

Table 12—Records of wells in Grant County, N. Mex.

EXPLANATION

Location number: See explanation in text. An asterisk before the location number indicates a chemical analysis is in table 14, and a dagger (†) indicates a driller's log is in table 15.

Year completed: Parentheses indicate approximate year; wells designated "old" were constructed generally before 1925.

Depth of well: Depths are in feet below land surface. Reported depth are followed by the letter "R."

Altitude: Altitude of land surface at well, interpolated from topographic map; generally accurate within ½ contour interval on source map.

Water level: Reported depths are given to nearest foot; measured depths are given to the nearest tenth of a foot.

Stratigraphic unit: Dp, Percha Shale, Kbj, Broken Jug Limestone; Kc, Colorado Formation; Ku, Cretaceous rocks, undifferentiated; p g, granite and granite-like rocks; p m, schist, gneiss, greenstone, and phyllite; p u, Precambrian rocks, undifferentiated; M, limestone and shale; SO-C, dolomite, limestone, and sandstone; Qab, alluvium and bolson deposits; Qal, alluvium; QTg, Gila Conglomerate; Qtg, terrace gravel; Ta, andesite, flow breccia, agglomerate, and tuff; Tba, basalt, and basaltic andesite flows; Td, dacite flows; TKa, andesite; TKab, andesite breccia; TKd, dacite; TKi, intrusive rocks; TKs, conglomerate, sandstone, fanglomerate, and shale; TKr, rhyolite; TKv, volcanic rocks, undifferentiated; Tl, latite and related volcanic and sedimentary rocks; Tr, rhyolite and related volcanic and sedimentary rocks; Trp, Rubio Peak Formation; Ts, gravel, sand and tuff.

Method of lift and power source: A, airlift; B, bucket; C, centrifugal pump; J, jet pump; P, plunger or cylinder pump; T, turbine pump; Ts, submersible type turbine pump; N, none; b, butane; d, diesel; e, electric motor; g, gasoline-driven engine; h, hand; n, natural gas; w, windmill.

Use of Water: D, domestic, Ind, industrial; Irr, irrigation; O, observation; Ps, public supply; S, stock; N, None; parentheses indicate purpose for which well was intended if not in use.

Remarks: The name of the driller, if known, precedes all other remarks. All wells are drilled and cased with steel casing unless otherwise indicated: dd, drawdown; est, estimated; gpm, gallons per minute; hyd, hydrograph or water levels in figures or in table 4; rept, report, reportedly; wl, water level. Data for core holes in Tyrone mining district from U.S. Geological Survey Professional Paper 122, 1922. T, temperature, given in degrees centigrade (°C). One degree of centigrade is equal to 1.8° of Fahrenheit. To convert °C to °F, multiply the °C by 9/5 (or 1.8) and add 32.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
13.13. 9.144	Gladys Hodge	Old	15	36	5,565	13.8	6-22-57	Qal	C, g	D, S	Dug, southernmost of two; 16 ft; galvanized culvert casing.
9.144a	do.	Old	27 R	36	5,580	Dry	do.	(Qal)	N	(D, S)	Dug, wl declined in recent years; when well went dry, hole was partly filled.
13.17.32.424	R. S. Rice	-	525 R	6	5,200	500	-	QTg	P, w	D, S	Bob Hooker; drilled to 490 ft before finding water; weak.
32.424a	do.	1959	615 R	6	5,200	500	5- 6-60	QTg	P, w	S	Jim McBee; drilled to 515 alongside 32.424; bailed 15 gpm; deepened in 1960 from 515 ft to 615 ft in soft granitic-type rock.
13.18. 6.423	L. R. Spires	-	46	60	5,985	14.5	10-26-55	QTg	N	(D, S)	Goes dry when nearby creek goes dry.
6.423a	do.	-	30	60	5,990	24.3	do.	QTg	N	(D, S)	Do.
6.432	do.	-	55	48	5,960	15.4	do.	QTg	N	N	Did not yield enough water in 24 hrs. to justify a windmill.
8.114	do.	-	500 R	6	6,035	Dry	10 14-55	(QTg)	N	(D)	Burrell; plugged at 15 ft rept struck no water.
* 13.443	R. S. Rice	-	20	36	5,500	12.2	6- 9-55	Qal	P, g	D	Dug; new well drilled to 49 ft, 1959; gravel and sand to 32 ft, volcanic rock at 32 ft.
15.131	do.	-	52	60	5,900	47.7	12-12-53	QTg	N	(D, S)	Dug, concrete lined to 10 ft; water perched.
15.132	do.	1928	400 R	4	5,933	-	-	QTg	P, g	D, S	Lee Childress; rept good.
18.231	L. R. Spires	(1949)	721 R	6	5,805	650	12-12-53	QTg	P, g, w	S	Lee Childress; Big Tank well; rept good; struck seep at 250 ft.
28.231	R. S. Rice	1944	301	5	5,500	241.0	10- 6-55	QTg	P, w	S	Lee Childress; cased 288 ft, drilled 350 ft; water found at 242 ft; yield 3 gpm.
33.143	Joe Hooker	-	393	6	5,310	290.6	do.	QTg	P, w	D, S	Lee Childress.
33.143a	do.	-	32	40	5,305	17.9	do.	Qal	N	(D, S)	Dug, northernmost of two; concrete lined to 10 ft; dry during drought.
13.19. 5.121	Jim Henry	1950	100 R	6	4,917	57.6	10-27-55	QTg	P, g, w	D	Lee Childress; cased to 100 ft; will pump air in 2 hrs at 2 gpm.
5.123	do.	-	53	6	4,919	19.1	do.	Qal/QTg	P, w	S	Normally weak, strong only in wet weather; water perched.
5.131	do.	-	56	48	4,917	50.4	do.	QTg	N	(D)	Dug, wooden timbering.
6.121	do.	1955	235 R	8	5,810	15.2	do.	Qal/QTg	N	(S)	Louis Oliver; drilled to 250 ft, backfilled to 235 ft; declines in dry season.
7.223	do.	-	220		4,960	111.1	do.	QTg	P, w	S	Hooker and Horn; Little Dry well, cased to 22 ft.
* 8.244	U.S. Forest Service	-	58	6	5,110	12.9	10-26-55	Qal	P, h	PS	Supplies water to campground; water may be perched.
10.312	do.	-	16	6	5,288	15.7	do.	Qal	P, g	D, S	Lee Childress; weak; 4 in casing inside 6 in, obstructed; water perched.
10.321	do.	-	188	8	5,295	127.9	10-28-55	QTg	N	(D)	Cased 20 ft; ranger station moved because water supply inadequate.
10.411	do.	-	600	8	5,350	Dry	do.	(QTg)	N	-	Lee Childress; did not find any water; some water observed on tape between 450 and 479 ft but end of 500 ft tape was dry.
15.333	L. R. Spires	1940	535 R	6	5,350	475	10-26-55	QTg	P, w	S	Cactus Flat well; Lee Childress; obstructed at 279 ft; pumping ½ gpm; yield 1 gpm when drilled; T 20°C.
22.112	do.	-	53	48	5,340	8.1	do.	QTg	N	(D, S)	Dug, wooden cribbing; yield 10 gal in 24 hrs, summer of 1954.
35.122	do.	1939	416	10	5,275	398.9	10-14-55	QTg	P, w	S	Lee Childress; Ann Tank well, drilled to 425 ft, cased to 10 ft; water found in loose sand at about 418 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
*13.19.35.123	L. R. Spires	-	399	7	5,300	371.9	4-29-55	QTg	P,e	D,S	Headquarters well no. 1; cased 400 ft, dd about 5.5 ft, pumping about 10 gpm; T 24°C.
35.123a	do.	-	381	10	5,300	-	do.	QTg	P,w	D,S	Headquarters well no. 2; splash at about 285 ft, prevented wl measurement.
35.133	do.	(1941)	370	6	5,270	338.1	10-27-55	QTg	P,w	D,S	Lee Childress; cased 367 ft; yield about 5½ gpm with 2.2 ft dd; T 50°C.
† 36.241	do.	1946	598 R	6	5,455	535.1	10-25-55	QTg	P,w	S	Lee Childress; Pine Tank well; cased 598 ft, perforated; strong.
13.20.14.444	John Henry	1954	334 R	6	5,120	237	2-22-56	Tr	P,w,g	S	Louis Oliver; drilled to 275 ft, 1954, yield 5 to 6 gpm, declined as a result of white bentonitic clay clogging cylinder; deepened and cased to 334 ft, 1961; yield increased to about 15 gpm.
23.444	do.	-	46	6	5,310	14.0	do.	Qal(?)	P,w	S	Drilled to 55 ft.
23.444a	do.	-	15	72	5,306	11.3	do.	Qal	N	(S)	Dug, partly caved.
25.311	do.	-	54	6½	5,330	16.9	do.	Qal/Tl	P,w	D,S	Lee Childress; weak.
25.311a	do.	-	16	48	5,325	11.0	do.	Qal	P,w	S	Dug, commonly goes dry in early summer; recovers when rains begin.
29.341	A. C. Watkins	-	75	6	5,205	10.4	11-22-55	Tl	P,w	S	Louis Oliver; drilled in dug well 18.9 ft deep; all in sandstone.
* 30.141	Byon Zumwalt	1950	77	6	5,160	25.5	11- 9-55	Qal/Tl	P,g	D,S	Cased 77 ft; weak but does not pump out.
31.124	Goats & Zumwalt	1954	71 R	14-10	5,265	56.2	11-22-55	QTg	N	-	Lee Childress Jr.; drilled for irrigation, yield inadequate.
31.141	do.	-	14	48	5,210	9.8	do.	Qal	N	(D)	Dug.
31.141a	do.	-	100 R	-	5,245	-	-	QTg(?)	P,w	D	Brock; rept good.
31.214	C. C. Harkey	1953	85	6	5,280	50.4	11-22-55	QTg	P,w	S	Lee Childress; pump off 15 min when measured, wl still rising.
31.331	Charles Cranmar	-	10	60	5,200	7.7	do.	Qal	N	(D)	Dug.
* 34.213	John Henry	-	75	6	5,425	40.1	2-21-56	Tl	P,w	D	Alluvium 0 to 20 ft, hard rock 21 to 78 ft; bit dropped 2 ft, water rose to 20 ft; water piped 2.5 miles to stock tank; T 23°C.
35.421	do.	-	31 R	6	5,440	20	do.	QTg	P,g,w	D,S	Pipes water to ranch headquarters; strong.
13.21.23.234	Byon Zumwalt	1954	172 R	8	5,400	110	11-1955	QTg	P,w	S	Louis Oliver; cased to 8 ft; wl drops to 160 ft in dry season.
25.114	do.	1958	104	6	5,300	36	12-29-58	QTg	P,w	S	Louis Oliver; water in conglomerate from 36 to 104 ft.
25.334	Ervin Goats	-	101	6	5,255	24.6	11- 9-55	QTg	P,w	S	Louis Oliver; cased to 20 ft; strong.
* 29.312	A. M. Traynor	1928	35 R	6	5,655	21.0	11- 8-55	Qal	P,w	D,S	Art Cloudt; cased 14 ft; declines in dry season, weak, water perched.
29.312a	do.	1946	325 R	10	5,653	80	11- 8-55	Tba	P,q,w	D,S	Hooker and Horn; cased to basalt at 30 ft; yield 3 gpm at 80 ft, drilled to 325 ft before getting more, pumps steadily at 10 gpm.
32.131	do.	-	320	6	5,710	295.8	do.	Tr	P,g,w	S	Horn.
32.413	B.H. & C. D. Schisler	1953	233	7-6	5,760	183.4	do.	Tr	P,w	D,S	Lee Childress Jr.; cased 235 ft; water supply diminished, spring, 1955.
35.244	A. C. Watkins	1955	150 R	6	5,250	10.8	11- 9-55	QTg	P,w	D,S	Drilled in dug well that went dry; yield 30 gpm without lowering wl.
36.232	Charles Stockton	1948	100 R	6	5,205	7.6	do.	Qal/QTg	P,g,w	D,S	Louis Oliver; cased 20 ft; dug 20 ft, drilled to 100 ft; dug well had water at 7 ft, drilled well found additional water at 80 and 85 ft.

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						DEPTH BELOW LAND SURFACE (FEET)	DATE				
13.21.36.314	Ervin Goats	-	25	40	5,240	14.1	11- 9-55	Qa1	P,w	D,S	Weak.
36.443	Charles Cranmar	-	17	8	5,223	7.8	11-23-55	Qa1	P,h	D	Louis Oliver; obstructed by tree roots.
14.13.33.334	Heart Bar Ranch Inc.	1946	22 R	8	5,915	-	-	Qa1	P,w	PS	Bob Hooker; cased 20 ft; supplies cemetery.
33.342	do.	1946	23	10	5,930	7.5	10-16-55	Qa1	P,g,w	D	Bob Hooker; cased 20 ft.
* 33.342a	do.	-	14	-	5,935	11.3	do.	Qa1	P,h	D	Dug, backfilled around casing; T 17°C.
14.16.30.114	Shelly Worthington	-	31	42	4,690	27.2	2-11-54	Qa1	N	(D)	Dug, on flood plain of Gila River.
31.144	U.S. Forest Service (W. J. Shelley)	-	212	16	4,740	180.6	8-18-55	QTg	P,w	D,S	-
* 14.17. 3.312	Lawrence Shelley	1950	135 R	6	4,995	75	6-19-55	QTg	P,g	D	Bob Hooker; cased 8 ft; yield 10 to 15 gpm on bailer test; T 16°C.
21.331	Robert Shelley	-	310 R	7	5,040	304.2	8-17-55	QTg	P,w	S	-
26.244	Otho Woodrow	-	196	6	5,755	152.8	8-18-55	QTg	P,g	S	-
* 31.214	A. R. Freeman	-	150	5	4,960	118.1	9-12-55	QTg	P,w	S	Lee Childress; cased to 150 ft.
32.224	State of New Mexico (Robert Shelley)	-	36	72	4,890	34.6	8-17-55	QTg	N	(S)	Dug, water probably perched.
33.423	Robert Shelley	1937	325 R	6	4,810	255 ±	do.	QTg	P,w	S	Splash in measuring line above 254 ft, line washed clean of chalk below 256 ft.
14.18. 4.211	Joe Hooker	-	171	6	5,250	116	10- 6-55	QTg	P,w	S	Lee Childress; cylinder at 140 ft.
* 8.424	E. M. Stevens	1930	158	6	5,080	121.0	10- 5-55	QTg	P,w	D,S	Lee Childress; cased to 6 ft; cylinder at 140 ft.
9.423	Joe Hooker	-	98	5	5,085	63.3	10- 6-55	QTg	P,w	S	Lee Childress.
10.433	do.	-	150	6	5,085	102.8	10-13-55	QTg	P,w	S	-
13.233	R. M. Hawkins	1967	400 R	6	5,410	p343	3-15-67	(QTg)	P,w	S	Byron Cody; yield 8 to 10 gpm.
15.334	Clayton Stephens	-	98 R	6	5,010	45	10- 3-55	QTg	P,w	D,S	Lee Childress; strong; waters large garden.
15.442	do.	(1915)	114	6	5,095	68.7	do.	QTg	P,w	S	L. A. Gordon; weak.
16.224	State of New Mexico (E. M. Stevens)	-	25	20	5,000	Dry	do.	(Qa1)	N	-	Dug; backfilled around galvanized pipe casing.
16.333	do.	-	60	6	4,940	p 50.1	10- 5-55	QTg	P,w	S	Water level measured during intermittent pumping.
18.141	Brunson McKeen	-	151	6	5,020	84.6	10- 7-55	QTg	P,w	S	-
18.141a	do.	-	50	40	5,015	50.3	do.	QTg	N	(D,S)	Dug; water perched.
19.343	do.	-	107	6	4,840	72.3	10-10-55	QTg	P,w	(S)	Not in use.
22.323	Walter Butler	-	69	6	4,980	49.4	10- 3-55	QTg	P,w	S	-
26.141	Clayton Stephens	-	175 R	6	4,920	57.6	do.	QTg	P,w	S	Lee Childress; cased 175 ft; weak.
26.211	do.	-	138	5	4,975	84.4	do.	QTg	P,w	S	Lee Childress; test bailed 30 gpm.
28.314	State of New Mexico (Walter Butler)	-	81	6	4,830	76.7	9-30-55	QTg	P,w	(S)	Weak; not in use.

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						DEPTH BELOW LAND SURFACE (FEET)	DATE				
14.18.30.121	R. E. Martin	-	98	6	4,880	71.8	9-10-55	QTg	P,w	(S)	Not in use.
30.141	do.	-	356 R	9	4,920	200	2-1956	Tba	P,w	D	Gordon and Martin; cased 9 ft; strong, supplied former CCC camp, water rept to be corrosive; drilled in gravel to 7 ft, hard black rock to 200 ft, first water struck at 200 ft.
30.444	L. R. Spires	1940	184	5	4,845	p117.6 94.4	9-19-55	QTg/Tba	P,w	S	Lee Childress; Hollingworth well; drilled 294 ft; basalt from 270 to 294 ft; dd 28 ft at rate of 2 gpm.
33.121	Walter Butler	-	88	6	4,805	64.3	10- 3-55	QTg	P,w	S	Van Liverman; drilled 97 ft, cased 90 ft.
33.211	J. T. Hollimon	-	600 R	6	4,805	64.3	9-30-55	QTg	P,w	D,S	Cased 100 ft; drilled as in oil-test hole.
33.212	do.	-	275 R	6	4,815	83	-	QTg	P,w	(D)	Cased to 100 ft; not in use.
* 33.213	do.	1942	1,900 R	15-12½	4,825	60.3	10-13-55	QTg	T,e	Irr	Cased to 300 ft, rept yields 600 gpm with 20 hp. turbine pump; T 18°C. drilled as an oil-test hole, Gordon No. 1.
						63.9	4-29-56				
						57.1	11-19-57				
						p 75.3	8-11-61				
						55.3	4-10-62				
33.314	Marjery Owen	-	35	36	4,790	Dry	9-30-55	(QTg)	N	(D)	Dry; concrete cribbing to 13 ft.
33.321	Walter Butler	-	92	10	4,785	38.8	do.	QTg	T,e	Irr	Van Liverman; drilled 100 ft, cased 60 ft; yield down from 180 to 100 gpm.
33.322	do.	-	66	6	4,780	50.2	do.	QTg	P,w	D,S	L. A. Gordon.
33.331	Frank Drummond	1933	70	8-6	4,810	67.0	do.	QTg	P,e	D,S	L. A. Gordon; declined in summer of 55, added 4 ft of pump column.
33.331a	do.	1956	196 R	-	4,775	60	4-20-56	QTg	P,g	D,S	Louis Oliver; drilled in conglomerate containing basalt boulders to 191 ft, loose gray sand, 191 to 196 ft, not fully penetrated; yield 25 gpm on test.
33.341	Walter Butler	-	58	8	4,795	52.6	9-19-55	QTg	P,w	D	-
33.344	Sarah Airsman	-	54	6	4,777	42.5	9-30-55	QTg	P,w	D	-
33.414	Clee Crumbley	-	48	8	4,767	41.4	9-29-55	QTg	P,w	D	Not in use.
33.423	Jaspar Sossaman	1956	634 R	20-12	4,772	43.4	do.	QTg	T,e	Irr	Drilled 220 ft, 1952; yield 800 gpm; deepened by Louis Oliver to 634 ft, 1956; yield 2000 gpm in July 1961; wl rose during deepening.
						33.2	4-10-62				
14.19. 3.433	Brunson McKeen	-	224	6	5,140	45.7	9-26-55	QTg	P,w	D,S	Weak; water may be perched.
9.114	L. R. Spires	1945	471 R	6	5,250	355.7	do.	Tba	P,w	D,S	Lee Childress; conglomerate to about 60 ft, then drilled mostly in volcanic rock to bottom of hole; water increased from 354 ft down.
12.231	Brunson McKeen	-	258	7	5,100	153.7	10- 7-55	QTg	P,w	S	-
13.223	State of New Mexico (Brunson McKeen)	-	134	6	5,030	p 95.9	do.	QTg	P,w	S	T 18°C.
14.231	State of New Mexico (L. R. Spires)	1948	358 R	6	5,020	299.1	9-15-55	QTg	P,w	S	Lee Childress; Bright well; cased 358 ft; pumps some fine sand.
19.324	Huling Means	-	504	6	5,450	478.1	11- 4-55	Tl	P,e,w	D,S	Water supply for three houses and stock.

