
74-06-20	2110	--	258	0	16	212	860	650	250	58	330	4.9	6.6	19
74-06-13	2910	--	94	0	3.8	77	390	310	150	3.2	980	22	2.4	1700
74-06-11	490	--	300	0	7.6	246	290	44	85	19	61	1.6	1.0	5.9
74-06-20	939	--	255	0	2.0	209	100	0	38	1.2	320	14	.9	370
74-06-18	1630	--	94	0	.9	77	77	0	29	1.1	550	27	1.2	530
75-07-24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-10-01	--	1624	87	7	.3	84	60	ND	22	1.2	506	28	.7	551
75-10-01	--	1614	84	9	.7	86	70	ND	28	ND	492	25	5.0	537
75-05-02	--	1857	166	14	2.0	161	170	9	56	7.3	536	17	3.5	123
74-06-17	433	--	236	1	.5	195	8	0	3.0	.2	160	24	.4	39
75-06-12	--	519	248	24	.1	243	30	ND	6.0	3.6	214	16	.3	154
74-06-19	1360	--	182	0	7.3	149	700	550	210	43	170	2.8	2.9	120
74-06-17	917	--	406	0	10	333	170	0	64	2.6	270	9.0	.9	120
74-06-17	995	--	218	1	1.1	180	51	0	19	.9	340	21	.9	230
74-05-28	441	--	431	0	6.9	354	100	0	26	9.3	140	6.0	1.3	17
74-06-10	401	--	339	0	3.4	278	47	0	17	1.2	140	8.9	1.2	17
74-06-07	417	--	305	0	4.9	250	61	0	20	2.7	140	7.8	.4	36
74-06-13	671	--	225	3	.9	190	27	0	9.9	.5	230	19	.6	58
74-06-10	373	--	191	6	.5	167	8	0	2.8	.2	140	22	.2	49
74-06-18	601	--	263	0	13	216	220	5	75	8.1	120	3.5	1.0	28
74-06-18	2210	--	2130	0	27	1750	23	0	7.6	1.0	910	82	4.2	18
74-06-18	896	--	375	0	3.8	308	40	0	15	.5	310	21	.5	51
76-02-03	--	663	283	--	14	240	90	0	20	9.7	200	9.1	1.9	39
75-08-01	--	855	664	109	18	727	60	0	22	1.2	324	18	4.3	2.1
75-10-26	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-07-29	--	378	204	33	.4	225	45	0	12	3.6	136	8.8	1.1	23
75-07-30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-08-26	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-08-26	--	358	242	29	2.4	246	15	0	6.0	.0	138	15	.7	21
75-08-27	--	363	222	16	.6	210	10	0	4.0	.0	138	18	.7	37
75-08-27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-10-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-10-26	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) *250*	DIS-SOLVED FLUO-RIDE (F) (MG/L) *1.3*	DIS-SOLVED SILICA (SIO2) (MG/L) *NONE*	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DIS-SOLVED NITRATE (NO3) (MG/L) *45*	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) *NONE*	DIS-SOLVED IRON (FE) (UG/L) *300*	DIS-SOLVED MAN-GANESE (MN) (UG/L) *50*	DIS-SOLVED BORON (B) (UG/L) *NONE*	DIS-SOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *10*	DIS-SOLVED SELE-NIUM (SE) (UG/L) *10*	TOTAL SELE-NIUM (SE) (UG/L) *10*
74-06-13	35	.7	14	.55	--	.00	180	0	30	--	0	--	9
74-05-24	49	.8	13	1.7	--	.01	10	20	40	--	0	--	13
74-05-09	11	1.0	3.3	.12	--	.01	40	430	40	--	2	--	1
74-06-11	200	1.3	6.9	4.8	--	.02	60	0	50	--	0	--	2
75-08-25	155	.7	--	--	3.1	--	ND	--	120	0	--	53	--
74-06-12	57	.9	17	2.1	--	.02	--	--	70	--	1	--	71
75-11-11	205	.2	--	--	.25	--	ND	--	<0	10	--	1	--
74-06-20	1300	.7	7.6	2.6	--	.02	720	110	70	--	0	--	29
74-06-13	19	3.2	5.3	.48	--	.03	50	280	60	--	6	--	0
74-06-11	150	1.3	10	.81	--	.00	130	5500	10	--	1	--	2
74-06-20	70	5.3	7.1	.18	--	.01	30	20	70	--	5	--	5
74-06-18	150	3.2	5.4	70	--	.01	50	0	80	--	0	7860	700
75-07-24	--	--	--	--	--	--	--	--	--	1	--	13000	--
75-10-01	122	2.5	--	--	246	--	50	--	50	0	--	5400	--
75-10-01	67	2.1	--	--	246	--	30	--	ND	0	--	6200	--
75-05-02	927	3.5	--	--	32	--	ND	--	12	0	--	1200	--
74-06-17	100	5.4	7.1	.05	--	.01	90	10	70	--	14	--	6
75-06-12	43	5.9	--	--	.12	--	ND	--	260	1	--	4	--
74-06-19	710	.7	7.4	2.4	--	2.4	100	40	40	--	0	--	66
74-06-17	250	.2	8.6	.13	--	.00	230	10	50	--	6	--	20
74-06-17	240	6.3	7.9	9.3	--	.00	40	10	60	--	1	--	60
74-05-28	32	.4	2.4	.03	--	.00	70	160	50	--	1	--	3
74-06-10	42	.7	7.7	1.6	--	.01	50	30	40	--	7	--	18
74-06-07	52	3.0	9.5	.67	--	.01	50	20	40	--	1	--	1
74-06-13	240	6.0	5.7	1.5	--	.00	80	0	50	--	5	--	80
74-06-10	65	6.4	8.4	.08	--	.01	50	0	50	--	11	--	20
74-06-18	200	.3	7.3	7.1	--	.00	50	130	40	--	4	--	4
74-06-18	26	1.3	30	.13	--	.06	480	0	1100	--	0	--	1
74-06-18	320	3.0	8.2	.55	--	.00	140	10	70	--	5	--	2
76-02-03	240	1.6	--	--	9.3	--	10	--	60	14	--	4	--
75-08-01	25	2.3	--	--	.62	--	0	--	50	5	--	58	--
75-10-26	--	--	--	--	--	--	90	--	--	0	--	33	--
75-07-29	54	3.0	--	--	8.0	--	0	--	50	1	--	400	--
75-07-30	--	--	--	--	--	--	--	--	--	0	--	540	--
75-08-26	--	--	--	--	--	--	--	--	--	0	--	120	--
75-08-26	39	1.7	--	--	6.2	--	160	--	50	--	--	--	--
75-08-27	39	3.5	--	--	5.7	--	90	--	0	--	--	--	--
75-08-27	--	--	--	--	--	--	--	--	--	1	--	330	--
75-10-02	--	--	--	--	--	--	0	--	--	0	--	260	--
75-10-26	--	--	--	--	--	--	10	--	--	2	--	90	--

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*
107	370952107395100	NB03400825ACA	JAMES MARTIN	197	63	75-08-28	124SNJS	15.0	7.5	735
108	370956107412600	NB03400826BDB	PATRICK KERRIGAN	170	--	75-11-21	124SNJS	11.5	6.5	1750
109	371006107422200	NB03400827BAA	ELI KOVACICH ARTESIAN	244	F*	74-06-20	124SNJS	12.0	8.9	1700
110	371008107391900	NB03400730BBA	E PRESTON 1	21	10	74-06-20	124SNJS	12.0	7.6	573
111	371008107392400	NB03400730BBB	E PRESTON 2	59	4	74-06-19	124SNJS	13.0	7.7	1150
112	371012107405700	NB03400823DCD	W J WITT	125	79	75-08-27	124SNJS	16.0	8.1	1650
113	371026107433000	NB03400821CAC	LEROY MC CAW	90	18	74-06-20	124SNJS	12.0	8.1	857
114	371029107420000	NB03400822DBD	MIKE MC MANUS	105	30	75-08-28	124SNJS	15.0	8.0	2000
114			MIKE MC MANUS			75-12-22	124SNJS	17.0	7.8	1800
115	370017107152400	NB03200423BCD	CHRIS A BAKER	124	21	75-11-24	125ANMS	9.0	7.7	570
116	370025107135900	NB03200424ACB	CHRIS CHAVEZ	65	8	75-08-25	125ANMS	14.0	8.2	1500
117	370118107522700	NB03200918BBC	B COGBURN 1	53	30	73-08-09	125ANMS	26.0	7.4	2200
117			B COGBURN 1			75-06-10	125ANMS	12.5	7.5	2010
118	370122107083600	NB03200314ABC	MODESTA ORTIZ 2	9	7	75-08-22	125ANMS	14.0	7.6	560
119	370122107522700	NB03200918BBB	B COGBURN 2	138	25	74-06-20	125ANMS	12.0	7.5	4920
120	370131107090200	NB03200311CCD	MODESTA ORTIZ 1	76	--	75-08-22	125ANMS	14.5	7.4	650
121	370132107524500	NB03201012DDC	MIKE MOHAR	143	86	75-06-10	125ANMS	18.0	7.6	2050
122	370150107121900	NB03200308CBC	MARTIN MARTINEZ	80	72	75-08-22	125ANMS	18.0	8.1	950
123	370151107122700	NB03200307DAD2	SOPHIA MARTINEZ 2	130	71	75-08-22	125ANMS	14.5	8.0	775
124	370204107085200	NB03200311BDB	ELOISA VILLARREAL	50	23	75-08-21	125ANMS	13.0	7.3	900
125	370246107114000	NB03200305DBA	LU ANN MATTSON	108	77	75-08-21	125ANMS	19.5	8.5	760
126	370300107081300	NB03200302AAD	TRAIL CANYON SPRING	--	--	74-05-27	125ANMS	--	7.8	1090
127	370314107522700	NB03300931CCC	CARL WESTON	201	52	75-06-11	125ANMS	16.0	7.9	1400
128	370331107114100	NB03300332DBD	GOMEZ SPRING	--	--	75-08-21	125ANMS	16.0	7.3	420
129	370400107243100	NB03300532AAB	L A FISHER	60	13	75-03-19	125ANMS	11.5	8.1	525
130	370422107360900	NB03300727CBC	RAY SAGE SPRING	--	--	74-06-10	125ANMS	12.0	7.4	820
131	370429107362000	NB03300728DAA	MARTIN HAYS	118	56	74-05-25	125ANMS	13.5	7.8	2130
132	370433107241400	NB03300528BCD	H W LINDSEY	48	14	75-05-10	125ANMS	10.5	7.9	555
133	370454107362700	NB03300728AAB	JULIUS CLOUD	230	49	74-06-12	125ANMS	13.0	7.8	1380
134	370503107362200	NB03300721DDA	MAURICE SAGE SR.	160	22	74-06-07	125ANMS	13.0	7.6	1340
135	370506107360300	NB03300722CCA	MAURICE SAGE SPRING	--	--	74-05-23	125ANMS	13.0	7.6	1810
136	370508107311000	NB03300724DDB	RAY OLQUIN	85	7	74-06-11	125ANMS	12.0	7.7	1850
137	370508107515900	NB03300919DCB	WILLIAM GRIMES	262	155	76-02-03	125ANMS	10.5	6.7	610
138	370514107355900	NB03300722CAC	MILLER SPRING	--	--	74-05-25	125ANMS	8.5	7.5	532
139	370519107361700	NB03300721DAA	CLAUDENE MILLER	142	5	74-05-25	125ANMS	13.0	7.4	2480
140	370549107432200	NB03300716CDD	J BROWN	176	43	74-06-18	125ANMS	13.0	7.8	1250
141	370556107343500	NB03300714DCB	EUGENE VALDEZ	81	14	74-06-12	125ANMS	12.0	7.5	1770
142	370602107330200	NB03300713DAD	BONNY KENT	50	9	74-06-11	125ANMS	12.0	7.7	1560
143	370607107332800	NB03300714DBD	JUNIA RUYBAL	60	18	74-06-11	125ANMS	--	7.9	1150
144	370628107343500	NB03300714ABC	DIAMOND SMITH	90	18	74-06-12	125ANMS	12.0	7.6	1560

*F INDICATES FLOWING WELL.