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14.19.24.123	L. R. Spires	1947	475 R	6	5,150	332.6	9-15-55	Tba	P,w	\$	Lee Childress; Brown well; strong.
25.411	do.	-	220	8	4,990	202.9	10-27-55	Tba	P,w	\$	Weak.
† 29.133	Huling Means	1960	713 R	6	5,400	385	6-22-60	QTg/Tl	P,w	D,S	Louis Oliver; cased 450 ft; test bailed at 21 gpm for about 3 hrs with no apparent dd; water struck at 425 ft, rose in casing.
29.311	Huling Means	-	6	-	5,300	1.8	11- 4-55	Qal	P,w	(D,S)	Dug; goes dry in dry weather; water flowing in adjacent creek.
† 36.443	L. R. Spires	1945	375 R	6	5,190	330.4	9-15-55	QTb	P,w	S	Lee Childress; Horse Lake well; on bluff 300 ft above dry creek bed.
14.20. 4.112	Sam Means Estate	-	88	6½	5,340	78.6	1-26-56	QTg	P,g,w	D,S	Zumwalt well; good.
4.344	do.	-	121	7	5,380	108.5	do.	QTg	P,g,w	S	Willson Place well; strong.
5.233	do.	-	104	-	5,360	86.6	do.	QTg	P,w	D,S	Good.
6.131	Mule Creek School (C.C. Harkey)	-	11	60	5,245	9.3	11-23-55	Qal	P,w	S	Dug, concrete cribbing.
6.131a	do.	1956	7	8	5,240	4.1	do.	Qal/QTg	P,w	S	Old dug school well, deepened by Louis Oliver from 8 ft to 110 ft, cased 40 ft, 1956; yield 30 gpm after deepening; alluvium to 32 ft, conglomerate to 110 ft.
6.143	C. C. Harkey	-	48	42	5,295	45.2	do.	QTg	N	(D,S)	Dug, log cribbing to 10 ft, being filled with trash; very weak.
7.343	Wilkinson & Johnson	-	156	6	5,540	148.8	1-24-56	QTg	P,w	S	Weak.
† 7.343a	do.	1959	195 R	6-5	5,540	149	1-22-59	QTg	P,w	\$	Louis Oliver; Bull Farm well; cased 195 ft; bailed 18 gpm; drilled along side old well.
8.211	Sam Means Estate	1947	99	8	5,390	68.6	do.	QTg	P,w	S	Pop's well; good.
8.314	A. M. Taylor	-	65	6	5,450	22.5	do.	QTg	P,g,w	D,S	-
8,314a	do.	-	15	36	5,445	10.8	do.	Qal	P,w	S	Dug, log cribbing.
9.323	Sam Means Estate	-	130	7	5,440	95.9	do.	QTg	P,w	\$	Body Place well; drilled 140 ft, strong.
† 12.342	Huling Means	1956	628 R	6	5,740	450±	1956	(?)	P,w	\$	Louis Oliver; about ½ gpm found on top of basalt at 450 ft.
15.122	Sam Means Estate	-	380 R	6	5,770	Dry	2-23-56	(QTg)	N	-	Did not find any water.
16.142	State of New Mexico (Sam Means Estate)	-	108	6	5,480	49.9	1-26-56	QTg	P,w	\$	Lee Childress drilled to 55 ft; deepened by Louis Oliver.
16.344	do.	-	200 R	6	5,510	Dry	2-23-56	(QTg)	N	-	Did not find any water.
18.424	Sam Means Estate	-	15	48	5,510	13.7	1-24-56	Qal	N	(D,S)	Dug, stone cribbing.
* 18.442	do.	1946	75	6	5,525	14.9	do.	QTg	P,w	S	Drilled 175 ft but sloughed in; water found at 65 ft; strong; T 16°C.
19.144	do.	1953	21	36	5,540	10.9	1-26-56	Qal	P,w	S	George Schale; dug, culvert casing.
19.331	State of New Mexico (Sam Means Estate)	1953	152 R	6	5,615	24	-	(?)	P,w	S	Lee Childress Jr.; yield 1/10 gpm; water found at 61 ft.
20.342	Sam Means Estate	-	91	-	5,615	52.5	1-26-56	QTg	P,w	D,S	Drilled to 100 ft.
20.342a	do.	(1938)	100 R	6	5,615	49	-	QTg	P,w	D,S	Lee Childress; water found at 45; strong.
21.311	do.	-	212 R	6	5,590	45.1	1-26-56	QTg	P,g,w	\$	Bob Barton; Horse shoe well; drilled 170 ft; deepened by Lee Childress.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
14.20.21.441	Sam Means Estate	-	380 R	-	5,700	Dry	2-23-56	(QTg)	N	-	No water found; cuttings indicate hole drilled in conglomerate.
26.113	do.	-	100 R	6	5,620	Dry	do.	(Tba)	N	-	No water found, cuttings indicate hole drilled in basalt.
* 26.311	Wilkinson & Johnson	-	18 R	48	5,640	7.4	2-23-56	Qal	P,g	D,S	Dug; 15 ft culvert casing; will pump out in dry weather; T 14°C.
26.313	do.	-	28 R	48	5,650	13.0	do.	Qal	P,g	D,S	Dug, cased 18 ft with oil drums; very weak.
27.212	Sam Means Estate	-	100 R	6	5,635	Dry	do.	(Tba)	N	-	No water found; drilled entirely in conglomerate.
27.222	do.	-	180 R	6	5,600	Dry	do.	(Tba)	N	-	Do.
14.21. 1.111	Ted Brannon	-	250 R	8	5,245	7.06	11-23-55	Qal/QTg	T,g	Irr	Yield 75 gpm; all water coming from above 75 ft.
1.211	A. C. Watkins	-	9	36	5,220	6.5	do.	Qal	P,h	D,S	Dug, wooden cribbing; has never gone dry.
1.421	do.	-	16	36	5,260	13.1	1-31-56	Qal	B,h	D,S	Dug.
* 1.431	C. C. Harkey	-	78 R	8	5,275	22	6-9-55	QTg	P,w	D,S	Hooker and Horn; test bailed at 48 gpm; T 16°C.
1.431a	do.	-	26	48	5,275	25.4	6-9-55	Qal	N	-	Dug, wooden cribbing; weak.
2.111	A. M. Traynor	-	17	36	5,310	9.8	11-8-55	Qal	N	(D,S)	Dug, strong.
2.222	do.	-	10	18	5,245	4.5	11-23-55	Qal	N	(D,S)	Dug, backfilled around culvert casing.
2.413	State of New Mexico (C. C. Harkey)	-	10	48	5,295	7.4	1-27-56	Qal	P,h	(D,S)	Dug, culvert casing, not in use.
3.221	U.S. Forest Service	-	100 R	6	5,350	80(?)	11-55	QTg	P,g	S	Louis Oliver; very little water above 80 ft.
12.332	Young Wells	1955	277 R	8	5,415	27.0	1-31-56	QTg	P,g	D,S	Louis Oliver; cased 80 ft; bailing 60 gpm did not lower wl appreciably.
12.332a	do.	-	35	60	5,415	24.8	do.	QTg	B,h	(D,S)	Dug 60 ft, rock cribbing 6 ft; can bail dry with bucket in dry weather; drilled entirely in conglomerate; main water at about 225 ft.
12.334	do.	-	47	6	5,415	19.3	do.	Qal	P,g	S	Strong.
12.432	Mike Cravey	-	356	6	5,500	168.4	1-27-56	QTg	P,w	S	Louis Oliver; shut down 30 min. to measure water level.
13.213	do.	-	10	48	5,425	7.4	1-31-56	Qal	C,g	D,S	Dug, rock and log cribbing; weakens in dry weather.
13.213a	do.	1958	197 R	8	5,420	6	9-17-58	QTg	C,g	D,S	Louis Oliver; cased 52 ft; water flowing in nearby creek; water seep, 175 to 180 ft.
14.411	U.S. Forest Service (Young Wells)	-	96	6	5,490	11.9	1-31-56	QTg	P,g	S	-
34.244	U.S. Forest Service (Mike Cravey)	-	18 R	24	5,850	10-16	-	Tr	P,w	S	Dug; water level lowers in dry season.
15.11.36.111	U.S. Forest Service	-	13	36	6,770	8.9	11-2-56	Qal	P,w	S	Dug; culvert casing; went dry in 1956, recovered after summer rains.
15.12. 6.321	V-Cross Cattle Co.	-	43	6	6,140	19.1	10-16-55	Qal	P,g,w	S	-
6.412	do.	-	30	8(?)	6,145	12.2	do.	Qal	P,w	D,S	Moderately strong, east well of two.
6.412a	do.	-	31	8	6,145	12.8	4-26-56	Qal	P,w	S	West well of two.
* 15.433	Hub Estes	-	19	74	6,398	p 12.6	4-27-56	Qal	P,w	D,S	Dug, wooden cribbing; new well restd drilled to 127 feet in QTg, 1961.
25.433	do.	-	32	48	6,430	28.9	10-19-55	QTg	P,w	S	Dug, culvert casing; good.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
15.12.36.224	U.S. Forest Service	-	19	48	6,385	13.4	10-19-55	Qal	P,g	D,PS	Dug for CCC camp; culvert casing, now supplies Camp Thunderbird.
15.15.31.424	Randolph Franks	-	71	7	5,128	30.4	11- 3-53	QTg	P,g,w	D,S	Adjacent creek has perennial flow.
15.16. 6.231	W. H. Shelley	-	98 R	6	4,665	87.4	7-15-55	Qal	J,e	D,S	Lee Childress; cased 98 ft; water struck at 92 ft rose to 85 ft; well finished in hard conglomerate.
6.433	U.S. Forest Service (W. H. Shelley)	-	109	6	4,670	102.8	7-19-55	Qtg	P,w	(S)	Not in use.
7.112	U.S. Forest Service	-	94	6	4,630	71.9	7-15-55	Qtg	N	(D)	Not in use; good.
7.313	J. H. Eaton	-	94	24	4,650	88.2	do.	Qtg	N	(D)	Dug, backfilled around oil drums; yield steady at not over 3/4 gpm.
7.344	Joe Hooker	-	151 R	6	4,690	121.4	7-19-55	QTg	P,w	S	Good.
17.234	do.	-	126	6	4,855	98.7	do.	QTg	P,w	S	Windmill out of order.
20.344	do.	-	8	6	5,755	Dry	6-17-55	(QTg)	N	(S)	Apparently has caved.
* 21.122	do.	-	55	48	4,940	48.8	11- 2-53	QTg	P,w	S	Dug, log and concrete cribbing, weak. New well restd drilled in 1956 to depth of 150 ft in sandstone.
						52.0	6-17-55				
* 23.322	do.	-	197 R	8	5,130	127.3	6-23-55	QTg	P,w	S	Cased 197 ft, weak; intermittent pumping when measured; T 23°C.
29.123	Donald Hooker	-	47	6	4,760	14.5	6-17-55	QTg	J,e	D,S	Drilled 90 ft.
29.311	Joe Hooker	-	19	10(?)	4,740	16.8	6-17-55	Qal	J,e	D,S	Dug, backfilled around casing; will pump air if run steady.
29.311a	do.	-	25 R	10	4,736	13.4	do.	Qal	N	(D)	Not in use, water supply not adequate.
15.17 1.444	Otho Woodrow	1954	16	48	4,570	7.1	8-18-55	Qal	T,e	Irr	Dug, in meander channel of Gila River; yield 1,100 gpm.
5.321	Robert Shelley	1942	220 R	6	4,830	139.6	8-17-55	QTg	P,w	S	Lee Childress; cased to 12 ft.
6.311	M, J, & R. Crumbley	-	229	6	4,760	139.9	9-12-55	QTg	N	(S)	Never equipped because of lack of water.
7.231	do.	1952	133	6	4,700	90.9	do.	QTg	N	(S)	Van Liverman; drilled 275 ft; inadequate water for stock well; much "fat" clay on measuring tape.
7.344	do.	-	55	6	5,670	Dry	do.	(QTg)	N	(D,S)	Obstruction at 55 ft; water had bad taste.
9.223	Fayette Rice	-	220	6	4,705	163.0	8-17-55	QTg	P,w	S	
10.214	Phelps Dodge Corp.	-	-	6	4,660	139.3	8-18-55	QTg	P,w	S	Drawdown 1.6 ft at 3 to 4 gpm; T 21°C.
11.414	do.	-	58	16	4,550	8.1	8-19-55	Qal	N	(Irr)	Never used.
11.421	do.	-	50	6	4,570	22.6	do.	Qal	P,w	(D)	Not in use.
11.432	do.	-	35	6	4,650	19.9	9-28-55	Qal	P,w	D	Roy Freeman.
12.121	do.	-	35	36	4,580	32.2	8-18-55	Qal	P,w	D,S	Dug.
12.141	H. E. Clark	-	42	6	4,575	28.2	8-19-55	Qal	J,e	D	
12.141a	do.	-	34	6	4,570	24.7	8- 1-55	Qal	T,e	Irr	Bob Hooker; dd 1.8 ft after 10 min at 120 gpm; conglomerate at 32 ft.
12.142	do.	1955	-	20	4,560	14	do.	Qal	T,e	Irr	Bob Hooker; being drilled at time of visit.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
15.17.12.244	J. H. Eaton	-	74	48	4,630	72.6	7-15-55	Qtg	P,w	D,S	Generally goes dry about December in dry years, recovers in February.
12.434	Manuela Maldonado	-	65	36	4,605	62.1	7-19-55	Qtg	J,e	D,S	Dug, concrete cribbing.
13.141	Jack Stewart	-	34	72	4,580	32.1	8-22-55	Qal	B,h	D,S	Celso Guerra; dug, never has gone dry.
13.312	Phelps Dodge Corp.	-	10	84	4,555	5.2	do.	Qal	N	(Irr)	Not in use.
14.211	do.	-	40 R	6	4,600	30	8-19-55	Qal	J,e	D	Dug, backfilled around 6-inch casing.
14.212	do.	1948	50 R	16	4,560	12.4	do.	Qal	T,e	Irr	Lee Childress; yield 2,000 gpm.
14.312	do.	-	22	42	4,580	16.7	do.	Qal	P,e	D,S	Dug, concrete cribbing.
14.331	R. S. Rice	-	29	52	4,560	13.0	do.	Qal	P,e,w	D,S	Dug, concrete cribbing.
14.343	do.	-	9	36	4,540	3.2	do.	Qal	P,w	(D,S)	Dug, concrete cribbing; not in use.
17.443	W. A. Howard	-	239	6	4,550	31.8	7-14-62	QTg	P,w	S	Bob Hooker; cased 40 ft, drilled to 300 ft; first water at 75 ft.
18.111	State of New Mexico (J.,M., & R. Crumbley)	-	83	6	4,635	46.5	9-12-55	QTg	P,w	S	-
18.313	J., M., & R. Crumbley	-	42	10	4,595	24.7	9-27-55	Qal	T,g	D	Van Liverman; pumps some fine sand.
19.124	A. R. Freeman	-	11	40	4,585	8.7	9-12-55	Qtg	P,g	D	Dug, concrete cribbing; seep spring in nearby wash.
19.233	Lewis Brown	(1950)	72	16	4,570	7.9	9-27-55	Qtg	T,g	Irr	Ballard & Payne; drilled 80 ft; yield 65 gpm; nearby spring flows 10 gpm.
19.312	M. E. Ault	-	15	48	4,595	8.8	do.	Qal	P,e,w	D,S	Dug, concrete cribbing to 8 ft.
20.343	A. R. Freeman	-	20 R	72	4,525	5	9-12-55	Qal	C,e	D,S	Dug, concrete cribbing.
22.214	Carl Rice	-	34	72	4,585	27.9	8-26-55	Qal	J,e	D,S	Some shortage of water in past two summers.
22.341	Phelps Dodge Corp.	-	-	6	4,530	-	-	Qal	J,e	D,S	-
22.424	do.	-	50 R	16(?)	4,525	6	8-26-55	Qal	T,g	Irr	Lee Childress; yield 1,500 to 1,800 gpm.
23.244	H. A. Coffee	-	17	96	4,540	11.3	8-22-55	Qal	C,e	D,S	H. A. Coffee; dug, concrete cribbing.
23.411	Manuel Dominguez	-	50	16	4,535	5.2	do.	Qal	T,g	Irr	Lee Childress; drilled to conglomerate at 75 ft, cased 65 ft; 1,200 gpm.
24.114	Joe Hooker	-	97	6(?)	4,580	35.0	5-17-55	QTg		(D)	Not in use, drilled for CCC Camp water supply.
24.224	do.	Old	72	60	4,655	72.0	7-14-62	QTg	P,w	S	Dug; log cribbing to 12 ft; will pump out; T 18°C.
26.123	Frank Hooker	-	31	8	4,540	17.1	8-22-55	Qal	N	(D)	-
26.133	C. V. Dominguez	-	40	-	4,555	Dry	do.	(Qtg)	P,w	(D)	Went dry recently; owner plans to deepen.
26.133a	Hornito Maldonado	-	50 R	6	4,545	31.6	do.	Qtg	J,e	D	-
26.211	C. V. Dominguez	-	99	6	4,559	36.6	7-15-55	Qtg/QTg	P,g	D,S	-
26.323	Allyn Turner	-	118	8	4,600	73.3	4-29-55	Qtg/QTg	J,e	D	Strong; T 18°C. New well restd drilled to the east, by a new house.
26.331	Walt Lowe	1958	100	6-5	4,558	30	11-25-58	Qtg/QTg	Ce	D	Louis Oliver; cased 100 ft; dug 0 to 40 ft, drilled 40 to 100 ft in conglomerate.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
15.17.27.111	Phelps Dodge Co.	1950	37 R	6(?)	4,515	16.6	8-25-55	Qa1	P, e	D, S	Bob Hooker.
27.111a	do.	-	21	36	4,515	15.1	do	Qa1	T, e	D, S	Dug, concrete cribbing.
* 27.111b	do.	1960	300 R	8	4,515	17.6	7-14-62	QTg	S, e	D, S	Cased 200 ft. perforated 75 to 85 ft and 170 to 180 ft; 1st water at 18 ft, more at 75 to 80 and 170 to 175, no increase below 175 ft; bailed at 50 gpm with dd to 90 ft; T 33°C.
27.312	do.	1948	58 R	16	4,495	5.0	8-16-55	Qa1	T, g	Irr	Lee Childress; yield 800 gpm, draws down to bowls.
27.432	do.	-	21	36	4,515	19.3	8-22-55	Qtg	N	(D)	Dug, log cribbing; newer well furnishes water to house.
27.444	do.	-	48	6	4,550	32.2	8-25-55	Qtg	N	(D)	-
* 28.331	Cliff Consolidated School	(1930)	30 R	6	4,490	16	4-55	Qa1	J, e	PS	Strong, T 21°C.
28.341	Isom Shoemaker	-	68 R	6	4,520	36.9	9- 2-55	Qtg	P, w, J, e	D	-
28.412	Phelps Dodge Co.	-	20	72	4,500	7.7	8-16-55	Qa1	J, e	D	Dug.
29.112	J. F. Dickerson	-	55 R	16	4,535	8.6	9-27-55	Qa1	T, e	Irr	Lee Childress; cased 50 ft; yield 300 gpm.
29.122	do.	1952	78	16	4,523	9.7	9-14-55	Qa1	T, e	Irr	Lee Childress; drilled 100 ft; yield 300 gpm.
29.124	do.	-	20	48	4,524	12.9	do.	Qa1	C, e	D, S	-
29.221	James Helton	-	28	40	4,545	18.4	do.	Qtg	P, w	D	Dug, no cribbing; not used for drinking; water tastes of soda and kills plants; will pump out in 4 to 5 hours in hard wind.
29.233	J. F. Dickerson	-	36	10	4,500	9.1	9-12-55	Qa1	C	(Irr)	Lee Childress; drilled 90 ft; not in use although yield is good.
29.322	W. E. Dickerson	-	41	6	4,520	14.3	9- 9-55	Qa1(?)	T, e	Irr	Bob Hooker; pumped steadily for a month at 190 gpm, dd 4 ft.
29.412	I. E. Calloway	-	25	48	4,510	22.7	9- 9-55	Qa1	P, e	D, S	Dug, concrete cribbing.
* 29.442	J. B. Horn	(1910)	410 R	8	4,510	Flowing	do.	QTg	C, e	D, S	Cased 40 ft, flows 1.8 gpm; head of about four ft; has flowed with no apparent fluctuation for 45 to 50 years; T 20°C; water increased all the way down—at depth of 170 ft, the static level was at land surface.
29.442a	do.	-	20 R	96	4,505	15	9-12-55	Qa1	B, g	Irr	James Horn; dug, concrete cribbing; water raised by 30 buckets fastened to paddle wheel turned by motor; wl declines in spring.
						12.9	4-10-62				
* 31.312	J. F. Bennett	1938	24	6	4,710	7.1	9- 2-55	Qa1	P, g, w	D, S	Lee Childress; drilled to 55 ft; conglomerate from 0 to 14 ft, basalt from 14 to 55 ft.
31.431	do.	-	39	60	4,670	34.3	do.	QTg	N	(D, S)	Dug, no cribbing; seep spring in channel of nearby creek; fish in pools below spring indicate spring is perennial.
33.111	Phelps Dodge Co.	-	18	60	4,495	p 16.1	9- 9-55	Qtg	P, e	D	Dug, concrete cribbing; can be pumped out.
33.121	do.	1955	85 R	8	4,520	50	4- 4-56	Qtg	P, w	D, S	Bob Hooker; cased to 85 ft; strong.
33.133	Cliff Home Extension Club	-	44 R	-	4,510	39	9- 9-55	Qtg	J, e	PS	Dug.
33.411	Harsh & Sons	1946	55 R	13	4,480	11.6	7-14-55	Qa1	T, g	Irr	Lee Childress; yield 1,500 gpm; 14 ft of loam from surface down, 41 ft of coarse sand and gravel; clay at 55 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
15.17.33.411a	Harsh & Sons	-	50 R	8	4,480	12	7-14-55	Qal	J,e	Ind	Dairy supply.
33.444	Orson Stailey	-	30 R	48	4,515	21	7-14-55	Qal	J,e	D,S	Dug, also supplies small dairy; water struck under thin bed of hardpan.
34.134	Harsh & Sons	-	50 R	16	4,495	17.0	do.	Qal	T,J,e	D, Irr	Yield 1,200 gpm, but will break suction.
34.243	Allyn Turner	1939	71 R	6	4,555	53.1	7-13-55	Qtg	J,e	D	Lee Childress; water is soft.
34.333	John Lee	-	23	36	4,580	20.2	7-14-55	Qal	B,h,T,e	D	John Lee; dug, has gone dry at times, bottomed on hardpan.
34.344	Gila Cemetery	-	139	6	4,580	122.4	7-13-55	QTg	P,w	-	Yields about ½ gpm, pumps air in strong wind; wl recovering at time of measurement--had recovered 15 ft after 55 minutes and was still rising.
34.442	Joe Hooker	-	33	48	4,550	30.2	6-16-55	Qtg	N	(D)	-
34.442a	do.	-	68 R	8	4,550	34.0	do.	Qtg	P,w	S	-
35.113	Phelps Dodge Corp.	-	59	48	4,570	56.1	7-13-55	Qtg	P,w	S	Dug, wooden cribbing.
35.134	do.	1941	59 R	10	4,560	29.3	do.	Qal	T,e	(Ind)	Had large yield; supplied water for fluorite mill during World War II; broad cracks opened up in adjacent flat when well was first pumped.
35.134a	do.	1941	108 R	10	4,560	30.1	do.	Qal	N	-	Lee Childress; 50 ft from well 35.132 but did not yield as much water.
35.321	John Barka	-	102	8	4,555	p 39.7	7-13-55	Qal/QTg	T,e	D,S	Cased to 102 ft; water-bearing beds at 35, 55, 83, and 102 ft.
35.321a	do.	-	58	48	4,555	41.5	do.	Qal/QTg	P,w	Irr	Dug, used to irrigate garden.
35.342	J. T. Moore	-	113	8	4,600	48.7	7-14-55	QTg	N	D(?)	Not equipped at time of visits.
						38.3	4-10-62				
35.414	A. L. Pennington	-	51	8	4,570	39.0	do.	Qal/QTg	P,g	D	-
35.422	Wilson Brown	-	95	8-5	4,578	49.1	6-16-55	Qal/QTg	P,w	S	Bob Hooker; drilled to 100 ft in old dug well in 1955; deepened to 130 ft by Louis Oliver, 1961; rept would yield 250 gpm in 1955.
† 35.442	State of New Mexico (Wilson Brown)	1958	304 R	12-7	4,600	36	11-20-58	Qal/QTg	T,e	(Irr)	Louis Oliver; drilled 12-in to 200 ft, cased to 77 ft; drilled 7-in, 200 to 304 ft.
36.134	C. V. Dominguez	-	16	36	4,610	Dry	6-23-55	(Qal)	N	(D)	Dug, log cribbing, partly caved.
36.234	do.	-	60 R	12	4,623	16.6	6-16-55	Qal/QTg	P,w	S	
36.421	Rito Dominguez	-	41	12	4,660	Dry	do.	QTg	T,g	Irr	Drilled to 70 ft; yield 200 gpm before caving.
15.18. 2.333	Bessie Crumbley	1949	450 R	8	4,680	Flowing	7-1949		N	-	Lee Childress; artesian flow from fine black sand, 217 to 237 ft; water unuseable because of mineral content; subsequently destroyed.
3.111	Lee Childress	-	27+	12	4,752	20.9	9-29-55	Qal	T,e	Irr	Bob Hooker.
3.111a	do.	-	-	6	4,747	p 28.0	do.	Qal	P,w	S	Bob Hooker; well destroyed in 1956.
3.113	do.	-	-	6	4,742	-	-	Qal	P,w	D	Lee Childress; tightly sealed.
3.133	L. R. Spires	-	14	36	4,740	Dry	9-14-55	(Qal)	N	(D)	Dug, concrete cribbing.
3.433	Sam Masoner	-	59	12	4,690	21.9	9-28-55	Qal/QTg	N	Irr	Van Liverman; yield 450 gpm.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
*15.18. 4.211	A. V. Youngblood	(1925)	101	8-6	4,805	48.6	4-29-55	QTg	P,w	D,PS	Lee Childress; cased 100 ft; T 19°C; Buckhorn store, PO, and station.
4.212	Charles Cranmar	-	28	48	4,760	Dry	9-29-55	(Qal)	P,w	(D)	Dug; rock cribbing; dry for past 5 years.
4.213	A. V. Youngblood	1956	298	12-10	4,845	55.0	9-26-61	QTg	T,e	Irr	Louis Oliver; cased 130 ft; perforated; yield 90 gpm with 5 Hp pump; dd 13 ft after 1 hr; wl fluctuates immediately when nearby irrig. wells pump; drilled in conglomerate all the way.
4.214	Emmett Latham	-	72	6	4,765	39.6	9-30-55	QTg	P,w	D,Irr	Waters small orchard.
4.221	L. R. Spires	-	101	24	4,755	22.0	9-29-55	Qal/QTg	T,e	Irr	Lee Childress; equipped with 30 Hp pump.
						18.0	11-19-57				
						34.1	8-11-61				
						15.3	4-10-62				
4.221a	do.	1916	65 R	8	4,740	7	9-1955	QTg	N	(D)	L.A. Gordon; obstructed at 2 ft; flowed for many years, began to decline and ceased flowing about 1952.
4.221b	do.	1956	308 R	18-10	4,750	18	4-1957	QTg	T,e	Irr	Lee Childress; 84 ft of 18-in. and 110 ft of 16-in. casing; 10-in. casing from 200 ft down; yields 1,100 gpm without breaking suction, bowls set at about 95 ft; struck water at 25 ft, rose gradually as drilling progressed, dropped to 28 ft, rose to 21 ft at depth of 203 ft., at 240 ft wl was 18 ft 10 in.
4.241	do.	(1940)	358	8	4,750	13.5	9-30-55	QTg	P,w	S	Bob Martin; Buckhorn well, flowed when drilled, casing broke and lost flow.
4.422	Emmett Latham	1944	100 R	8	4,745	21.6	9-29-55	QTg	T,e	S,Irr	McKinney Bros; yield 180 gpm with very little dd.
8.112	L. R. Spires	(1940)	297	8	5,000	257.4	9-15-55	QTg(?)	P,w	D,S	Lee Childress; Horse Camp well; will yield continuously at about 4 gpm.
9.424	do.	1948	194 R	6½	4,810	70.0	10-25-55	QTg	P,w	S	Whitehill well.
10.314	do.	-	23	48	4,790	17.4	do.	Qal	N	(S)	Dug, no cribbing; generally goes dry each spring; water perched.
11.111	Quaide St. Clair	-	25	5	4,675	18.9	9-28-55	Qal	J,e	D	Weak.
11.113	Bessie Crumbley	(1947)	61	16	4,665	20.5	9-27-55	Qal/QTg	T,e	Irr	Van Liverman; yield 400 gpm with 45 ft of dd.
11.143	do.	1952	67	16-10	4,660	18	1942	Qal/QTg	T,e	D,S,Irr	Lee Childress; cased 70 ft; yield 450 gpm, dd 48 ft rapidly, then holds steady; wl began to decline after 1952.
						21.1	9-28-55				
						18.6	3-10-61				
						25.8	8-11-61				
11.143a	do.	1946	60 R	8	4,660	-	9-28-55	Qal/QTg	T,e	Irr	Van Liverman; cased 60 ft; yield 400 gpm, dd 40 ft after long pumping.
11.223	J., M., & R. Crumbley	1947	31	6	4,670	14.4	9-29-55	Qal	P,w	S	Van Liverman; water obtained in first gravel.
11.231	Dan Oliver	1956	125 R	12	-	p 42.6	6-13-61	Qal/QTg	Tb	Irr	Louis Oliver; yield about 1,000 gpm.
11.322	Gretchen Osmer	-	21	10	4,660	Dry	9-28-55	(Qal)	P,w	(D)	