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) *500*	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) *500*	BICAR-BONATE (HCO3) (MG/L) *NONE*	CAR-BONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKA-LINITY AS CACO3 (MG/L) *NONE*	HARD-NESS (CA,MG) (MG/L) *NONE*	NON-CAR-BONATE HARD-NESS (MG/L) *NONE*	DIS-SOLVED CAL-CIUM (CA) (MG/L) *NONE*	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) *125*	DIS-SOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM AD-SORP-TION RATIO *NONE*	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) *NONE*	DIS-SOLVED CHLO-RIDE (CL) (MG/L) *250*
75-08-28	--	445	275	33	17	281	90	ND	34	1.2	138	6.3	1.9	47
75-11-21	--	117	404	26	232	376	100	<0	36	2.4	372	16	1.1	115
74-06-20	944	--	243	11	.5	218	53	0	19	1.4	330	20	1.5	310
74-06-20	329	--	296	0	12	243	210	0	67	9.9	38	1.1	.8	10
74-06-19	709	--	350	0	11	287	160	0	52	7.5	190	6.5	1.3	29
75-08-27	--	1041	352	24	5.1	328	65	ND	24	1.2	344	18	1.1	149
74-06-20	466	--	343	0	4.4	281	66	0	23	2.1	1.6	8.6	.7	37
75-08-28	--	1358	309	31	6.0	305	150	ND	60	ND	393	13	1.9	152
75-12-22	--	1205	360	9	9.6	311	150	<0	48	7.3	395	14	3.5	127
75-11-24	--	383	225	363	31	245	20	<0	6.0	1.2	152	14	.3	21
75-08-25	--	948	343	33	4.2	337	150	ND	44	9.7	312	11	1.1	58
73-08-09	1480	--	261	0	17	214	960	740	300	50	120	1.7	3.3	380
75-06-10	--	1266	216	19	13	209	775	566	265	27	145	2.2	7.8	266
75-08-22	--	371	200	17	9.4	192	225	33	74	9.7	39	1.1	1.5	ND
74-06-20	3490	--	135	0	6.8	111	1200	1100	420	39	770	9.6	5.9	1400
75-08-22	--	409	244	29	19	248	265	17	82	14	43	1.1	3.1	19
75-06-10	--	1592	244	21	12	235	515	280	148	35	347	6.6	1.9	284
75-08-22	--	605	239	219	8.7	232	330	98	100	19	102	2.4	3.5	17
75-08-22	--	415	259	24	4.9	252	210	ND	68	9.7	92	2.7	3.1	3.5
75-08-21	--	565	202	33	22	221	210	ND	70	8.5	120	3.5	1.1	54
75-08-21	--	340	245	9	1.3	217	25	0	8.0	1.2	131	11	.3	7.0
74-05-27	--	--	403	36	12	390	280	0	76	21	152	4.0	1.6	5.3
75-06-11	--	793	229	53	6.8	277	80	ND	30	1.2	276	13	.7	222
75-08-21	--	252	153	26	17	170	215	46	42	26	37	.4	.7	1.7
75-03-19	--	341	209	15	3.1	198	50	ND	18	1.2	92	5.7	5.4	14
74-06-10	492	--	360	0	23	295	390	90	100	33	24	.5	.7	42
74-05-25	1230	--	851	0	22	698	61	0	22	1.5	480	27	1.8	290
75-05-10	--	365	253	0	5.1	208	230	22	80	7.3	37	1.0	1.9	5.3
74-06-12	765	--	516	0	13	423	46	0	17	.9	290	19	1.5	190
74-06-07	971	--	422	0	17	346	290	0	87	18	200	5.1	1.0	52
74-05-23	1310	--	333	0	13	273	880	600	260	55	89	1.3	5.5	25
74-06-11	1190	--	502	0	16	412	150	0	52	3.8	370	13	1.6	57
76-02-03	--	382	198	0	63	162	15	0	6.0	.0	120	13	1.5	21
74-05-25	331	--	216	0	11	177	210	29	61	13	33	1.0	.5	6.9
74-05-25	1720	--	519	0	33	426	570	150	160	42	360	6.5	1.4	120
74-06-18	679	--	182	0	4.6	149	27	0	10	.6	250	21	1.4	240
74-06-12	1240	--	505	0	26	414	390	0	120	22	280	6.2	3.4	30
74-06-11	993	--	503	0	16	413	110	0	30	7.3	320	14	1.0	17
74-06-11	744	--	230	0	4.6	189	210	19	69	8.5	170	5.1	3.4	18
74-06-12	1010	--	179	0	7.2	147	320	170	77	30	210	5.1	2.8	75

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DISSOLVED SULFATE (SO4) (MG/L) *250*	DISSOLVED FLUORIDE (F) (MG/L) *1.3*	DISSOLVED SILICA (SIO2) (MG/L) *NONE*	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DISSOLVED NITRATE (NO3) (MG/L) *45*	DISSOLVED ORTHOPHOSPHORUS (P) (MG/L) *NONE*	DISSOLVED IRON (FE) (UG/L) *300*	DISSOLVED MANGANESE (MN) (UG/L) *50*	DISSOLVED BORON (B) (UG/L) *NONE*	DISSOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *10*	DISSOLVED SELENIUM (SE) (UG/L) *10*	TOTAL SELENIUM (SE) (UG/L) *10*
75-08-28	31	2.6	--	--	2.0	--	ND	--	ND	2	--	140	--
75-11-21	241	1.4	--	--	31	--	20	--	150	1	--	11	--
74-06-20	100	3.2	10	8.6	--	.02	70	0	50	--	0	--	240
74-06-20	35	1.0	8.8	2.8	--	.01	30	0	40	--	4	--	3
74-06-19	240	1.0	7.9	1.8	--	.00	70	0	30	--	0	--	16
75-08-27	189	1.7	--	--	126	--	ND	--	180	1	--	52	--
74-06-20	59	1.0	6.2	1.7	--	.00	50	0	50	--	6	--	8
75-08-28	115	.6	--	--	482	--	ND	--	50	0	--	170	--
75-12-22	145	.9	--	--	423	--	60	--	--	0	--	240	--
75-11-24	855	3.0	--	--	<.00	--	50	--	150	18	--	0	--
75-08-25	365	1.3	--	--	.12	--	20	--	ND	4	--	0	--
73-08-09	440	.4	11	9.6	--	.01	30	20	250	--	0	--	28
75-06-10	432	.3	--	--	15	--	ND	--	400	1	--	32	--
75-08-22	131	.3	--	--	1.9	--	ND	--	150	0	--	1	--
74-06-20	770	.3	7.9	1.9	--	.01	30	50	110	--	3	--	100
75-08-22	46	.2	--	--	37	--	--	--	12	1	--	7	--
75-06-10	567	1.4	--	--	.06	--	ND	--	400	2	--	0	--
75-08-22	250	.4	--	--	8.6	--	ND	--	40	0	--	33	--
75-08-22	129	.3	--	--	6.8	--	ND	--	80	0	--	14	--
75-08-21	93	.3	--	--	80	--	ND	--	240	0	--	4	--
75-08-21	80	2.8	--	--	.62	--	--	--	80	2	--	2	--
74-05-27	175	.4	--	1.8	--	--	--	--	300	--	--	--	--
75-06-11	92	1.9	--	--	.12	--	ND	--	120	1	--	1	--
75-08-21	58	.3	--	--	8.6	--	ND	--	40	0	--	24	--
75-03-19	32	1.2	--	--	3.7	--	ND	--	ND	0	--	0	--
74-06-10	50	2.8	27	7.8	--	.02	90	150	90	--	1	--	10
74-05-25	4.0	1.0	10	.02	--	.01	310	0	60	--	2	--	0
75-05-10	97	.5	--	--	ND	--	ND	--	ND	0	--	1	--
74-06-12	2.3	2.0	6.4	.09	--	.00	--	--	50	--	2	--	3
74-06-07	290	.6	12	.45	--	.01	160	510	40	--	0	--	50
74-05-23	700	.3	9.6	.10	--	.01	20	50	40	--	22	--	22
74-06-11	450	1.5	7.4	.10	--	.00	--	--	60	--	4	--	1
76-02-03	85	3.6	--	--	1.2	--	10	--	60	0	--	28	--
74-05-25	94	.8	14	.23	--	.02	20	20	10	--	1	--	30
74-05-25	770	.6	9.9	.23	--	.01	70	40	60	--	0	--	24
74-06-18	73	5.6	7.1	.23	--	.01	30	0	80	--	1	--	240
74-06-12	520	.4	6.9	.91	--	.01	--	--	30	--	0	--	16
74-06-11	360	1.5	7.1	.18	--	.00	0	10	40	--	14	--	53
74-06-11	340	.2	5.4	3.7	--	.01	--	--	40	--	1	--	3
74-06-12	520	1.6	.8	.28	--	.00	20	100	50	--	28	--	4

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*
145	370631107340700	NB03300714AAD	SUNSHINE SMITH	115	42	74-06-12	125ANMS	13.5	9.6	1080
146	370707107365700	NB03300709CAB	JAMES BAKER	55	18	74-06-12	125ANMS	11.0	7.6	768
147	37070B107365000	NB03300709BDD	NOVA BURCH	118	16	74-06-11	125ANMS	11.5	7.9	734
148	370708107373700	NB03300708ACD	GERALD HOWE	101	27	74-05-23	125ANMS	13.5	8.6	551
149	370711107371200	NB03300709BCC	ERNEST BURCH	205	--	74-06-13	125ANMS	14.0	8.0	787
149			ERNEST BURCH			74-09-26	125ANMS	--	--	--
150	370722107330300	NB03300712ADD	BENNY BERRY	200	3	75-03-27	125ANMS	7.0	8.2	1750
151	370725107363500	NB03300709ABD	HARRY RICHARDS	--	55	74-06-13	125ANMS	14.0	7.6	1180
152	370728107324600	NB03300607BBA	O R CROSS	80	17	75-08-28	125ANMS	16.5	7.5	700
153	370730107533600	NB03301012BBB	HINIO TUCSON	94	21	75-06-11	125ANMS	14.0	8.3	1400
154	370731107370B00	NB03300709BBA2	EDNA HOOD	40	5	74-06-13	125ANMS	11.0	7.2	900
155	370732107370900	NB03300709BBA1	M DURAN	130	25	74-06-13	125ANMS	13.0	7.4	860
156	370732107523800	NB03301012AAB1	MARY MC CULLOCH 1	116	--	75-11-25	125ANMS	8.0	6.5	775
157	370734107380900	NB03300705CDC	STANLEY FROST	60	5	74-05-27	125ANMS	10.0	7.3	1020
158	370736107381600	NB03300705CCD	BIRD RED	8	4	74-05-27	125ANMS	12.0	7.5	1080
159	370805107040300	NB03300701BBC	ALLAN CAREL	159	27	74-06-13	125ANMS	13.0	8.1	1060
159			ALLAN CAREL			75-05-01	125ANMS	13.5	8.2	1050
160	370814107330300	NB03300701AAD	ELMER POWELL	75	33	73-08-08	125ANMS	18.0	8.0	1110
160			ELMER POWELL	75	41	75-05-14	125ANMS	13.0	--	1100
161	370B21107462400	NB03300901ABA	M B DORE	90	26	75-07-26	125ANMS	14.0	8.7	1440
162	370824107341900	NB03300702AAB	ELMER KENNER SPRING	--	--	75-05-01	125ANMS	10.5	7.8	800
163	370825107334800	NB03400736CDC	TEAD RUSSELL	85	9	75-05-01	125ANMS	11.5	7.8	735
164	370B25107341200	NB03400735DDD	ELMER KENNER	200	--	75-05-01	125ANMS	10.0	8.2	570
165	370830107374900	NB03400732DCC	J SANCHEZ	58	19	74-06-07	125ANMS	15.0	7.6	1040
166	370835107210600	NB03400536CCB	JOHN GALLEGOS JR. 1	80	18	75-05-06	125ANMS	12.0	7.9	850
167	370840107363100	NB03400733DBD	OSCAR STRAIN 2	60	6	74-05-27	125ANMS	11.0	7.4	398
168	370841107374300	NB03400732DBD	VONESTA HERRERA	160	15	74-06-08	125ANMS	12.0	7.8	940
169	370842107361900	NB03400733DAD	OSCAR STRAIN 1	52	28	74-05-27	125ANMS	12.0	7.4	546
170	370849107375200	NB03400732DBB	M SANTISTEVAN	130	40	74-06-07	125ANMS	12.0	8.3	622
171	370901107375100	NB03400732ACB	JOE GOMEZ	87	30	74-06-01	125ANMS	13.0	8.7	576
172	370911107371100	NB03400732AAA	SAM PINNECOOSE	198	18	74-06-10	125ANMS	12.0	8.7	596
173	370913107363900	NB03400733ABA	RUBY GARCIA	198	7	74-05-28	125ANMS	14.0	8.5	680
174	370913107375000	NB03400732ABB2	GARNET OLQUIN	96	28	74-06-01	125ANMS	13.0	8.2	767
175	370915107364400	NB03400733ABB	SYLVIA VALDEZ	114	6	74-05-27	125ANMS	12.0	7.3	640
176	370916107371100	NB03400733BBA	FRED PINNECOOSE	75	--	74-06-01	125ANMS	12.0	7.3	638
177	370916107374600	NB03400732ABB1	BELLE CUTHAIR	61	35	74-06-01	125ANMS	12.0	7.4	632
178	370920107363100	NB03400728DDC	JOE RAEL	82	11	74-05-27	125ANMS	21.0	7.8	503
179	370922107450900	NB03400830DDC	LA PLATA AIRPORT W.	177	70	74-06-20	125ANMS	14.0	8.5	1160
180	370924107363100	NB03400728DDB	JOE TREE	154	25	74-05-27	125ANMS	23.0	8.5	613
181	370929107345400	NB03400726CCA	BERTHA GROVE	122	7	74-05-23	125ANMS	--	9.0	677

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) *500*	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) *500*	BICARBONATE (HCO3) (MG/L) *NONE*	CARBONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKALINITY AS CACO3 (MG/L) *NONE*	HARDNESS (CA,MG) (MG/L) *NONE*	NONCARBONATE HARDNESS (MG/L) *NONE*	DISSOLVED CALCIUM (CA) (MG/L) *NONE*	DISSOLVED MAGNESIUM (MG) (MG/L) *125*	DISSOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM ADSORPTION RATIO *NONE*	DISSOLVED POTASSIUM (K) (MG/L) *NONE*	DISSOLVED CHLORIDE (CL) (MG/L) *250*
74-06-12	632	--	174	60	.1	243	28	0	9.5	1.0	220	18	2.4	80
74-06-12	475	--	455	0	18	373	290	0	93	14	65	1.7	1.2	4.0
74-06-11	442	--	369	0	7.4	303	130	0	39	7.1	120	4.6	1.9	14
74-05-23	328	--	281	5	1.2	239	7	0	2.9	.0	130	21	.4	13
74-06-13	440	--	262	0	4.2	215	49	0	16	2.1	150	9.4	1.2	77
74-09-26	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-03-27	--	1247	413	31	4.8	392	125	ND	40	6.0	384	15	.7	15
74-06-13	763	--	379	0	15	311	250	0	86	8.3	170	4.7	1.5	8.5
75-08-28	--	430	320	41	20	330	225	ND	84	3.6	72	2.0	1.5	12
75-06-11	--	1148	414	31	3.8	391	75	ND	28	1.2	400	20	2.7	119
74-06-13	550	--	522	0	53	428	350	0	110	19	66	1.5	.9	7.4
74-06-13	522	--	528	0	34	433	190	0	50	17	130	4.1	1.0	7.6
75-11-25	--	473	259	7	138	224	105	<0	34	4.8	122	5.1	1.9	31
74-05-27	604	--	538	0	43	441	310	0	93	18	110	2.7	1.2	36
74-05-27	666	--	543	0	27	445	240	0	67	17	160	4.5	1.4	41
74-06-13	692	--	216	0	2.7	177	180	4	48	15	150	4.8	.9	46
75-05-01	--	734	67	17	1.0	180	235	80	70	14	140	3.9	.7	47
73-08-08	713	--	439	0	7.0	360	66	0	15	7.0	240	13	.7	10
75-05-14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75-07-26	--	578	143	31	.7	170	35	ND	12	1.2	216	15	.3	179
75-05-01	--	494	317	24	9.3	301	295	35	84	20	75	192	.7	35
75-05-01	--	434	395	14	11	349	130	0	40	7.3	126	4.7	1.5	8.8
75-05-01	348	433	311	18	3.5	286	180	0	58	8.5	63	2.0	2.7	14
74-06-07	638	--	434	0	17	356	250	0	78	14	140	3.8	1.2	41
75-05-06	--	613	320	ND	6.5	263	350	87	100	24	57	1.3	1.5	15
74-05-27	249	--	203	0	13	167	120	0	38	7.2	25	1.0	21	3.3
74-06-08	567	--	422	0	11	346	200	0	63	10	140	4.3	1.1	33
74-05-27	327	--	283	0	18	232	200	0	65	10	40	1.2	1.1	7.7
74-06-07	362	--	226	0	1.8	185	69	0	23	2.7	110	5.8	.4	42
74-06-01	336	--	109	3	.4	94	21	0	8.2	.2	110	10	.3	30
74-06-10	290	--	216	3	.7	182	11	0	3.9	.2	110	15	.3	25
74-05-28	399	--	333	4	1.7	280	19	0	7.1	.2	150	15	.4	25
74-06-01	444	--	194	0	2.0	159	40	0	14	1.3	140	9.6	.6	61
74-05-27	385	--	352	0	28	289	300	8	94	15	22	.6	.9	14
74-06-01	379	--	359	0	29	294	260	0	84	12	35	.9	.8	5.3
74-06-01	371	--	365	0	23	299	240	0	76	13	43	1.2	1.1	7.8
74-05-27	295	--	290	0	7.4	238	130	0	39	7.6	65	2.5	1.4	3.4
74-06-20	700	--	324	0	1.6	266	17	0	6.5	.3	250	26	.4	83
74-05-27	370	--	311	4	1.6	262	19	0	6.0	.9	140	14	.5	14
74-05-23	384	--	249	18	.5	234	8	0	2.9	.2	150	23	.3	49

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) *250*	DIS-SOLVED FLUO-RIDE (F) (MG/L) *1.3*	DIS-SOLVED SILICA (SIO2) (MG/L) *NONE*	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DIS-SOLVED NITRATE (NO3) (MG/L) *45*	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) *NONE*	DIS-SOLVED IRON (FE) (UG/L) *300*	DIS-SOLVED MAN-GANESE (MN) (UG/L) *50*	DIS-SOLVED BORON (B) (UG/L) *NONE*	DIS-SOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *10*	DIS-SOLVED SELE-NIUM (SE) (UG/L) *10*	TOTAL SELE-NIUM (SE) (UG/L) *10*
74-06-12	88	2.3	2.4	18	--	.18	0	0	90	--	14	--	12
74-06-12	45	.3	22	1.4	--	.03	--	--	40	--	0	--	17
74-06-11	54	.3	7.0	3.8	--	.00	40	0	50	--	0	--	76
74-05-23	26	2.1	8.8	.18	--	.01	50	20	30	--	32	--	1
74-06-13	49	2.0	5.5	1.8	--	.00	30	90	30	--	0	--	450
74-09-26	--	--	--	--	--	--	--	--	--	--	--	240	--
75-03-27	531	1.0	--	--	1.2	--	ND	--	ND	1	--	0	--
74-06-13	290	.1	8.2	.78	--	.01	160	60	60	--	0	--	49
75-08-28	21	.3	--	--	8.9	--	ND	--	120	1	--	40	--
75-06-11	386	2.4	--	--	--	--	ND	--	100	1	14	19	4
74-06-13	56	.2	22	2.5	--	.03	20	0	30	--	1	--	20
74-06-13	30	.3	19	1.5	--	.01	50	0	70	--	0	--	13
75-11-25	113	1.5	--	--	.62	--	10	--	50	1	--	1	--
74-05-27	65	.6	13	.18	--	.03	460	560	40	--	0	--	7
74-05-27	96	.6	14	.18	--	.05	50	470	50	--	0	--	2
74-06-13	48	.4	2.7	62	--	.00	40	0	40	--	14	--	4
75-05-01	63	.6	--	--	297	--	ND	--	26	0	--	3	--
73-08-08	210	1.7	7.7	.97	--	.01	30	10	60	--	0	--	21
75-05-14	--	--	--	--	--	--	--	--	--	2	--	20	--
75-07-26	54	.3	--	--	5.5	--	ND	--	50	2	--	53	--
75-05-01	96	.6	--	--	4.3	--	ND	--	ND	0	--	0	--
75-05-01	65	.3	--	--	.62	--	ND	--	ND	0	--	4	--
75-05-01	31	.4	--	--	1.8	--	--	--	ND	1	--	0	--
74-06-07	130	.6	12	1.6	--	.11	50	0	30	--	1	--	14
75-05-06	159	.4	--	--	21	--	ND	--	ND	0	--	2	--
74-05-27	31	.3	14	1.3	--	1.1	70	20	60	--	2	--	0
74-06-08	98	.5	9.4	.83	--	.01	100	50	20	--	2	--	14
74-05-27	43	.4	12	1.9	--	.02	50	10	20	--	0	--	3
74-06-07	51	3.0	11	1.6	--	.01	70	0	40	--	10	--	21
74-06-01	120	1.8	8.1	.12	--	.01	60	20	40	--	9	--	12
74-06-10	30	2.5	8.6	.06	--	.02	90	10	60	10	13	--	1
74-05-28	36	3.1	8.7	.03	--	.01	40	0	50	--	4	--	3
74-06-01	120	2.1	8.5	.11	--	.02	90	10	40	--	4	--	1
74-05-27	33	.8	24	1.6	--	.06	50	10	30	--	0	--	1
74-06-01	25	.4	19	4.7	--	.03	50	0	20	--	1	--	0
74-06-01	30	.6	15	.94	--	.00	60	0	20	--	0	--	21
74-05-27	29	.6	5.0	.08	--	.01	40	140	40	--	0	--	0
74-06-20	190	.9	8.2	.11	--	.01	100	30	60	--	10	--	22
74-05-27	41	1.1	8.2	.09	--	.04	60	20	60	--	2	--	0
74-05-23	29	4.5	6.8	.05	--	.01	130	50	50	--	5	--	1