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
15.18.11.413	Dan Oliver	1956	85 R	10	4,645	23.7	8-11-61	Qal/QTg	T,g	Irr	Louis Oliver; cased 60 ft; yield 150 gpm.
* 11.423	Charles O'Donnell	1949	77	12	4,650	14.6	do.	Qal/QTg	T,e	D,Irr	Lee Childress; cased 80 ft; perforated; yield 680 gpm with 9.5 ft dd; has pumped steady for week with no noticeable decline in yield; T 17°C.
						19.1	4-10-62				
* 12.314	J., M., & R. Crumbley	-	30	6	4,635	20.1	do.	Qal	P,w	S	Water tastes of alkali and iron.
14.224	R. O. Dinwiddie	1954	84	8	4,680	26.3	9-13-55	QTg	N	-	Louis Oliver; drilled 150 ft; cased 30 ft; entered red clay at 20 ft, never got through it; would pump out in 6 min. at 20 gpm.
14.231	R. B. Dinwiddie	(1943)	66	6	4,725	26.4	do.	QTg	N	-	Lee Childress; drilled 385 ft; yield 1 pint per minute; water not suitable for drinking because of potash taste.
14.234	do.	-	11	36	4,705	5.2	do.	QTg	P,g,w	D	Dug at site of seep spring; tin and wood cribbing; will pump out.
15.431	L. R. Spires	-	118	6.5	4,755	22.6	10-25-55	Qal	P,w	S	Hunter well; dug well nearby; large cottonwoods in area.
22.112	J. F. Bennett	-	106	6	4,817	78.9	do.	QTg	P,w	S	-
24.244	R. O. Dinwiddie	-	20	48	4,610	15.3	9-27-55	Qal	C,e	D	Dug, not enough water to raise a garden.
34.431	State of New Mexico	-	600 R	-	5,160	Dry	-	(Tba)	N	(S)	Found no water.
*15.19. 3.433	L. R. Spires	(1944)	532	5	5,450	498.6	9-15-55	Ts	P,g	S	Hole crooked; pumped fine sand until cylinder raised; T 21°C.
7.423	Huling Means	1934	5	30	5,790	1.4	9- 4-55	Qal	N	(S)	Dug, rock cribbing; water flowing in adjacent creek.
* 18.211	do.	-	6	60	5,840	.0	11- 4-55	Qal	P,w	D,S	Dug, concrete cribbing; seep springs and marshland adjacent, water standing at ground surface; T 17°C.
19.243	State of New Mexico (Huling Means)	1954	600 R	8	6,025	578	9-16-55	QTb	P,g,w	S	Louis Oliver.
32.344	do.	-	92	6	5,872	12.2	do.	Tba	P,w	D,S	Red Ross well; drilled to 100 ft.
34.431	Huling Means	-	450 R	6	5,675	425	do.	Tba	P,w	S	-
15.20.11.311	Wilkinson & Johnson	-	30 R	48	6,000	Dry	2-23-55	(Qal)	N	(S)	Dug, rock cribbing to 30 ft; contains water only after rains.
13.231	Huling Means	1951	654 R	6	5,960	621	11- 4-55	Tba	P,g,w	S	Louis Oliver; Flo Well, could not get line past 480 ft.
† 31.413	U.S. Forest Service (George Schale)	1957	440 R	6	6,200	400	8-30-57	Tba	P,w	S	Louis Oliver; yield about 14 gpm when test bailed.
15.21. 4.224	U.S. Forest Service (Mike Cravey)	-	12 R	48	6,100	3	1-1955	Tl	-	S	Old mine shaft, timber cribbing; automatic siphon empties to tank.
14.211	Thygerson Bros.	-	35	6	6,255	25.5	1-25-55	Tr	P,w	D,S	Will pump out if wind blows hard all day.
14.411	do.	-	18	50	6,261	11.7	do.	Tr	N	(S)	New well restd drilled in 1957 to 102 ft in red lava; yield 20 gpm.
15.122	U.S. Forest Service (Lunt & Sons)	-	46	60	6,240	15.5	1-24-55	Tl	N	S	Mine shaft rept dug to 75 ft; no cribbing; used only occasionally.
15.131	R. H. Lupton	-	22	48	6,290	8.6	do.	Qal	P,w	D,S	Dug, concrete cribbing.
15.224	Lunt & Sons	(1940)	22	6(?)	6,285	15	do.	†l	P,g,w	D,S	Drilled adjacent to spring, will pump out in 2 to 3 hrs.
26.234	Thygerson Bros.	-	29	48	6,380	Dry	1-25-55	(Qal)	N	(D,S)	Dug, rock cribbing.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
15.21.26.443	Thygerson Bros.	-	15	60	6,330	9.7	1-25-55	(?)	P,g,w	D,S	Dug, concrete cribbing.
26.444	do.	1957	102 R	6	6,320	20	6-25-57	QTb	P,w	S	Louis Oliver; cased 102 ft; main water at 40 ft; drilled in red malpais underlying 20 ft of alluvium.
35.222	do.	-	16	48	6,315	6.0	1-25-55	Qa1	P,w	S	Dug, no cribbing.
*16.11. 7.214	U.S. Forest Service	-	-	5	6,252	-	4-29-55	QTg	P,g	D,S	Supplies water to Mimbres Ranger Station.
7.422	W. A. Fowler	-	48	6	6,202	16.8	10-19-55	Qa1/QTg	P,g,w	D,S	Drilled to 65 ft, declined 14.8 ft between Oct. '55 and June, '57.
						31.6	6-19-57				
* 8.311	do.	1955	184	16	6,195	32.8	do.	Qa1/QTg	T,b	(Irr)	McBee; pumped about 200 gpm when drilled in fall of '55; declined in 1956; tested in June '57, and broke suction at 30 gpm; T 14°C One of three test holes drilled in area.
10.124	U.S. Forest Service (W. A. Fowler)	-	22	60	6,440	14.0	11- 2-55	QTg	P,w	S	Went dry for short period in June, 1955.
14.431	Frank & John Kenly	-	600 R	-	6,960	Dry	-	QTg/Tba	N	(S)	Drilled in search for stock water, none found; hole destroyed.
16.122	W. M. & Don Oliver	-	161	7	6,270	130.7	11- 2-55	QTg	P,w	S	Drilled to 300 ft.
17.132	W. A. Fowler	-	43	7	6,172	15.2	10-19-55	Qa1	P,w	S	Small flow in adjacent creek; water perched.
17.132a	do.	-	35	48	6,174	16.2	do.	Qa1	P,w	(S)	Dug, wooden cribbing; water perched.
17.141	do.	-	65	6	6,175	44.6	do.	Qa1	P,g,w	S	-
17.341	Lee Bloodgood	1953	92	7	6,165	17.3	do.	Qa1	P,w	D,S	Ed. Boone; drilled to 100 ft; first water struck at 32 ft, water rose in hole.
20.414	D. E. Giraud	-	31	6	6,075	10.1	4-24-57	(?)	P,w	D,S	-
25.331	Frank & John Kerly	-	391 R	6	6,330	270	do.	QTg	P,w	S	Water struck in crevice; rept weak.
28.134	J. E. Able	-	42	36	6,045	40.2	do.	QTg	P,w	D	Dug, no cribbing.
28.342	J. E. Montoya	-	32	60	5,990	26.4	do.	QTg	P,w	(D)	Dug, wooden cribbing; has never gone dry; not used.
33.344	Frank & John Kenly	-	182 R	5	6,010	p 95.2	do.	Tba	P,e	D,S	Ed. Boone; cased to 182.
16.12.35.311	U.S.S.R. & M. Co.	-	-	-	6,850	179.3	10-21-54	IPM	N	N	5 x 10 ft mine shaft.
16.13.32.133	-	-	8	72	6,820	4	8-17-54	Tki	N	N	Mine shaft, water seeps from shaft to creekbed; copper stains on sand.
32.323	T. K. Bennett	-	16	36	6,925	13.8	8-19-54	Tki	P,e	D,S	Dug; generally reliable but has pumped dry twice in recent years.
32.341	B. H. Riddle	-	27	48	6,935	25.6	8-17-54	Tki	P,w	(D,S)	Dug, concrete cribbing to 8 ft; not in use because supply inadequate.
16.14.21.411	U.S. Forest Service	-	10 R	-	6,000	6	7-1955	Qa1	P,w	S	-
16.15. 9.411	Ben Avery	-	8 R	48	5,260	4	4-1954	Qa1	P,w	D,S	Weak but never has gone dry.
14.132	do.	-	-	48	5,435	30	do.	QTg	P,w	N	6-in pipe in old dug well; not in use.
16.16. 2.143	State of New Mexico (Joe Hooker)	-	143	6	5,040	123.1	11- 2-53	QTg	P,w	S	-
5.334	Wesley & Wilson Brown	-	350 R	6	4,965	258.6	6- 6-55	QTg	P,w	S	Cased to 20 ft; will pump out.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
16.16. 7.344	Wesley & Wilson Brown	(1925)	367	6	4,730	173.5	6- 6-55	QTg	P,w	D,S	Drilled to 240 ft, cased 20 ft; would pump out; restd deepened to 367 ft.
17.344	Phelps Dodge Corp.	-	220	6	4,910	172.2	6- 7-55	QTg	P,w	S	T 22°C.
19.133	Fate McCauley	1938	63	7	4,660	46.4	4-26-55	Qal/QTg	P,w	S	Lee Childress; drilled to 68 ft in gravel; bailed at 25 gpm.
20.444	Phelps Dodge Corp.	-	22	48	4,840	17.3	4-15-55	Qal	N	(D)	Dug, no cribbing; not in use.
21.321	do.	-	122	8	4,875	54.3	4-19-55	QTg	N	(S)	-
* 21.442	do.	1955	335+	6	5,115	303.9	do.	QTg	P,w	S	Paul Jones.
28.121	do.	-	106	6	4,920	78.8	4-15-55	QTg	P,e	D,S	Water is hard.
29.124	Carl Waldrip	-	22	24	4,765	20.4	do.	Qal	P,e	D	Dug, no cribbing; will pump out in summer dry season.
29.212	Phelps Dodge Corp.	-	20 R	6	4,810	15.8	do.	Qal	P,b,w	S	Used sometimes to irrigate small plot of ground.
29.312	James Smith	(1935)	125 R	6	4,800	100	do.	QTg	P,e	D,S	Could not get tape past 41 ft; cased to about 50 ft.
* 30.212	Phelps Dodge Corp.	-	25	48	4,711	22.8	4-19-55	Qal	P,w	S	Dug, rock cribbing.
33.242	do.	(1917)	218	6	5,030	208.9	3-27-54	QTg	P,w	D,S	L. A. Gordon; cased 210 ft; will not yield more than 4 gpm.
33.242a	do.	1948	400 R	8	5,030	209	do.	QTg	P,e	D,S	Bob Hooker; cased 400 ft; strong; water found in soft sandstone between 290 and 400 ft; sands up about every 5 years, cleaned in 1954.
34.243	do.	-	500 R	4	5,232	400	do.	Tr	P,w	S	Could not get line past 290 ft - dry at that depth; 475 ft of rods in hole.
34.333	State of New Mexico (Fred Foster)	-	190	6	4,947	143.4	do.	QTg	P,w	S	-
35.223	John McMillen	-	350 R	6-6	5,580	260	1954	Tr	P,w	S	Lee Childress; cased to 60 ft; water at 70 ft lost as drilling continued; more at 260 ft, drilled to 400 ft; backfilled to 350 ft; yield 2 gpm.
35.233	Phelps Dodge Corp.	-	95 R	40	5,525	Dry	do.	Tr	-	(S)	Dug, no cribbing; restd found no water.
16.17. 1.132	U.S. Forest Service (Joe Hooker)	1943	153 R	6	4,660	114.4	7-14-62	QTg	P,w	S	Bob Hooker; T 21°C.
4.132	Phelps Dodge Corp.	-	26	36	4,480	23.6	7-25-55	Qtg	J,e	D,S	Dug, concrete cribbing; strong.
4.143	do.	1951	50 R	16	4,460	6.8	do.	Qal	T,d	Irr	Lee Childress; cased 50 ft; yield measured at 1,475 gpm; T 17°C.
4.234	Harsh & Sons	-	44	8	4,510	13.0	do.	Qal	P,e	D	McKinney Bros.; cased to 45 ft.
4.241	Frank Lee	-	15	48	4,510	-	-	Qal	P,w	D,S	Dug, rock cribbing.
4.324	S. T. Fruit	-	14	48	4,480	11.1	6-24-55	Qal	C,e	D	Dug, rock cribbing to 14 ft; never has pumped out.
4.332	George Barrows	-	23	36	4,476	21.0	do.	Qtg	P,e	D,S	Dug, rock cribbing.
8.112	I. E. Calloway	-	145	8	4,620	75.2	7-12-62	QTg	P,w	S	Hooker and Horn; restd drilled to 175 ft in conglomerate.
9.141	Phelps Dodge Corp.	-	25	8	4,470	23.4	7-22-55	Qtg	J,e	D	Breaks suction after about 1 hour of steady pumping.
9.223	do.	-	22	6	4,470	14.0	6-24-55	Qtg	C,e	D	Dug, backfilled around steel casing; adequate only for domestic use; T 29°C.
9.233	do.	-	-	-	4,475	25	7-11-62	Qal	T,e	Irr	-
* 9.242	Roy Clark	1955	36 R	8	4,465	18.9	6- 6-55	QTg	J,e	D,PS	Paul Jones; cased 36 ft; T 30°C.
10.132	Shirl Reese	-	82+	6	4,530	77.2	7-11-62	QTg	- ,e	(D)	Hayes.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
16.17.10.433	John Scott	1930	21	24	4,460	16.4	6-24-55	Qtg	P,e	D,S	John Scott; dug; has never pumped out.
10.433a	K. N. Vanlandingham	(1905)	14	3	4,460	Dry	do.	(Qtg)	-	(D)	Originally was 35 ft deep and pumped warm water that had a high concentration of fluoride.
11.144	Rito Dominguez	-	134 +	6	4,560	116.3	6- 2-55	QTg	P,w	S	Will pump down in steady wind.
11.321	Phelps Dodge Corp.	-	65 +	6	4,555	p 45.6	do.	QTg	P,w	S	
13.323	do.	-	100 +	6	4,600	54.5	4-19-55	QTg	P,w	S	
14.143	do.	-	53	8	4,506	42.8	4-26-55	QTg	P,w	S	Good.
14.444	do.	1939	100	6	4,570	43.6	6- 2-55	QTg	P,w	S	Lee Childress; weak but reliable.
15.134	Harry Carlson	-	25	24	4,455	17.4	7-22-55	Qtg	P,w	D	Dug, sheet-iron cribbing; never has gone dry.
17.414	Marie McCauley	-	26	36	4,510	22.3	7- 3-55	QTg	P,w	S	Dug, never has gone dry; not used in recent years.
17.444	do.	-	40	12	4,480	18.0	do.	QTg	N	-	Bailed at 30 gpm; yield not sufficient to justify irrig. pump.
19.213	State of New Mexico (Marie McCauley)	1948	180 R	8	4,710	147.4	7-11-62	QTg	P,w	S	Bob Hooker; bailed at rate of 12 gpm; T 19°C.
21.114	Marie McCauley	1957	34R	8	4,440	10	do.	Qal	S,e	D,S	Bob Hooker; wl ranges from 7 to 10 ft seasonally.
21.434	Tom McCauley & Sons	1948	70 R	6	4,430	p 33.1	7-28-55	QTg	P,e	S	Bob Hooker; cased 26 ft; Marsaille well; yield 7 gpm.
* 25.311	Phelps Dodge Corp.	1953	380 R	9	4,880	300.5	6-24-55	Tr	P,w	S	Water found at 378 ft rose to 300 ft; yield 9 gpm; T 19°C.
27.114	do.	(1900)	21	-	4,420	15.8	4-26-55	Qtg	P,e	D	Dug, backfilled around casing; never has pumped out.
28.242	Tom McCauley & Sons	1952	30 R	8	4,420	12.0	do.	Qal	P,e	S	Bob Hooker; Feed pen well; cased 30 ft.
28.243	do.	-	24	48	4,430	16.4	7-28-55	Qtg	J,e	D,S	Dug, yield 10 gpm without lowering.
29.134	do.	1940	133 R	6	4,630	84.9	7-11-62	QTg	P,w	S	Lee Childress, Big Dix well; good.
34.413	Phelps Dodge Corp.	-	18	54	4,405	14.3	5-19-55	Qtg	T,e	D	Dug, concrete cribbing to 10 ft.
16.18. 9.343	J. F. Dickerson	Old	11	100	4,950	7.4	7-12-62	Qal	C,g	D,S	Volcanic bedrock exposed in bottom of well.
13.242	Marie McCauley	-	130 R	6	4,635	93.8	8- 3-55	QTg	P,w	S	Yield 2½ gpm.
14.134	J. J. Norris	-	13	84	4,810	4.0	8- 2-54	Qal	P,w	D,S	J.J. Norris; dug, rock cribbing; wl fluctuates with flow in adjacent creek; bedrock at 16 ft; partly filled by last flood.
14.134a	do.	1954	92 R	10	4,830	7.8	11- 9-54	Qal/Tr	P,w	D,S	Lee Childress; water rose from 15 ft to 8 ft; yield 400 gpm on bailer test.
14.224	do.	-	13	48	4,755	Dry	8- 3-54	(Qal)	N	(S)	J.J. Norris; dug, rock cribbing; went dry in 1953.
19.231	Ruby Wallace	1935	133	6	5,580	82.4	7-27-55	Tr	P,w	S	Water struck at 75 ft, lost at 160 ft, backfilled 20 ft and recovered water; yield steady at 1½ gpm but pumps out at higher rate.
† 19.231a	do.	1950	330	8	5,580	183.2	do.	QTg/Tr	P,e,w	S	Hooker and Horn; water struck at 75 ft lost at 160 ft; drilled to 330 ft and water came back up to 180 ft; yield steady at 3½ gpm.
20.311	do.	1950	360 R	8	5,585	298.6	do.	Tr	P,w	D,S	Bob Hooker; cased 20 ft; water struck at 350 ft rose to 300 ft.
* 20.444	Lewis Patterson	1954	640 R	8	5,740	580	2-1955	Tr	P,g,w	D,S	Bob Hooker; cased 20 ft; cascade at about 240 ft; yield 4 gpm; T 18°C.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS	
						DEPTH BELOW LAND SURFACE (FEET)	DATE					
16.18.26.332	Marie McCauley	1959	296 R	8	5,145	200	7-11-62	Tba	P,w	S	Hooker and Shelton; Hooker well; yield steady at 5 gpm from fine sand.	
27.413	do.	-	100 R	8	5,320	6.5	7-28-55	Tba	P,w	S	Bob Hooker; cased 20 ft, shallow water in gravel of creekbed is seasonal; struck permanent water in rock at 31 ft; yield steady at 5 gpm.	
27.413a	do.	-	21	48	5,321	4.3	do.	Qal	P,w	S	Ben Avery, dug, log cribbing, goes dry in dry weather.	
36.111	State of New Mexico (Marie McCauley)	1956	54 R	8	5,000	22	do.	QTg	P,w	S	Bob Hooker; Little Dix well; cased 54 ft; drilled through stratum of hard rock and water rose - bailed 40 to 50 gpm and could not lower water level.	
16.19. 9.333	J. B. Falls	-	685 R	5	6,020	625	7-28-55	Tba	P,g,w	D,S	Harold Foster; cased 685 ft; splash wets tape at about 618 ft.	
† *	11.414	Noel Rankin	1939	451 R	6	5,572	410	7-29-55	Tr	P,w	D,S	Lee Childress; obstructed at 380 ft; T 19°C.
	13.423	do.	-	600 R	6	5,340	548	8-1955	Tr	P,w	S	Weak, periodic drilling-out needed because white clay clogs cylinder.
	25.234	John Wallace	-	600 R	8	5,850	510.0	7-27-55	Tba	P,w	S	Bob Hooker; weak, some water struck at 412 ft more at 535--water rose to 412 but declined; deepened to 600 ft, declined again; white clay clogs cylinder.
16.20. 8.134	Sam Means	(1940)	70	6	5,950	51.1	1-25-56	Tba	P,w	S	Carter well; strong.	
*	10.114	do.	(1940)	338	8	5,890	p292.3	do.	Tba	P,w	S	Lee Childress; Aviation well; strong; T 19°C.
	13.333	U.S. Forest Service (Huling Means)	-	30 R	-	5,487	10	9-1955	Qal	P,w	S	Dug, weak, and will pump out.
	16.221	Sam Means	-	5	36	5,740	.1	do.	Tba	B,h	D	Dug, steel casing; sometimes flows; lush meadow indicates shallow water.
	17.234	George Schale	-	8	36	5,845	6.1	do.	Ti	P,w	S	Geo. Means; wood cribbing to 6 ft; has not failed during drought.
	28.311	do.	-	23	60	5,680	Dry	3- 7-56	(Qal)	N	(D,S)	Dug, rock cribbing.
	29.142	Thygerson Bros.	-	16 R	-	5,785	6.4	3-11-56	Qal	N	(S)	Dug, goes dry in dry seasons.
	33.344	do.	-	16 R	48	5,610	7.0	9- 6-55	TKa	P,w	S	Dug, wooden cribbing to about 7 ft.
†	34.242	do.	1959	119 R	6	5,420	35	1-1959	TKa	P,w	S	Louis Oliver; Cherry Creek well; cased 119 ft; yield about 2½ gpm.
*16.21. 1.443	Sam Means	-	328	6	6,262	320.0	1-25-56	Tb	P,w	S	Woodyard well; strong, water struck in gravel; T 17°C.	
	5.234	Lunt & Sons	1957	140 R	7-5	4,720	30	10-30-57	TKa	P,w	S	Louis Oliver; cased 140 ft; water in blue lava from 120 to 140 ft; good.
	8.231	Dick Johnson	1957	112 R	6-5	4,810	35	10- 3-57	TKa	P,w	D,S	Louis Oliver; cased 105 ft; yield 3 to 4 gpm from blue lava.
	20.321	T. T. Waddell	-	24	60	4,780	13.7	3- 8-56	Qal	P,w	S	Dug, no cribbing, weak in dry weather.
	20.413	do.	-	150 R	8	4,795	40	do.	TKd	N	-	Not in use; strong.
*	26.114	Lon Moore	-	113	6	5,250	80.8	do.	TKa	P,w	S	Water has strong taste of iron; T 19°C.
	27.232	James Chapman	(1950)	70 R	8	5,115	20.5	do.	TKd	P,w	S	-
	28.211	T. T. Waddell	1953	50 R	8	4,950	22.6	do.	TKd	P,w	D,S	Water supply adequate; water tastes of iron, and stains porcelain yellow.
	28.211a	do.	-	23	60	4,945	11.7	do.	TKd	P,w	(D,S)	Dug, concrete cribbing; not in use.
	32.412	State of New Mexico (James Chapman)	-	400 R	60	4,890	19.0	7-15-62	Qal/TKa	P,w	S	Old mine shaft; 60 ft of column in hole; water has strong taste of iron.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17. 9. 5.131	Black Range Development Co.	-	40	60	7,280	35.0	6-13-57	SOc	N	(D)	Dug, wooden cribbing to 8 ft; supplied water to mine-camp houses.
18.131	U.S. Forest Service (Jim Estrada)	-	17	48	6,640	10.2	do.	Tr	B,h	D,S	Dug, concrete and wood cribbing; goes dry in drought.
17.10. 7.211	D. E. Giraud	-	425 R	6	6,010	300	-	QTg	P,w	D,S	Walter McCowan; 360 ft of column in hole.
7.441	do.	1917	210	7	5,850	174.0	6-20-57	QTg	P,g	S	Walter McCowan; recently put into use when nearby dug well went dry.
7.441a	do.	-	160 R	48	5,850	Dry	do.	(QTg)	N	(S)	Dug, no cribbing.
8.424	do.	-	443	8	6,300	150.6	do.	Tr	N	(S)	Ed. Boone; cased 10 ft; pump pulled recently because well would pump out.
18.412	Biebelle Bros. Inc.	-	142	12	5,802	135.8	do.	QTg	P,w	D,S	Never has pumped out.
19.133	H. B. Smith	1955	130 R	8	5,800	93.1	10-4-56	QTg	P,g	D,S	McBee Drilling Co.
19.133a	do.	-	88	48	5,797	Dry	do.	(QTg)	N	(D,S)	Dug, concrete cribbing; failed during current drought.
19.232	A. E. Montoya	1954	100 R	6	5,805	70.0	6-19-57	QTg	P,w	D,S	W. C. Wright; cased 100 ft; wl was 61 ft at time of drilling; dug well 15 ft southwest is 64.5 ft deep and dry-failed in past few years.
19.312	San Lorenzo School	-	80 R	6	5,760	-	-	QTg	Tre	PS	-
19.314	Frank Dominguez	-	37	48	5,710	33.0	10- 3-56	Qtg	P,e,w	D	Dug, concrete cribbing to 10 ft.
* 19.332	S. C. Galaz	-	28	48	5,710	14.9	4-28-55	Qtg	P,e,w	D	Dug, concrete cribbing to 6 ft; declines in early summer.
19.441	Anastasia Cordova	-	64	6	5,720	40.1	6-19-57	QTg	P,w	S	-
25.343	Earnestine Wheaton-Smith	-	10	48	6,080	9.2	6-13-57	Qal	P,w	S	Dug, concrete and culvert cribbing to 10 ft.
26.244	do.	-	165 R	6	6,380	73.7	6-15-57	(?)	P,w	S	Rept good.
27.333	W. R. Biebelle	1921	83 R	6	5,780	81±	6-21-57	Qal/QTg	P,w	S	Walter McCowan; cased 83 ft; breaks suction pumping less than ½ gpm; wl close to surface after summer rains begin.
29.141	S. C. Galaz	Old	121	40	5,790	Dry	6-20-57	(QTg)	P,w	(S)	Dug, wooden cribbing; has gone dry during current drought.
29.313	do.	-	72	48	5,720	71.7	do.	QTg	N	(D,S)	Dug, log cribbing; puddle of water in bottom of well may be rain water.
29.331	Ysabal Orosco	-	49	72	5,710	47.5	do.	QTg	B,h	D	Never has gone dry.
30.122	Pete Dominguez	-	22	9	5,700	6.2	do.	Qal	P,w	S	Dug 30 ft south of 9-inch drilled well; close to irrigation ditch.
30.122a	do.	-	90	9	5,697	4	do.	Qal	C,g	Irr	Irrigates large garden.
30.211	Fred Royball	1955	100 R	8	5,710	20.3	6-20-57	Qtg	T,g	D,S,Irr	McBee; wl was 11 ft below ground surface when drilled; irrigates about 2 acres of chili and corn.
30.313	Flora Herrington	-	311	12	5,735	55.3	10- 3-56	Qtg	T,e	Irr	McBee; yield originally large, but decreased and did not improve with cleaning and deepening.
30.333	do.	-	125 R	8	5,740	70.4	10- 2-56	Qtg	P,w	D	Ed. Boone; cased 30 ft; good; west well of two.
30.333a	do.	-	114	8	5,740	71.2	do.	Qtg	P,w	D,S	Ed. Boone; cased 30 ft; good; east well of two.
30.344	S. C. Galaz	-	29	24	5,665	26.4	10- 3-56	Qtg	J,e	D	Dug, culvert casing; will pump down; inadequate during drought.
30.413	Flora Herrington	-	80 R	16	5,650	12	do.	Qal	T,e	Irr	McBee; cased 120 ft; will fill a 4-inch discharge pipe; runs about 10 days and nights per month during pumping season.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.10.30.431	Flora Herrington	-	90	16	5,650	11.6	10- 3-56	Qal	T,e	Irr	McBee; cased 120 ft; will fill a 4-inch discharge pipe; runs about 10 days and nights per month during pumping season.
31.121	Roy Smith	-	-	6	5,695	-	-	Qtg	P,e	D,S	-
31.144	Adelea Valencia	(1896)	51	48	5,660	49.1	6-11-57	Qtg	P,w	D,S	Dug, log cribbing to 15 ft; could not bail dry to clean well using 15-gallon bucket--lowered wl 5 inches.
31.211	Tony Torrez	-	69	6	5,665	28.4	10- 3-56	Qtg	P,h	D	-
31.213	Flora Herrington	-	19	36	5,645	14.7	do.	Qtg	T,e	D	Dug, concrete cribbing to 10 ft; strong.
31.242	Lloyd Merino	1938	45	60	5,680	43.7	6-21-57	QTg	P,w	D	Lloyd Merino; concrete cribbing; will pump out during drought.
31.324	W. R. Biebelle	-	71	6	5,675	50.1	6-11-57	Qtg	P,w	D,S	Good.
31.342	Juan Valencio	1950	80 R	6	5,680	51.9	do.	Qtg	P,w	S	Ed Boone; good.
32.331	W. R. Biebelle	1946	160 R	6	5,720	p 50.8	6-21-57	QTg	P,w	S	Ed Boone; cased 160 ft water struck at 160 ft, rose to about 50 ft; T 18°C.
33.414	do.	1946	119 R	7	5,725	p 61.6	do.	QTg	P,w	D,S	Ed Boone; water struck at 72 ft, rose to 65 ft; bailed 600 gallons in 20 minutes and did not lower wl appreciably.
17.11. 4.243	Frank & John Kenly	-	75	60	5,960	65.0	8-28-56	Qtg	P,w	D	Dug, log cribbing to 6 ft; will pump out with gasoline-powered pump but generally will not with windmill.
4.412	Vivian Redding	-	99	6	5,970	69.7	do.	Qtg	N	(D)	Too weak to supply water for house.
4.422	Howard Thrall	(1936)	84	6	5,935	45.8	do.	Qtg	J,e	D,S	Will break suction with prolonged pumping.
4.422a	Ross Hamilton	1948	79	6	5,925	21.1	8-29-56	Qtg	P,g,w	D,S	Ed Boone; cased 80 ft; good.
4.442	Ester Mattocks	-	88	6	5,950	67.7	8-28-56	Qtg	P,e,w	D,S	Drilled 100 ft; dd 0.37 ft pumping 4 gpm; full recovery in 6 minutes.
4.442a	Howard Thrall	1916	85	6	5,954	70.3	do.	Qtg	P,w	D,S	Will break suction but has never gone dry.
* 5.144	Frank & John Kenly	-	96	6	6,130	21.6	8-29-56	QTg	P,w	S	Good.
6.112	U.S. Forest Service (Frank & John Kenly)	-	336	10½	6,325	32.8	10-29-54	QTg	P,w	S	Drilled 390 ft as test for mine, mill, and public supply.
6.433	H. H. Estes	Old	85	6	6,420	Dry	do.	(SOE)	p,w	(D)	Appears to have gone dry only recently.
10.111	Mariano Grijalva	-	62	48	5,925	do.	8-28-56	Qtg	N	(D,S)	Dug, no cribbing.
10.231	Isabel Valencia	-	34	36	5,890	33.3	do.	Qal	P,h,w	D,S	Dug, log cribbing.
10.421	Bert Mattocks	-	82	6	5,885	51.4	do.	Qtg	J,e	D,S	Bob Hardin; good.
11.343	M. T. Gonzales	-	172	6	5,845	89.1	do.	Qtg	P,w	D,S	Good.
13.133	Virginia Ceballos	-	30	40	5,780	26.4	8-27-56	Qal	P,g	(D)	Dug; wood cribbing; wl low in late summer; may go dry.
13.314	John VonTress	-	99	12	5,790	46.7	do.	Qtg	J,e	D,S	Good.
13.334	do.	-	61	12	5,770	56.4	do.	Qtg	P	(D,S)	Dug, oil-drum cribbing.
13.343	Wigwam Ranches, Inc.	1947	55 R	14	5,745	12	8-28-55	Qal	T,e	Irr	Floyd Lawry; Bounds No. 2; cased 57 ft, perforated 15 to 55 ft.
* 14.131	Atanacia Heredia	1951	350 R	7	5,877	107.3	8-27-56	QTg	P,w	D,S	Ed Boone; good; T 17°C.

Table 12—Records of wells in Grant County—Continued

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						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.11.14.214	Earl Allen	-	30	60	5,800	21.2	8-28-56	Qtg	J,e	D,S	Good.
14.214a	do.	1952	459 R	12	5,840	61.1	do.	Qtg	T,b	Irr	Watson; cased 170 ft; yield 300 gpm; dd 90 ft; deepened by Childress.
14.321	Atanacia Heredia	-	106	84	5,875	90.6	8-27-56	Qtg	N	(D,S)	Dug, wood cribbing to 20 ft; never has gone dry.
14.442	do.	-	131	6	5,825	67.1	do.	Qtg	N	(D)	-
15.122	Wigwam Ranches, Inc.	-	202	10	6,045	184.7	do.	QTg	P,w	S	-
17.132	do.	-	24	48	6,536	10.4	10-29-54	PM	P,w	S	Dug; good; water may be perched; seep spring in nearby creek channel.
17.132a	do.	-	132	12	6,545	9.8	do.	PM	N	(S)	-
17.132b	do.	-	81	36	6,555	35.1	do.	PM	P,g	S	Dug, culvert casing.
19.411	Pete Pedraza	-	151	6	6,637	148.6	10-25-54	TKi	N	(D)	Ed Boone; first of five wells drilled or dug at this location.
19.411a	do.	1950	48	60	6,647	Dry	do.	(TKi)	N	(D)	Pete Pedraga; dug; wood cribbing.
19.411b	do.	1953	291 R	10	6,646	149.1	do.	TKi	N	(D)	Frank Winn; cased 4 ft; drilled 316 ft, caved to 291 ft; shot with 350 lb of dynamite; did not develop enough water for domestic use.
19.411c	do.	1953	316 R	10	6,642	67.6	do.	PM	N	(D)	Frank Winn; cased 5 ft; water struck at 80 ft—not enough for drilling; could bail dry at 310 ft, would fill 17 ft in 15 hours.
19.411d	do.	1953	250 R	12	6,637	224.2	do.	TKi	P,w	D	Frank Winn; cased 5 ft; water struck at 87 ft; pumped recently.
19.423	Manuel Nevarez	(1943)	144	-	6,600	113.8	do.	TKi	P,w	(D,S)	Has not pumped out in past few dry years.
20.441	Wigwam Ranches, Inc.	1927	81	12	6,301	17.4	8-28-56	SOE	P,w	(D,S)	Ed Boone; drilled to 88 ft.
20.441a	do.	Old	33	48	6,300	16.3	do.	Dp	N	(D,S)	Dug, log cribbing.
† * 24.141	do.	1949	310 R	12-8	5,800	92.0	5-14-55	Qtg/QTg	T,e	Irr	Lee Childress; Bounds No. 3; cased 310 ft; yield 600 gpm; T 14°C.
24.214	do.	1946	81	16-8	5,780	30.9	7-18-55	Qal	T,e	Irr	Floyd Lawry; cased 300 ft; yield was 60 gpm, dd 29 ft, at depth of 86 ft; yield was 800 gpm at depth of 300 ft; T 13°C at 86 ft.
* 24.244	do.	1954	105 R	14	5,720	29.3	4-28-55	Qtg	T,e	Irr	Lee Childress; Bonds No. 4; cased 107 ft; yield 300 gpm; dd 32 ft; T 14°C.
24.314	do.	-	150 R	7½	5,800	87.6	5-14-55	Qtg	P,w	S	Good.
25.132	Henry Acklin	1924	200 R	8	5,880	135.9	10- 2-56	QTg	P,w	D,S	Bob Hodge; cased 20 ft; drilled in fault zone; seeps to 200 ft, then drill struck water that rose to 140 ft.
25.132a	do.	1927	200 R	8	5,960	150	do.	QTg	P,w,P	D,S	Rogers and Baird; cased 20 ft; water struck at 190 ft, rose to 140 ft.
25.222	Flora Herrington	1956	55	14	5,705	17.2	do.	Qal	T,e	Irr	Lee Childress, yield 600 gpm, dd 3.6 ft after 30 min; conglomerate at 55 ft.
25.222a	do.	Old	25	48	5,710	-	do.	Qtg	P,w	D,S	Dug, concrete cribbing; good.
25.243	do.	Old	125	14	5,790	112.3	10- 2-56	Qtg	N	(D,S)	Drilled inside old dug well.
27.344	Annie Delk	-	40 R	6	6,450	Dry	8- 4-54	(PM)	N	(S)	Drilled to 170 ft; always has been weak; apparently has caved.
28.441	do.	1955	226 R	8	6,420	78.3	4-23-57	PM	P,w	S	Ed Boone; water rose in casing.
30.223	Wigwam Ranches, Inc.	(1930)	96	8	6,473	68.1	10-25-54	TKi	P,w	S	Ed Boone; weak but never has gone dry.