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C)	PH	SPECIFIC CONDUCTANCE (MICROMHOS)
								NONE	(UNITS) *NONE*	*NONE*
182	370930107361100	NB03400727CCB	HAZEL WEAVER	53	4	74-05-29	125ANMS	10.0	7.7	704
183	370931107344100	NB03400726CAD	SANDRA BURCH	253	4	75-11-11	125ANMS	11.5	5.9	590
184	370937107355500	NB03400727CAB	ROLAND WEAVER	128	48	74-05-31	125ANMS	11.0	8.0	863
185	370947107361300	NB03400727BCC	ARTHUR WEAVER	140	12	74-05-31	125ANMS	11.0	7.2	538
186	370958107361100	NB03400727BBC	NEDMA RED	113	13	74-05-28	125ANMS	11.0	7.4	672
187	371007107343100	NB03400726ABB	LUCY THOMPSON	86	6	74-05-23	125ANMS	11.0	8.9	579
188	371009107361300	NB03400722BBB	BRYCE RED	72	16	74-05-31	125ANMS	--	7.2	577
189	371011107355400	NB03400722CDC	RILEY JOY	105	14	74-05-31	125ANMS	11.0	7.7	390
190	371034107360100	NB03400722CBA	G PINNECOOSE	25	18	74-06-10	125ANMS	10.0	7.3	472
191	371034107361300	NB03400722CBB	F PINNECOOSE	90	9	74-05-28	125ANMS	12.0	7.3	491
192	371042107343000	NB03400723ACC	ALDEN NARANGO JR.	116	15	74-05-22	125ANMS	13.0	8.8	491
193	371102107361900	NB03400722BBB2	B FROST	102	14	74-06-07	125ANMS	11.0	7.6	948
194	371103107481300	NB03400914CCC	ROBERT WUEST	118	62	75-03-24	125ANMS	7.0	7.2	660
195	371104107470100	NB03400913CCD	BRUCE FASSETT	240	48	75-03-24	125ANMS	8.5	7.6	715
195			BRUCE FASSETT	240	--	75-05-03	125ANMS	12.0	--	710
196	371115107343400	NB03400714UDCB	J WILLIAMS	201	8	74-06-10	125ANMS	--	9.8	467
197	371131107343400	NB03400714UACC	JACK FROST	141	56	74-05-22	125ANMS	13.0	7.7	446
198	371144107361300	NB03400715UBBC	IRWIN TAYLOR	62	26	74-05-31	125ANMS	10.0	7.3	1080
199	371154107502000	NB03400916BBB	PERRY CRAIG	60	49	75-03-25	125ANMS	4.0	7.0	875
200	371156107463000	NB03400812UDCC	JAMES JEFFERSON	201	45	74-06-13	125ANMS	14.0	7.8	535
201	371156107465701	NB03400912UCCD1	EMILY BUTLER 1	200	38	74-06-10	125ANMS	12.0	8.8	313
202	371156107465702	NB03400912UCCD2	EMILY BUTLER 2	300	42	75-07-23	125ANMS	16.0	9.3	850
203	371200107344600	NB03400711UCDC	JOHN WILLIAMS	105	45	74-05-10	125ANMS	16.5	7.8	622
204	371201107485800	NB03400910UCDC	AUSTIN DECKER	304	104	75-03-21	125ANMS	10.0	7.5	480
205	371216107345100	NB03400711UCAB	RUSSELL BOX SR.	102	15	74-05-21	125ANMS	10.5	7.4	683
206	371220107490400	NB03400910UCBA	B B QUEEN	234	114	75-06-12	125ANMS	14.5	8.5	650
207	371227107350500	NB03400711UCBB	MANUEL CASIAS	65	--	74-05-25	125ANMS	11.0	7.7	201
208	371242107331800	NB03400712UABA	M EVENSEN	107	24	74-06-08	125ANMS	12.0	8.4	932
209	371243107361100	NB03400710UBBB	FRITZ BOX	99	39	74-05-31	125ANMS	--	8.1	495
210	371244107345900	NB03400711UBBA	MARY CHAVEZ 1	78	25	74-05-10	125ANMS	11.5	7.2	697
211	371246107352000	NB03400710UAAB	BRYAN ROCK	175	14	74-05-21	125ANMS	11.0	8.5	576
212	371258107474300	NB03400912DDD	JEANETT BARRY	63	19	74-06-13	125ANMS	13.0	7.1	618
213	371322107442500	NB03400810CCC	E GERRY	110	74	73-08-09	125ANMS	19.0	8.3	553
214	371327107364300	NB03400711CBD	MARY SAGE	199	37	74-06-20	125ANMS	14.0	8.4	588
215	370325108050500	NB03301131CDA	PICNIC FLATS ARTESIAN	--	F*	74-05-09	125KRLD	19.0	7.0	3920
216	370346108044800	NB03301131ACD	PICNIC FLATS ARTESIAN	--	F*	74-05-09	125KRLD	19.0	7.6	6530
217	370449108041900	NB03301129BBC	PICNIC FLATS ARTESIAN	--	F*	74-05-09	125KRLD	--	7.3	4600
218	370611108040400	NB03301117CAD	IRON SPRING PICNIC FLATS	--	--	74-05-09	125KRLD	9.5	7.4	1810
219	370051108111300	NB03201303CBD	STEWARD 1 GAS TEST-ARTESIAN	3240	F*	75-07-25	211CLFH	15.5	8.6	1725
220	370628108084300	NB03301215BCB	MARVEL COMMUNITY SPRING	--	--	75-10-30	211CLFH	12.0	6.9	640

*F INDICATES FLOWING WELL.

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) *500*	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) *500*	BICAR-BONATE (HCO3) (MG/L) *NONE*	CAR-BONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKA-LINITY AS CACO3 (MG/L) *NONE*	HARD-NESS (CA,MG) (MG/L) *NONE*	NON-CAR-BONATE HARD-NESS (MG/L) *NONE*	DIS-SOLVED CAL-CIUM (CA) (MG/L) *NONE*	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) *125*	DIS-SOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM AD-SORP-TION RATIO *NONE*	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) *NONE*	DIS-SOLVED CHLO-RIDE (CL) (MG/L) *250*
74-05-29	433	--	400	0	13	328	290	0	96	12	46	1.2	.9	3.6
75-11-11	--	338	345	14	756	308	190	<0	64	7.3	80	5.5	1.1	8.8
74-05-31	536	--	332	0	5.3	272	97	0	34	2.9	160	7.1	1.0	14
74-05-31	321	--	315	0	32	258	240	0	77	12	22	.6	.9	2.5
74-05-28	402	--	406	0	26	333	260	0	81	13	50	1.4	1.3	1.8
74-05-23	349	--	284	15	.6	258	6	0	2.3	.1	140	25	.3	11
74-05-31	350	--	305	0	31	250	230	0	71	13	32	.9	1.2	10
74-05-31	237	--	215	0	6.9	176	100	0	33	4.6	49	2.1	1.1	2.5
74-06-10	290	--	273	0	22	224	190	0	63	9.0	27	.8	1.0	2.6
74-05-28	295	--	273	0	22	224	200	0	62	11	28	.9	1.2	3.9
74-05-22	304	--	259	10	.7	229	12	0	4.4	.2	120	15	.5	5.6
74-06-07	585	--	539	0	22	442	380	0	120	20	74	1.6	.8	25
75-03-24	--	436	289	33	36	293	315	78	100	15	35	.9	1.5	33
75-03-24	--	456	195	29	10	21	285	111	84	18	43	1.1	.7	85
75-05-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
74-06-10	271	--	119	54	.1	188	12	0	4.2	.3	100	13	.9	11
74-05-22	261	--	244	0	7.8	200	160	0	48	8.9	35	1.2	1.5	4.0
74-05-31	643	--	560	0	45	459	450	0	140	24	65	1.3	1.4	40
75-03-25	--	613	408	12	69	354	465	131	98	53	23	.5	1.1	30
74-06-13	308	--	277	0	7.0	227	180	0	59	7.8	46	1.5	.8	21
74-06-10	178	--	154	4	.4	133	28	0	9.7	1.0	61	5.0	.5	15
75-07-23	--	406	192	24	.2	199	30	0	10	1.2	167	13	.3	65
74-05-10	367	--	329	0	8.3	270	54	0	20	1.1	120	7.1	.8	3.3
75-03-21	307	--	291	0	15	239	200	0	63	10	34	1.1	1.6	12
74-05-21	403	--	419	0	27	344	230	0	68	14	62	1.8	1.7	3.3
75-06-12	--	356	256	20	1.5	243	60	ND	20	2.4	129	7.2	.7	50
74-05-25	115	--	112	0	3.6	92	94	2	32	3.3	4.0	.2	.8	1.3
74-06-08	544	--	413	1	2.6	340	24	0	8.1	.8	210	19	.5	60
74-05-31	296	--	220	0	2.8	180	52	0	19	1.0	92	5.6	.6	25
74-05-10	421	--	382	0	39	313	300	0	97	14	34	.9	.9	8.0
74-05-21	314	--	210	3	1.1	177	14	0	5.2	.2	120	14	.6	65
74-06-13	356	--	333	0	42	273	270	0	91	10	22	.6	.8	16
73-08-09	335	--	283	0	2.3	232	12	0	5.0	.0	130	16	.3	12
74-06-20	354	--	339	0	2.2	278	35	0	13	.6	130	9.6	.4	9.0
74-05-09	2710	--	2970	0	475	2440	160	0	36	18	1100	37	9.1	13
74-05-09	4450	--	5090	0	205	4170	150	0	35	15	1800	64	13	21
74-05-09	3140	--	3480	0	279	2850	110	0	29	9.7	1300	53	8.0	14
74-05-09	1120	--	1240	0	79	1020	24	0	5.9	2.2	440	39	2.6	21
75-07-25	--	1018	599	77	3.0	621	50	ND	6.0	8.5	407	25	1.9	115
75-10-30	--	402	259	14	58	236	290	54	84	19	32	.8	1.5	26