Table 12—Records of wells in Grant County—Continued

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						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.11.32.421	Anne Delk	-	80 R	5	6,070	28.8	4-23-57	IPM	P,w	D	Enough water for house during present drought.
32.423	do.	1947	170 R	8	6,050	p 62.5	4-23-57	IPM	P,w	S	Ed Boone; cased 10 ft; weak but dependable.
17.12. 1.222	U.S. Forest Service	-	345	14-10	6,350	53.8	10-29-54	QTg	N	N	Test hole for mine, mill and public supply.
3.134	New Jersey Zinc Co.	-	29	48	6,795	6.6	10-21-54	Kc	P,e	N	Dug, wood cribbing.
3.333	do.	-	36	60	6,685	24.6	do.	TKi	P,e	-	Do.
4.334	U.S. Smelting & Refining	-	45+	2	6,950	6.6	11- 1-54	Kc	N	-	Diamond-drill core hole; open to at least 45 ft; inclined 45°.
7.421	D. H. Crumbley	-	18 R	48	6,535	16	7-1954	Kc	P,w	S	Dug, wood cribbing; dry for first time in spring of '54 but recovered.
9.423	New Jersey Zinc Co.	-	14	36	6,600	6.6	1- 6-55	TKi	N	N	Prospect shaft, wood timbered.
11.113	U.S. Forest Service (Clarence Tipton)	1946	349 R	8	7,160	140	11- 2-54	IPM	P,w,g	D,S	Morrison Bros.; first water at 139 ft, more at 349 ft.
11.142	Clarence Tipton	-	40	-	7,000	39.7	do.	TKi	N	(D)	Dug, concrete apron cover; partly caved.
11.421	Vance Hawkins	-	12	48	6,905	8.1	do.	IPM	P,w	S	Dug, rock cribbing.
14.433	E. R. Hernandez	-	170	8	6,757	162.7	11- 4-54	IPM	P,w	(S)	Foot valve at 151 ft; well not in use; wl apparently has declined recently.
15.311	Gilbert Mendoza	-	16	24	6,475	11.9	1- 6-55	Qal	B	D	Dug, wood cribbing; never has gone dry; wl declined 2 ft in spring of '55.
15.322	Frank Arciero	-	17 R	36	6,575	15	1-1955	TKi	C,g	D,S	Dug; may go dry during periods of drought.
15.333	James Rhea	-	33	36	6,412	20.8	12- 6-54	TKi	P,w	D,S	Dug, concrete cribbing; furnished water to neighbors during summer of '54.
15.333a	Ramon Borunda	-	24	36	6,410	17.9	do.	TKi	P,e	D	Dug, wood cribbing; almost dry in June, '54; recovered, declined again.
16.141	D. H. Crumbley	-	37	6	6,665	34.7	10-14-54	TKi(?)	P,w	S	Mine shaft deepened by drilling, backfilled around casing, strong.
18.224	do.	(1915)	240 R	6	6,505	104.8	9-22-54	Kc	P,w,g	D,S	Pack; cased 40 ft; first water found at 40 ft.
20.121	Bill Riley	-	1,000 R	2	6,649	226.9	10-15-54	IPM(?)	N	-	Diamond-drill core hole, cased 10 ft.
20.211	do.	1952	250 R	8-6	6,600	200	do.	IPM	P,w	S	Ed Boone; 8-in casing to 30 ft; 6-in casing to 220 ft, perforated at bottom; bailed at 16 gpm and did not lower; wl appreciably.
20.223	U.S. Forest Service	-	-	2	6,655	224.0	do.	IPM	N	-	Diamond-drill core hole inclined 45°.
20.244	U.S. Forest Service (T & M Dairy)	-	400 R	12	6,470	350	10-20-54	IPM	P,e	PS,Ind	Cased 10 ft; hole reduces to 8-in, water entering at 188 ft; south well of three.
* 20.244a	do.	-	500 R	12	6,475	p363.7	12-13-54	IPH	S,e	PS,Ind	Cased to 10 ft; middle well of three; pumping 9 gpm.
						360.9	12-15-54				
20.244b	do.	-	500 R	12	6,495	-	10-20-54	IPH	P,e	PS,Ind	North well of three.
20.322	Bill Riley	-	23	72	6,470	9.0	10-15-54	IPH	P,g	D,S	Dug; went dry in spring of '54.
20.332	do.	-	19	48	6,405	4.2	do.	IPM	N	(S)	Dug, wood cribbing; dry in spring of '54.
21.241	New Jersey Zinc Co.	-	17	48	6,350	12.3	11- 5-54	TKi	N	(D)	Dug, concrete cribbing.
21.241a	New Jersey Zinc Co. (E. G. Martinez)	1954	27	48	6,365	16.8	do.	TKi	B,h	D	Dug; has gone dry prior to rainy season.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.12.21.241b	New Jersey Zinc Co. (Gertrude Allen)	-	42	6	6,360	19.9	11- 5-54	TKI	J,e	D	-
21.331	T & M Dairy	Old	25	48	6,305	14.7	10-25-54	TKs	N	(D)	Dug; tunnel rept extends out from bottom of shaft.
21.332	do.	(1924)	600 R	8-4	6,330	141.0	10-20-54	IPM	P,e	N	Formerly supplied water to dairy; inadequate.
21.342	John Galbreath	-	26	60	6,298	20.3	10-22-54	TKi	B,h	D	Dug, no cribbing; has not gone dry.
21.433	Alvin Franks	-	180 R	8-6	6,300	153.5	do.	TKi	P,e	D	Will break suction if pumped steadily for 1 hr.
21.433a	John Flemming	1946	150 R	6	6,265	-	do.	TKi	P,e	D,PS	Zack Morrison; has never pumped out.
22.113	Luis Garth	-	125	8	6,405	35.9	12- 6-54	TKi	P,w	S	Has not declined noticeably during current drought.
23.142	Kennecott Copper Corp (Dan Powers)	-	219	8	6,651	192.4	11- 4-54	IPM	P,w	D,S	Unused for a long time.
23.322	Peru Mining Co.	(1920)	700 R	12	6,602	141.2	10-21-54	IPM	P,e	D,Ind	Ed Boone; Head well; supply for mining operations.
† 23.413	Kennecott Copper Corp	(1926)	998 R	10	6,578	481.8	8-27-54	IPM / SOG	S,e	PS	Well 593; cased 998 ft, yield 186 gpm; water hard; N well of two.
† 23.413a	do.	1926	2,115 R	14-12	6,540	980	5-12-54	IPM / SOG	S,e	PS	Well 700, cased 980 ft, yield 235 gpm 5-29-54 pump set at 1,063 ft; during drilling the nearby Head well drained completely but well 593 did not; penetrated to Precambrian rock; south well of two.
24.333	Gregorio Merino	-	62	-	6,645	59.0	10-28-54	IPM	P,w	D,S	Dug, went dry in summer of 1951, recovered in June, 1954.
24.432	Kirk Frost	1953	350 R	6	6,700	90	1955	IPM	P,e	D,S	Floyd Lawry; cased 11 ft; yield about 3 gpm when first drilled, later test yielded 4½ gpm.
24.434	Susano Rodriguez	-	220	8-4	6,690	153.8	10-25-54	IPM	P,w	(D,S)	-
* 24.441	Forest Delk	1927	290 R	8	6,726	265	1954	IPM	P,e	D,S	Ed Boone; cased 8 ft; drilled originally to 250 ft; deepened in 1936.
25.111	L. R. Grijallva	1951	275 R	8	6,615	270		IPM	P,w	D,S	Ed Boone; will pump out in 1 hr; water coming in at 240 ft.
26.223	Kennecott Copper Corp	-	365+	96	6,540	352.9	10-27-54	IPM	S,e	PS	Well 701; old mine shaft; yield 168 gpm 2-22-51 and wl 220 ft.
26.411	do.	-	260+	14	6,415	237.1	10-28-54	IPM	S,e	PS	Well 611B; yield 45 gpm.
* 27.131	John Trevarrow	(1936)	559 R	8	6,405	280.9	10-22-54	TKs(?)	P,e	D	John Trevarrow; drilled originally to 385 ft, first water at 280 ft; went dry; deepened by Lee Childress, 1941.
28.114	Empire Zinc Co.	-	102	6	6,233	23.4	10-20-54	Ts	P,w	S	-
28.132	do.	-	-	-	6,210	15	1954	TKi(?)	P,e	PS	Old mine shaft, supplies water for community of Hanover.
28.214	John Galbreath	-	400 R	-	6,327	325	10-26-54	TKs	P,e	D,S	Weak but dependable; cylinder set at 395 ft.
28.223	Frank Lea	-	-	8	6,355	Dry	10-22-54	(IPM)	P,w	(D)	Ed Boone; a tunnel from the Princess Shaft passed 90 ft below and 25 ft northwest of the bottom of well and drained the well.
28.232	do.	-	500 R	10	6,350	do.	do.	(IPM)	P,w	(D)	Drained by tunnel from the Princess Shaft; had water in limestone.
28.413	Kennecott Copper Corp	-	85	10	6,287	52.9	do.	Kc	N	(D)	Water entering at about 45 ft.
* 29.242	U.S. Smelting Refining & Mining Co.	-	675 R	-	6,310	625	10-20-54	IPM(?)	C,e	PS	Combination Shaft of Blackhawk Mine; pump on automatic since about 1946, on 4 min, off 10 min, average yield 57 gpm, T 17°C.
31.121	A. F. Mracek	-	650 R	8	6,300	Dry	10-14-54	(IPM)	N	(D)	Ed Boone drilled originally to 440 ft, wl was 120 ft; deepened to 650 ft by Morrison in 1945 after going dry; continued to decline.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.12.31.121a	A. F. Mracek	1942	292	12	6,270	219.8	4-24-43	(IPM)	N	-	Winiger Bros; wl at drilling was 220 ft, yield 570 gpm with 28 ft dd after 24 hrs. Pumping; declined steadily and finally went dry.
						Dry	10-14-54				
31.214	Alford Roos	-	361	6	6,100	Dry	do.	(IPM)	N	D,S	Well went dry after nearby mines were developed and dewatered.
* 32.444	America Smelting & Refining Co.	-	2,200 R	-	6,046	pl,950	9-16-54	TKi/PM	C,e	PS,Ind	Star Shaft, Ground Hog Mine; interconnected workings yield about 500 gpm mine kept dewatered to 1,900 ft level; T 33°C; see 18.12.5.142.
36.113	Forest Delk	-	22	60	6,480	10.8	10-27-54	TKi	P,w	S	Dug, rock cribbing; bubbles rising indicate this may be developed spring.
36.124	do.	-	9	60	6,250	4.4	do.	TKi	N	(D,S)	Dug in jointed rock on bank of dry channel.
36.244	do.	-	24	96	6,353	15.7	do.	TKi	N	N	Old mine shaft.
* 17.13. 5.111	W. G. Massingill	Old	20	72	6,974	16.1	8-17-54	TKi	P,e	D	Dug, concrete cribbing; yield adequate for domestic use; T 13°C.
5.111a	do.	1954	15	48	6,968	10.8	do.	TKi	P,e	S	Dug, culvert cribbing; has not gone dry.
5.113	Leonard Phillips	1953	25	48	6,985	24.2	do.	TKi	B,h	D,S	Leonard Phillips; dug, no cribbing; has not gone dry.
5.324	Emmett Fitzpatrick	-	6 R	48	6,600	4	do.	TKi	N	(S)	Dug, rock cribbing; rept went dry before summer rains started.
* 6.143	Dorothy Watson	Old	-	60	7,165	15.0	4-14-54	TKi	R	N	Old mine shaft on Peach Orchard claim, west edge of Pinos Altos; has been full of water for years; large dump indicates extensive workings.
6.214	Grabriel Davila	-	19	36	7,006	Dry	8-17-54	(TKi)	N	(D)	Dug, rock cribbing; went dry in 1953.
6.222	W. G. Massingill	Old	17	30	6,975	do.	do.	TKi	P,w	S	Dug, culvert cribbing; went dry for first time in summer of 1954.
6.223	Apex Co.	-	23	108	7,003	19.5	do.	TKi	N	(D)	Dug, rock cribbing; wl stands normally at 4 ft; never has gone dry.
6,421	Golden Giant Mining Co.	Old	60 R	-	7,070	46.2	do.	TKi	N	N	Old mine shaft; large dump indicates extensive workings; wl measured through 3-inch airline in caved shaft.
* 7.231	Emmett Fitzpatrick	-	26	96	6,750	22.0	do.	TKi	P,e	D,S	Dug, wood cribbing; tunnel from bottom extends northeastward to infiltration gallery in bed of creek; went dry this past spring.
7.242	C. H. Trent	-	85 R	-	6,640	26.5	do.	TKi	N	(D)	Old mine shaft; pumping 300 to 400 gpd would keep shaft dry.
8.124	Emmett Fitzpatrick	1948	13	48	6,530	4.1	8-16-54	Qal	B,h	D	Dug, wood cribbing.
8.323	Juanita Langer	1953	200+	8½	6,500	60.7	do.	TKi	P,w	(D),S	
18.211	Frank Tatsch	-	21	72	6,595	Dry	8- 4-54	(TKi)	P,w	(S)	Dug, rock cribbing.
18.243	do.	-	168	6	6,480	23.6	8- 9-54	TKi	P,w	D,S	Will pump out.
18.422	do.	1954	50 R	72	6,475	42.0	8- 9-54	TKi	-	D,S	Dug, wood cribbing; tunnel being driven 25 ft northwest from bottom of shaft; pump keeps shaft dry during construction.
19.343	A. Delk & M. Frank	-	28	48	6,250	26.4	8- 1-54	Qal(?)	B,h	D,S	Dug, wood cribbing.
20.222	Maggie Frank	-	47	48	6,300	19.8	8- 9-54	TKi	N	-	Old mine shaft; house had cistern to catch rain water.
† 24.323	State of New Mexico (Ft. Bayard Hospital)	1963		8-6	6,160	30	1-31-63	Qal	N	-	Lee Childress; cased 656 ft; yield 33 gpm mostly from surface gravel when tested at depth of 656 ft; dd 281 ft at 30 gpm when tested at depth of 923 ft.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.13.29.424	Cecil Stephens	1951	73	6	6,140	31.5	7-28-54	Kc	P,w	D	Ken McKinney; adequate for house and small garden; drilled through dike into Sandstone bed.
29.424a	do.	-	40 R	-	6,140	Dry	do.	(Qal)	N	(D,S)	Dug, adequate for many years; went dry recently and caved.
29.441	do.	1918	57	8	6,136	44.2	do.	TKi	N	(D,S)	Weak.
29.441a	do.	1922	75	6	6,137	44.3	do.	TKi	N	(D,S)	Drilled to 120 ft but caved.
30.311	A. Delk & M. Frank	1954	60 R	-	6,130	14.9	8- 1-54	Kc	P,w	D,S	Yield about 10 gpm.
30.434	Preston Tumlinson	-	263	8	6,185	137.3	5-17-54	Kc	P,e	D,S	Weak, well pump out; drilled in complex of dikes; east well of two.
30.434a	do.	-	301	6	6,182	252.5	5-14-54	Kc	P,w	D,S	Drilled to 325 ft; weak; necessary to haul water; west well of two.
31.211	Maggie Franks	-	125 R	6	6,180	Dry	do.	TKab	N	(D)	Caved at 5 ft; went dry several years ago.
32.222	Cecil Stephens	(1910)	74	8	6,115	45.0	7-28-54	TKi	N	(D)	Weak, never has had enough water for domestic use.
32.223	do.	-	75	6	6,087	45.3	do.	TKi	P,w	S	-
32.311	Anne Delk	1948	76	6	6,060	66.2	5-14-54	TKab	P,w	D,S	Lee Childress; water supply inadequate for domestic use.
32.311a	do.	1950	224	4	6,055	171.3	do.	TKab	P,w	D,S	Lee Childress; cased 225 ft; drilled to supplement well 32.311a.
32.313	Maggie Franks	1951	60	6	6,027	26.2	do.	TKab	P,w	(D,S)	Bill McKinney; adequate until recently; went dry in 1953.
32.313a	do.	1951	40 R	8	6,027	-	do.	TKab	C,e	D	Bill McKinney; flowed at depth of 20 ft; yield now about 20 gal daily.
32.313b	do.	(1884)	22	84	6,010	15.9	do.	TKab	P,w	D,S	Dug, concrete cribbing to 5 ft; never has gone dry.
32.421	Emory McKeen	-	132	6	6,095	64.4	6-25-57	TKi	N	(D)	Lee Childress; inadequate for domestic supply.
33.221	Claude Malloy	-	85 R	8	6,112	60.8	5-15-54	TKab	J,e	D,S	Will pump out at pumping rate over $\frac{1}{2}$ gpm.
33.221a	do.	1953	250 R	8	6,110	66.6	do.	TKab	N	(D)	Drilled to 85 ft; deepened to 250 ft in June, 1955.
33.223	Hassie Culver	1941	208 R	6	6,095	40	1941	Kc	P,e	D	Cased to 119 ft; supplies water to three houses and two gardens.
33.343	S. F. Minor	-	145 R	10	6,018	50	1957	Qal/QTg	T,e	D	Good.
33.343a	S. F. Minor (F. R. Gose)	01d	52	60	6,019	42.0	6-25-57	Qal/QTg	P,e	Irr	Dug, concrete cribbing; may be one of old Casper wells once considered a possible supply well for Silver City.
33,343b	do.	01d	122	8	6,020	39.4	do.	Qal/QTg	N	-	May be one of old Casper wells.
34.343	Dale Croom	1951	150 R	8	6,060	46.0	5-25-54	Kc	-	(D)	Bob Hooker; cased 4 ft; yield 4 gpm on bailer test when drilled.
34.434	A. P. Dromgoole	1948	110 R	7	6,055	73.8	do.	Kc	J,e	D,S	C.L. Wright; cased 110 ft; water struck in loose sand from 99 to 110 ft, rose to within 45 ft of surface; will pump out at 7 gpm.
35.331	Town of Central	1953(?)	-	-	5,952	-	-	TK1(?)	P,e	PS	East well of two 20 ft apart; yield 20 gpm; used only occasionally.
36.343	Louis Suchoff	1942	300 R	8	6,065	150 250	9-29-54 8- 8-62	TKi	P,e	D	Zack Morrison; first water struck at 252 ft rose to 150 ft and was adequate for motel of 13 units and 2 houses; began to fail in early 1940's; in 1962 would break suction in 1 hr at pumping rate of 10 gpm with cylinder set at bottom of hole.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.14, 2.334	Leo Johns	-	16	60	6,550	14.8	2-12-54	Kc	P,e	D,S	Dug, no cribbing; adjacent creek bed is moist.
3.441	U.S. Forest Service	(1934)	110 R	6	6,495	17	12- 3-62	Kc	N	(D)	Former supply well for CCC camp yield 3 gpm on pump test; nearby dug well 35 ft deep rept goes dry.
6.333	do.	-	57	7.5	6,232	7.7	8-23-54	TKs	P,w	(S)	Windmill out of order.
10.213	do.	(1956)	120	8	6,430	12	11-14-62	Qal/Kc	P,e	D	Lee Childress; yield 2½ gpm; water perched on the Colorado Shale.
10.414	do.	-	-	-	6,365	-	2-16-54	(Kc)	P,e	D	Dug, caved; supplied a lumber mill and later a CCC camp.
* 10.432	Vernel Clark	1947	68	7	6,375	39.7	do.	Kc	P,w,g	D,S	Bob Hooker; cased 70 ft; some water from 35 to 40 ft; main water at 70 ft.
10.432a	Elda Johns	1936	36 R	6	6,355	-	2-16-54	Kc	P,e	D	Lee Childress.
11.113	Lawrence Shelley	-	297	6	6,510	27.8	2-12-54	Kc	N	(D)	Cased 300 ft; never used; wl was 26.5 ft in summer of 1953.
14.433	Bob Judge	-	285 R	6	6,347	-	do.	Kc	P,w	D,S	Water has mineral taste.
15.214	Clifford Syverson	1953	108	10	6,310	29.3	2-18-54	Kc	J,e	D,S	Wayne Boone; cased 20 ft; water struck at 36 ft, 60 ft, and 84 to 95 ft; water at 84 ft rose to 26 ft at time of drilling.
15.214a	Lillian Pruitt	1953	105 R	9	6,304	27.9	do.	Kc	J,e	D	Wayne Boone; cased 21 ft; first water struck at 40 ft rose to 19 ft.
15.214b	do.	Old	22 R	-	6,305	Dry	do.	(Kc)	N	(D)	Wl used to be about 19 ft; went dry in 1953.
15.222	C. L. Starrett	1951	151 R	8	6,422	90.9	2-16-54	Kc	P,e	D,S	Ed. Boone; water supply adequate for house.
15.233	Luis Montes	-	19	72	6,279	15.7	do.	Kc	-	-	Dug, no cribbing; does not pump dry.
* 15.343	D. H. Crumbley	1952	200 R	8	6,195	9	do.	Kc	J,e	D,S	McKinney Bros; cased 18 ft; water struck at 18 ft rose to 8 ft; dd not appreciable at yield of 17 gpm.
15.343a	do.	-	13	48	6,195	11.0	2-16-54	Kc	N	(D,S)	-
17.414	Wade White	-	65+	8	6,235	62.4	4-18-55	Kc	P,e	D,S	Weak but reliable.
17.432	U.S. Forest Service (Wade White)	-	37+	6	6,217	34.1	do.	TKi	P,w	D	Weak; north well of two.
17.432a	do.	-	65+	6	6,220	48.6	do.	TKi	P,e	D	Weak; south well of two.
20.232	Leo Schiff	1927	162 R	6	6,222	40	do.	Kc	P,e	D	Inadequate for both house and yard; has weakened in past few years.
* 21.323	E. L. Allison	1913	693	8	6,100	Flowing	8-11-54	Kc	N	(PS)	Flows about 4 gpm from around casing; test well for Silver City.
22.313	do.	(1900)	23	60	6,112	8.3	5-19-54	Kc	P,h	S	Dug, rock cribbing.
22.331	do.	1953	145 R	6	6,112	Flowing	do.	Kc	N	(D,S)	J. H. Wright; cased 21½ ft; wl at 10 ft until depth of hole was 134 ft, then started flowing, increased to 13 gpm at 140 ft; wl 12.9 ft above surface.
23.142	Joe Burke	-	74	8	6,279	49.3	2-12-54	Kc	P,w	S	-
24.212	M. Franks & A. Delk	-	132	8	6,420	55.1	8- 2-54	Kc	P,w	D,S	Weak; water has laxative effect; white efflorescence on pipes.
26.222	Clint Johnson	-	190+	6	6,320	136.6	8-18-54	Kc	P,e	D,S	-
26.242	Howard Lea	1947	295 R	6	6,275	85	1947	Kc	P,e	D	Lee Childress; deepened from 96 ft to 295 ft in 1953; adequate for domestic needs and some watering of trees.
						140	8-18-54				

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATI-GRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.14.26.421	J. D. Sprunk	1951	200 R	8	6,190	p164.9	8-18-54	Kc	P,e	D,S	Wayne Boone; cased 12 ft; weak; seep water from 40 ft down.
26.421a	do.	-	125 R	-	6,170	30	do.	Kc	P,e	D,S	Originally 80 ft deep; will pump out fast; first water at 30 ft.
* 26.444	C. H. Aspen	1944	82	6	6,103	p 45.9	7-17-54	Kc	P,w	D,S	Lee Childress; wl 42 ft when drilled; supplies 3 to 4 houses.
27.144	E. L. Allison	-	-	-	6,030	55	1951	Kc	P,w	D	Water supply adequate for domestic needs.
27.323	R. R. Strasser	(1935)	150 R	6	6,005	36.5	3-19-54	Kc	P,e	D,S	Boone; water supply adequate for household and some stock.
† 32.233	James Turner	1955	310 R	9	6,395	234.1	4-13-55	SOE	P,g	S	Paul Jones; original yield of 1½ gpm declined after first year.
33.212	K. P. White	(1939)	125 R	6	6,047	80.8	8-19-54	Kc	P,e	D	Lee Childress; cased 125 ft; wl; no appreciable decline; east well of two.
33.212a	do.	-	78	36	6,055	66.4	do.	Kc	N	(D)	Dug, brick cribbing to 10 ft.
34.121	Virginia Hotchkiss	Old	88	7	5,984	36.5	2-18-54	Kc	N	(D,S)	Water supply inadequate for domestic use.
34.131	Harrison Schmitt	-	99	6	5,950	25.5	8-11-54	Kc	P,e	D,S	Adequate for domestic use and some stock.
† 34.323	Town of Silver City	1911	1,865 R	6.5	5,930	Flowing	5-11-11	PM	N	(PS)	J. A. Boller; cased 1,200 ft; dd reptd 225 ft when bailed 50 gpm.
35.214	Grance Duncan	1940	400 R	-	6,100	140	7-16-54	Kc	P,e	D	Uncased; main water found at 390 ft rose; measurement not permitted.
35.214a	do.	1940	200 R	-	6,105	Dry	do.	(Kc)	P,w	(D)	Rept to be dry - measurement not permitted.
35.214b	F. E. Rice	-	195 R	6	6,095	68.1	7-17-54	Kc	P,e	(D)	-
35.233	J. R. Salars	1953	150 R	-	6,040	50	7-1953	Kc	J,e	D,S	Marion Portwood; adequate; drilled; upstream from cross-cutting dike.
35.233a	do.	1900	28	-	6,039	Dry	7-17-54	(TK1)	P,w	(D,S)	Dug in dike; generally dry during summer months.
35.322	Myrtle Waters	1940	279	8	6,000	82.3	8-19-54	Kc	P,w	D	Ed Boone; cased 60 ft.
35.444	Rosedale Dairy	1939	248 R	6	5,971	48	6-25-57	Kc	P,e	D,S	Lee Childress; reliable under heavy use; not used much.
17.15. 6.422	Randolph Franks	-	172	6	5,753	18.3	7-30-54	Tr	P,w	S	Good.
* 7.313	John McMillen	-	96	6	5,359	64.5	7-27-54	QTg	P,w	S	Reliable although wl shows large seasonal fluctuations; T 17°C.
9.131	Homer White	-	35 R	6	5,776	10	8-1954	Tr	P,w J,e	S	Lee Childress; water shot 10 ft above surface when first struck and flowed for many days but gradually declined.
9.222	do.	-	35 R	-	6,030	5	do.	Tr	P,n	S	Dug; generally adequate but yield declines greatly in June and July.
9.224	do.	(1949)	80 R	-	6,010	62.8	8-23-54	TKi	P,w	D,S	Bob Hooker; water rose when found; bailed at 15 gpm.
10.112	U.S. Forest Service	-	99	6	6,085	p 62.6	do.	Tr	P,w	S	-
31.134	State of New Mexico (John McMillen)	1935	247	6	5,260	58.2	7-27-54	QTg	P,w	S	Lee Childress; drilled 205 ft; west well of two.
31.134a	do.	1914	300 R	6	5,260	-	do.	QTg	P,w	S	East well of two.
31.333	John McMillen	1944	234	6	5,342	208.3	do.	QTg	P,w	D,S	Boone; cased 240 ft; adequate for domestic use; east well of two.
31.333a	do.	1941	221 R	6	5,322	189	7-27-54	QTg	P,w	D,S	Lee Childress; cased 221 ft, perforated; yield 30 gpm on bailer test; west well of two.
36.412	James Turner	-	32	48	6,400	Dry	7-15-54	(pe)	N	(S)	Dug in Precambrian greenstone and granite.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS	
						DEPTH BELOW LAND SURFACE (FEET)	DATE					
17.16. 5.342	Madeline Foster	1945	62 R	6	4,725	34.0	4-14-55	QTg	J,e	D,S	Bob Hooker; cased 60 ft; test pumped 60 gpm.	
8.213	do.	1933	60	6	4,760	37.8	4-26-55	QTg	P,g	D,PS	Furnished adequate water for large CCC camp.	
8.242	John McMillen	-	38 R	6	4,745	4.1	4-14-55	Qal	T,e	D,PS	Cased 20 ft; never has gone dry but can be pumped out.	
8.424	do.	1948	34	12	4,755	12.8	8-27-54	Qal	P,w	S	Lee Childress; good.	
8.442	do.	-	34 R	6	4,770	24.3	do.	Qal	P,e	D	Do.	
8.442a	do.	-	32	8	4,768	22.8	do.	Qal	J,e	D	Do.	
9.313	do.	-	55	-	4,753	9.7	8-27-54	Qal	T,g	Irr	Lee Childress; drilled and cased to 85 ft; perforated; yield 1,100 gpm; water found at 11 ft rose 2 ft.	
†*	9.343	do.	178 R	13	4,780	23.2	do.	Qal	T,g	Irr	Lee Childress; cased 175 ft; dd 31 ft at 1,400 gpm; T 18°C; water rose 2 ft when found; wl about 23 ft at time of drilling.	
						22.8	6- 1-55					
						19.3	4-10-62					
*	11.113	do.	286	6	5,085	249.6	1-29-55	QTg	P,w	S	Lee Childress; Big Mill; cased 294 ft; water found at 255, 270 and 290 ft; wl at 248 ft when drilled; T 19°C.	
	15.333	do.	-	192	8	4,894	125.4	7-27-54	QTg	P,w	S	Good.
	16.142	State of New Mexico (John McMillen)	-	44	6	4,795	31.3	8-27-54	QTg	P,w	S	Do.
*	16.323	do.	-	60 R	6	4,802	47.5	do.	Qal	P,w	S	Lee Childress; good.
	21.212	Elmo McMillen	-	56	48	4,848	Dry	4-14-54	(Qal)	N	(D,S)	Dug, no cribbing.
	24.113	John McMillan	1914	179	6	5,114	92.4	7-27-54	QTg	P,w	S	Cane Springs Wells; north well of two.
*	24.113a	do.	-	275 R	6	5,112	p 89.7	do.	QTg	P,w	S	South well of two.
	27.124	do.	1955	151 R	6	4,918	90.4	9-26-55	QTg	P,w	S	Lee Childress; cased 40 ft; bailed 6 gpm; water at 120 to 151 ft; drilled entirely in conglomerate.
*	27.143	Elmo McMillen	-	104	6	4,920	96.2	9- 7-54	QTg	P,w	S	West well of two; good.
	27.143a	do.	-	102	6	4,919	95.1	do.	QTg	P,w	S	East well of two; good.
	27.342	do.	-	112	6	4,925	93.5	do.	QTg	P,w	S	Good.
	33.413	U.S. Forest Service (Elmo McMillen)	-	200 R	6	5,110	126.9	do.	Tr	P,w	S	Black Hawk Mill; 5-in casing inside 6-in casing; inadequate, not used.
17.17. 3.142	Hap McCauley	-	35 R	-	4,387	13.2	5-31-55	Qtg	T,c	Irr	Lee Childress; good.	
	3.234	do.	-	33 R	6	4,420	17.5	5-19-55	Qtg	J,e	D	Will pump out.
	3.243	do.	-	50	6	4,425	28.9	do.	Qal	P,w	S	Lee Childress; good.
	4.144	do.	1950	34	5	4,500	8.4	5-23-55	Qal(?)	P,w	S	Lee Childress; cased 37, perforated; good.
	5.111	Marie McCauley	1942	225 R	4	4,711	143	do.	Tr	P,w	S	Lee Childress; Crow's Nest Mill; good.
*	5.431	Hap McCauley	-	97	7	4,671	74.1	do.	Tr	P,w	S	Good; T 19°C.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DYK				
17.17.11.233	U.S. Forest Service (Hap McCauley)	-	76	5½	4,616	50.1	5-19-55	Tr	P,w	S	Schoolhouse well; good.
15.233	U.S. Forest Service (Dale McCauley)	1949	295 R	6	4,730	170	1949	Tr	P,w	S	Lee Childress; cased about 40 ft; first water at 255 ft rose to 170 ft.
16.141	do.	-	20	60	4,355	12.2	5-31-55	Qal	J,e	D,S	Dug, rock cribbing; good.
16.414	do.	(1947)	70 R	6	4,358	37	do.	Qtg	J,g	D,S	Will yield 4 to 5 gpm steadily.
17.18. 1.212	U.S. Forest Service (Tom McCauley & Sons)	-	58	7½	4,877	p 49.6	5-23-55	Tr	P,w	S	Davis Mill; good.
1.212a	do.	-	-	6	4,876	48.6	do.	Tr	N	(S)	-
4.443	Lewis Patterson	1958	550 R	8	5,500	-	-	Tr	P,w	S	Hooker and Hays; cased 20 ft; water restd found in sandstone at 530 ft.
* 9.442	U.S. Forest Service (Tom McCauley & Sons)	-	230	8	5,329	p118.3	7-28-55	Tr	P,w	S	Bob Hooker; Pot Hole Well, cased 240 ft; first water found at 100 ft rose 20 ft but would pump out so deepened to 130 ft; held for awhile but began to fail so deepened again to 230 ft; stringers of pyrite penetrated in drilling; T 18°C at depth of 130 ft in 1955.
						60	7-11-62				
11.421	do.	1925	400 R	6	5,495	-	do.	Tr	P,w	S	Little Brushy Creek Well; water seep at 80 ft; yield 30 gallons overnight.
* 22.332	Tom McCauley & Sons	-	134	6	5,000	28.9	do.	Tr	P,w	D,S	Bob Hooker; cased 20 ft; water rose; flow in creek 7 ft lower than well.
33.411	do.	-	-	-	4,775	-	11- 4-55	Tr	P,w	S	Walking H Mill; not visited.
33.431	do.	-	-	-	4,740	-	do.	Tr	P,w	S	Not visited.
17.19.20.233	Charles Blakey	-	-	-	4,590	-	-	QTg	P,w	S	Dutch John Mill, not visited.
* 21.213	do.	1946	78 R	-	4,805	52	8-25-55	TKa	P,g,w	D,S	A.K. Huey; good; T 16°C.
22.424	do.	1946	225 R	6	5,081	71.5	do.	TKa	P,w	(S)	A.K. Huey; casing obstructed at 115 ft; not in use.
						70.0	9- 7-55				
22.424a	do.	-	-	6	5,070	50.7	do.	TKa	N	-	-
29.431	do.	1946	340 R	6	4,516	325	1955	QTg	P,w	S	A. K. Huey; good; new well restd drilled to 300 ft in QTg, 1956.
*17.20. 5.111	Thygerson Bros.	1938	20 R	48	5,435	8.2	9- 6-55	TKa	P,w	S	Dug, weak.
5.111a	do.	1957	127 R	6	5,430	60	9-13-57	TKa	P,w	S	Louis Oliver; Racburn Well; cased 127 ft; test bailed 10 gpm; alluvium to 3 ft; soft gray lava to 110 ft, fractured quartz to 127 ft; water in fractures.
6.322	do.	1951	16 R	36	5,280	8.3	do.	TKa	P,w	D,S	Dug, steel culvert cribbing; adequate for house and stock.
6.324	do.	-	25	30	5,265	25.4	9- 8-55	Qal	N	(S)	Dug, steel cribbing to 10 ft.
8.414	Park Bros.	(1935)	250 R	72	5,600	240	do.	TKv	N	N	Mine shaft at East Camp Mine; pumping at 10 gpm will keep mine dry; water stands at level where first found when shaft was dug.
9.112	U.S. Forest Service (Lindel Croom)	1955	110 R	8	5,405	54.5	9- 5-55	TKa	P,w	D,S	-
20.232	Garth Lunt	-	-	8	5,045	4.4	do.	TKd	P,g,w	S	Hext Place dug well; backfilled around casing.
20.232a	do.	1958	87 R	6	5,045	40	1- 3-58	TKd	P,w	S	Louis Oliver; Hext Place drilled well; cased 59 ft; yield 25 gpm on bail test.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
17.20.23.134	Schale & Means	1930	32	30	4,975	15.1	9- 5-55	TKa	P,w	S	Dug, concrete cribbing; Cottonwood Ranch Mill.
27.432	Calvin Martin	1935	190 R	6	4,950	-	-	TKr	P,w	S	Cased to 15 ft; not visited.
29.231	Garth Lunt	1958	158 R	6	4,840	50	1-18-58	TKv	P,w	S	Louis Oliver; cased 156 ft; yield 25 gpm on bail test.
17.21. 1.342	Carlisle Mine	(1900)	381	72	5,210	83	9- 8-55	TKd	N	N	Mine shaft.
* 2.444	U.S. Forest Service (Thygerson Bros.)	-	60 R	6	5,128	24.7	9- 6-55	TKd	P,w	S	Water may come from alluvial fill.
† 5.323	J. L. Phillips	1958	152 R	6	4,640	55	4-26-55	TKa	P,w	S	Louis Oliver; cased 12 ft;
5.441	U.S. Forest Service (Thygerson Bros.)	-	150	5	4,705	p 42.0	7-15-62	TKa	P,w	S	Water has strong taste of iron.
9.231	Elmer Stevens	-	58+	8	4,820	p 44.0	do.	TKa	P,w	(D),S	Nearby spring pool in creek bed contains water but has no visible flow.
12.241	U.S. Forest Service (Thygerson Bros.)	Old	20	40	5,155	5.6	9- 6-55	TKd	N	(D)	Dug, wood cribbing.
23.343	do.	-	15	24	4,650	8.0	do.	TKa	P,w	S	Dug, culvert casing; Mt. Royal Well; weak.
† 23.343a	do.	1959	70 R	6	4,660	40	2-1959	TKa	P,w	S	Louis Oliver; cased 44 ft; yield 12 gpm from hard gray lava, 34 to 70 ft.
26.313	do.	-	-	-	4,520	-	-	TKa	P,w	S	Happy Hollow Mill; not visited.
18. 9. 6.434	Voss Yates	1947	237 R	8	6,190	201.6	6-20-57	QTg	P,w	S	Ed. Boone; cased 40 ft; wl at 195 ft when drilled; strong; T 20°C.
7.331	do.	1946	126 R	5	5,940	p 31.4	6-21-57	QTg	P,w	D,S	Ed. Boone; cased 126 ft; bailed 60 gpm; main water at about 60 ft.
8.142	State of New Mexico (Roy Gunter)	-	160 R	6	6,055	90.0	3-25-57	QTg	P,w	S	Walter McCowan; good.
10.233	W. B. Hinton	(1954)	549	8	6,440	534.5	do.	Tr	P,g	S	New well; strong.
16.442	U.S. Forest Service (W. B. Hinton)	-	375 R	6	6,125	280	do.	Tr	P,w,g	S	Garrizo Camp Well; strong; T 22°C.
* 17.313	State of New Mexico (Roy Gunter)	(1951)	99	6	5,840	34.5	do.	Qal(?)	P,w	S	Floyd Lowry; good.
17.424	Roy Gunter	1950	372 R	6	6,150	277.6	do.	QTg	P,w	D,S	John Watson; cased 120 ft; good; dd to about 300 ft.
18.224	Voss Yates	-	200 R	8	5,980	120	6-1957	QTg	P,w	S	Ed. Boone; cased 200 ft; restd deepened to 300 ft, got 10 gpm at 240 ft.
23.432	State of New Mexico (W. B. Hinton)	1932	-	6-4	6,045	-	3-21-57	Tr	P,w	S	Ed. Boone; Boone Well; 4-in casing inside 6-in; obstruction at 59 ft.
* 28.114	State of New Mexico (Roy Gunter)	-	182	8-5	5,840	89.1	3-25-57	QTg	P,w	S	Five-inch casing inside 8-in; T 22°C.
* 30.343	Roy Gunter	-	173	7	5,680	154.7	6-10-52	QTg	P,w	S	Good.
						154.1	3-25-57				
33.132	W. B. Hinton	-	143	6	5,745	83.3	do.	QTg	P,w	S	Raspberry Well; good.
35.212	do.	1935	300 R	-	6,110	p217.4	do.	QTg	P,w	S	Ed. Boone; strong; T 16°C.
18.10. 6.211	Refugia Valencia	1947	123 R	6	5,640	103.1	1-11-57	QTg	P,w	D,S	Ed. Boone; cased 50 ft; good.
6.212	do.	1916	54	60	5,610	53.3	do.	Qtg(?)	P,w	(D,S)	Dug, log cribbing; goes dry in summer.
6.442	Joe Salais	-	160 R	8	5,620	92.2	do.	QTg	P,w	D	No change in wl during dry spells.
6.443	Rancho de San Juan, Inc.	-	198	8	5,670	155.8	do.	Tr	P,w	S	Good but not used for past 3 years.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
18.10. 8.111	A. H. Cordova	-	90 R	48	5,630	73.4	1-11-57	Tr	J,e	D,PS	Declines somewhat in summer but never has gone dry.
8.112	W. H. Baker	1936	175 R	4	5,615	73.6	do.	Tr	P,w	D	Supplies five houses; wl does not fluctuate.
8.132	Carlos Norero	-	123	5	5,635	79.2	do.	Tr	P,w	D	Adequate.
8.143	San Juan School	-	128 R	6	5,620	60	1952	Tr	J,e	PS	Adequate.
8.324	Juan Rael	1954	165 R	8	5,660	127.2	1-14-57	Tr	P,w	D,S	Ed. Boone; has not declined noticeably in past two years.
8.414	E. V. Norero	-	30	48	5,560	Dry	do.	Qtg	N	(D,S)	Dug, concrete cribbing; water was obtained from conglomerate.
* 8.433	Ranchos de San Juan	1936	148	6	5,615	72.9	do.	Tr	P,w	D,S	Ed. Boone; good; T 19°C.
* 8.443	do.	-	22	48	5,555	16.8	do.	Qtg	B,h	D	Dug, declines in summer; T 17°C.
11.131	Ernestine Wheaton-Smith	Old	180	4	5,820	47.5	6-13-57	Tr	P,w	S	Four-in casing inside old 6-in riveted casing; wl not fully recovered from pumping when measured, pumping level 54.6; T 19°C.
13.122	R. S. Ridout	1949	162	6	5,845	132.4	8- 4-54	Tr	P,e	D,S	Ed. Boone; cased 169 ft; yield 27 gpm when first drilled, now pumps out in 15 to 20 min; first water at 56 ft; pumping prior to '57 wl measurement.
13.123	do.	1934	373	5	5,840	95.5	8- 4-54	Tr	N	(D,S)	Ed. Boone; cased 365 ft; inadequate for domestic supply.
13.124	do.	1952	250 R	6	5,890	62.0	8- 4-54	Tr	P,w	D,S	Ed. Boone; water found at 60 ft when drilled.
* 15.111	Lucio De La O	-	150 R	6	5,600	p113.8	1-14-57	Qtg	P,w	S	Good; T 17°C.
15.111a	do.	-	23	60	5,515	16.5	do.	Qal	P,g	D,S	Dug, log cribbing to 6 ft.
15.323	W. T. Graham	-	17	60	5,522	Dry	do.	(Qal)	N	(D)	Dug, no cribbing; obtained water from alluvium.
* 16.113	Ranchos de San Juan	Old	50 R	36	5,533	16.0	6-11-52	Tr	P,h	(D)	Dug, not in use.
16.321	do.	-	27	60	5,535	26.8	do.	Tr	N	(D)	Dug, no cribbing.
16.413	W. T. Graham	-	31	60	5,517	28.3	do.	Qtg(?)	N	(D)	Do.
* 17.224	Walter McCown	-	33	36-4	5,54	35.7	6-11-52	Qtg(?)	P,w	D,S	Dug, backfilled around casing; pumps out; south side of house; T 16°C.
* 17.224a	do.	-	35 R	-	5,545	7.1	1-14-57	Qtg(?)	P,e	D,S	Will not pump out; north side of house; T 17°C.
17.224b	Rocque Dominguez	1957	93	6	5,600	28.1	6-11-52	Tr	P,e	D	Jim McBee; cased 100 ft; water at 85 and 100 ft rose to about 40 ft.
* 20.313	Ranchos de San Juan	1922	100 R	-	5,835	p 34.2	6-11-52	Trp	P,w	S	Yield about 2 to 3 gpm; T 17°C.
21.214	W. T. Graham	-	165 R	60	5,520	76.9	1-15-57	Tr	P,w	S	Dug 100 ft, then tunneled 50 ft under creek bed; drilled to 165 ft.
21.222	Rocque Dominguez	-	-	48	5,500	24.8	1-14-57	Qtg	P,g	S	Dug, log cribbing to 10 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
18.10.22.111	W. T. Graham	-	27	48	5,495	p 23.5	1-14-57	Qtg	P,e,w	D,S	Dug, concrete cribbing to 30 ft.
22.122	do.	-	12	60	5,480	Dry	1-15-57	(Qal)	N	-	Dug in alluvium for irrigation but was inadequate, later went dry.
22.124	do.	-	13	30	5,495	12.2	do.	Qal	N	(D)	Dug, stone cribbing.
22.222	Frank Sorelle	-	-	-	5,520	-	do.	QTg	J,e	D,S	Rept good.
* 23.111	do.	-	21	60	5,505	17.7	6- 5-52	Qal	P,w	D	Dug, concrete cribbing; T 12°C.
						17.6	1-15-57				
26.142	W. B. Hinton	-	344	16	5,446	40.3	do.	Qtg/QTg	N	-	John Watson; cased 30 ft; drilled to 400 ft for irrigation but never tested.
26.144	do.	1952	400 R	16	5,445	39.2	do.	Qtg/QTg	T,e	Irr	John Watson; cased 30 ft; yield 350 gpm; main water struck at 380 ft.
* 29.233	W. T. Graham	(1930)	75	8	5,780	p 53.1	3-16-57	Trp	P,w	S	Strong; T 22°C.
33.433	State of New Mexico (Leedro Eby)	(1880)	18	48	5,760	11.3	do.	Trp	P,w	S	Dug, rock cribbing; site of old spring; weak but never dry.
* 34.131	V. S. Dominguez	1935	73	10	5,520	28.0	3-20-57	Tr	P,w	S	Ed. Boone; cased 10 ft; drilled to 125 ft; never has pumped out.
34.424	L. S. Dominguez	Old	33	60	5,460	32.7	do.	Qal	P,w	S	Dug, concrete and rock cribbing.
† 34.424a	do.	1957	100 R	6	5,460	16.3	6-21-57	Tba	P,w	S	Jim McBee; cased 100 ft; bailing 30 gpm did not lower wl appreciably.
35.324	V. S. Dominguez	(1936)	99	6	5,400	30.7	1-16-57	QTg	P,w	D,S	Ed. Boone; good.
35.344	do.	-	20	60	5,390	16.6	do.	Qal	P,w	D,S	Dug, concrete cribbing; weak.
35.344a	do.	1952	47 R	8	5,410	24.9	do.	Qal	P,w	D,S	Lem Watson; good.
35.432	Roy Gunter	1957	39	16	5,370	8.3	6-21-57	Qal	N	(Irr)	Jim McBee; cased 50 ft; perforated 30 to 50 ft; bedrock found at 50 ft.
18.11. 3.134	Forest Delk	1954	220 R	8	6,165	199.0	4-23-57	(IPM)	P,w	S	Ed. Boone; cased 10 ft; water found at 206 ft rose to 190 ft; bailed 6 gpm.
5.414	State of New Mexico (Forest Delk)	1936	57	6	5,920	24.1	do.	Qal	P,w	S	Ed. Boone; strong.
18.244	do.	-	80	-	5,865	25	do.	Tr	P,w	S	Not visited.
20.213	Flora Herrington	1953	50 R	16	5,740	15	12-1954	Qal	N	(Irr)	Lee Childress; slight yield from gravel overlying volcanic rock at 50 ft.
30.114	Kennecott Copper Corp.	-	78	12-6	5,614	15.7	1-12-55	Tr	P,w	S	Delk well; 6-in casing inside 12-in.
18.12. 5.142	American Smelting & Refining Co.	1932	510 R	-	6,120	300	1932	TKi	T,e	Ind	Groundhog No 1 mine shaft; steady yield of 5 gpm kept mine dry when bottom workings were at 310 ft below surface-10 gpm from the 410 ft level, and 20 gpm from the 510 ft level; this shaft now connected with the Star shaft (17.12.32.444) from which 500 gpm is pumped steadily.
6.314	J. M. Neal	Old	13	36	5,824	8.7	9-15-54	Qal	N	(D)	Dug, wooden cribbing; mine waste in adjacent creek ruined well.
7.133	Lee Rogers	(1935)	51	8	5,780	28.1	9-14-54	Ts	P,e	D,S	McLeHaney; wl fluctuates--was 17 ft in spring of 1954.
7.133a	do.	-	98	6	5,780	p 32.1	do.	Ts	P,w	Irr	McLeHaney; used to irrigation large garden and yard.
13.321	Kennecott Copper Corp.	1956	345 R	8	6,225	Dry	1- 4-56	Tr	N	(S)	Jim McBee; drilled in volcanic tuff, no water found.
18.131	do.	-	26	72	5,730	19.7	9-14-54	Qal	C,g	S	Dug, wood cribbing; south well of two.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	Date				
18.12.18.131a	Kennecott Copper Corp	-	24	8	5,730	16.8	9-14-54	Qal	N	N	Test hole, north well of two.
18.133	do.	Old	22	12	5,715	17.6	do.	Qal	P,w	(D,S)	Spiral riveted casing; pump out of order; water contaminated about 1947 by mine waste flowing in nearby creek; south well of two.
18.133a	do.	-	8	48	5,707	9.6	do.	Qal	N	(S)	Dug, concrete cribbing; water unuseable because of minerals from mine wastes.
18.341	do.	-	247	6	5,715	13.4	do.	Ts	P,w	S	
19.111	O. L. Little	1944	210 R	6	5,680	190	6-1954	Ts	P,e	D	Ed. Boone; cased 40 ft; drilled originally to 156 ft, deepened to 210 ft in 1953; will pump out in 20 minutes with small capacity pump.
19.112	M. H. Kindorff	1953	205 R	8	5,678	-	-	Ts	P,e	D	Ed. Boone; found first water at 70 ft, never has pumped out.
19.112a	do.	-	26	60	5,678	8.0	6-15-54	Qal	P,w,C,e	Irr	James Kindorff; dug, concrete cribbing; adequate for large garden and yard.
19.113	O. L. Little	1948	10	48	5,680	8.1	do.	Qal	C,e	Irr	O.L. Little; dug, culvert cribbing; will pump out at 3 gpm; water marks indicate wl was 5.9 ft before current drought.
19.311	S. L. Dennis	-	225	8-6	5,675	197.6	do.	Ts	P,w	(D,S)	Eight-in casing to 15 ft; depth of 6-in casing unknown, but probably below shallower water-bearing strata; pump out of order.
19.311a	do.	-	-	-	5,770	-	do.	-	P,e	D	Sealed.
19.321	N. L. Haggerson	-	13	18	5,651	10.1	12-15-54	Qal	N	(S)	Dug, backfilled around steel casing.
19.323	N. L. Haggerson, Jr.	(1935)	285	6	5,653	230+	do.	Trp	P,e	D,S	Weak; can pump only 5 min a day; water entering at about 225 ft.
19.324	N. L. Haggerson	-	125 R	6	5,665	-	do.	Trp	P,e	D,S	Weak; can pump for about 30 min each day.
30.124	Kennecott Copper Corp	-	74	10	5,623	10.6	do.	Ts	P,w	D,S	Good.
31.241	do.	-	4	60	5,555	2.9	9-26-54	Qal	N	(D)	Dug, and infiltration gallery about 700 ft N.E. extends under creek bed and to 40 HP turbine pump--water used in Hurley Mill.
34.432	do.	-	13	48	5,723	3.6	12- 2-54	Tr	N	(D)	Dug, concrete cribbing; may be a developed spring.
36.144	do.	1951	296 R	6	5,565	192.4	1-12-55	Tr	P,w	S	Lampbright well; strong; wl 193 ft at time of drilling; Zinc ore at 206 ft.
18.13. 1.133	State of New Mexico	Old	119	96	5,960	100.9	9-15-54	TKi	N	-	Mine shaft, wood timbered; found covered by new hiway in 1962.
1.133a	Sevita Wood	-	220	6	5,965	81.0	8- 8-62	TKi	P,e,w	D	Had only a few feet of water several years ago.
1.313	State of New Mexico	1957	500	6	5,925	-	do.	TKi	N	N	Found destroyed in 1962; did not make enough water to justify installing pump.
2.114	John Dzurek	-	102	6	5,945	88.1	5-10-54	Kc	P,w	S	Pumping less than ½ gpm and drawing air.
2.143	do.	-	23 R	-	5,917	22	4-26-54	Qal	P,e	D,S	Dug; weak, will pump out; plenty of water when rainfall is normal.
2.143a	do.	-	110 R	-	5,915	21	do.	TKi	N	D,S	Will be equipped with pump soon; weak.
* 2.321	M. T. Parra	1870	26 R	40	5,910	24.3	do.	Qal	P,e,w	D,S	M.O. Parra; dug, rock cribbing; pumps out in 10 min at 25 gpm.
2.323	do.	1948	110	17	5,909	25.3	do.	Ts	N	(PS)	Drilled 232 ft as supply well for town of Central; yield 2 gpm.
2.434	Lester Williams	(1915)	83	6	5,890	33.8	4-23-54	Ts	P,w	D,S	Adequate; pumping level 64 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
18.13. 3.112	J. B. Horn	(1953)	55	10	5,995	31.4	6-11-54	Kc	N	(D)	Bob Hooker; will be equipped with pump soon.
3.114	K. W. McKinney	1948	60 R	6	5,985	32	do.	Kc	P,w	D	K.W. McKinney; pumping level 52 ft.
3.114a	William McKinney	-	58	6	5,986	32.1	do.	Kc	N	(D,S)	-
3.132	David Hill	-	75	6	5,980	-	do.	Kc	P,w	D,S	Bob Hooker; adequate.
3.412	L. H. Cron	-	200	8	6,026	24.3	9- 8-54	Trp	N	-	Drilled 500 ft as test hole but produced very little water; no casing.
4.322	A. J. Cloudt	(1951)	67	12	5,975	21.2	5- 7-54	Kc	P,w J,e	D,S	Enough water to maintain lawn and shrubs.
4.433	J. W. Cusey	-	-	6	5,910	-	do.	Kc	J,e	D,S	Inadequate during drought; one of two wells at house.
4.433a	do.	-	45	72	5,910	44.0	do.	Kc	P,w	S	Dug, backfilled around 12-in pipe in lower part of well; has not pumped out.
4.441	L. H. Cron	-	55	6	5,921	23.9	5-10-54	Qa1	P,w	S	Unused for many years.
5.241	A. J. Gosnell	1954	300 R	6	6,010	110.6	10-13-54	Kc	P,g	D	Ed. Boone; cased 11 ft; yield less than 1 gpm; first water found at 143 ft; rose to 110 ft by next day; southwest well of two.
5.241a	do.	1955	99	8	6,025	38.7	4-12-55	QTg	N	(D,S)	Ed. Boone; sand and gravel at bottom; bailed 50 gpm; to be equipped soon.
5.242	M. C. Pena	1954	280 R	10	6,060	92.4	do.	QTg	J,e	D	Cased 6 ft; has plenty of water for domestic use.
8.111	G. A. Gosnell	1949	172	6	5,995	137.4	5-19-54	Kc	P,e	D	Bob Hooker; first water found at 180 ft rose to about 135 ft.
* 8.133	E. S. Montoya	1950	270 R	6	5,965	145.5	5-18-54	QTg(?)	P,g	D,S	Joe Smith; cased 40 ft; hard rock found at 257 ft; drilled 3 ft then bit dropped 10 ft, and water rose to 140 ft.
* 8.313	T., F., & J. Pugmire	-	207	12	5,985	175.4	do.	QTg	P,w	S	Adequate; water slightly murky; T 20°C.
9.211	Maggie Franks	-	34	72	5,916	26.5	5-10-54	Kc	P,w	(S)	Unused for many years.
9.224	Clint Johnson, Jr.	1935	20	7	5,908	17.9	5- 7-54	Qa1	N	(D)	Bored; middle well of three.
9.224a	do.	-	18	60	5,909	15.8	do.	Qa1	P,w	S	Dug, concrete cribbing to 15 ft; strong; south well of three.
9.224b	do.	-	50	7	5,917	22.3	do.	Kc	P,w	D,S	Drilled adjacent to old unused dug well; north well of three.
9.231	Maggie Franks	1953	116	6	5,902	28.7	5-10-54	Kc	P,w	S	Bill McKinney.
10.213	L. H. Cron	-	56	6	5,924	19.1	do.	Trp	N	(S)	-
10.444	do.	-	61	48	5,860	15.2	7-29-54	Trp	N	(S)	Dug, wood cribbing.
11.212	Lester Williams	-	30	8	5,880	30.0	4-23-54	Trp	P,w	(S)	Water supply declined; not used for past twelve years.
11.441	Thomas Foy	-	55	36	5,837	Dry	5-26-54	(QTg)	N	-	Dug, backfilled around steel drums.
11.444	do.	1947	-	6	5,831	68.2	5-24-54	QTg	P,w	S	Cased 6 ft; dependable.
12.111	do.	1953	308+	6	5,885	255.7	2-13-54	QTg	P,w	D,S	S.P. Jones; drilled alongside old shallow dug well that went dry.
12.113	do.	1944	129	6	5,855	Dry	-	(QTg)	N	(PS)	Formerly Bayard well No. 1; drilled 500 ft; penetrated fault and water drained away; plugged back to 125 ft; north well of four.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	Date				
18.13.12.113a	Thomas Foy	1944	345 R	8	5,855	69.0	3-21-49	QTg	P,w	S	Formerly Bayard well No. 3; yield 40 gpm but would pump out if No. 5 well pumping; dd 88 ft at yield of 25 gpm in 1954 when used by Central.
						87.6	3-23-54				
12.113b	do.	1944	224 R	8	5,855	69.2	3-21-49	QTg	T,e	Irr	Formerly Bayard well No. 5; yield 40 gpm; now used for small orchard.
						88.0	3-23-54				
12.113c	do.	1944	343 R	8	5,855	69.5	3-21-49	QTg	N	(PS)	Formerly Bayard well No. 2; used by Central in 1954, west well of four.
						88.1	3-23-54				
13.222	Kennecott Copper Corp.	-	14	8	5,840	3.1	6-18-57	Qal	N	-	South hole of 3 drilled 20 ft apart, all about 13 to 14 ft deep.
13.323	do.	1953	645 R	20-8	5,975	190.5	4-15-54	QTg	N	-	Golf Course well No. 5; cased 338 ft; yield 24 gpm, dd 425 ft; water found at 360, 395, 413, and 580 ft; bottom of hole shot with dynamite.
14.221	Town of Bayard	1950	-	8	5,830	61.3	3-23-54	QTg	T,e	PS	Bayard well No. 10; nearby wells pumping when wl measured.
* 14.221a	do.	1950	100 R	9	5,830	p 78.1	2-13-54	QTg	T,e	PS	Bayard well No. 9.
14.222	do.	1948	102 R	12	5,830	65.2	3-23-54	QTg	T,e	PS	Bayard well No. 6; nearby wells pumping when wl measured.
14.222a	do.	1948	124 R	12	5,830	64.8	do.	QTg	T,e	PS	Bayard well No. 7; restd yield 75 gpm with about 25 ft; nearby wells pumping; Hyd.
14.222b	do.	1950	-	8	5,830	-	-	QTg	T,e	PS	Bayard well No. 8.
14.222c	do.	1956	250	12	5,830	65	1956	QTg	T,e	PS	Bayard well No. 11; cased 250 ft, perforated 65-250 ft; yield 100 gpm.
14.244	Kennecott Copper Corp.	1953	274	10	5,818	46.4	2-13-54	QTg	N	Ind	Golf Course No. 6; cased 263 ft; drilled to 310 ft; casing perforated 139-161, 182-203, 243-263; yield 145 gpm with 8 ft dd.
14.431	do.	1953	270 R	14-10	5,795	30.9	5-26-54	QTg	N	-	Golf Course No. 1; cased to 116 ft; yield 28 gpm; fissured rock between 220 and 225 ft; water found at 42 ft; about 100 ft NW of No. 2 well.
14.431a	do.	1953	300 R	14-10	5,795	30.8	do.	QTg	N	-	Golf Course No. 2; cased 183 ft; yield 31 gpm; water found at 42 ft.
14.432	do.	1953	175 R	14	5,785	28	1953	QTg	N	-	Golf Course No. 3; cased 135 ft; bailed 30 gpm; casing perforated 28-134 ft; water found at 37 ft; T 16°C.
14.434	do.	1953	141 R	18	5,780	25.0	3-26-54	QTg	N	-	Golf Course No. 4; cased 37 ft; water found at 25 ft; T 18°C.
15.222	State of New Mexico	-	92	5	5,862	p 9.4	do.	Trp	P,w	S	Bill McKinney.
15.433	State of New Mexico (Town of Central)	1961	555 R	10	5,830	75.7	4-11-62	QTg	T,e	PS	Lee Childress; Central Well No. 3; cased 401.5 ft, perforated 80 ft to 397 ft; yield about 375 gpm.
† * 15.434	do.	1954	472	12	5,920	167.6	10-13-54	QTg	T,e	PS	McBee Drilling Co.; Central Well No. 1; yield 108 gpm, dd 46 ft, 9-29-56; T 21°C.
* 15.444	do.	1954	387 R	18-10-6	5,815	44.8	10-22-54	QTg	P,e	PS	McBee Drilling Co.; Central Well No. 2; yield 24 gpm; T 20°C.
21.143	Kennecott Copper Corp.	-	7	24	5,725	Dry	5-10-54	(Qal)	N	(DS)	Dug, rock cribbing; caved; water rising in adjacent creek channel flows for several hundred yards.
21.213	do.	-	148	12	5,760	16.9	10- 6-54	Qal/QTg	N	(Ind)	Weak; south well of two that supplied the Hurley smelter about 1910 to 1934; depression around casing indicates well may have caved.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
† 18.13.22.222	L. H. Cron	1952	744 R	10-8	5,790	30.4	5-26-54	Qal/QTg	T,e	Irr	Lee Childress; dd 105 ft after pumping 175 gpm for 2½ hrs, T 19°C.
22.224	do.	-	26	-	5,790	Dry	do.	(Qal)	N	(D,S)	Dug, went dry in early 1954.
22.242	do.	-	130 R	6	5,775	-	do.	Qal/QTg	T,e	D,S	Yield 70 gpm with 5 HP motor on pump.
24.244	Luis Pena	1949	500 R	6	5,710	295±	6-15-54	Trp	P,e	D,PS	Ed. Boone; water entering about static level; wl about 200 ft in 1949.
24.444	J. O. Marquez	-	225 R	6	5,695	147.0	do.	TKi	P,w	D,PS	Cased 6 ft; originally 125 ft deep, deepened about 1952.
25.222	J. N. Brown	1952	158 R	8	5,685	90.7	do.	TKi	P,w	D	Ed. Boone; has weakened in past two years--will now break suction.
25.242	John Cassita	-	74	7	5,715	39.4	do.	Qal(?)	P,w	D	Not pumped for past year; inadequate for domestic supply.
29.213	T., F., & J. Pugmire	1950	161	6	5,670	147.3	6-10-54	p6	P,w	S	Will pump out; wl measured 1 hr after pumping halted.
32.333	Maggie Franks	-	300 R	6	5,550	205.7	do.	QTg	P,w	S	Not pumped recently - mill out of order.
34.212	T., F., & J. Pugmire	1949	300 R	-	5,550±	Dry	1949	-	N	(S)	Rept dry when drilled but may have had some water; not visited.
34.434	do.	Old	157	7	5,537	Dry	6-14-54	QTg/SO6	N	(D,S)	Adjacent to ruins of old house.
18.14. 1.111	Stanton Wallace	-	300 R	8	5,981	-	-	Kc	P,w	D	Ed. Boone; weak but will not pump out.
1.111a	do.	-	68	-	5,980	-	-	Kc	T,e	Irr	Ed. Boone; will pump out in one hour; waters yard and garden.
1.412	Betty Turner	-	260 R	6	5,935	-	5-18-54	Kc	P,w	D,S	Weak; will break suction.
1.444	Clyde Upton	-	29	6	5,865	p 25.9	5-17-54	Kc	P,w	D,S	Dug, backfilled around casing; wl pumped down to cylinder.
2.222	Rosedale Dairy	1944	290 R	8	5,971	27.8	6-25-57	Kc	T,e	D,S	Ed. Boone; water at 80 ft and 235 ft; supplied former dairy.
2.222a	do.	Old	38	60	5,970	26.9	do.	Kc	N	(Ind)	Dug, concrete curbing; original well for former dairy.
3.211	State of New Mexico	-	148	6	5,910	37.4	8-11-54	Kc	P,w	(D)	No longer used.
4.333	State of New Mexico (James Turner)	1948	74	6	6,115	34.3	7-14-54	Dp(?)	P,w	S	Dick Childress; cased 74 ft; yield 8 gpm when drilled, now yields 1/3 gpm.
5.343	do.	(1935)	216	6	6,190	126.3	7-15-54	QTg	P,w	D,S	Lee Childress; drilled 350 ft; cased 240 ft; water found only at 110 ft.
5.343a	do.	1912	184	6	6,172	87.0	12-23-49	QTg	P,w	D,S	Burk Turner; cased 175 ft; yield 3/4 gpm; water found at 90 ft; west well of two.
						p108.0	7-15-54				
5.344	do.	1922	225	8	6,190	85.3	do.	QTg	P,w	D,S	Will Fleming; yield about ½ gpm steady.
* 6.111	do.	1954	287	6	6,300	p151.9	do.	p6g	P,w	S	Lee Childress; cased 290 ft; seeps at 110 and 200 ft; main water from 265 to 270 ft; yield has declined from 4½ to 1 gpm; T 18°C.
8.224	Charles Gray	-	-	6	6,085	-	7-14-54	SO6	P,e	D	-
8.224a	do.	-	69	48	6,085	55.4	do.	QTg	J,e	D,S	Dug, water may be perched.
8.234	Sarah Smith	-	50	48	6,075	44.9	do.	QTg	P,w	D,S	Dug, wooden cribbing to 10 ft; water may be perched.
8.242	Tom Threepersons	1952	164 R	5	6,070	135	do.	QTg	P,w	D,S	Lee Childress; drilled and cased 200 ft; perforated and gravel-packed.
8.312	Andrew Haugland	-	190+	10	6,075	200	do.	QTg	P,w	D,S	-

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS	
						DEPTH BELOW LAND SURFACE (FEET)	DATE					
18.14. 9.111	Marie Thomas	1947	50	10	6,115	p 33.2	7-14-54	Dp(?)	J,e	D	McKinney Bros; water found at 35 ft; yield originally about 25 gpm but now about 1 gpm; wl fluctuates with change of seasons.	
9.112	G. G. Trujillo	-	29	60	6,110	27.3	do.	Qal	B,h	D,S	Dug, no cribbing; weak supply but is helped with each rain.	
9.113	Tevis Foster	1952	270 R	-	6,100	Dry	1952	-	-	-	Lee Childress; one of two unsuccessful test holes drilled about 100 ft apart in fault zone; both holes destroyed.	
9.333	Allyn Turner	(1920)	190	7	5,980	21.5	3-29-54	QTg	P	(N)	Supplied former dairy; would pump out; drilled beside old dug well.	
9.333a	do.	(1880)	75 R	96	5,980	15	do.	QTg	J,e	D	Dug, dependable but can be pumped out.	
9.333b	do.	-	45	60	5,985	19.8	do.	QTg	P,w	S	Dug, strong.	
10.321	James Turner	-	271	8	6,012	69.3	8- 9-54	SOe	N	-	Believed to have been former supply well for cemetery.	
10.323	do.	-	160	6	6,020	81.3	12-30-49	SOe	P,w	S	Cased 140 ft; water at 120 ft rose to 85 ft; yield of 24 gpm lowered wl 1 ft.	
						86.0	8- 9-54					
†*	11.233	R. C. Cloudt	1953	137	8	5,880	58.7	5-19-54	QTg	Ts,e	D	Bob Hooker; cased 20 ft; water found at about 60 ft.
	11.233a	do.	1953	81	8	5,880	58.1	do.	QTg	P,w	D,S	Bob Hooker, cased 20 ft; south well of two at house.
	16.111	Joseph Turner	-	29	50	5,960	14.7	3-29-54	QTg	P,w J,e	D,S	Will pump down to cylinder in 2 hrs.
	21.343	Elmo McMillen	-	46	6½	5,775	Dry	3- 9-54	(Qal)	N	(S)	Had some water in 1948; another dry drilled well 46 ft deep is located about 150 ft southeast, and a dry dug well 150 ft southwest.
	21.343a	do.	Old	65	96	5,773	Dry	do.	(Qal)	N	(S)	Dug, no cribbing.
	24.122	James Turner	-	250 R	10	5,732	201.1	3-24-54	QTg	P,w	S	Good; 240 ft of pump column in hole.
	24.414	do.	-	270+	10	5,737	-	-	QTg	P,w	S	Good; 270 ft of pump column in hole.
	25.333	Clarice King	-	300+	-	5,730	280	-	QTg	P,w	S	Strong; 300 ft of pump column in hole.
	26.444	do.	(1948)	480 R	12	5,800	349.0	12-30-49	QTg	P,w	D,S	Hollis Williams; cased 8 ft; good.
						355.1	3-29-54					
*	27.433	Elmo McMillen	Old	166	6	5,634	p156.3	3- 9-54	QTg	P,w	S	Laney Well; cased 6 ft; yield about 1½ gpm.
†	27.434	do.	1944	1,395 R	10	5,636	108.6	3- 9-54	QTg	N	-	Lee Childress; test well for Silver City water supply; yield about 45 gpm; no increase in water below 400 ft; hole found open to about 700 ft.
	28.124	Ernest Wischmann	-	182	7	5,750	172.9	3-25-54	QTg	P,w	D,S	Good.
†	28.141	A. V. Hayes	1970	700	16	5,780	261.7	11-17-70	Tba(?)	Ts	Ind	Ed. Boone; first water at 400 ft; dd 43 ft after pumping 48 hrs at 850-1,770 gpm; wl recovered 42 ft within 7 min after pumping stopped.
	28.211	Ernest Wischmann	-	85	36	5,755	81.5	3-25-54	QTg	P,w	S	Dug, timber cribbing; water probably perched.
	28.331	Phelps Dodge Corp.	1941	299	6	5,760	257.3	4-17-54	QTg	P,w	D	Lee Childress; drilled to 370 ft in conglomerate; water at 300 ft; yield 2½ gpm at depth of 350 ft, 7½ gpm at depth of 370 ft.
	29.424	do.	-	350 R	6	5,720	225±	3- 5-54	QTg	P,w	S	Bill Thwaites; cased 10 ft; drilled 250 ft, deepened later to 350 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
18.14.30.312	Marvel Woodward (Town of Silver City)	1954	769 R	14-12	5,918	315.7	7-13-54	QTg	T,e	PS	Lee Childress; Woodward No. 2; cased 769 ft; dd 55 ft at 285 gpm; wl fluctuations indicate water is semi-confined.
* 30.324	do.	1954	895 R	14-12	5,902	300.3	4-21-54	QTg	T,e	PS	Lee Childress; Woodward No. 1; cased 600 ft; dd 110 ft after 14 days continuous pumping at rate of 400 gpm; water semi-confined; T 21°C.
* 30.343	do.	1957	835	16	5,910	318.4	8-16-57	QTg	T,e	PS	Lee Childress; Woodward No. 3; T 22°C; water semi-confined.
30.432	do.	1966	954	15	5,853	273.7 289.0	5-23-66 10- 5-67	QTg	T,e	PS	Lee Childress; Woodward No. 4; rept. will yield 500 gpm.
34.112	W. E. McKinney	1927	-	6	5,680	125	1954	QTg	P,w	D,S	Roe Micheal; north well of two.
34.214	Elmo McMillen	(1944)	620 R	16-10-6	5,610	106.7	3- 9-54	QTg	N	-	Lee Childress; test well for Silver City water supply; yield about 8 gpm.
34.242	W. E. McKinney	Old	175	8	5,618	131.3	3- 9-54	QTg	N	(D,S)	McKinney homestead site.
34.412	do.	1946	260 R	8	5,605	154.5	5- 4-54	QTg	N	(S)	W. E. McKinney; bailed 14 gpm without lowering wl appreciably.
18.15.6.411	Randolph Franks	-	100 R	6	5,291	71.0 80	12-28-49 7-14-54	QTg	P,e,w	S	Good; pumping 4 gpm 7-14-54; T 19°C.
9.413	Elmo McMillen	-	-	6	5,569	129.0	7-22-54	QTg	P,w	S	Drawdown 19 ft at pumping rate of 4½ gpm.
† * 10.441	State of New Mexico (Town of Silver City)	1954	659 R	14- 8	5,780	192.0 201.9	10-11-54 3-24-57	QTg	T,e	PS	Lee Childress; Franks No. 5; cased 659 ft; dd 192 ft after pumping 410 gpm for 4 hrs; T 20°C.
11.233	James Turner	1914	371	7	5,895	307.0 p296.7	12-23-49 7-14-54	QTg	P,w	S	Burk Turner; pumping 2 gpm; water found at 303 ft; Franks Ranch PS wells on about 4 hrs at time of '49 measurement.
11.313	Randolph Franks	(1930)	275	6	5,818	200 248	1930 12-23-49	QTg	P,w	(S)	Cased 250 ft; not used.
* 11.313a	Randolph Franks (Town of Silver City)	1945	597 R	12	5,822	207 242.8	3-30-45 3-24-57	QTg	T,e	PS	Lee Childress; Franks No. 1; cased 417 ft; yield 350 gpm; T 20°C.
† * 11.323	do.	1945	580 R	12	5,842	237 264.8	6- 6-45 3-24-57	QTg	N	(PS)	Lee Childress; Franks No. 3; used for observation because of low yield.
11.331	do.	1945	547 R	12	5,815	220 252.2	8- 2-45 3-24-57	QTg	T,e	PS	Lee Childress; Franks No. 4; yield 350 gpm on test; dd 62 ft at 137 gpm.
11.341	do.	1945	558 R	12	5,830	240 264.3	4-19-45 3-24-57	QTg	T,e	PS	Lee Childress; Franks No. 2; yield about 150 gpm.
18.331	Elmo McMillen	Old	-	60	5,160	69.6	4-14-54	QTg	N	(S)	Dug, wood cribbing.
18.333	do.	-	-	6	5,165	65.0	3-26-54	QTg	P,w	S	Whitehill Well; good.
24.143	Randolph Franks	Old	265 R	8	5,945	Dry	3-24-57	-	-	-	Clark; cased 6 ft; found caved; one of 3 holes drilled to same depth to supply stagecoach; all holes were rept "dust dry".