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) 250	DIS-SOLVED FLUO-RIDE (F) (MG/L) 1.3	DIS-SOLVED SILICA (SIO2) (MG/L) NONE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) 10	DIS-SOLVED NITRATE (NO3) (MG/L) 45	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) NONE	DIS-SOLVED IRON (FE) (UG/L) 300	DIS-SOLVED MAN-GANESE (MN) (UG/L) 50	DIS-SOLVED BORON (B) (UG/L) NONE	DIS-SOLVED ARSENIC (AS) (UG/L) 10	TOTAL ARSENIC (AS) (UG/L) 10	DIS-SOLVED SELE-NIUM (SE) (UG/L) 10	TOTAL SELE-NIUM (SE) (UG/L) 10
74-05-29	49	.3	18	2.2	--	.02	50	0	20	--	1	--	1
75-11-11	46	.7	--	--	.06	--	<0	--	<0	1	--	0	--
74-05-31	150	1.2	8.6	.12	--	.01	50	0	40	--	3	--	4
74-05-31	28	.3	20	.62	--	.03	50	0	20	--	1	--	2
74-05-28	29	.2	20	1.3	--	.03	90	0	20	--	1	--	3
74-05-23	29	2.7	8.4	.03	--	.01	70	30	40	--	22	--	1
74-05-31	46	.1	20	.13	--	.01	5400	110	20	--	0	--	0
74-05-31	26	.3	14	.02	--	.02	270	110	30	--	5	--	1
74-06-10	19	.2	23	2.2	--	.02	590	120	10	--	4	--	3
74-05-28	20	.2	21	3.0	--	.02	70	0	20	--	0	--	3
74-05-22	24	1.5	8.6	.24	--	.01	40	20	40	--	7	--	1
74-06-07	49	.4	24	1.4	--	.05	40	0	20	--	1	--	45
75-03-24	44	.1	--	--	9.3	--	ND	--	ND	1	--	4	--
75-03-24	51	.4	--	--	15	--	ND	--	ND	0	--	120	--
75-05-03	--	--	--	--	--	--	--	--	--	--	--	200	--
74-06-10	29	1.7	11	.08	--	.04	80	0	40	--	16	--	0
74-05-22	26	.4	11	1.4	--	.01	40	30	20	--	0	--	2
74-05-31	61	.3	26	2.1	--	.05	50	0	20	--	0	--	23
75-03-25	135	.1	--	--	3.1	--	ND	--	ND	0	--	10	--
74-06-13	22	.9	10	.79	--	.02	30	30	6	--	1	--	3
74-06-10	5.9	1.6	2.8	.13	--	.01	100	20	6	--	1	--	0
75-07-23	66	8.8	--	--	.25	--	0	--	0	8	--	0	--
74-05-10	49	1.5	8.1	.14	--	.10	20	240	40	--	3	--	2
75-03-21	24	.7	16	.45	--	.02	50	0	--	--	--	--	--
74-05-21	30	.4	13	.94	--	.01	0	--	30	--	5	--	1
75-06-12	33	2.4	--	--	.62	--	ND	--	400	4	--	2	--
74-05-25	10	.3	7.0	.25	--	.07	20	10	8	--	0	--	0
74-06-08	45	5.5	8.9	.08	--	.01	350	20	30	--	1	--	2
74-05-31	39	.6	9.6	.20	--	.01	70	0	20	--	8	--	10
74-05-10	43	.9	21	3.1	--	.14	90	20	20	--	0	--	3
74-05-21	2.9	5.2	7.5	.04	--	.03	90	20	40	--	2	--	1
74-06-13	22	.2	18	2.6	--	.06	20	0	30	--	1	--	1
73-08-09	39	2.2	7.3	.01	--	.00	60	20	20	--	6	--	2
74-06-20	26	1.7	5.9	.11	--	.01	30	30	40	--	1	--	2
74-05-09	45	1.1	20	.06	--	.01	830	100	1500	--	1	--	0
74-05-09	35	1.1	18	.04	--	.02	3700	150	2000	--	23	--	1
74-05-09	40	.9	21	.03	--	.03	1100	100	1900	--	0	--	1
74-05-09	8.6	1.1	25	.02	--	.03	90	40	530	--	1	--	1
75-07-25	102	1.6	--	--	.25	--	ND	--	470	0	--	0	--
75-10-30	95	.2	--	--	13	--	20	--	50	2	--	6	--

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*
221	370641108074200	NB03301210DDD	LEO AND RUTH CANDELARIA	82	--	75-10-30	211CLFH	12.0	7.1	540
222	370647108073700	NB03301211CCC	DOROTHY HERRERA	80	--	75-10-30	211CLFH	14.0	7.3	590
223	370816108124400	NB03301301BAC	JAMES E STINSON	267	37	76-01-30	211CLFH	12.0	7.2	3025
224	370916108051900	NB03401131BBA	ORLO SCHMITT	145	108	76-02-02	211CLFH	11.0	7.0	600
225	371028108122900	NB03401324DBC	RAYMOND JONES	100	30	76-01-29	211CLFH	8.0	5.1	2640
226	371052108083200	NB03401222BBD	W E DUNAWAY	111	28	73-08-10	211CLFH	--	7.2	3780
227	371128108063800	NB03401214DAA	ACHILLE VITALE	196	--	76-01-31	211CLFH	8.0	6.7	855
228	371150108035600	NB03401108UCDD	ART ISGAR 2	225	36	75-11-14	211CLFH	10.0	6.6	2250
229	371153108095700	NB03401217AAA	L WOOD - ARTESIAN EAST	--	F*	76-01-31	211CLFH	14.0	6.5	1750
230	371156108101200	NB03401208UDCD	LEONARD WOOD	395	54	76-01-31	211CLFH	11.0	8.0	1685
231	371207108104900	NB03401208UCCB	L WOOD - ARTESIAN WEST	--	F*	76-02-01	211CLFH	13.0	7.6	1685
232	371211108082200	NB03401210UCAC	R W STROBEL SPRING	--	--	76-01-30	211CLFH	3.0	7.4	1125
233	371223108131600	NB03401311UADC	ARTHUR S JONES	85	15	76-01-29	211CLFH	7.5	7.6	1600
234	370236108053700	NB03201201DAD	SODA SPRING IRON GULCH	--	--	74-05-09	211FRLD	15.0	7.0	5570
235	370432108044000	NB03301130DAB	SULPHUR SPRING VALENCIA CREEK	--	--	75-11-13	125KRLD	9.0	6.9	3700
236	370021108111400	NB03201310ABD	JESSE DECKER	21	8	75-07-25	211LWIS	12.0	7.6	950
237	370322107023900	NB03300235CCB	ARTHUR W KING SPRING	--	--	75-10-22	211LWIS	9.5	7.0	1500
238	370425107044900	NB03300228CBB	T J BOND	50	28	75-10-25	211LWIS	10.0	7.1	1600
239	370515108075200	NB03301222DAC	MARTHA SANCHEZ SPRING	--	--	75-10-30	211LWIS	13.0	6.6	2100
240	370540107025400	NB03300222AAA	O R HENNING	42	16	75-10-21	211LWIS	11.0	7.0	2175
241	370630107104000	NB03300316ABD	JUAN GARCIA	72	43	75-10-27	211LWIS	12.0	6.9	905
242	370645108100700	NB03301208DCD	J PAT GREER	130	16	75-11-12	211LWIS	10.5	6.2	2450
243	370726107090500	NB03300311BBC	KEARNS SPRING CATTLE CREEK	--	--	75-10-27	211LWIS	17.0	8.7	2000
244	370908107092900	NB03400327ADC	CHRIS PACHECO	40	2	75-10-27	211LWIS	13.0	9.1	1450
245	370936107100700	NB03400327CBD	GEORGE ESPINOSA SPRING	--	--	75-10-27	211LWIS	11.0	6.4	605
246	371029107101000	NB03400322CBC	FRED EBELING	200	46	75-11-10	211LWIS	11.0	8.4	1560
247	371059107112200	NB03400321BBB	DON SLAGLE	10	4	75-10-28	211LWIS	9.0	7.0	3350
248	371144107160100	NB03400415UACA	CAPOTE LAKE DRILL HOLE 3	30	3	75-05-06	211LWIS	.1	7.9	1545
249	371151108013100	NB03401110UDCD	LES CHEVIAL	116	60	76-02-02	211LWIS	4.0	6.6	2000
250	371201107152700	NB03400411UCCD1	CAPOTE LAKE WELL 1	91	12	75-05-07	211LWIS	13.0	8.4	1235
251	371205107154400	NB03400410UDDA3	CAPOTE LAKE WELL 3	56	2	75-05-06	211LWIS	12.0	8.4	2050
252	371274107153800	NB03400411UCBC	CAPOTE LAKE WELL 2	--	8	75-05-10	211LWIS	11.0	8.5	1425
253	371214107155400	NB03400410UDAC	CAPOTE LAKE DRILL HOLE 2	45	2	75-05-10	211LWIS	11.0	8.2	1875
254	371214107190600	NB03400407UDAC	UTE YOUTH CAMP	171	21	75-05-13	211LWIS	9.0	8.0	0
255	371220107153500	NB03400411UCBB	CAPOTE LAKE DRILL HOLE 1	55	16	75-05-10	211LWIS	16.0	7.1	2000
256	370615108132300	NB03301314DBA	ELMER LANGFORD SPRING	--	--	76-02-02	211MENF	6.0	5.3	4050
257	370754108151400	NB03301303CBB	G S OLDFIELD	620	551	76-01-30	211MENF	14.0	8.2	3400
258	371057108114500	NB03401219BBA	BILLY BAKER	440	40	76-02-01	211MENF	6.0	7.8	2425
259	371144108073900	NB03401214BBC	GRANT PAULEK-ALLEN	122	29	76-01-31	211MENF	7.0	7.3	2700
260	371327107105400	NB03400311CCD	R D WHITTINGTON	140	67	73-08-08	211MNCS	12.0	6.9	1670

*F INDICATES FLOWING WELL.