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
18.15.25.442	Marvel Woodward	(1924)	449	10	5,935	333.8	3- 5-54	QTg	P,w	S, Irr	Walter Woodward; lower house well, cased 20 ft; first 20 to 30 ft below water table yielded 1 to 2 gpm but yield increased markedly with increase in depth; static wl has never fluctuated more than 1 ft; dd about 2 ft at 6 gpm after 24 hrs pumping.
* 25.442a	do	1943	600 R	10	5,970	367.0	12-29-49	QTg	P,e,w	D,S Irr	Lee Childress; upper house well; cased 20 ft; very light intermittent pumping at time of measurement; T 18°C; wl unchanged since drilling.
						367	1954				
27.443	do.	(1870)	22	60	5,745	12.6	3- 5-54	Qal	N	(D,S)	Dug, wood cribbing, Homestead Well, never has failed; water perched.
* 29.313	Mangas Cattle Co.	-	100 R	6½	5,282	p 46.6	12-29-49	QTg	P,w	S	T 17°C.
						p 52.5	3-27-54				
31.344	do.	-	111	6	5,379	96.5	3-18-54	QTg	P,w	S	Found pumping, off 30 min before measuring wl; good.
32.112	State of New Mexico (Mangas Cattle Co.)	Old	55	40	5,319	45.7	do.	QTg	N	(D,S)	Dug, rock cribbing to 15 ft.
32.142	Mangas Cattle Co.	(1937)	100 R	6	5,339	62	-	QTg	P,w,J,e	D,S	Lee Childress; cased about 80 ft; good.
32.234	do.	1954	400 R	14	5,345	59.0	8-31-54	QTg	N	(Irr)	Lee Childress; cased 217 ft; test pumping at well depth of 210 ft produced 236 gpm with dd of 141 ft from 22 ft of water-bearing strata; an additional 29 ft of water-bearing strata between 210 and 400 ft repled. by driller; alluvial fill from surface to 70 ft, soft Gila conglomerate from 70 to 400 ft. First static water level at 63 ft; level was 59 ft at completion.
† 34.224	Marvel Woodward	1940	210 R	6	5,790	66.4	3- 5-54	Kc	P,w	S	Lee Childress; Redrock Well, cased 20 ft; water has strong iron taste; wl was 24 ft from surface and yield 15 gpm when drilled.
35.312	Phelps Dodge Corp.	1943	145 R	6	5,859	74.7	do.	Kc	P,w	S	Lee Childress; cased 20 ft; weak; bottomed on hard quartzite.
35.423	do.	(1910)	325 R	6	6,030	212	1912	QTg	N	-	Cased 10 ft; caved; original yield 6 to 7 gpm but failed in about 5 years.
35.431	do.	(1910)	46	78	5,960	38.4	3- 5-54	Qal/TKi	N	(D,S)	Dug, rock cribbing; Homestead place; connected by tunnel to dug well 41 ft deep 50 ft south; tunnel continues and passes under dry creek bed; water in alluvium perched on intrusive rock.
36.422	do.	1947	480	8	5,989	399.4	do.	QTg	P,w	S	Bob Hooker; drilled 500 ft; water rose 12 ft and could not be bailed down; static wl has remained steady since drilling.
						400.1	8-21-54				
18.16. 2.322	Elmo McMillen	-	85	6	4,997	69.1	9- 7-54	QTg	P,w	D,S	Good.
2.322a	do.	-	106	7	4,998	81.0	12-29-49	QTg	P,w	D,S	Do.
						70.7	9- 7-54				
12.312	Lucy Fleming	-	171	6	5,075	106.2	8-31-54	QTg	N	(S)	Not used for many years.
* 13.124	do.	-	148	6	5,110	123.3	do.	QTg	P,g,w	D,S	Good since being deepened in recent years; T 19°C.
14.433	do.	-	70	9½	5,295	60.1	do.	Tr	P,w	S	Dug, backfilled around 70 ft of casing because of caving; strong.
21.411	Black Hawk Mining Co.	1952	1,004 R	2	5,635	77	8-23-55	pCg	N	-	Core hole No. 3, U.S.Geol.Survey Bull. 1009K; wl computed from measurement in hole inclined 27° from vertical.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
18.16.21.411a	Black Hawk Mining Co.	1952	1,002 R	2	5,645	90	8-23-55	pEg	N	-	Core hole No. 1; wl computed from measurement in hole inclined 30°.
24.322	Jim Fleming	-	197	6	5,262	90.3	3-26-54	QTg	P,w	#	Not in use for over a year; pumps out quickly.
34.442	Mangas Cattle Co.	-	36	6	5,773	21.7	9- 7-54	Qal	P,w	D,S	Lee Childress; deepened to 250 ft, 1939; cased 39 ft; bailed 5 gpm; weakened considerably during current drought.
35.331	do.	-	44	6	5,770	21.2	do.	Qal	P,w	S	Good.
18.18. 9.234	State of New Mexico (Robert Martin)	1951	23 R	-	4,670	6	8-24-55	Qal	N	(S)	Robert Martin; dug; weak; not used recently.
16.333	R. R. Blakey	1959	120 R	8	4,160	60 R	3- 5-59	QTg	P,w	S	Walter Johnson; first water at 60 ft weak; bailed 10 gpm at 120 ft.
22.231	Tom McCauley & Sons	Old	-	-	4,245	-	8- 5-55	pE	N	(D,S)	Old mine adit; water seeps from joints and fractures, fills pool on floor of adit—piped to stock tank and house.
22.313	Lewis Conner	1951	35	16	4,090	12.2	8- 5-55	Qal	N	-	Lee Childress; yield of 100 gpm inadequate for irrigation well; caliche stratum from 15 to 46 ft; hole has sanded in.
22.324	do.	-	65 R	16	4,092	16.9	7- 8-55	Qal	T,e	Irr	Lee Childress; dd about 26 ft at 1,500 gpm; original yield 2,000 gpm; T 17°C.
22.333	do.	-	13	6	4,088	10.4	6-29-55	Qal	P,h	(D,S)	Not used recently.
22.343	do.	-	34	6	4,096	20.2	do.	Qal	P,w	D	-
23.314	do.	-	54	6	4,110	31.5	6-28-55	Qal	N	(D)	-
26.323	do.	1946	220 R	-	4,310	171.2	3-30-54	QTg	P,w	S	McKinney Bros; yield 8 gpm; water found at 176 ft; water rept to be warm.
27.211	do.	1916	130 R	6	4,125	60.7	do.	QTg	J,e	D,S	Yields 15 gpm without appreciably lowering the wl.
28.114	New Mexico State Game Commission	-	33	6	4,069	27.2	7-12-55	Qal	P,w	S	Adequate.
28.124	do.	Old	16	48	4,070	10.4	do.	Qtg	N	(D)	Surface water entering well from overflow of nearby irrigation ditch.
28.131	Ellis Wright	Old	14	6	4,070	12.7	do.	Qal	P,h	D	Bored, adequate.
28.331	Pacific Western Land Co.	1948	64	16	4,051	9.5	6-30-55	Qal	N	(Irr)	Lee Childress; drilled and cased to 78 ft but sanded in and yield dropped from 1,500 to 500 gpm.
28.334	do.	1948	36 R	8	4,065	-	-	Qal	P,w	D	Lee Childress; adequate.
28.411	do.	1954	68	16	4,054	7.0	do.	Qal	T,e	Irr	Lee Childress; cased 76 ft; dd 3.0 ft after pumping 15 min at 1,320 gpm.
28.421	Mangas Cattle Co.	(1900)	32	36	4,085	28.4	do.	Qtg	P,w	S	Dug, culvert cribbing; never has gone dry; T 21°C.
29.222	New Mexico State Game Commission	-	63	16	4,055	13.8	7-12-55	Qal	T	(Irr)	No motor on pump; has never been tested.
29.231	do.	-	52	8-7	4,060	10.7	do.	Qal	J,e	D	Good.
29.422	do.	Old	9	24	4,055	9.0	do.	Qal	P,h	D	Not in use.
* 29.422a	Elma Wright	1954	75 R	16	4,056	10.4	7-13-55	Qal	T,e	Irr	McBee; cased 75 ft; dd 11 ft after pumping 30 min at 1,200 gpm; T 17°C.
31.133	C. C. Patton	(1930)	27	-	4,030	25.5	7-15-55	Qal	N	(D)	Dug, weak.
31.144	Mary Patton	1929	16	30	4,035	15.1	do.	Qtg	N	(D)	Taylor Cloudt; dug, weak.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
18.18.31.331	Virgil Craddock	-	20	-	4,010	16.8	7- 7-55	Qa1	N	(D)	Dug, weak.
31.414	Mary Patton	1914	26	36	4,040	22.6	7-14-55	Qa1	P,e	D	Lum Cook; dug, good.
31.431	C. C. Patton	1951	12	40	4,025	10.1	7-15-55	Qa1	C,e	D	C.C. Patton; dug, weak.
31.442	do.	1953	11	96	4,023	9.7	do.	Qa1	N	(Irr)	C.C. Patton; dug; construction interrupted.
32.111	Robert Martin	(1915)	16	48	4,040	11.2	7-14-55	Qa1	J,e	D,S	Jernigan; dug; good.
32.121	Elma Wright	1947	15	40	4,050	13.6	do.	Qa1	J,e	D	Ralph Wright; dug; good.
32.223	Phelps Dodge Corp.	(1947)	11	72	4,049	8.3	7- 1-55	Qa1	C,g	Irr	-
* 32.224	Grant Harper	1950	67	16	4,050	9.4	do.	Qa1	C,e	Irr	Lee Childress; cased 70 ft; dd 7 ft after pumping 12 min at 1,050 gpm; T 18°C.
32.321	Phelps Dodge Corp.	-	15 R	30	4,040	10.7	7- 5-55	Qa1	P,h	D	Dug, not in use.
32.234	Grant Harper	1952	50 R	6	4,060	25	1952	Qa1	J,e	D	Lee Childress; cased 50 ft; good.
33.132	Roy Harper	1918	135 R	8	4,133	81.5	7- 1-55	QTg	P,w	D,S	Dug 85 ft; later drilled to 135 ft; water much harder than in nearby well.
* 33.132a	do.	1915	122	6	4,160	92.6	do.	QTg	P,w	D,S	Reynolds; cased 6 ft; water found at 105 ft; southeast well of two.
*18.19. 1.433	State of New Mexico (Robert Martin)	1918	27 R	30	4,485	24.2	8-23-55	Qa1	N	(D,S)	-
* 1.433a	do.	1920	101 R	12	4,486	30.5	do.	QTg	P,w	D,S	Heinman & Wallace; cased 101 ft; pumps out in strong wind, T 22°C.
6.411	Cal. Martin	-	185	6	4,480	42.6	3- 7-56	QTg	P,w	S	Originally dug to 35 ft, later drilled to 220 ft and the dug part back-filled around 6-inch casing; rept weak but reliable.
13.434	State of New Mexico (Robert Martin)	-	145 R	6	4,334	115	8-24-55	QTg	P,w	S	Heinman & Wallace; rept weak.
22.121	do.	1949	306 R	6	4,475	284	1955	QTg	P,w	S	Good.
26.343	Robert Martin	1933	111 R	6	4,190	85	do.	QTg	P,w	S	McHaffey Well; cased 111 ft; good.
* 32.231	State of New Mexico (Calvin Martin)	-	48 R	6	4,106	43.5	9- 7-55	QTg	P,w	S	Bar U Well; yield 9 gpm with dd of 1.7 ft; T 19°C.
36.443	State of New Mexico (J. H. Beeson)	1954	14	72	4,075	12.3	7-15-55	Qa1	P,h	D,S	J.S. Beeson; dug, no cribbing; hard conglomerate at 20 ft; weak.
18.20. 6.113	Otis Swaford	-	125+	-	4,575	98.8	9- 5-55	TKv	P,w	S	In Hidalgo Co., 0.2 mile south of Grant Co. line.
* 8.223	Calvin Martin	-	75 R	8	4,550	39.5	3- 7-56	Tr	P,w	S	In Hidalgo Co., 1.25 miles south of Grant Co. line.
12.142	do.	-	89	6	4,570	75.1	do.	QTg	P,w	D,S	In Hidalgo Co., 1 mile south, 0.75 mile west of Grant Co. line; dug 50 ft; drilled to 104 ft, cased to 50 ft, backfilled; good.
15.431	Floyd Johns	-	49	48	4,460	40.5	do.	Tr	N	(S)	In Hidalgo Co. 2.75 miles south and west of Grant Co. line; dug, weak; has drilled and cased well inside; water perched.
15.431a	do.	-	140	6(?)	4,460	130.2	do.	Tr	P,w	S	Drilled inside well 15.431.
15.431b	do.	-	45	8	4,460	40.5	do.	Tr	N	(S)	In Hidalgo Co., at same site as well 15.431a.
18.21.12.413	Otis Swaford	-	183	8	4,480	96.4	9- 5-55	QTg	P,w	S	In Hidalgo Co., 1.65 miles south of Grant Co. line.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATI-GRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
† 19. 9. 2.412	State of New Mexico (W. B. Hinton)	1950	451 R	7	6,150	311.0	3-21-57	QTg	P,w	S	John Watson; cased 442 ft; Skyline Well; strong; T 18°C.
3.221	do.	1950	230 R	6	6,005	183.6	do.	QTg	P,w	S	John Watson; Mitchell Well; strong.
9.134	W. B. Hinton	-	200 R	6	5,720	114.1	do.	QTg	P,w	S	Bob Hodges; Eby Camp Well; strong.
10.434	do.	1929	200 R	6	5,955	190±	do.	QTg	P,w	S	Bob Hodges; Simon Eby Well; weak.
14.433	do.	1946	250 R	6	5,910	140	do.	QTg	P,w	S	Ed. Boone; Jacob Well; cased 20 ft; weak; water entering well at about 140 ft.
22.443	do.	-	250 R	8	5,725	33.8	do.	QTg	P,w	S	Lucero Well No. 1; weak; north well of three.
22.443a	do.	-	500 R	8	5,726	34.5	do.	QTg	P,w	S	Lucero Well No. 2; weak; southeast well of three; third well to the south-west is dry at total depth of 29.6 ft.
26.424	do.	1951	350 R	6	5,850	112.2	do.	QTg	P,w	S	John Watson; Saddle Well; cased 40 ft; strong; T 18°C.
27.111	do.	Old	18 R	60	5,655	Dry	do.	(Qal)	N	(D,S)	Hart-H Well; dug; old homestead site; water was in alluvium.
27.444	do.	Old	20	6	5,730	Dry	do.	(Qal)	N	(S)	Holstein Well; dug, backfilled around casing.
30.332	do.	-	125 R	6	5,485	97.0	do.	QTg	P,w	S	Antonio Torres; Torres Well; cased 35 ft; strong.
* 34.211	do.	1934	19	6	5,685	19.0	6- 4-52 Dry 3-21-57	(Qal)	P,w	S	Bert Hollis; Preutt Well, dug; backfilled around casing; T 17°C (1952).
35.432	do.	1951	150 R	6	5,840	83.9	do.	Trp(?)	P,w	S	John Watson; Kane Springs Well; strong; T 18°C.
19.10. 2.241	John McKinn	(1876)	30	60	5,360	21.8	1-16-56	Qal	B,h	D	Dug, log cribbing to 6 ft.
3.433	Roy Gunter	-	102	6	5,520	90±	3-20-57	Trp	P,w	S	Water entering well at about 45 ft.
7.232	State of New Mexico (Leedro Eby)	1947	570 R	8	5,840	554.2	3-26-57	Tr	P,g,w	S	L. E. Morrison; Box Well; bailed 8 gpm, sands up; 600 ft dry hole 300 yds north.
* 9.112	do.	-	56	6	5,530	p 38.6	3-16-57	Ts	P,w	S	Little Well; good; T 17°C.
* 9.334	Leedro Eby	1950	81	7	5,420	14.8 24.1	8-12-52 3-16-57	Qal/Trp	P,w	S	Ed. Boone; Doolittle Well; strong.
11.224	V. S. Dominguez	1933	125 R	6	5,350	10.7	1-16-57	Tr	P,w	D,S	Ed. Boone; will pump out.
11.414	W. B. Hinton	-	47	7	5,300	20.5	do.	Qal	P,w	D,S	Good.
11.421	do.	-	-	48	5,304	20.5	do.	Qal	P,w	D,S PS	Dug, concrete cribbing; supplies water to house, livestock, and tavern.
14.124	Juan Chacon	1956	45 R	12	5,277	15.0	do.	Qal	T,e	Irr	McBee; good.
14.211	W. B. Hinton	1916	49 R	16	5,280	18.7	do.	Qal	T,e	D,S Irr	McBee; originally dug, deepened by drilling in 1956; good.
14.234	do.	-	144	8	5,270	13.7	4-24-57	Qal/Trp	N	(D,S)	Was not adequate for stock and maintenance of lawns and gardens of 5 houses, at Y-B (Nan Ranch) headquarters.
14.321	do.	-	200+	7	5,274	31.7	1-16-57	Trp	T,w	S	Good.
14.332	do.	-	31	40	5,268	30.5	do.	Qtg(?)	N	(S)	Dug, concrete cribbing to 12 ft.
16.122	State of New Mexico (Leedro Eby)	(1900)	16	48	5,400	p 7.9	3-16-57	Qal	P,w	S	Dug, wood cribbing to 4 ft; site of former spring; will flow if windmill left off.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.10.16.412	State of New Mexico (Leedro Eby)	1936	113	6	5,330	p 53.1	3-16-57	Qal/Trp	P,w	S	Ed Boone; Middle Well; pumping about 3 gpm; reliable, T 18°C.
20.112	Leedro Eby	(1930)	160 R	6	5,395	99.3	3-26-57	Ts	P,w	S	Walt Boone Well; has weakened the past few years, will now break suction; peculiar taste noticed in past years no longer detectable; T 18°C.
20.112a	do.	Old	28	48	5,395	9.6	4-26-57	Qal	N	(S)	Dug, log cribbing; pumps out quickly in dry weather.
* 21.244	do.	1940	120 R	6	5,260	38.9	3-16-57	Trp	P,w	D,S	Ed. Boone; House Well; dd 6 ft at about 4 gpm; T 17°C.
* 22.434	Clyde Wooton	(1890)	26	-	5,200	16.1 18.2	6-12-52 1-16-57	Qal	P,w	D,S	Dug, reliable.
22.443	do.	1951	30	60-12	5,195	10.4	do.	Qal	T,e	Irr	W. J. Reives; dug 10 ft; drilled 20 ft, rock cribbing to 10 ft, steel casing 0 to 30 ft.
26.113	W. B. Hinton	-	78	6	5,240	37.4	3-19-57	Trp	P,w	S	Good.
27.122	G. C. McSherry	1936	162 R	6	5,240	p 54.9	do.	Trp	P,w	D,S	Ed Boone; cased 10 ft; good.
27.133	H. L. Rust	-	23	36	5,200	21.9	4-18-57	Qal	B,h	(D)	Not used for many years.
27.133a	W. R. Warren	(1954)	78	9	5,210	40.2	4-19-57	Qtg	P,h	D	John Watson.
27.134	M. R. Carillo	1947	75 R	8	5,170	-	4-18-57	Qal	J,e	D	Sparks; cased 25 ft; strong.
27.134a	do.	-	75 R	6	5,175	19	4-1957	Qal	P,g,w	S	Taylor; first water at 48 ft; water found at 55 ft rose to 19 ft.
27.134b	do.	-	24	36	5,172	Dry	4-18-57	(Qal)	P,w	Irr	Dug, concrete cribbing to 6 ft; irrigates garden when well has water.
27.141	Leedro Eby	1938	81	6	5,205	p 41.7	3-16-57	Qtg	P,w	D	Ed Boone; Old House Well; strong.
27.141a	do.	-	-	6	5,200	34.7	do.	Qtg	P,w	PS	Strong.
27.142	do.	1935	16	96	5,180	7.5	3-19-57	Qal	C,e	Irr	Tom Eby; dug, rock cribbing to 10 ft; yield 200 to 400 gpm; wl fluctuates with flow and decline in adjacent creek.
27.143	do.	(1900)	30	6	5,180	p 13.3	3-20-57	Qal	P,w	S	Barn Well; dug, backfilled around culvert casing.
27.211	G. C. McSherry	-	21 R	14	5,190	10	3-16-57	Qal	T,e	Irr	Yield 200 gpm; bedrock found at 19 ft.
27.212	do.	-	154 R	-	5,195	10	-	Qal	N	-	Yield would not fill a 2-in pipe; well later destroyed.
27.221	do.	1948	23 R	12	5,195	9.8	1-16-57	Qal	T,e	Irr	Morrison Bros.; casing obstructed; yield 380 gpm; wl sensitive to any rain in upstream area; hard conglomerate at 22 ft; one of 4 wells in row.
27.221a	do.	1948	23	12	5,195	7.5	do.	Qal	T,e	Irr	Morrison Bros.; yield 380 gpm; hard conglomerate at 21 ft.
27.222	do.	1948	25	14	5,196	7.6	do.	Qal	T,e	Irr	Morrison Bros.; yield 300 gpm.
27.222a	do.	1948	18	14	5,196	7.8	do.	Qal	T,e	Irr	Morrison Bros.; yield 200 gpm; seldom used.
† 27.234	Leedro Eby	1953	355	14-12	5,195	19.5	3-26-57	Qal	N	(Irr)	Walter Johnson; cased 14-in 30 to 280 ft; yield about 100 gpm; not much water below hardrock at 20 ft; east well of three 100 ft apart.
27.234a	do.	1952	75	12	5,193	17.9	do.	Qal	N	(Irr)	John Watson; yield about 100 gpm; middle well of three.
27.234b	do.	1952	141	12	5,190	15.8	do.	Qal	N	(Irr)	John Watson; yield about 100 gpm; west well of three.
27.241	do.	1949	510 R	14	5,196	8.6	3-19-57	Qal	T,e	Irr	Morrison Bros.; test at depth of 22 ft yielded 300 gpm; test at total depth of 510 ft yielded 350 gpm; drilled in hardrock from 22 ft to 510 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.10.27.243	Leedro Eby	Old	52	6	5,205	p 29.6	3-27-57	Qtg	P,w	S	East Pasture Well; strong.
27.311	Manuela Trujillo	-	27	48	5,195	24.1	4-18-57	Qal	B,h	D	Dug, no cribbing.
27.311a	Edward Baca	-	20	60	5,178	11.5	4-18-57	Qal	C,g	Irr	Ed. Baca; dug, no cribbing; will pump 2-in pipe full of water.
27.311b	do.	-	53	6	5,190	p 22.9	do.	Qal	P,w	D	Static wl is about 20 ft; no decline in recent years.
27.313	do.	-	26	60	5,175	23.0	do.	Qal	P,w	D	Dug, no cribbing.
27.313a	do.	-	18	48	5,165	14.1	do.	Qal	C,g	Irr	Dug, wooden cribbing to 10 ft; gravel found at 10 ft under sandy soil.
27.324	do.	-	15	60	5,180	9.7	do.	Qal	C,g	Irr	Ed. Baca; dug, wood cribbing.
27.334	do.	1957	15	48	5,170	9.9	do.	Qal	C,g	Irr	Do.
27.343	do.	1955	71	8	5,195	p 26.1	do.	Qal	P,w	D,S	Ed. Boone; cased 10 ft; good.
28.443	Salvadorr Para	-	21	36	5,160	16.3	4-19-57	Qal	B,h	D	Dug, concrete cribbing to 16 ft.
29.211	Roy Gunter	1936	99	6	5,319	p 70.2	3-27-57	Ts	P,w	S	Ed. Boone; Jimmy Well; will not pump out at 6 gpm; replaced old well.
29.211a	do.	Old	96	6	do.	69.5	do.	Ts	N	(S)	Cased 20 ft; would break suction in 3 hrs at pumping rate of 3 gpm.
31.434	do.	Old	18	60	5,110	13.7 11.7	8-13-52 3-27-57	Qtg	P,w	S	Gardner Well; dug 30 ft, rock cribbing; has caved; weak, T 22°C.
32.442	Pedro Roybal	-	26	48	5,120	23.3	4-19-57	Qal	P,w	D	Dug, concrete cribbing; will pump out.
32.444	do.	-	24	46	5,115	17.2	do.	Qal	P,w C,g	Irr	Dug, concrete cribbing; pumps out at yield of 2-in pipe full of water.
33.111	W. R. Warren	1939	920 R	8	5,240	8.9	6-12-57	Trp	N	N	Oil-test hole; open to 17 ft; plugged with clay at close of drilling; water may be from surface drainage into hole; very little water found.
33.211	do.	-	127	8	5,150	16.7	do.	Qal(?)	N	(D,S)	Good, but not needed; water hard; old dug well about 30 ft north.
33.212	do.	-	22	60	5,140	12.2	4-19-57	Qal	C,g	Irr	Dug, wood cribbing at south end of dragline pit adjacent to river.
33.221	Maria Soliz	1935	735 R	10-5	5,142	Flowing	do.	Qal/Trp	N	D,S	Oil-test hole; artesian flow, 7 gpm; 10-in casing set 0 to 30 ft; 5-in set 0 to 375 ft; capped and water piped to house; T 73°F, casing was set on rubber plug, and a packer placed to shut off heavy flow of water from 700 to 715 ft interval but packer leaked; alluvium 0 to 22 ft, hard rock (Tuff) from 22 to 700 ft.
33.313	C. T. Baca	(1916)	22	72	5,140	20.4	do.	Qal	P,w	D	Severo Ruiz; dug, no cribbing; goes dry by June; recovers with first rain.
33.321	W. B. Hinton	1947	19	60	5,140	16.5	do.	Qal	P,w B,h	D	Ramon Baca; dug, no cribbing; good, never has gone dry.
33.321a	do.	-	17	66	5,130	8	do.	Qal	C,g	Irr	Dug, wooden cribbing; one of two wells 10 ft apart; pumps 1½-in stream of water from both wells using manifold connection.
33.332	Ramona Baca	-	21	60	5,220	12.4	do.	Qal	C,g	Irr	Dug, wooden cribbing; one of two wells 20 ft apart; pumps 2-in stream of water from both wells using manifold connection.
34.142	M. R. Carillo	-	54	6	5,240	p 52.3	4-18-57	Trp	P,w	S	Sucking air at time of measurement; was strong well before current drought
19.11.13.143	Leedro Eby	(1936)	620 R	6	5,820	590	3-26-56	Ts(?)	P,w,g	S	West Mill; good; bit dropped into cavity, water rose in casing.
16.131	State of New Mexico (2 C-Cattle Co.)	-	542 R	6	5,690	190+	1-12-55	Ts	P,w	S	Lee Childress; Big Mill, cased 542 ft; obstructed at 190 ft; dry at that depth.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATI-GRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.11.25.122	Roy Gunter	1938	119	10	5,425	50.2	3-27-57	Ts	P,w	S	Payne; North Mill; drill broke through shell of rock at 25 ft, water rose almost to surface, later went down and stayed at about 25 ft.
29.311	2 C Cattle Co.	-	380 R	6-4	5,370	349.1	1-13-55	Ts(?)	P,w	S	Mimbres Mill; cased to 380 ft rept good; 4-in casing inside 6-in casing.
19.12. 1.123	do.	-	120	6	5,498	39.5	1-12-55	Ts(?)	N	N	Goat Peak Well; water can be seen and heard moving in the well; not used for many years.
8.121	Kennecott Copper Corp.	1940	355 R	10	5,550	127	1940	QTg/Ts	T,e	Ind	Bolton No. 14; cased 352 ft; yield 70 gpm in 1951, at 25 gpm Jan, 1955; water found at 135 and 243 ft; T 11°C.
8.224	do.	1929	71	20	5,500	63 Dry	1929 1-19-55	QTg/Ts	N	(Ind)	Bolton No. 2; drilled 475 ft, cased 130 ft; yield 30 gpm; water struck at 73 and 150 ft; not used since 1929.
8.224a	do.	1929	274	15	5,498	138 143.6	1939 1-19-55	QTg/Ts	N	(Ind)	Bolton No. 3; drilled 300 ft, cased 196 ft; would yield 215 gpm; not used since 1943; water found at 80 ft and 150 ft.
8.231	do.	1937	440 R	10	5,544	136	1937	QTg/Ts	N	(Ind)	Bolton No. 12; cased 225 ft; yield 105 gpm in 1951; water found at 250 ft.
8.231a	do.	1940	350 R	-	5,537	135	1940	QTg/Ts	T,e	Ind	Bolton No. 13; cased 174 ft; yield 150 gpm in 1951; water found at 143 ft; T 16°C.
8.233	do.	1947	525 R	20	5,517	147 p182	1947 1-19-55	QTg/Ts	T,e	Ind	Bolton No. 15; cased 404 ft; yield 280 gpm in 1951; water found at 156 ft; T 17°C; hole caved to 480 ft.
8.241	do.	1937	365 R	10	5,542	133 172.4	1937 1-19-55	QTg/Ts	N	(Ind)	Bolton No. 10; cased 200 ft; water found at 145 ft; no yield after Bolton No. 15 was put into service.
8.241a	do.	1937	365 R	10	5,540	130 169.7	1937 1-19-55	QTg/Ts	N	(Ind)	Bolton No. 11; cased 216 ft; water found at 144 ft; no yield after Bolton No. 15 was put into service.
8.241b	do.	1941	344 R	-	5,537	130	1941	QTg/Ts	T,e	Ind	Bolton No. 9-B; cased 343 ft; pumping 24p gpm 1955; water found at 150 ft; T 18°C.
8.241c	do.	1940	168	20-12	5,537	140 Dry	1940 1-19-55	QTg/Ts	N	(Ind)	Bolton No. 9-A; drilled 344 ft, cased 172 ft; yield 100 gpm in 1940; went dry in 1941.
8.241d	do.	1937	390 R	10	5,537	-	-	QTg/Ts	N	(Ind)	Bolton No. 9; yield 370 gpm in 1937; went dry, casing pulled in 1940.
8.242	do.	1927	1,542 R	17-13	5,500	69	1927	Ts/PM	N	(Ind)	Bolton No. 1; cased 470 ft, yield dropped from 1,150 to 230 gpm; caved to 491 ft; rept 1 pint of oil per bailer run at depth of 1,101 to 1,144 ft; at 900 ft depth wl raised 400 ft in 4 hrs; water found at 75, 660, 940, and 1,533 ft; not used since 1952; replaced by Bolton 1-A.
8.242a	do.	1943	300 R	20	5,500	133	1943	QTg/Ts	T,e	Ind	Bolton No. 1-A; cased 94 ft; yield 185 gpm in 1951; water found at 149 ft.
8.242b	do.	1943	320 R	20	5,500	150	1943	QTg/Ts	N	-	Bolton No. 1-B; cased 112 ft; water found at 155 and 185 ft was deemed insufficient for testing, casing pulled and hole filled.
8.242c	do.	1937	244 R	10	5,500	98	1937	QTg/Ts	N	-	Bolton No. 4; cased 88 ft; water found at 90, 130, 155 and 188 ft was deemed insufficient for testing; casing pulled and hole filled.
8.242d	do.	1937	405 R	20-10	5,530	111 p153.1	1937 1-19-55	QTg/Ts	T,e	Ind	Bolton No. 8; cased 354 ft; deepened from 355 to 405 ft in 1940; yield 440 gpm in 1937; water found at 160, 210, and 260 ft.
8.413	do.	1948	755 R	24-16	5,505	133	1948	QTg/Ts	T,e	Ind	Bolton No. 16; cased 565 ft; yield 202 gpm in 1951; water found at 143 and 485 ft; T 26°C.
9.131	do.	1937	240 R	10	5,485	116	1937	QTg/Ts	N	-	Bolton No. 5; water found at 105 and 155 ft was deemed insufficient for testing; casing pulled and hole capped; washed out by flood.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.12. 9.131a	Kennecott Copper Corp.	1937	225 R	-	5,490	"Dry"	1937	QTg/Ts	N	-	Bolton No. 6; abandoned as a dry hole.
9.133	do.	1937	315 R	10	5,505	128.3	1-19-55	QTg/Ts	N	(Ind)	Bolton No. 7; cased 230 ft; test pumped at 90 gpm, yield later dropped to 10 gpm, casing pulled and hole capped in 1939.
9.343	do.	1950	410 R	24-18	5,430	125.9	1-18-55	QTg/Ts	N	-	Bolton No. 17; first water found at 44 ft, never tested, not used.
11.443	E. D. Visciana	-	22	14	5,395	16.3	1-12-55	Qal	N	(D)	Dug, backfilled around stove pipe casing; water may be perched.
14.233	Kennecott Copper Corp. (2 C Cattle Co.)	-	98 R	6	5,365	46	do.	QTg	P,w	D,S	2-C Ranch Headquarters; good; south well of two.
14.233a	do.	-	17	6	5,362	15.1	11-30-54	Qal	N	(D,S)	May be dug and backfilled around casing; east side of house.
17.114	Kennecott Copper Corp.	1942	287 R	30	5,445	103	8- 1-42	QTg/Ts	T,e	Ind	Whitewater No. 5; cased 152 ft; dd 137 ft at 220 gpm in Aug. 1942; pumping 64 gpm in 1951, and 16 gpm in Nov., 1954; water found at 115 ft; T 18°C.
17.122	do.	1941	253 R	20-16	5,405	39	1941	QTg/Ts	T,e	Ind	Whitewater No. 3; cased 135 ft; dd 132 ft at 315 gpm in 1941; pumping 25 gpm in 1951; water found at 43 ft; T 18°C.
17.122a	do.	1941	253 R	14	5,410	69.7	1-25-55	QTg/Ts	N	Ind	Whitewater No. 4; cased 120 ft; dd 170 ft at 220 gpm in 1941; caved in 1948; nearby well pumping when wl measured.
17.123	do.	1940	252 R	30	5,400	33	1940	QTg/Ts	T,e	Ind	Whitewater No. 1; cased to 122 ft; dd 130 ft; at 390 gpm in 1940; pumping 103 gpm in 1951; water found at 50 ft; T 18°C.
17.123a	do.	1941	253 R	30	5,400	35 71.1	1941 1-25-55	QTg/Ts	N	(Ind)	Whitewater No. 2; cased 135 ft; dd 128 ft at 360 gpm in 1941; pumping 54 gpm in 1951; went dry and caved in 1951; No. 1 well pumping at time wl measured.
17.131	do.	1942	285 R	14	5,448	116	1942	QTg/Ts	N	(Ind)	Whitewater No. 7; cased 160 ft; dd 240 ft at 30 gpm in 1942.
17.132	do.	1942	286 R	18	5,449	103 114 118.1	do. 1-31-51 11-26-54	QTg/Ts	T,e	Ind	Whitewater No. 6; cased 212 ft; dd 240 ft at 175 gpm in 1942; pumping 25 gpm in 1954; water found at 116 ft.
17.141	do.	1942	265 R	14	5,395	58 93.3	1942 1-25-55	QTg/Ts	T,e	Ind	Whitewater No. 8; cased 126 ft; dd 240 ft at 175 gpm in 1942; pumping 28 gpm in 1951; water found at 77 ft and 250 ft; T 19°C.
17.142	do.	1942	77	14	5,393	60 36.5	1942 1-25-55	QTg/Ts	N	(Ind)	Whitewater No. 9; drilled 205 ft, cased 116 ft; dd 190 ft at 110 gpm in 1942; went dry and caved in 1949; water found at 75 ft.
17.144	do.	1942	290 R	14	5,385	55 72.7	1942 1-25-55	QTg/Ts	N	(Ind)	Whitewater No. 10; cased 112 ft; dd 220 ft at 240 gpm in 1942; deepened from 240 to 290 ft in 1950; yield 65 gpm in 1951.
17.144a	do.	1942	63	20	5,375	55 Dry	1942 1-24-55	QTg/Ts	N	(Ind)	Whitewater No. 11; drilled 275 ft; cased 136 ft; dd 235 ft at 145 gpm in 1942; went dry and caved in 1948.
17.144b	do.	1943	250 R	14	5,381	60 79.1	1943 1-24-55	QTg/Ts	N	(Ind)	Whitewater No. 12; cased 129 ft; dd 220 ft at 40 gpm in 1943; went dry, and caved in 1945; water found at 73 ft.
17.144c	do.	1943	300 R	20-14	5,380	60 67.4	1943 1-25-55	QTg/Ts	N	(Ind)	Whitewater No. 13; cased 124 ft; dd 220 ft at 145 gpm in 1943; water found at 72 ft; deepened from 250 to 300 ft in 1950.
17.144d	do.	1949	710 R	20	5,380	70 78.0	1949 1-24-55	QTg/Ts	N	-	Whitewater No. 15; water found at 90 and 415 ft; yield 19 gpm.
17.411	do.	1943	-	20-14	5,370	60 7.19	1943 1-24-55	QTg/Ts	N	(Ind)	Whitewater No. 14; cased 105 ft; dd 220 ft at 135 gpm in 1943; water found at 65 ft; caved in 1945.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.12.19.113a	Kennecott Copper Corp.	1913	-	-	5,385	-	-	IPM	-	Ind	Three wells were drilled at Apache Tejo after dynamiting destroyed the spring; combined yield of 3 wells was 800 gpm; abandoned about 1920.
* 19.113b	do.	1938	405 R	20	5,385	150 218.5	1938 6- 8-54	IPM	T,e	Ind	Apache No. 8; cased 241 ft; water found at 166, 200, 314, and 332 ft; nearby wells pumping when wl measured.
19.114	do.	1920	-	-	5,375	-	-	IPM	N	(Ind)	Apache No. 6.
† 19.132	do.	1920	777 R	14	5,377	148	1920	IPM	T,e	Ind	Apache No. 4; cased 231 ft; water found at 160, 396, and 408 ft.
19.132a	do.	1920	2,445 R	20-16	5,375	153	1924	IPM/SOC	N	(Ind)	Apache No. 5; cased 827 ft; deepened to precambrian granite 1924; this well and Nos. 4 and 6 together pumped 1,400 gpm when first drilled.
19.132b	do.	1923	881 R	14	-	-	-	IPM	T,e	Ind	Apache No. 7; cased 288 ft; water found at 140 and 599 ft.
* 19.134	do.	1951	370 R	18	5,360	216 201.2	1951 6- 8-54	IPM	T,e	Ind	Apache No. 11; cased 296 ft; water found at 300 ft; dd rept 26 inches at 500 gpm in 1951.
19.141	do.	1938	325 R	-	5,365	140	1938	IPM	N	(Ind)	Apache No. 9; cased 76 ft; water found at 155 and 170 ft; went dry in 1958.
19.141a	do.	1939	392 R	-	5,380	156	1939	IPM	N	(Ind)	Apache No. 10; cased 170 ft; water found at 218 ft; went dry in 1950.
20.223	do.	1956	325 R	14	5,340	131	1956	QTg	T,e	Ind	Whitewater No. 21; water found at 135, 195, and 305 ft; pumping 85 gpm in 1956.
20.234	do.	1956	330 R	14	5,345	140	1956	QTg	T,e	Ind	Whitewater No. 22; water found at 165 ft; dd 95 ft at 125 gpm.
20.241	do.	1956	325 R	14	5,335	130	1956	QTg	T,e	Ind	Whitewater No. 23; cased 165 ft; dd 64 ft at 90 gpm.
21.144	2 C Cattle Co.	-	-	6	5,324	137.7	12- 7-54	OTg	P,w	S	Drawdown 6 ft at steady yield of 2 gpm.
21.343	Kennecott Copper Corp.	1951	320 R	14	5,290	160 164.0	1951 12- 7-54	QTg	N	-	Whitewater No. 17; cased 17 ft; dd 122 ft at 35 gpm; water found at 165 ft; drilled in gravel to 200 ft, bottomed in rhyolite.
21.344	do.	1951	350 R	14	5,310	220 222.3	1951 12- 7-54	Tr	N	-	Whitewater No. 18; cased 11 ft; water found at 220 ft deemed insufficient for testing; drilled all the way in rhyolite and tuff.
23.441	2 C Cattle Co.	-	302	8	5,340	241.6	12-14-54	Ts	N	(S)	Cased 20 ft.
26.114	do.	-	250+	6	5,300	p225.7 223.9	11-30-54 12-14-54	Ts	P,w	d,s	Adobe Well; good; pumping 5 gpm; T 18°C.
26.434	do.	1932	220 R	6	5,235	175.6	12-12-55	Ts	P,w	S	Lower Horse Pasture well; cased 220 ft; good.
28.112	Kennecott Copper Corp.	1951	335 R	14	5,305	178 191.3	1951 1-11-55	QTg	N	-	Whitewater No. 17; cased 20 ft; dd 115 ft at 40 gpm in 1951; water found at 185 ft; drilled in gravel from 0 to 285 ft; bottomed in rhyolite.
† 29.222	do.	1951	575 R	14	5,320	235.0	do.	QTg	N	-	Whitewater No. 19; cased 12 ft; water found at 190 ft; caving at 575 ft led to abandonment of hole; drilled entirely in sand and conglomerate.
30.124	2 C Cattle Co.	1951	540 R	18	5,312	95.6	12- 7-54	QTg	N	-	Apache No. 12; cased 12 ft; water found at 95 and 510 ft; exploration hole, never used.
† 30.411	do.	1951	1,208 R	18	5,281	168 216.6	1951 1-25-55	QTg/IPM	N	-	Apache No. 13; cased 85 ft; water found at 230 and 902 ft; exploration hole; never used; T 21°C at 230 ft and 91°F at 902 ft.
* 33.431	Kennecott Copper Corp.	1951	645 R	16-14	5,208	153	1951	QTg	T,e	Ind	Whitewater No. 20; cased 126 ft; dd 177 ft at 118 gpm; pumping 110 gpm in 1951; water found at 150 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.12.34.433	2 C Cattle Co.	-	200 R	5½	5,199	150.2	1-18-55	QTg	P,w	S	Rice Mill; good; much mineral encrustation on end of discharge pipe.
19.13. 6.131	H. H. Bagby	1912	220 R	6	5,530	173.0	5-28-54	QTg	P,w	D,S	Bill Ull; cased 20 ft; reliable but will pump down appreciably.
11.223	Kennecott Copper Corp.	01d	-	12	5,560	-	-	QTg	P,w	S	Casing obstructed at 40 ft.
11.223a	do.	-	128	12	5,560	109.4	7-14-54	QTg	N	(S)	Twelve ft south of well 11.223.
* 18.141	Sarah Smith	01d	126	8	5,395	64.6	5-28-54	QTg	P,w	D,S	C.C. Patton; good.
18.141a	do.	01d	164	7	5,425	p119.0	do.	QTg	P,w	D,S	Pumping 5 gpm; T 19°C.
18.243	Henry Rankin	-	139	8	5,395	78.7	6- 4-54	QTg	P,w	S	Good, adequate.
20.122	Phil. Taber	-	135	6	5,380	98.3	do.	QTg	P,w	D,S	Has not been used for a long time.
20.322	V. L. Patton	-	-	6	5,335	-	-	QTg	P,w	D,S	Good.
20.332	do.	-	309	6	5,335	119.9	6- 4-54	QTg	N	(S)	Cased at least 120 ft; north well of two.
20.332a	do.	-	-	8	5,335	-	do.	QTg	P,w	S	Good; south well of two.
20.411	Jessie Patton	-	175 R	6	5,330	p 95.0	6-10-54	QTg	P,w	Irr	Waters garden and small orchard; static wl about 80 ft.
22.432	Marvin Glenn	-	176	6	5,325	130.7	6- 8-54	QTg	P,w	S	Drilled to 200 ft; no casing; strong; cable, pipe, and cylinder lost in hole.
* 24.214	Kennecott Copper Corp.	-	127	8	5,400	p 60.0	do.	QTg	P,w	S	Cased 8 ft; pumping 2 gpm; T 21°C.
24.214a	do.	1941	588 R	20	5,397	58.5	do.	QTg/PM	N	-	-
26.124	Grant County Airport (U.S. Forest Service)	1961	402 R	8	5,374	195	3-1961	QTg	-,e	D	Ed. Boone; cased 302 ft; yield 20 gpm at depth of 302 ft, 33 gpm at 402 ft.
26.214	Grant County Airport	1950	284 R	6	5,373	210 p207.1	12-18-50 6- 8-54	QTg	P,e	PS	Lee Childress; cased 284 ft; test bailed 3 gpm; drilled in conglomerate.
27.423	Marvin Glenn	-	163	5	5,280	p141.9	2-10-55	QTg	P,w	D,S	Pumping 3 gpm; T 18°C.
29.421	J. L. McCauley	01d	210 R	6	5,295	121.1	6- 4-54	QTg	N	(D,S)	Conglomerate found at 5 ft below surface cover of soil.
* 29.421a	do.	-	221	8	5,320	148.6 p154.2	5-29-54 6- 4-54	QTg	P,w	D,S	Pumping 10 gpm, dd about 5½ ft; T 16°C.
29.423	do.	-	160+	6	5,309	134.5	do.	QTg	P,w	S	Pump out of order.
34.411	Marvin Glenn	01d	139	60	5,232	114.2	2-10-54	QTg	N	(D,S)	Dug, no cribbing.
34.421	do.	01d	-	6	5,225	-	do.	QTg	P,w	S	Could not get line past 30 ft; T 18°C.
35.133	do.	01d	198	8	5,280	168.9	do.	QTg	N	(D,S)	Cased 6 ft.
19.14. 1.143	Elmer Salars	1944	390 R	10	5,520	138	9- 1-44	QTg	N	(PS)	Lee Childress; test hole for Silver City; dd 190 ft at 7 gpm.
† 1.143a	do.	1944	1,003 R	16	5,520	133.7	4-20-54	QTg	N	(PS)	Layne-Texas; no casing; test hole for Silver City; could be bailed dry; core sections composed of hard conglomerate; 20 ft south of well 1.143.
* 1.311	do.	01d	168	6	5,510	p135.5	3- 9-54	QTg	P,w	S	H-L Well, east well of 2; pumping 2 gpm.
1.311a	do.	01d	-	6	5,510	-	do.	QTg	P,w	S	H-L Well, west well of 2.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.14. 2.223	Elmer Salars	-	-	6	5,515	120	3- 9-54	QTg	P,w	S	Good.
4.322	Phelps Dodge Corp.	1944	480 R	6	5,821	393.6	3- 8-54	QTg	P,w	S	McKinney Bros.; cased 400 ft; deepening from 450 ft to 480 ft in 1956 increased yield but not enough.
6.343	Louis Valenzuela	1948	598 R	6	6,115	545 542.3	1948 5- 4-54	QTg	P,w	D,S	Richard Childress; cased 598 ft, perforated 32 ft; water from 555 to 560 ft.
8.342	Phelps Dodge Corp.	1938	599 R	5	6,050	553	8-17-58	QTg	P,e,w	D,S	Lee Childress; cased 598 ft; good.
14.443	Elmer Salars	1937	540 R	8	5,510	363.4	3-12-54	QTg	P,w	S	Lee Childress; cased 540 ft; has pumped 40 gpm for 8 hours; water rose in casing when found.
17.413	Phelps Dodge Corp.	1950	392	6	5,945	337.5	5- 8-54	QTg(?)	P,w	S	Lee Childress; cased 395 ft; good; not used in past 4 months.
22.313	Elmer Salars	1956	642 R	6	5,715	607	9-29-56	QTg	P,g	S	Lee Childress; good; some water entering well at about 400 ft depth.
29.412	Phelps Dodge Corp.	Old	83	8	5,740	Dry	2-17-55	(QTg)	N	(S)	-
19.15. 3.313	do.	Old	257	-	5,540	123.0 128.4	8-31-54 9-26-58	QTg	N	(S)	Laughlin Ranch well.
3.323	Phelps Dodge Corp.	-	111	60	5,550	Dry	3-18-54	(QTg)	N	(D,S)	Dug.
4.122	do.	1915	139	8	5,450	101.3	9- 9-54	QTg	P,e	S	C.S. & W.W. Woodward; dug to 107 ft, drilled by Childress to 140 ft in 1934; cased 0 to 140 ft and backfilled around casing; dd 20 ft at 60 gpm; water and loose sand shot up through drill hole when a 2 ft hardpan stratum was penetrated at 107 ft; hole was "bone dry" above 107 ft; soft loose sand from 107 to 140 ft.
4.124	do.	(1934)	200 R	8	5,462	115	1954	QTg	P,w	D,S	Lee Childress; cased 120 ft; water-bearing white sand found at 120 ft.
8.241	Nettie Thompson	Old	271 R	6	5,550	-	3-16-54	QTg	P,e	D,S	Jackson & Portwood; cased 10 ft; caved at 16 ft; old Ridout place.
9.134	do.	Old	148	6	5,580	Dry	3-26-54	(QTg)	N	(D,S)	Jackson & Portwood; cased 21 ft; obstructed by roots at 21 ft; old Casey place.
† 10.221	Town of Silver City	1944	1,180 R	14-12	5,633	145.4 146.2	4-20-54 9- 9-54	QTg	N	-	Layne-Texas; no casing; test hole for Silver City; 40 gpm on bailer test.
10.221a	do.	(1910)	130	48	5,650	109.7	do.	QTg	N	(D)	C.S. & W.W. Woodward; dug, brick cribbing to 140 ft; drifts extend laterally from bottom of hole; was water supply for nearby mines; seep water only, very weak.
* 10.324	Phelps Dodge Corp.	-	1,200 R	6	5,801	240.3	3-15-54	QTg	P,w	D,S	Cased 1,200 ft; will not pump down to cylinder 20 ft in water; drilled as prospect hole for turquoise; w1 lowered when attempt was made to dewater mines at Tyrone about 1952.
11.112	Frank Holman	1939	287	8	5,755	129 130.2	1939 9- 9-54	TKi(?)	P,w	S	Lee Childress; Woodward Well; drilled 300 ft; cased 15 ft; bottomed in sticky clay (in fault zone); water is mineralized.
11.114	do.	-	138 R	6	5,740	120.5	4-20-54	QTg	N	(S)	Gonzalles Well.
11.443	Phelps Dodge Corp.	(1913)	1,180 R	-	5,920	230	(1913)	QTg	N	N	Core hole 3-4; conglomerate from 0 to 950 ft; may be one of the old Tyrone City supply wells of the Fortunata well field.
† 12.242	Frank Holman	1939	548 R	4½	6,180	375.5	3-15-54	QTg	P,w	D,S	Lee Childress; cased 548 ft, perforated; main water found at 520 ft, other strata at 372 and 390 ft; hole caved below 390 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.15.12.242a	Frank Holman	Old	76	60	6,175	73.9	3-15-54	QTg	N	(D,S)	Dug, no cribbing.
13.123	Phelps Dodge Corp.	(1913)	1,320 R	-	6,040	355	(1913)	QTg	N	N	Core hole 3-2; conglomerate from 0 to 1,120 ft.
13.133	do.	(1913)	1,030 R	-	5,980	220	do.	QTg	N	N	Core hole 3-3; conglomerate from 0 to 800 ft.
13.324	do.	(1913)	1,100	-	5,970	330	do.	QTg	N	T	Core hole 1-13; conglomerate, 0 to 1,100 ft.
14.112	do.	(1913)	790 R	-	5,740	115	do.	QTg	N	-	Core hole 1-2; conglomerate, 0 to 480 ft.
14.122	do.	(1913)	720 R	-	5,825	490	do.	TKi	N	-	Core hole 1-1; conglomerate, 0 to 390 ft, quartz monzonite to 720 ft.
14.132	do.	(1913)	945 R	-	5,800	130	do.	QTg	N	-	Core hole 1-7; conglomerate, 0 to 200 ft.
14.222	do.	(1919)	683 R	-	5,892	250	1926	QTg	T,e	PS	This Tyrone City Supply Well pumped about 3 million gallons and the nearby mines pumped about 25 million gallons in June 1925, and lowered the wl in the vicinity about 20 to 30 ft; the 3 supply wells together pumped up to 25 million gallons per month; 2 other wells were 1,200 ft deep; conglomerate, 0 to 628 ft; the bottom 55 ft was drilled in granite.
14.224	do.	(1919)	1,190 R	-	5,895	290	(1915)	QTg	N	-	Core hole 2-10; conglomerate, 0 to 875 ft.
14.233	do.	(1953)	-	-	5,868	302.2	9-26-58	QTg	N	-	Core hole MF-7; wl measured and rept by Phelps-Dodge personnel.
14.432	do.	(1913)	780 R	-	6,015	425	do.	TKi	N	-	Core hole 2-8; conglomerate from 0 to 340 ft.
14.443	do.	(1913)	800 R	-	6,120	510	do.	TKi	N	-	Core hole 1-6; conglomerate from 0 to 390 ft.
15.424	do.	(1953)	385	12	5,935	384.6	4-11-55	QTg	N	-	Water in hole may be drainage from surface, but water level conforms with that in hole 15.424a across canyon.
15.424a	do.	(1953)	400+	9	5,930	373.1	do.	QTg	N	-	-
16.111	David Osmer	1955	520 R	-	5,680	305	9-1955	QTg	N	-	Core hole drilled to 520 ft for prospect, but cemented off at 300 ft to 310 ft to block water occurring in fine running sand; drilled to 490 in unconsolidated sand and gravel, bottomed in bedrock or boulders of bedrock.
17.441	Phelps Dodge Corp.	(1910)	36	60	6,060	34.8	3-18-54	Qal	B,h	(D)	Dug, no cribbing; on Ohio group of claims; supplied all domestic water for mining camp; wl now low compared to past years.
22.343	do.	(1910)	240	6	6,240	Dry	3-14-55	(TKi)	N	(D)	Uncased; adjacent to shaft of Sampson mine; shaft was 500 ft deep and could be pumped dry.
22.424	do.	(1953)	-	-	6,398	596.5	10-21-58	TKi	N	-	Core hole 16-E; wl measured and rept by Phelps-Dodge personnel.
22.444	do.	(1953)	375 R	-	6,405	370	do.	TKi	N	-	Core hole 36; Virginia group of claims.
23.133	do.	(1953)	830 R	-	6,400	600	do.	TKi	N	-	Core hole 47; Thistle group of claims.
23.243	do.	(1953)	-	-	6,135	488.4	10-21-58	TKi	N	-	Core hole 21-Ac; wl measured and rept by Phelps-Dodge personnel.
23.324	do.	(1953)	520 R	-	6,260	500	do.	TKi	U	-	Core hole 15; Bessie-Gettysburg group of claims.
23.443	do.	(1953)	450 R	-	6,065	380	do.	TKi	U	-	Core hole 14; Gettysburg-Victoria group of claims.
24.222	do.	(1913)	1,320 R	-	5,990	370	do.	QTg	N	-	Core hole 2-1; conglomerate to 1,200 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
† 19.15.25.321	Mangas Cattle Co.	(1953)	300 R	6	6,035	103.3	3-26-54	QTg	J,e	D,S	Drilled as core hole to about 140 ft; later equipped with jet pump but would pump out in 3 hrs at 8 gpm; deepened to 300 ft in 1956 and then pumped 10 gpm continuously for 3 days; bailing 28 gpm for 3 hrs lowered wl from 112 ft to 250 but wl would go no lower.
26.211	Phelps Dodge Corp.	(1953)	-	-	6,134	177	10- 8-58	TKi	N	-	Core hole 7-W; wl measured and rept by Phelps-Dodge personnel.
29.333	do.	1956	300	8	6,600	-	-	TKi	P,h	D,S	Paul Jones; cased 20 ft; yield 1½ gpm; decomposed "granite" to 40 ft.
29.333a	do.	01d	14	48	6,590	3.8	10- 8-58	TKi	P,g	D,S	Dug, has not gone dry at any time in past few years but wl lowers in period before summer rains begin; north well of two dug wells.
31.122	John & Tom Foy	01d	18	7	6,630	11.3	do.	TKi	N	(D,S)	Dug, backfilled around casing; wl declines in late summer or fall; north well of two.
31.122a	do.	01d	49	8	6,631	12.1	3-14-55	TKi	P,e	D,S	Reliable but weak, will pump down.
34.422	James McCauley	(1948)	75 R	6	6,252	69.5	11-24-54	TKi	P,w	S	Good.
34.423	do.	1953	250 R	6	6,315	124.3	do.	p6g	P,w	S	Lee Childress; good.
36.332	do.	1949	268	6	6,078	13.7	do.	p6g	N	(S)	Yield about 1 pint per minute; not worth equipping.
36.433	do.	1954	236 R	6	6,030	90.1	do.	p6g	P,w	S	Good.
19.16.13.144	Shrine Mine	-	251	8	5,950	Dry	9- 8-54	TKi	N	(D)	Casing obstructed at 20 ft; measured inside pump column; supplied mine camp.
13.144a	do.	-	11	60	5,948	7.8	do.	TKi	N	(D)	Dug, no cribbing; located on bank of dry stream channel; water perched.
13.323	do.	-	12	48	5,975	9.2	do.	TKi	N	(D)	Dug, wood and concrete cribbing; water perched.
17.133	Mangas Cattle Co.	01d	12	48	5,958	6.7	3- 6-56	p6g	P,w	(D,S)	Dug, wood cribbing; caved; measured in pump column; not in use; water perched.
35.224	Pat Osmer	01d	75	72	6,735	44.1	3-14-55	p6g	P,g	N	Austin-Amazon mine shaft; small gasoline driven pump and 2-in pipe would keep shaft dewatered.
35.241	Tejano Mining Co.	1956	700 R	8	6,695	207.7	4-19-56	p6g	A,g	D, Ind	Paul Jones; cased 503 ft; yield 8 gpm; water found at 110, 500 and 580 ft.
35.242	Pat Osmer	-	33	94	6,720	29.0	3-14-55	p6g	N	N	Mine shaft, no curbing.
19.17. 3.422	Mangas Cattle Co.	01d	19	36	5,310	Dry	3-30-54	p6g	P,w	(S)	Edgar Place well; dug; culvert casing to 19 ft.
3.441	do.	(1947)	-	-	5,282	-	-	p6g	P,w	S	-
5.241	do.	(1947)	37	16	4,966	13.5	do.	Qa1	P,w	S	Cottonwood Well; dug; culvert casing to 5 ft; one good early summer rain will put water in well for rest of season.
6.122	do.	01d	72	36	4,695	65.3	do.	QTg	P,w	S	H-M Well; dug, culvert casing; weak; south well of two.
6.122a	do.	-	309	6	4,695	59.5	do.	QTg	P,w	S	H-M Well; will pump down to cylinder set at 190 ft; north well of two.
21.144	J. S. Culberson	01d	37	60	5,123	36.2	do.	Qa1	P,w	D,S	Dug, wooden cribbing; weak.
21.241	do.	(1915)	98	6	5,135	34.3 65.8	do. 8- 8-55	QTg	P,w	S	Kuykendall; Eccles Well; good.
27.421	Mangas Cattle Co.	(1915)	290	6	5,428	235.8	do.	QTg	P,w	S	Smith Well; yield weakened in spring of '54; T 18°C.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATI-GRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.17.29.312	J. S. Culberson	1935	248	6	5,116	229.8	8- 8-55	QTg	P,w	S	Bill Uhl; not used recently; east well of three.
29.312a	do.	1937	245	6	5,111	224.1	do.	QTg	P,w	S	Lee Childress; not used recently; northwest well of three.
* 29.312b	do.	1946	270 R	6	5,112	224.5	do.	QTg	P,w	S	Lee Childress; strong; T 18°C; southwest well of three.
33.143	Bureau of Land Management	(1957)			5,290			QTg	P,w	(S)	-
36.421	State of New Mexico (Mangas Cattle Co.)	(1957)	406	10	5,695	220	5-24-40	PCg	N	(S)	Lee Childress; no casing; did not find enough water to justify equipment.
19.18. 5.141	Roy Harper	1928	128	8	4,130	p103.4	7- 6-55	QTg	P,w	S	Rogers; cased 18 ft; strong.
* 6.114	Elma Wright	1929	108	6	4,033	p 59.7	do.	QTg	P,w	D	Baird Bros.; water found at 112 ft rose to 60 ft and wl never has declined.
6.121	do.	1934	31	6	4,085	Dry	7- 7-55	(QTg)	N	D	Bill Uhl; drilled for CCC camp; wl was 82 ft before hole caved.
6.132	Pacific Western Land Co.	1955	60	16	3,992	9.3	7- 6-55	Qa1	T,e	Irr	Lee Childress; good.
6.221	do.	1954	75 R	16	4,016	7.1	7- 5-55	Qa1	T,g	Irr	McBee; cased 75 ft; dd 20 ft after pumping 700 gpm for 10 min.
6.214	do.	-	43	12	4,028	9.2	do.	Qa1	C,g	D	Cased 47 ft; good.
6.232	Arch McDaniel	1932	32 R	6	4,025	15	1955	Qa1	J,e	PS	Cased 32 ft; never has pumped out.
6.232a	do.	(1910)	60 R	6	4,030	18	do.	Qa1	P,w	D	Jim Harper; good.
6.323	do.	(1910)	90 R	6	4,112	34.4	7- 6-55	QTg	P,w	D,S	Good; T 20°C.
7.131	J. S. Culberson	(1920)	136	6	4,070	61.3	7- 8-55	QTg	P,w	D,S	Jim Harper; drilled 180 ft; good.
7.434	State of New Mexico (Arch McDaniel)	1948	220 R	6	4,195	187.9	7- 6-55	QTg	P,w	S	Lee Childress; Hornet Well; cased 220 ft; water found at 185 ft.
12.242	J. S. Culberson	(1929)	270	6	4,581	251.2 258.0	3-30-54 8- 8-55	QTg	N	(S)	Was rept to be dry; wl indicates seasonal fluctuation.
12.242a	do.	1948	292	6	4,581	252.7 259.1	3-30-54 8- 8-55	QTg	P,w	S	Lee Childress; good.
20.112	do.	(1933)	280 R	6	4,305	p252.6	7-18-55	QTg	P,w	S	T 21°C.
* 19.19. 1.142	Phelps Dodge Corp.	(1925)	24	36	3,990	21.2	8- 6-55	QTg	P,w	D	Good.
1.333	do.	(1905)	31 R	15	3,995	25	1955	QTg	J,e	D	Cased 25 ft; will pump out at 1 gpm; wl not affected by flow of river.
1.334	do.	1951	48	12	3,988	19.2	7- 8-55	Qa1	N	(Irr)	Bob Hooker; wl fluctuates with flow of river.
1.341	do.	1952	99	16	3,985	28.2	7-13-55	QTg	J,e	D	Main water-bearing stratum found at 60 ft.
1.411	do.	1952	69	16	3,972	6.5	8- 6-55	QTg	T,e	Irr	Lee Childress; cased 72 ft; yield 2,250 gpm; pump bowls at 21 ft; T 17°C.
2.141	do.	1934	177 R	7	4,061	90.1	do.	QTg	P,e	D,S	McHalfee; good.
2.242	do.	1932	27	36	3,970	24.7	do.	Qa1	N	(D)	
2.314	do.	1934	40 R	6	3,972	19.2	do.	Qa1	P,w	S	Good.
2.444	do.	1936	120 R	6	4,005	40	1-1955	QTg	J,e	D	Cased 120 ft; will pump out in one hr; drilled for CCC camp.
3.442	do.	1947	73 R	16	3,957	-	do.	Qa1	T,e	Irr	Lee Childress; yield 1,400 gpm; T 18°C; Sand & gravel, 0 to 60 ft, blue mud to 70 ft, hard conglomerate to 73 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
19.19. 4.443	F. G. Bichl	1904	27	-	3,960	24.1	8- 6-55	Qal	P,w	D,S	Morehead; dug; never has gone dry.
8.211	-	-	22 R	6	4,10	18.1	9- 7-55	Qal	P,w	S	-
10.112	McCarty & Burke	1955	88	16	3,930	8.3	7- 8-55	Qal	T,e	Irr	Cased 88 ft; dd 10 ft at 450 gpm.
10.113	do.	1955	73	16	3,031	8.5	do.	Qal	T,e	Irr	Cased 80 ft; dd 5 ft at 850 gpm; 450 ft south of well 10.113.
10.132	do.	(1942)	18	24	3,923	17.5	do.	QTg	J,e	D	Dug.
† 10.221	Fred Anderson	1948	66	16	3,953	15.0	do.	Qal	T,g	Irr	Lee Childress; cased 76 ft; gravel-packed; dd 8 ft at 740 gpm after 10 min; hard conglomerate at 55 ft.
10.223	do.	(1905)	22	36	3,959	21.5	do.	Qal	P,w	D,S	Frank Harper; dug; wl has remained constant.
* 10.231	Charles Anderson	1948	79 R	6	3,960	23.9	do.	QTg	P,w	D,S	Lee Childress; cased 79 ft; good; T 20°C.
18.432	Martha Fuller	1955	-	-	3,885	11	8-1955	Qal	-	(Ind)	Johnson; being drilled as supply well for ore mill; down 40 ft at time of visit.
18.441	do.	1955	80 R	-	3,915	35	do.	QTg	N	-	Johnson; intended as supply well for ore mill; yield 125 gpm, needed 400.
20.113	do.	1955	300 R	-	4,090	Dry	8-10-55	(QTg)	-	-	Johnson; intended as supply well for ore mill.
24.313	Fred Anderson	1945	320 R	6	4,285	247.4	8- 4-55	QTg	P,w	S	First water found at 260 ft, more at 290 ft; T 21°C.
35.224	do.	-	63	6	4,323	51.8	8- 5-55	Qab	N	(S)	Hole too crooked to be equipped; south well of two; water perched.
* 35.224a	do.	1944	340 R	6	4,329	274.7	do.	QTg	P,w	S	Floyd Myers; cased 340 ft; adequate; T 27°C.
19.20.16.222	-	-	112+	8	4,097	97.7	8-18-55	Qab	P,w	S	In Hidalgo County, 2.1 mi south of Grant County line; T 22°C.
20. 9. 3.324	W. B. Hinton	1935	450 R	6-4	5,620	385	3-21-57	Qab	P,w	S	Ed. Boone; Bryant Well; in Luna Co. 0.75 mi south of Grant Co line; obstructed at 382 ft; cylinder set at 390 ft; T 21°C.
7.121	do.	-	41	60	5,364	24.8	do.	Qal	P,w	S	Dug; Double Well No. 1; in Luna Co, 1 mi south of Grant Co line; on bank of channelway in which volcanic rock is exposed; weak; water perched.
7.121a	do.	1929	90+	6	5,365	79.9	3-21-57	Trp	P,w	S	Ed. Boone; Double Well No. 2, in Luna Co, 1.0 mi south of Grant Co line; strong.
8.113	do.	1930	300 R	6	5,380	p176.5	do.	Qab	P,w	S	Bob Hodges; East Mill; in Luna Co, 1.2 mi south of Grant Co line; T 19°C.
20.10. 2.433	do.	-	100 R	8	5,460	p 87.8	do.	Trp	P,w	S	John Watson; Surprise Well; in Luna Co, 1.0 mi south of Grant Co line; cased 20 ft; wl at 80 ft when drilled.
3.343	do.	1952	500 R	6	5,210	-	do.	Trp	P,w	S	Boone & Watson; Trouble Well; in Luna Co, 1.0 mi south of Grant Co line; cased 150 ft; water entering hole at about 30 ft, above static wl.
7.121	J. C. Trujillo	-	16	96	5,035	8.7	3-17-54	Qal	C,g	Irr	In Luna Co, 0.15 mi east of Grant Co line; dug, timber cribbing; never has gone dry.
19.322	George Moseley	-	30 R	6	4,990	20	4-19-57	Qal	P,w	D	In Luna Co, 0.5 mi east of Grant Co line; cased 30 ft; obstructed at 19 ft.
20.11. 3.441	2 C Cattle Co.	1947	1,890 R	-	5,320	-	-	-	N	-	Colgrove and Brinker No. 1; Oil test-hole; rept penetrated to the Cretaceous; "show of oil" rept from 1,757 to 1,759 ft (questionable).
7.312	Kennecott Copper Corp.	1953	-	14	5,113	78.2 77.9	1-27-55 3-30-55	Qab	T,d	Irr	2 C Farm Well No. 2.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
20.11. 7.332	Kennecott Copper Corp.	1953	-	14	5,103	68.8	1-27-55	Qab	T,d	Irr	2 C Farm Well No. 3.
7.413	do.	1953	350 R	24-14	5,116	72.7 76.4	3-1953 1-27-55	Qab	N	-	Paul Jones; Bromback No. 3; cased 253 ft; dd 77 ft at 780 gpm; water found at 83 and 105 ft; test hole.
7.433	do.	1952	232 R	20-18	5,098	57 60.6 60.4	12-1952 1-27-55 3-30-55	Qab	N	-	Paul Jones; Bromback No. 1; cased 95 ft; dd 41 ft at 1,000 gpm; water found at 62, 84 and 160 ft; test hole; drilled in conglomerate.
7.444	do.	1953	395 R	18-14	5,097	61 64.0	2-1953 1-26-55	Qab	N	-	Paul Jones; Bromback No. 2; cased 307 ft; dd 171 ft at 400 gpm; water found at 76 and 95 ft; test hole.
8.233	Lewis Farms Inc.	-	-	6	5,133	93.9	1-27-55	Qab	P,w	S	Drawdown 1 ft at 2 gpm; T 19°C.
8.333	do.	-	72	6	5,097	65.5	1-26-55	Qab	P,w	S	Good.
10.111	City of Rocks State Park	1955	502 R	6	5,210	119.2	4-19'57	Ts	P,w	PS	Do.
† 17.314	Boy Scouts of America	1952	250	18	5,045	16	5-1952	Trp(?)	N	-	Paul Jones; Cold Spring No. 2; casing pulled and hole filled; dd 132 ft at 61 gpm; test pumping dropped flow of Cold Spring from 41 gpm to less than 16 gpm.
† 17.331	do.	1952	360	20	5,028	12	7-1952	Trp(?)	N	-	Paul Jones; Cold Spring No. 1; casing pulled and hole filled; dd 198 ft at 8 gpm.
* 18.112	Kennecott Copper Corp.	1953	-	14	5,087	52.5	1-27-55	Qab/Ts	T,d	Irr	2 C Farm Well No. 4; yield est. 1,500 gpm. T 22°C.
18.133	do.	1951	292 R	19-15	5,053	18	7-1951	Qab	N	-	Warm Springs No. 4; T 20°C; drilled by Kennecott; hole destroyed when found to be on wrong property.
18.213	do.	1953	350	16-14	5,085	50.6 50.2 57.5	1-27-55 3-30-55 6- 3-55	Qab	T,d	Irr	2 C Farm Well No. 5; dd 48 ft at 1,300 gpm, May, 1955; No. 4 well pumping June 3, 1955.
18.312	do.	1952	184 R	24-14	5,053	25 36.8 35.2	1-1952 1-27-55 3-30-55	Qab	N	-	Paul Jones; Warm Springs No. 10; dd 125 ft at 100 gpm; T 18°C at top of water, 21°C at bottom of hole; test hole.
18.313	do.	1951	120 R	18-14	5,035	73.8	1-26-55	Qab	T,n	Ind	Paul Jones; Warm Springs No. 9; cased 109 ft; dd 7 ft at 355 gpm; water found at 53 and 80 ft; sand and conglomeration to 82 ft, rhyolite to 120 ft.
18.314	do.	1950	25 R	17	5,026	3	1950	Qab	N	-	Warm Springs No. 1; test well, never used; destroyed in 1952.
18.314a	do.	1950	44 R	17	5,029	8	1950	Qab	N	-	Warm Springs No. 2; test hole; cased to 198 ft; yield 240 gpm; destroyed in 1952.
18.314b	do.	1950	223 R	18-14	5,029	7	1950	Qab	T,e	Ind	Warm Springs No. 3; cased 210 ft; yield 700 gpm; dd 20 ft at 500 gpm.
18.314c	do.	1951	39 R	24	5,028	25	1951	Tr	N	-	Paul Jones; Warm Springs No. 7; yield 45 gpm; drilled in rhyolite dike or plug; water found at 27 ft; hole destroyed.
18.332	do.	1951	247 R	24-14	5,026	28	1951	Qab	T,e	Ind	Paul Jones; Warm Springs No. 8; cased 198 ft; yield 480 gpm; drilled mostly in rhyolite; water found at 30 and 42 ft in gravel and sand; more water at 192 ft.
18.414	do.	1951	167 R	20	5,056	21 44.7	1951 1-27-55	Qab	N	-	Paul Jones; Warm Springs No. 5; cased 3 ft; dd 116 ft at 54 gpm; water found at 32 and 90 ft; sand and gravel to 110 ft, conglomerate to 163 ft, rhyolite to 167 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
† 20.11.18.422	Kennecott Copper Corp.	1952	350 R	20-14	5,064	p 27 61.1	5-1952 3-30-55	Qab	T,e	Ind	Paul Jones; Warm Springs No. 11; cased 254 ft; dd 17 ft at 666 gpm; water found at 39 ft rose to 29 ft; more water at 223 and 265 ft; T 21°C at top of water, 24°C at bottom of hole.
† 19.111	do.	1952	400 R	24-18	5,013	59 52.4	10-1952 1-26-55	Qab	N	-	Paul Jones; Warm Springs No. 6; cased 5 ft; loose sand clogged pump during test; water found at 110 ft stood at 109 ft and had temp of 19°C; water found at 285 ft rose to 59 ft and had temp of 28°C; sand, gravel, and clay to 284 ft; hard tan conglomerate to 315 ft; hard red rhyolite to 400 ft.
20.444	Lewis Farms Inc.	1949	212	6	4,990	193.7 197.9	3-27-57 7-13-62	Qab	P,w	D,S	Ed. Boone, cased 220 ft; has some trouble with loose sand from 198 to 221 ft.
22.124	Triple S Land Corp.	1916	194	8	5,055	122.4	3-27-57	QTg(?)	P,w	S	Test pumped at 20 gpm, Dec., 1962.
26.133	do.	Old	244	6	5,084	228.4	do.	QTg	P,w	S	Cased 3 ft; test pumped at 7 gpm, Dec., 1962.
27.444	do.	1962	302	6	5,020	268	11-12-62	Qab	N	-	McBee Drilling Co; cased 302 ft; test bailed 4 gpm; water found at 262 ft.
* 30.113	Kennecott Copper Corp.	1952	350 R	18-14		140 149.8	8-21-52 1-25-55	Qab	N	(Ind)	Paul Jones; Warm Springs No. 12; cased 350 ft; dd 120 ft after 7 days pumping at 520 gpm; water found at 155 ft and possibly at 210 ft; T 21°C; loose sand and gravel to 78 ft, tan conglomerate and clay to 390 ft.
30.442	2 C Cattle Co.	1962	400 R	10-6	4,925	128.3	7-13-62	Qab	P,w	S	Ed Boone.
31.113	John Stark	1951	1,607 R	-	4,924	-	-	-	N	-	Drilled as an oil test hole; C.D. Murphy Jr., State 1; bottom in bolson fill.
† 34.444	Triple S Land Corp.	1962	224	6	4,962	190	10-27-62	Qab	N	-	McBee Drilling Co; cased 224 ft, bottom 25 ft perforated; yield 10 gpm; water found in sand from 206 to 224 ft.
35.444	do.	1962	210	6	4,961	140	11- 3-62	Qab	N	-	McBee Drilling Co.; cased 204 ft; bottom 40 ft perforated; yield 12 gpm; water found in sand from 172 to 210 ft.
20.12. 4.122	John Stark	Old	199	6	5,195	150.7	1-25-55	QTg	N	(S)	Cased to about 10 ft.
6.343	do.	(1936)	-	6	5,190	157.6	2- 2-55	Qab	N	(S)	-
7.131	do.	(1936)	175+	6	5,178	157.0	do.	Qab	N	(PS)	Drilled to supply CCC Camp.
7.312	do.	-	186	8-6	5,158	141.5	do.	Qab	N	(S)	Cased to 20 ft; east well of three.
7.312a	do.	-	-	5	5,156	p141.3	do.	Qab	P,w	D,S	Good, west well of two 10 ft apart.
7.312b	do.	-	145	8	5,156	139.5	do.	Qab	N	(D,S)	-
9.133	do.	-	-	6	5,144	p114.0	1-26-55	Qab	P,w	S	Ed Boone; T 20°C.
12.212	Kennecott Copper Corp.	1953	400 R	16	5,125	87.0 89.0	3-30-55 4-16-57	Qab	T,d	Irr	2 C Farm No. 1; yield 450 gpm.
12.213	do.	-	93 R	8	5,118	74.3	12-14-54	Qab	P,w	S	Mullins Well; good.
13.222	2 C Cattle Co.	1953	1	16	5,078	54.4 50.6	1-27-55 3-30-55	Qab	T,d	Irr	2 C Farm Well No. 6.
15.121	State of New Mexico (L. D. Kennedy)	-	72	6	5,095	50.4	1-26-55	Qab	P,w	S	Good.
18.343	John Stark	(1947)	400 R	18-14	5,149	64	1-1952	Qab	T,e	Ind	Lee Childress; Stark Ranch No. 4; cased 302 ft; dd 223 ft at 600 gpm; T 20°C; water found at 65, 100, 170, and 290 ft; sand and gravel to 10 ft, light red conglomerate having clay binder to 400 ft; leased to Kennecott Corp.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
20.12.19.114	John Stark	-	100 R	6	5,045	87.6	3- 3-55	Qab	P,w	S	Good
19.123	do.	01d	110 R	6	5,037	82.5	do.	Qab	N	(S)	Do.
19.123a	do.	1915	125 R	6	5,036	61.7 82.9	10-31-39 3- 3-55	Qab	N	(D,S)	Iron Portwood; water found between 63 and 100 ft.
* 19.123b	do.	1947	375 R	16-8	5,036	64	1952	Qab	T,e	Ind	Lee Childress; Stark Ranch No. 1; cased 160 ft; dd 132 ft at 450 gpm; dd 232 ft at 580 gpm; main water found at 290 and 350 ft; T 16°C; leased to Kennecott Corp.
19.141	do.	1947	415 R	16	5,035	59.4 63 81.2	10- 9-47 1952 2- 3-55	Qab	N	(Ind)	Lee Childress; Stark Ranch No. 3; cased 140 ft.
21.411	Gladys Holman	-	104	48	5,035	p 96.0	do.	Qab	P,w	S	Dug, no cribbing.
28.242	John Stark	-	107+	6	5,003	96.8	do.	Qab	P,w	S	Good.
32.234	Nancy McCauley	-	117 R	6	4,990	83.6	3- 9-55	Qab	P,w	D,S	Do.
32.234a	do.	-	76	72	4,965	58.7	do.	Qab	N	(D,S)	Dug, no cribbing.
34.434	Gladys Holman	-	100	10	4,945	96.3	3- 3-55	Qab	N	(S)	-
34.434a	do.	-	104+	6	4,947	98.7	do.	Qab	P,w	D,S	-
36.111	State of New Mexico (John Stark)	-	140+	8	4,937	123.5	do.	Qab	P,w	S	Faywood Well; dd 0.44 ft at 6.5 gpm; T 17°C.
20.13. 1.444	Marvin Glenn	-	180+	6	5,190	p171.8	2- 2-55	Qab	P,w	D,S	T 19°C.
2.214	State of New Mexico (Marvin Glenn)	-	191	6	5,215	p154.8	2-10-55	Qab	P,w	S	Good.
11.114	James McCauley	-	145	6	5,150	117.1	do.	Qab	P,w	S	Windmill out of order.
12.414	Marvin Glenn	-	160+	6	5,155	p152.3	2- 9-55	Qab	P,w	D,S	Pumping about 2 gpm.
12.421	Santa Fe Railway Co.	-	-	-	5,160	-	do.	Qab	P,w	D	Supply well for railroad station house.
* 13.121	John Stark	1947	512 R	14	5,090	91	1954	Qab	T,e	Ind	Lee Childress; Stark Ranch No. 2; cased 305 ft; dd 124 ft at 370 gpm; T 21°C; most water found between 87 and 360 ft; leased to Kennecott Corp.
13.211	do.	1942	109	6	5,095	85 88.0	1942 2- 9-55	Qab	N	(S)	Lee Childress; cased 21 ft.
15.313	do.	1927	232.0	6	5,251	200 170.2	1939 2- 8-55	Qab	P,w	S	Lee Childress; Cherry Creek Well; cased 200 ft; water found at 200 ft.
18.441	do.	1927	348 R	5	5,416	328 310.5	1939 2-10-55	Qab	P,w	S	Rogers Bros.; Mesa Verde Well; cased 348 ft; good.
19.133	Howard Burns	-	420 R	6	5,470	399.8	2-11-55	Qab	P,w	D,S	Cased 12 ft; good.
23.444	John Stark	-	185+	6	5,145	158.0	2- 8-55	Qab	P,w	S	Good.
26.222	do.	-	194	6	5,173	182.3 181.9	10-31-39 2- 8-55	Qab	N	(S)	Dave Kelsey; Jess Place Well; good; main water from 186 to 196 ft.
28.124	Howard Burns	-	340 R	-	5,303	310	1955	Qab	P,w	D,S	Porter Place Well; good.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
*20.13.31.214	Walter Hightower	-	222	8	5,318	212.7	2-11-55	Qab	P,w	S	Good.
33.221	John Stark	1926	268 R	6	5,265	202.5 199.7	11- 1-39 2- 8-55	Qab	P,w	S	Lee Childress; Charco Well.
33.324	Walter Hightower	-	202	6	5,209	149.5 146.0	10-30-39 2- 8-55	Qab	N	(S)	Hogback Well; drilled 370 ft; east well of two.
33.324a	do.	-	-	6	5,209	-	do.	Qab	P,w	S	Could not get tape line past 18 ft.
35.434	John Stark	1917	206 R	6	5,135	158.9 156.1	10-31-39 2- 8-55	Qab	P,w	S	Ira Portwood; good.
35.434a	do.	-	200 R	6	5,135	155.9	do.	Qab	N	(S)	Cased 6 ft; about 150 ft sw of well 35.434.
*20.14. 1.432	James McCauley	-	405 R	6	5,460	345.0	2-17-55	Qab	P,w	S	Lee Childress; good.
2.424	Mangas Cattle Co.	1946	439±	6	5,519	410.0	do.	Qab	P,w	S	Do.
3.423	do.	Old	500+	5	5,640	500+	do.	Qab	N	(S)	Open and dry to 500 ft; strong current of air coming from hole.
* 6.433	Howard Burris	-	400 R	6	5,895	373.1	2-15-55	Qab	P,w	S	Little Cherry Well; cased 400 ft; good.
9.223	do.	-	550 R	6	5,702	522.4	2-15-55	Qab	P,w	S	Big Cherry Well; cased 550 ft.
13.422	do.	-	369 R	4	5,425	330	1955	Qab	P,w	S	Cherry Creek Well; water cascading from about 270 ft.
18.113	do.	-	23	60	5,928	17.3	2-16-55	Qal	P,w	S	Dug, concrete cribbing to 12 ft; bottomed in granite, went dry in 1954.
18.134	do.	-	214	5	5,900	41.1	do.	pCg	N	-	Drilled to 500 ft for mine supply; when tested was not adequate even for a windmill; drilled in granite near diabase dike.
19.332	do.	Old	32	7	5,825	Dry	2-15-55	(pCg)	N	(S)	
19.431	do.	Old	58	60	5,862	54.1	7-23-54	pCg	N	-	Dug, timbered mine shaft.
21.411	do.	1947	589 R	8	5,711	555.1	2-15-55	QTg	P,w	S	Good.
22.330	A. L. Frost	-	350 R	-	5,640	Dry	-	-	-	(S)	Two holes 300 and 350 ft deep were drilled in this area and no water was found in either hole.
30.124	Howard Burris	-	98	8	5,795	p 44.8	7-23-54	Qab(?)	P,w	S	Good; dd 7 ft at 4 gpm.
30.124a	do.	-	45	6	5,795	38.0	do.	Qab(?)	N	(S)	About 12 ft south of well 30.124.
32.233	McKay	Old	47+	72	5,675	43.3	2-23-55	pCg	N	(S)	Uncle Sam Mine; four shafts; water level measured in second from north; has been equipped with pump at some time.
* 33.334	Marie Frost	-	96 R	6	5,605	41.9	do.	Qab	P,w	D,S	Cased 40 ft; soil to 20 ft; quicksand to 30 ft; water-bearing granitic sandstone to 90 ft.
33.334a	do.	-	34	48	5,597	33.0	do.	Qab	N	(S)	A.L. Frost; dug 45 ft; concrete cribbing to 8 ft; penetrated stratum of quicksand 2 ft thick; bottomed in sand and boulders.
35.310	do.	-	450 R	-	5,540	Dry	-	-	-	-	An exploratory hole drilled in this general area found no water; destroyed.
20.15. 1.211	Harry McCauley	-	14	36	6,020	9.5	11-24-54	Qal	P	S	Dug; culvert cribbing; goes dry in periods of drought; bottomed in decomposed granite; water enters from alluvium.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
20.15. 1.422	Mary Posey	1948	119 R	6	5,955	46.1	2-23-55	QTg	P,w	D	Lee Childress; good.
1.422a	do.	Old	55 R	8	5,955	45.9	do.	QTg	P,w	(D)	Weak; about 20 ft N.W. of well 1.422.
2.224	Frank McCauley	-	118	72	6,200	Dry	3- 8-55	(pCg)	-	-	Apache Trail mine shaft; wood cribbing.
4.434	do.	-	31	48	6,517	p 29.9	do.	TKi	P,w	S	Dug, wood cribbing to 25 ft; weak; sucking air.
10.223	Albert Stephens	Old	24	36	6,265	19.2	do.	Qal	N	(D)	Coke Cabin Well; dug, wooden cribbing to 22 ft.
10.244	do.	-	42	6	6,220	12.4	11-29-54	pCg(?)	P,w	S	Water may be coming from alluvium overlying the granite.
10.244a	do.	-	35	60	6,220	12.5	do.	pCg	P,e	D,S	Dug, concrete curbing.
10.422	do.	-	18	60	6,220	14.8	do.	pCg	N	(D,S)	Water may be coming from alluvium overlying granite.
11.343	Frank McCauley	-	250 R	6	6,145	Dry	-	(pCg)	N	(S)	Lee Childress; drilling stopped at depth of 250 ft because no water found; hole was drilled mostly in granodiorite; caved.
12.142	do.	Old	8	6	6,047	3.3	11-29-54	Qal	N	(S)	Located in sandy wash; nearly filled with sand by recent floods.
12.311	do.	-	230 R	-	6,080	195	11-16-55	pCg	N	(S)	Found barely enough water for drilling; hole abandoned.
12.431	do.	-	110 R	-	5,980	-	do.	pCg	N	-	Not enough water found to justify equipping with windmill; hole abandoned.
13.113	Smith & Kane	-	153	6	6,070	118.2	do.	pCg	P,e	D,S	Good.
13.221	Frank McCauley	-	67	6	5,949	20.0	do.	Qal(?)	P,w	S	-
14.121	do.	-	121	6	6,115	31.1	3- 8-55	Qal(?)	P,w	S	Drilled 142 ft; casing crimped at 120 ft, cylinder set at that depth.
14.434	C. O. Prevost	1947	76	6	5,975	32	do.	Qal/pCg	P,e	PS	Lee Childress; cased 76 ft; wl fluctuates with seasons; commonly is 5 to 6 ft; higher for a while after floodflow in nearby Walnut Creek.
20.313	Frank McCauley	-	150	6	6,370	75.5	do.	pCg	P,w	S	Good; T 17°C.
21.211	do.	1948	141	6	6,262	p130.0	do.	pCg	P,w	S	Lee Childress; cased 146 ft; static wl 43 ft; will pump out, hauls water.
21.214	do.	-	22	48	6,230	Dry	do.	(pCg)	N	(S)	Dug.
21.244	do.	Old	-	72	6,150	10.0	do.	pCg	N	-	Dug, prospect shaft in granite; water may be flood wash or rain accumulation.
22.233	do.	Old	28	48	6,070	13.0	do.	Qal	N	(D,S)	Dug, wood cribbing.
23.133	do.	(1890	29 R	60	6,018	15.4	3- 7-55	Qal	P,w	S	Dug, wood cribbing; weak but has never gone dry; west well of three.
23.133a	do.	-	163 R	6	6,020	40	3- 8-55	Qal(?)	P,e	D,S	Lee Childress; first water found at 20 ft; well at house.
23.133b	do.	-	39	72	5,995	18.4	do.	pCm	P,w	S	Dug, prospect shaft; east well of three.
23.142	C. O. & Fred Prevost	(1912)	100 R	10	5,970	22.5	3- 1-55	Qal	J,e	D,S	Pasco; dug, deepened by drilling, cased to 100 ft; bottom 10 ft drilled in in rock; will pump down to bottom of pipe at 60 ft.
23.214	R. T. Crosby	1953	110 R	6	5,963	p 39.6	do.	pCg	J,e	D,S	Lee Childress; cased 3 ft; nearby mine shafts contain water.
23.223	D. V. Tullock	Old	24+	72	5,941	21.1	3- 1-55	pCg	N	N	Dug, wood cribbing to 12 ft; prospect shaft.
23.231	C. O. & Fred Prevost	-	69	6	5,955	22.8	do.	Qal	P,w	(D,S)	-