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) *500*	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) *500*	BICAR-BONATE (HCO3) (MG/L) *NONE*	CAR-BONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKA-LINITY AS CACO3 (MG/L) *NONE*	HARD-NESS (CA,MG) (MG/L) *NONE*	NON-CAR-BONATE HARD-NESS (MG/L) *NONE*	DIS-SOLVED CAL-CIUM (CA) (MG/L) *NONE*	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) *125*	DIS-SOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM AD-SORP-TION RATIO *NONE*	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) *NONE*	DIS-SOLVED CHLO-RIDE (CL) (MG/L) *250*
75-10-30	--	385	233	4	31	199	240	41	58	23	27	.6	1.5	24
75-10-30	--	372	222	14	20	204	265	61	74	19	29	.8	1.5	30
76-01-30	--	2179	1580	408	243	1975	55	0	8.0	8.5	876	51	3.5	39
76-02-02	--	400	273	0	44	224	290	66	86	18	18	.4	2.3	7.0
76-01-29	--	2124	536	0	6810	439	1345	906	247	178	168	1.9	10	31
73-08-10	3500	--	666	0	67	546	1700	1100	260	250	460	4.9	4.5	75
76-01-31	--	676	345	7	115	283	410	115	112	31	39	.8	.7	3.5
75-11-14	--	1952	413	4	170	397	1375	978	323	139	80	.9	3.1	15
76-01-31	--	616	847	76	507	822	40	0	6.0	6.0	428	27	1.1	10
76-01-31	--	1111	920	12	15	774	5	0	2.0	.0	402	78	1.1	12
76-02-01	--	1085	854	120	44	900	45	0	4.0	8.5	393	25	4.6	17
76-01-30	--	810	431	24	31	393	665	272	106	97	29	.5	1.1	8.8
76-01-29	--	1105	935	76	44	894	45	0	6.0	7.3	416	27	1.5	5.6
74-05-09	3800	--	4330	0	693	3550	280	0	63	30	1500	39	13	7.2
75-11-13	--	3118	1822	72	397	1614	665	<0	40	137	917	15	8.6	54
75-07-25	--	662	170	38	10	150	445	295	104	44	43	.9	1.9	14
75-10-22	--	1132	373	31	70	359	705	346	184	59	96	1.5	2.7	28
75-10-25	--	1349	295	39	48	308	825	517	218	68	87	1.3	5.0	3.5
75-10-30	--	1929	215	1	88	179	1125	946	321	79	62	.8	1.5	337
75-10-21	--	1821	307	31	59	304	1055	751	231	117	149	2.0	5.8	12
75-10-27	--	573	322	29	77	313	440	127	104	43	50	1.0	2.7	3.5
75-11-12	--	2255	1000	6	1020	417	1480	1063	277	192	124	1.4	.8	49
75-10-27	--	1285	1091	128	4.3	1108	25	<0	6.0	2.4	538	46	3.9	40
75-10-27	--	1175	248	89	.5	353	575	222	10	134	147	2.6	5.8	8.8
75-10-27	--	428	244	17	178	229	315	86	64	37	16	.3	.2	1.7
75-11-10	--	1087	577	12	3.8	493	355	<0	66	46	290	6.7	3.5	15
75-10-28	--	3374	247	33	50	259	2000	1741	571	140	138	1.3	6.2	29
75-05-06	--	1220	455	13	9.7	395	850	470	162	108	47	.7	2.7	7.0
76-02-02	--	1312	247	7	105	214	845	631	243	58	59	.8	2.7	275
75-05-07	--	847	431	21	3.0	384	155	ND	52	6.0	238	8.3	1.5	31
75-05-06	--	1380	1168	14	7.6	982	45	0	10	4.8	525	34	1.1	75
75-05-10	--	778	713	38	4.0	549	584	0	12	47	220	6.3	2.3	8.8
75-05-10	--	0	653	30	7.2	586	865	330	136	128	148	21	3.1	15
75-05-13	--	820	209	36	4.5	231	540	309	104	68	53	1.0	8.9	23
75-05-10	--	1390	921	13	121	777	990	235	190	125	133	1.8	9.7	7.0
76-02-02	--	7169	862	0	6910	706	4700	3994	601	778	193	1.1	1.9	124
76-01-30	--	3326	2538	420	34	9080	65	0	10	9.7	1315	70	5.4	82
76-02-01	--	1585	1202	192	40	1305	50	0	6.0	8.5	639	39	3.5	74
76-01-31	--	1870	744	108	77	790	150	0	20	24	577	20	7.4	44
73-08-08	1250	--	530	0	107	435	810	370	190	81	120	1.8	2.3	7.1

Table 1.--*Chemical analyses of ground-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) *250*	DIS-SOLVED FLUO-RIDE (F) (MG/L) *1.3*	DIS-SOLVED SILICA (SIO2) (MG/L) *NONE*	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DIS-SOLVED NITRATE (NO3) (MG/L) *45*	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) *NONE*	DIS-SOLVED IRON (FE) (UG/L) *300*	DIS-SOLVED MAN-GANESE (MN) (UG/L) *50*	DIS-SOLVED BORON (B) (UG/L) *NONE*	DIS-SOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *10*	DIS-SOLVED SELE-NIUM (SE) (UG/L) *10*	TOTAL SELE-NIUM (SE) (UG/L) *10*
75-10-30	82	.2	--	--	1.2	--	10	--	<0	1	--	3	--
75-10-30	77	.2	--	--	26	--	10	--	50	1	--	3	--
76-01-30	10	4.9	--	--	.00	--	10	--	340	0	--	0	--
76-02-02	87	.2	--	--	9.3	--	10	--	0	0	--	1	--
76-01-29	1109	.8	--	--	.06	--	630	--	120	0	--	0	--
73-08-10	2100	.7	14	.03	--	.01	7700	210	410	--	0	--	3
76-01-31	213	.6	--	--	.62	--	20	--	60	0	--	3	--
75-11-14	1103	.1	--	--	1.2	--	50	--	<0	0	--	0	--
76-01-31	135	3.8	--	--	.00	--	50	--	60	0	--	0	--
76-01-31	56	2.9	--	--	.06	--	480	--	340	0	--	0	--
76-02-01	21	4.1	--	--	.00	--	10	--	200	0	--	0	--
76-01-30	313	.3	--	--	.06	--	20	--	120	0	--	0	--
76-01-29	17	5.1	--	--	.06	--	110	--	420	0	--	0	--
74-05-09	29	1.2	15	.03	--	.01	420	90	1900	--	1	--	1
75-11-13	927	.9	--	--	.06	--	40	--	0	1	--	0	--
75-07-25	285	--	--	--	5.5	--	--	--	120	0	--	2	--
75-10-22	461	.2	--	--	27	--	40	--	50	0	--	11	--
75-10-25	633	.2	--	--	6.8	--	<0	--	<0	0	--	8	--
75-10-30	1065	.1	--	--	1.8	--	20	--	<0	1	--	3	--
75-10-21	994	.4	--	--	4.9	--	50	--	<0	0	--	20	--
75-10-27	219	1.2	--	--	.62	--	<0	--	<0	2	--	3	--
75-11-12	1201	.8	--	--	1.8	--	<0	--	150	1	--	16	--
75-10-27	36	.1	--	--	<.00	--	380	--	290	3	--	0	--
75-10-27	516	.1	--	--	1.2	--	30	--	<0	0	--	0	--
75-10-27	132	.1	--	--	4.3	--	<0	--	50	0	--	1	--
75-11-10	428	.7	--	--	.62	--	1100	--	<0	1	--	1	--
75-10-28	1984	.3	--	--	13	--	20	--	50	0	--	52	--
75-05-06	509	.2	--	--	.12	--	0	--	ND	0	--	0	--
76-02-02	30	.3	--	--	400	--	140	--	420	0	--	3	--
75-05-07	240	.6	--	--	.62	--	ND	--	6	0	--	5	--
75-05-06	84	.9	--	--	.25	--	ND	--	26	2	--	0	--
75-05-10	41	.2	--	--	.12	--	ND	--	6	0	--	0	--
75-05-10	528	.4	--	--	.12	--	ND	--	12	2	--	0	--
75-05-13	391	.1	--	--	3.7	--	ND	--	ND	0	--	2	--
75-05-10	463	.1	--	--	1.8	--	ND	--	ND	1	--	3	--
76-02-02	4053	1.7	--	--	.06	--	2100	--	280	1	--	0	--
76-01-30	37	3.0	--	--	.00	--	0	--	490	0	--	0	--
76-02-01	21	3.8	--	--	.00	--	40	--	420	0	--	0	--
76-01-31	600	.5	--	--	.00	--	230	--	340	0	--	0	--
73-08-08	570	.3	15	.02	--	.00	130	40	190	--	1	--	38

Table 1.--*Chemical analyses of ground-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	NAME OF WELL OWNER	WELL DEPTH (FEET)	DEPTH TO WATER (FEET)	DATE OF SAMPLE	GEOLOGIC UNIT	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*
260	371327107105400	NB03400311CCD	R D WHITTINGTON	140	--	75-10-28	211MNCS	12.5	6.8	1610
261	371231107180500	NB03400408UADB1	BOYD BUNNING SPRING 1	--	--	75-05-05	211MVRD	6.5	7.9	760
262	371231107180700	NB03400408UADB2	BOYD BUNNING SPRING 2	--	--	75-05-05	211MVRD	9.0	7.7	1000
263	370342107051800	NB03300232ACD	RICHARD TECUBE	26	7	75-10-25	211PCCF	11.5	7.2	2175
264	370352107050800	NB03300232AAC	ALVIN BEYER	35	5	75-10-25	211PCCF	12.5	7.6	345
265	370710108024800	NB03301109ACC	HOUSTON WELL DEER CANYON	20	15	75-11-13	211PCCF	8.0	6.8	1980

DATE OF SAMPLE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) *500*	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) *500*	BICARBONATE (HCO3) (MG/L) *NONE*	CARBONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKALINITY AS CACO3 (MG/L) *NONE*	HARDNESS (CA,MG) (MG/L) *NONE*	NONCARBONATE HARDNESS (MG/L) *NONE*	DISSOLVED CALCIUM (CA) (MG/L) *NONE*	DISSOLVED MAGNESIUM (MG) (MG/L) *125*	DISSOLVED SODIUM (NA) (MG/L) *NONE*	SODIUM ADSORPTION RATIO *NONE*	DISSOLVED POTASSIUM (K) (MG/L) *NONE*	DISSOLVED CHLORIDE (CL) (MG/L) *250*
75-10-28	--	1260	482	73	160	472	590	118	126	66	140	2.5	1.5	3.5
75-05-05	--	572	276	15	6.2	253	370	117	106	25	34	.7	3.5	3.5
75-05-05	--	716	315	19	11	291	525	234	148	37	38	.7	23	19
75-10-25	--	1830	334	31	40	327	790	463	190	76	216	3.3	5.8	26
75-10-25	--	222	131	2	5.4	111	130	19	40	7.3	22	.8	2.7	3.5
75-11-13	--	1274	1050	91	313	1012	750	<0	60	146	182	2.8	12	60

DATE OF SAMPLE	DISSOLVED SULFATE (SO4) (MG/L) *250*	DISSOLVED FLUORIDE (F) (MG/L) *1.3*	DISSOLVED SILICA (SIO2) (MG/L) *NONE*	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DISSOLVED NITRATE (NO3) (MG/L) *45*	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L) *NONE*	DISSOLVED IRON (FE) (UG/L) *300*	DISSOLVED MANGANESE (MN) (UG/L) *50*	DISSOLVED BORON (B) (UG/L) *NONE*	DISSOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *10*	DISSOLVED SELENIUM (SE) (UG/L) *10*	TOTAL SELENIUM (SE) (UG/L) *10*
75-10-28	401	.2	--	--	.12	--	<0	--	90	0	--	12	--
75-05-05	207	.2	--	--	.62	--	ND	--	ND	1	--	2	--
75-05-05	269	.2	--	--	.12	--	ND	--	ND	1	--	0	--
75-10-25	828	.3	--	--	.62	--	130	--	<0	2	--	1	--
75-10-25	60	.3	--	--	.06	--	110	--	50	1	--	0	--
75-11-13	102	1.5	--	--	3.7	--	30	--	<0	4	--	1	--

Table 2.--*Chemical analyses of surface-water samples*

[The mandatory and recommended limits for drinking water of the Colorado Department of Health (1971) and the U.S. Public Health Service (1962) are listed for each constituent immediately below the column headings. NONE indicates that no limit has been established. MG/L = milligrams per liter; UG/L = micrograms per liter; ND = not detectable]

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	STATION NAME	DATE OF SAMPLE	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) *500*
1	STA.NO.09354500[1]		LOS PINOS RIVER AT LA BOCA	74-05-03	19.5	8.3	309	182
2	STA.NO.09355000[1]		SPRING CREEK AT LA BOCA	74-05-03	20.0	7.7	485	292
3	STA.NO.09363100[1]		SALT CREEK NEAR OXFORD	74-05-01	16.0	8.0	1530	905
4	370036107272400	NB03200624BBA	SAMBRITO CREEK NEAR MOUTH	75-08-02	24.0	8.3	320	--
5	370126107085600	NB03200314BBB	NAVAJO RIVER NEAR GAGING STATION	75-10-24	3.5	6.7	370	--
6	370142107361400	NB03200710CBC	LOS PINOS RIVER NEAR CLEM BAKER RANCH	74-05-03	19.0	8.4	294	173
7	370220107120000	NB03200308BAA	CAT CREEK AT PAGOSA JUNCTION	75-08-29	18.0	7.9	900	--
8	370230108052600	NB03201106CCC	IRON SPRINGS - IRON SPRINGS GULCH	75-10-29	7.0	8.6	6000	--
9	370313107011900	NB03300236CDC	MONTEZUMA CREEK AT KING RANCH	75-10-22	15.0	8.2	1425	--
10	370324108103700	NB03301232CDB	LONG HOLLOW CREEK NEAR CONFLUENCE LA PLATA RIVER	75-07-25	21.0	8.6	1415	--
11	370325107520900	NB03300931CAC	FLORIDA RIVER CONFLUENCE WITH ANIMAS RIVER	75-11-22	4.0	6.9	530	--
12	370328107364200	NB03300733DBC	LOS PINOS RIVER NEAR MAX MARTINEZ RANCH	74-05-24	13.5	7.6	252	147
13	370340107080000	NB03300336CCC	TRAIL CANYON CREEK NEAR JUANITA	73-08-07	23.0	8.1	551	349
13			TRAIL CANYON CREEK NEAR JUANITA	74-05-24	--	8.2	560	--
14	370342107052400	NB03300232ACC	COAL MINE CREEK AT PAGOSA ROAD	75-10-31	8.0	5.3	490	--
15	370433108074100	NB03301227ADD	LONG HOLLOW CREEK AT HERRERA RANCH	75-10-29	10.5	8.4	1440	--
16	370447107113500	NB03300329AAC	ROUND MEADOW CREEK AT MOUTH	75-10-28	10.0	7.7	480	--
17	370538107363800	NB03300721ABD	UTE CREEK NEAR MOUTH	74-05-03	20.5	7.9	457	--
18	370547107371500	NB03300721BBB	LOS PINOS RIVER NEAR UTE CREEK MOUTH	74-05-03	17.0	7.3	232	134
19	370607107024500	NB03300214CBC	SAN JUAN RIVER AT TRUJILLO	75-10-21	12.5	8.5	365	--
20	370623107375700	NB03300717BDA	ROCK CREEK SOUTH OF IGNACIO	74-05-02	17.0	7.5	277	157
21	370656108115400	NB03301207CBC	CHERRY CREEK CONFLUENCE LA PLATA RIVER	75-07-25	28.5	8.7	750	--
22	370716107023600	NB03300211BCA	RIO BLANCO RIVER AT MOUTH	75-08-25	23.5	9.5	225	--
23	370724107380000	NB03300708BAD	SEEP LINE SOUTH OF SOUTHERN UTE AGENCY	74-05-02	17.0	7.8	983	589
24	370749107471000	NB03300902DAD	SALT CREEK AT CONFLUENCE FLORIDA RIVER	75-07-28	21.5	8.8	195	--
25	370754107473100	NB03300902DBA	PINE CREEK NEAR MOUTH	75-07-26	22.0	9.2	355	--
26	370758107385200	NB03300706DBB	IGNACIO CREEK WEST OF SOUTHERN UTE AGENCY	75-11-21	4.0	6.7	925	--
27	370803107480400	NB03300902BCD	COTTONWOOD CREEK AT MOUTH	75-07-26	19.0	9.1	510	--
28	370804107372100	NB03300705ADD	LOS PINOS RIVER NE OF SOUTHERN UTE AGENCY	74-05-03	13.0	8.1	246	143
29	370824107402400	NB03300801BBB	ROCK CREEK SOUTH OF OXFORD TRACT	74-05-01	22.0	8.7	1320	741
30	370825108094100	NB03301204BBA	ALKALI GULCH CONFLUENCE LA PLATA RIVER	75-07-24	19.5	8.3	5570	--
31	370827107210200	NB03400536CCC	STOLLSTEIMER CREEK AT GALLEGOS BRIDGE	75-07-26	26.0	8.9	725	--
32	370831107371800	NB03400733CCC	DRY CREEK NEAR MOUTH SOUTHERN UTE AGENCY	74-05-02	--	8.4	565	339
33	370859107354600	NB03400734BDA	COMMISSIONER DITCH PT. DIVERSION	74-05-03	10.0	7.7	184	106
34	370859107354700	NB03400734BDA	OSCAR STRAIN DRAIN DITCH	74-05-22	9.5	7.4	484	289
35	370923107403800	NB03400826DDD	DXFORD TRACT POND - NDRTH BANK	75-07-31	22.5	9.9	138	--
36	370924107404000	NB03400826DDD	OXFORD TRACT POND - NORTH BANK	74-05-01	18.0	7.9	241	121
37	370933107403900	NB03400826DAD	DR. MORRISON DITCH LATERAL - OXFORD TRACT	75-07-31	21.0	7.7	95	--
38	370958108083100	NB03401227BBD	HAY GULCH CONFLUENCE LA PLATA RIVER	75-07-24	14.5	7.8	1750	--
38			HAY GULCH CONFLUENCE LA PLATA RIVER	75-07-25	--	--	--	--

[1]U.S. GEOLDGICAL SURVEY GAGING STATIDN.

Table 2.--*Chemical analyses of surface-water samples*--Continued

DATE OF SAMPLE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) *500*	BICARBONATE (HCO3) (MG/L) *NONE*	CARBONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKALINITY AS CACO3 (MG/L) *NONE*	HARDNESS (CA,MG) (MG/L) *NONE*	NONCARBONATE HARDNESS (MG/L) *NONE*	DISSOLVED CALCIUM (CA) (MG/L) *NONE*	DISSOLVED MAGNESIUM (MG) (MG/L) *125*	DISSOLVED SODIUM (NA) (MG/L) *250*	SODIUM-ADSORPTION RATIO *NONE*	DISSOLVED POTASSIUM (K) (MG/L) *NONE*	DISSOLVED CHLORIDE (CL) (MG/L) *250*
74-05-03	--	143	0	1.1	117	110	0	35	6.2	24	1.0	2.1	6.0
74-05-03	--	163	0	5.2	134	130	0	37	8.7	50	1.9	4.8	8.9
74-05-01	--	411	0	6.6	337	240	0	68	17	250	7.0	5.3	160
75-08-02	202	109	24	1.3	494	110	ND	36	4.8	32	1.3	2.7	2.4
75-10-24	281	101	2	34	87	125	38	40	6.0	20	.8	2.3	1.7
74-05-03	--	136	0	.9	112	99	0	30	5.9	23	1.0	2.0	6.3
75-08-29	625	309	24	7.2	293	390	97	84	43	63	1.3	3.5	7.0
75-10-29	5378	2745	388	14	2897	695	<0	261	10	1832	30	8.9	69
75-10-22	1064	221	29	2.8	271	550	279	122	59	140	2.6	3.9	24
75-07-25	1081	109	65	1.0	198	675	477	154	70	64	1.0	1.1	34
75-11-22	263	267	6	56	229	215	<0	70	9.7	45	1.3	2.3	30
74-05-24	--	121	0	4.9	99	91	0	28	5.0	16	.7	3.3	4.3
73-08-07	--	253	0	3.2	208	150	0	39	13	68	2.4	1.5	5.8
74-05-24	--	210	21	2.6	207	140	0	34	12	77	2.9	2.0	8.9
75-10-31	280	234	21	2240	229	170	<0	52	9.7	48	1.6	1.9	1.7
75-10-29	1089	281	17	2.0	260	700	440	156	75	73	1.2	3.1	37
75-10-28	251	202	31	8.5	219	190	<0	60	9.7	41	1.3	1.9	1.7
74-05-03	--	191	0	3.8	157	120	0	33	8.0	49	2.0	4.6	9.2
74-05-03	--	109	0	8.7	89	76	0	23	4.6	18	.9	2.0	4.9
75-10-21	258	114	<0	.6	93	115	22	34	7.3	32	1.3	3.5	7.0
74-05-02	--	118	0	6.0	97	77	0	23	4.7	25	1.2	2.1	7.2
75-07-25	497	138	36	.7	144	355	181	86	84	22	.5	2.7	17
75-08-25	133	109	2	.1	94	90	ND	28	4.8	11	.5	1.9	ND
74-05-02	--	409	0	10	335	260	0	76	18	120	3.2	2.5	51
75-07-28	134	79	7	.2	72	80	2	28	2.4	11	.5	3.5	35
75-07-26	227	106	26	.2	132	150	18	50	6.0	16	.5	3.1	16
75-11-21	572	314	36	124	319	210	<0	62	13	168	5.0	4.3	62
75-07-26	263	145	38	.3	184	190	6	64	7.3	22	.7	1.9	16
74-05-03	--	124	0	1.6	102	95	0	29	5.6	14	.6	1.5	3.0
74-05-01	--	338	6	1.1	287	62	0	17	4.8	260	14	3.4	170
75-07-24	6175	255	55	3.0	302	3600	3298	321	681	400	2.9	6.6	101
75-07-26	500	161	38	.5	197	355	158	90	31	32	.7	2.3	6.0
74-05-02	--	240	0	1.5	197	140	0	40	10	74	2.7	2.6	18
74-05-03	--	93	0	3.0	76	79	3	24	4.6	6.9	.3	1.1	1.5
74-05-22	--	256	0	16	210	220	5	68	11	22	.7	1.3	5.6
75-07-31	120	57	7	.0	60	60	ND	14	6.0	11	.6	1.9	.7
74-05-01	--	114	0	2.3	94	49	0	14	3.3	28	1.7	1.5	6.8
75-07-31	70	48	ND	1.5	40	50	10	16	2.4	4.6	.2	1.5	.7
75-07-24	1387	227	51	8.4	271	950	679	192	114	52	.7	3.1	28
75-07-25	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2.--*Chemical analyses of surface-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) *250*	DIS-SOLVED FLUO-RIDE (F) (MG/L) *1.3*	DIS-SOLVED SILICA (SIO2) (MG/L) *NONE*	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DIS-SOLVED NITRATE (NO3) (MG/L) *45*	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) *NONE*	DIS-SOLVED IRON (FE) (UG/L) *300*	DIS-SOLVED MAN-GANESE (MN) (UG/L) *50*	DIS-SOLVED BORON (B) (UG/L) *NONE*	DIS-SOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *NONE*	DIS-SOLVED SELE-NIUM (SE) (UG/L) *10*	TOTAL SELE-NIUM (SE) (UG/L) *NONE*
74-05-03	33	.6	4.2	.01	--	--	80	0	20	2	--	3	--
74-05-03	92	.8	8.1	.17	--	--	80	0	60	4	--	2	--
74-05-01	200	.7	1.2	.02	--	--	80	210	40	--	1	--	25
75-08-02	49	.4	--	--	.62	--	ND	--	ND	2	--	3	--
75-10-24	81	.4	--	--	.62	--	10	--	<0	4	--	0	--
74-05-03	34	.5	4.2	.01	--	.02	80	0	20	--	2	--	2
75-08-29	248	.3	--	--	.25	--	0	--	ND	1	--	4	--
75-10-29	1568	.5	--	--	.19	--	20	--	1320	2	--	0	--
75-10-22	545	.2	--	--	.12	--	<0	--	50	1	--	1	--
75-07-25	527	.3	--	--	1.8	--	ND	--	50	1	--	3	--
75-11-22	57	.2	--	--	.62	--	20	--	<0	0	--	6	--
74-05-24	24	.3	6.4	.03	--	.04	70	40	30	--	0	--	1
73-08-07	88	.3	8.8	.01	--	.00	10	10	40	--	--	--	--
74-05-24	77	.2	--	1.8	--	--	10	--	370	--	--	--	--
75-10-31	59	.1	--	--	.62	--	10	--	<0	1	--	0	--
75-10-29	520	.3	--	--	.12	--	10	--	<0	1	--	2	--
75-10-28	51	.4	--	--	.62	--	20	--	50	0	--	1	--
74-05-03	60	.7	--	--	--	--	70	30	50	--	1	--	2
74-05-03	22	.5	5.1	.08	--	.04	30	70	20	--	6	--	4
75-10-21	73	.2	--	--	.12	--	20	--	50	4	--	0	--
74-05-02	30	.6	5.1	.13	--	.02	40	120	30	--	5	--	6
75-07-25	199	230	--	--	.62	--	ND	--	ND	1	--	1	--
75-08-25	23	.2	--	--	.12	--	ND	--	ND	1	--	0	--
74-05-02	110	.6	8.8	.04	--	.04	70	160	70	--	0	--	3
75-07-28	20	.2	--	--	.62	--	100	--	100	0	--	1	--
75-07-26	28	.1	--	--	.62	--	ND	--	50	4	--	1	--
75-11-21	152	.5	--	--	.62	--	20	--	<0	0	--	>30	--
75-07-26	22	.2	--	--	.25	--	ND	--	120	1	--	2	--
74-05-03	22	.5	5.7	.03	--	.02	100	20	20	--	1	--	0
74-05-01	99	1.2	2.0	2.4	--	.03	60	60	50	--	0	--	--
75-07-24	3821	31	--	--	.62	--	0	--	120	3	--	2	--
75-07-26	210	.3	--	--	.12	--	ND	--	ND	2	--	4	--
74-05-02	70	.5	5.1	.01	--	.03	100	50	40	--	0	--	3
74-05-03	16	.4	5.4	.06	--	.01	90	0	40	--	0	--	1
74-05-22	44	.3	9.4	.10	--	.01	110	290	20	--	0	--	1
75-07-31	26	.4	--	--	.25	--	0	--	ND	1	--	1	--
74-05-01	10	1.0	.1	.02	--	.00	30	0	40	--	2	--	1
75-07-31	17	.2	--	--	.12	--	ND	--	ND	0	--	0	--
75-07-24	694	.2	--	--	1.2	--	ND	--	100	2	--	1	--
75-07-25	--	--	--	--	--	--	--	--	--	2	--	1	--

Table 2.--*Chemical analyses of surface-water samples*--Continued

MAP NUMBER	LATITUDE AND LONGITUDE	LOCATION	STATION NAME	DATE OF SAMPLE	TEMPERATURE (DEG C) *NONE*	PH (UNITS) *NONE*	SPECIFIC CONDUCTANCE (MICROMHOS) *NONE*	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) *500*
39	371017107342400	NB03400723DCA	BEAVER CREEK AT BUCK HIGHWAY	74-05-03	9.0	7.6	167	98
40	371018107430800	NB03400821DCA	SALT CREEK AT OXFORD HIGHWAY 172	74-05-01	22.0	7.8	1320	755
41	371033107350200	NB03400723CBB	LOS PINOS RIVER AT SOUTHERN UTE WATER PLANT	74-05-02	19.5	7.7	158	92
42	371112107524500	NB03401013DDB	BASIN CREEK AT MOUTH ANIMAS RIVER	75-11-22	1.0	7.1	2100	--
43	371149107433500	NB03400816UBAB	SALT CREEK NORTH OF OXFORD	74-05-01	19.0	7.8	1110	665
44	371200107153000	NB03400411UCCD	CAPOTE LAKE - NORTH SHORE	75-05-13	17.0	8.4	950	--
45	371240107174800	NB03400409UBBC	DEVIL CREEK AT U.S. HIGHWAY 160	75-10-20	11.0	6.9	620	--
46	371245107340100	NB03400712UBBB	BEAVER CREEK AT NORTH RESERVATION BOUNDARY	74-05-02	14.0	7.4	128	76
47	371246107352800	NB03400710UABA	CEANOBOO DIVERSION LOS PINOS RIVER	74-05-03	6.5	7.6	120	68
48	371333107405600	NB03400707CAC	DRY CREEK WEST OF BAYFIELD ON U.S. 160	74-06-20	25.0	8.3	718	433

Table 2.--*Chemical analyses of surface-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) *500*	BICAR-BONATE (HCO3) (MG/L) *NONE*	CAR-BONATE (CO3) (MG/L) *NONE*	CARBON DIOXIDE (CO2) (MG/L) *NONE*	ALKA-LINITY AS CACO3 (MG/L) *NONE*	HARD-NESS (CA,MG) (MG/L) *NONE*	NON-CAR-BONATE HARD-NESS (MG/L) *NONE*	DIS-SOLVED CAL-CIUM (CA) (MG/L) *NONE*	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) *125*	DIS-SOLVED SODIUM (NA) (MG/L) *250*	SODIUM-AD-SORP-TION RATIO *NONE*	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) *NONE*	DIS-SOLVED CHLO-RIDE (CL) (MG/L) *250*
74-05-03	--	82	0	3.3	67	70	3	21	4.3	7.1	.4	1.0	1.9
74-05-01	--	465	0	12	381	190	0	55	12	210	6.7	5.6	120
74-05-02	--	84	0	2.7	69	71	3	23	3.4	4.9	.3	1.2	1.8
75-11-22	1702	373	8	50	320	940	620	160	216	156	2.7	5.0	31
74-05-01	--	364	0	9.2	299	250	0	73	17	150	4.1	1.2	69
75-05-13	883	161	36	1.5	191	540	349	104	55	39	.7	76	86
75-10-20	414	225	9	49	201	335	134	94	24	13	.3	2.3	12
74-05-02	--	60	0	3.8	49	54	5	16	3.4	4.3	.3	1.0	1.1
74-05-03	--	64	0	2.6	53	56	4	18	2.8	1.9	.1	.9	.6
74-06-20	--	393	0	3.2	322	100	0	23	11	130	5.6	1.0	18

Table 2.--*Chemical analyses of surface-water samples*--Continued

DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) *250*	DIS-SOLVED FLUO-RIDE (F) (MG/L) *1.3*	DIS-SOLVED SILICA (SIO2) (MG/L) *NONE*	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) *10*	DIS-SOLVED NITRATE (NO3) (MG/L) *45*	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L) *NONE*	DIS-SOLVED IRON (FE) (UG/L) *300*	DIS-SOLVED MAN-GANESE (MN) (UG/L) *50*	DIS-SOLVED BORON (B) (UG/L) *NONE*	DIS-SOLVED ARSENIC (AS) (UG/L) *10*	TOTAL ARSENIC (AS) (UG/L) *NONE*	DIS-SOLVED SELE-NIUM (SE) (UG/L) *10*	TOTAL SELE-NIUM (SE) (UG/L) *NONE*
74-05-03	16	.4	5.1	.05	--	.03	140	10	30	--	1	--	1
74-05-01	120	1.1	1.3	.07	--	.02	110	610	0	--	0	--	21
74-05-02	9.7	.6	4.6	.03	--	.01	190	800	10	--	0	--	1
75-11-22	855	.4	--	--	<.00	--	50	--	<0	0	--	5	--
74-05-01	170	.6	4.3	.06	--	.01	40	240	40	--	0	--	16
75-05-13	341	.2	--	--	3.1	--	20	--	ND	0	--	1	--
75-10-20	139	.1	--	--	.12	--	<0	--	<0	0	--	2	--
74-05-02	14	.4	5.4	.02	--	.01	230	10	30	--	1	--	0
74-05-03	8.0	.4	3.8	.03	--	.01	40	0	7	--	0	--	1
74-06-20	49	.7	5.6	.23	--	.01	30	30	70	--	4	--	4