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
20.15.24.133	D. V. Tullock	Old	22	72	5,920	11.2	3- 1-55	pEg	N	-	Dug, prospect shaft.
24.143	Howard Burris	1953	40 R	6	5,898	p 36.2	7-23-54	pEg	P,e	D,S	Bob Hooker; cased 40 ft; static wl is about 13 ft; T 17°C.
24.143a	do.	Old	19	8	5,898	17.7	do.	Qal	P,w	S	Dug, backfilled around riveted casing; will pump out; south well of two.
24.314	do.	1955	95	4	5,970	79.9	2-24-55	pEg	N	-	Core-hole 37, Inez claim; western of 5 uranium prospect holes; on crest.
24.314a	do.	1955	280 R	4	5,942	56.2	do.	pEg	N	-	Core-hole 2, Inez claim; second from west of 5 prospect holes; on slope.
24.323	do.	1955	220 R	4	5,920	25.5	do.	pEg	N	-	Core-hole 10, Inez claim; eastern of 5 prospect holes; in bottom of draw.
24.421	do.	-	80 R	6	5,855	22.2	7-23-54	Qal	Ts,e	D,S	Good.
24.421a	do.	Old	50	8	5,856	21.7	do.	Qal	N	(S)	About 100 ft N.W. of well 24.421.
25.312	do.	1955	320 R	4	6,000	205.5	2-24-55	pEg(?)	N	-	Talcacite core-hole 4; uranium prospect.
26.443	Harry McCauley	1947	56	6	5,815	25.0	3- 1-55	Qal	P,w	D,S	North well of two.
26.443a	do.	-	26	6	5,815	24.8	do.	Qal	N	-	Wooden casing to 4 ft.
28.411	do.	Old	98	6	6,081	49.9	3- 8-55	pEg(?)	P,w	S	-
* 28.424	do.	1951	42 R	6	6,030	p 26.5	do.	Qal	P,w	D,S	Lee Childress; dd ½ ft at 4 gpm; sand and gravel overlying granite at about 42 ft; T 17°C; southwest well of three.
28.424a	do.	-	31	6	6,032	27.9	do.	Qal	N	-	Dug, backfilled around steel casing; about 12 ft north of well 28.424.
28.424b	do.	-	31	48	6,028	27.3	do.	Qal	N	-	East well of three.
29.224	Charles Russell	1925	112 R	5	6,200	55.2	do.	pEg	P,w	D,S	Russel Bros.; cased 60 ft; water found in soft zones in granite at 72, 92, and 112 ft; water rose in casing; never has pumped out.
29.232	do.	-	44	4	6,180	36.8	do.	Qal	N	(S)	Russel Bros., dug, backfilled around casing; dug 2 ft into granite; not strong but does not pump out.
31.212	Harry McCauley	1953	253 R	8	6,120	62	10-23-53	Qal/pEg	N	(S)	Lee Childress; yield 1 gpm at depth of 190 ft, 3 gpm at 253 ft; alluvium to 70 ft; decomposed granite, 70 to 225 ft, hard granite to 253 ft.
34.212	do.	(1918)	9	36	5,925	Dry	3- 9-55	(Qal)	N	(S)	Dug to 25 ft; filled by flood in 1954; wl was 22 ft prior to flood.
36.443	do.	-	51	6	5,689	35.9	2-28-55	Qal	P,w	S	Good.
*20.16.13.111	U.S. Forest Service	-	19	72	6,740	8.5	9-25-55	Qal	N	(D)	Dug, concrete cribbing; supplied solar observatory; beside creek channel.
17.214	Frank McCauley	-	31	6	5,548	24.3	4-13-55	Qal	N	(D,S)	Not used recently.
17.434	U.S. Forest Service	(1936)	12	54	5,620	8.0	3-24-55	Tr	N	-	Dug, concrete cribbing; supplied CCC camp; beside creek channel.
21.413	Grace Copeland	(1930)	56	8	5,790	18.5	3-22-55	Qal	N	(D)	Drilled and cased 87 ft to supply gold camp; never equipped.
25.433	Dick Cureton	(1909)	00 R	6	6,242	148.8	3-11-55	QTg	N	(S)	Yield about 30 gpm.
26.322	do.	-	33	60	6,190	p 31.2	do.	Qal	P,w	S	Dug, wooden cribbing; sucking air at time of visit.
20.17. 1.442	Frank McCauley	1939	194 R	6	5,560	63	7-25-39	Qal/QTg	P,w	S	Lee Childress; cased 194 ft; weak; drilled 35 ft N.E. of old 140 ft well that caved after being deepened to 500 ft in conglomerate without increasing yield.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
20.17. 3.223	Frank McCauley	-	257	6	5,430	22.4	3-30-54	QTg	P,w	S	Pumping 3 gpm; off for 15 minutes before making wl measurement.
13.332	Brock Cattle Co.	1965	500	16	5,276	161.1	11-23-65	Qab	T,d	(Irr)	Dick Childress; not yet in use at time of visit.
† 22.242	do.	1956	300 R	12	5,172	156.1	9-21-56	Qab	T	Irr	Lee Childress; cased 246 ft; yield about 400 gpm.
* 23.141	Jim Cureton	(1915)	151	6	5,190	132.8	4-13-55	Qab	P,w	S	R. W. Cureton; strong.
* 36.344	Damon Dunagon	-	21.3	48	5,440	11.8	3-23-55	Qal	P,w	(D,S)	Dug, concrete cribbing; not used recently.
20.18. 2.333	Sherwood Culbertson	1941	731 R	6	4,797	694	4-30-41	Qab	P,w,g	S	In Hidalgo Co.; 1 mi south of Grant Co. line; Lee Childress; cased 731 ft; mostly in sandy conglomerate, some clay; water found at 700 ft rose to 694.
20.19.15.312	Fuller Ranch	1917	361	5	4,347	335.6	5-20-54	Qab	P,w	D,S	In Hidalgo Co.; 2.6 mi south of Grant Co. line; Graham; dependable; bedrock found at 376 ft; rhyolite plug exposed 1.7 mi northeast of ranch; T 27°C.
21.11. 5.112	-	-	100+	6	4,875	98.5	1-25-55	Qab	P,w	D,S	In Luna Co.; 200 ft south of Grant Co. line.
21.12. 2.333	Frank McCauley	Old	70	48	4,871	65.7	2- 9-55	Qab	N	(D,S)	In Luna Co.; 1 mi south of Grant Co. line; dug, no cribbing; Bootney Place Well; rept supplied adequate water for profitable still making good-quality bootleg during the 1920's.
3.433	do.	-	54	6	4,884	32.1	do.	Qab	N	(S)	In Luna Co.; 1 mi south of Grant Co. line; floodwater went over this well in 1954 - water may be perched on mud that poured into casing.
* 3.433a	do.	-	111	5	4,884	p 67.3	do.	Qab	P,w	S	In Luna Co.; 1 mi south of Grant Co. line; pumping 3 gpm; T 17°C.
4.114	do.	-	105	8	4,930	61.0	2- 8-55	Qab	N	(S)	In Luna Co.; 0.2 mi south of Grant Co. line.
4.142	do.	-	92	8	4,925	63.1	2- 9-55	Qab	N	(S)	In Luna Co.; 0.4 mi south of Grant Co. line; cased 8 ft.
21.14. 5.121	do.	Old	40	6	5,623	p 33.3	2-23-55	Qal	P,w	S	East well of two about 15 ft apart; sucking air.
5.121a	do.	Old	34	5	5,623	28.9	do.	Qal	N	(S)	West well of two.
5.223	A. L. Frost	Old	21	36	5,585	19.4	do.	Qal	P,w,g	S	A. L. Frost; dug, wood cribbing.
5.331	McDonald Bros.	-	66	8	5,577	27.9	2-28-55	Qal	N	(S)	About 400 ft east of well 6.442.
6.442	do.	1948	200 R	6	5,578	30	1954	Qal	P,w	S	Lee Childress; weak but never pumps out; did not hit bedrock.
8.122	Homer Arnn	Old	19	48	5,534	p 17.7	2-24-55	Qal	P,w	S	Dug, concrete cribbing; sand is damp in nearby creek channel.
8.234	A. L. Frost	Old	25	7	5,520	19.5	do.	Qal	P,w	D,S	Dug, backfilled around casing.
16.412	Bill McMillen	-	38	6	5,406	16.8	1968	Qal	P,w	S	Also waters garden; house well is about 30 ft north.
16.423	do.	-	35	6	5,399	15	1968	Qal	P,w	S	North well of two.
16.441	do.	-	20	6	5,399	15	6-24-68	Qal	P,w	S	South well of two.
24.343	Elmo McMillen	1968	385	16	5,260	121.1	do.	QTg	T,d	Irr	B. P. Cody: dd 97 ft after 8 hrs test pumping at rates starting at 990 gpm and ending at 1,810 gpm; the pumping level reptd will level off within 10 minutes at any given pumping rate; pump bowls set at 300 ft.
25.111	do.	-	166	6	5,243	118	do.	Qal/p-C	P,w	S	Dick Hayes; west well of two.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
21.14.25.324	Elmo McMillen	-	139	6	5,205	100	4-14-68	Qal/p6	P,w	S	Hay Meadow Windmill; west well of two.
25.324a	do.	Old	-	6	5,205	73.0	6-24-68	do.	N	(S)	East well of two.
27.422	A. L. Frost	Old	30	36	5,259	25	4-19-68	p6	P,w	S	A. L. Frost; dug, wood cribbing.
21.15. 1.224	McDonald Bros.	(1910)	60 R	8	5,644	-	-	Qal	P,w,g	S	Rogers; dug, backfilled around casing; wl declined prior to summer rains of 1954 but wl rose within 48 hours after first big flood; west well of two.
1.224a	do.	1953	62 R	8	5,644	27.5	3- 1-55	Qal	P,w	D,S	Joe Hooker; east well of two.
1.242	do.	(1890)	32	-	5,638	24.2	do.	Qal	P,g	S	Dug, cinderblock cribbing; went dry in summer of 1953; cleaned out and cribbed; water came back strong after first summer rains of 1954.
6.213	Harry McCauley	-	170 R	6	5,945	113.9	3-11-55	QTg	P,w	S	McKinney Bros.; cased 170 ft; good; an old well with 6-in. casing, about 50 ft to southeast, is dry at total depth of 108 ft.
8.341	do.	-	169	6	5,719	47.9	4-12-56	QTg	P,w	S	T 18°C.
10.112	do.	1946	275 R	6	5,842	210.7	3- 9-55	QTg	P,w	S	Dick Childress; cased 275 ft; dd 6.3 ft at 4 gpm; recovery nearly complete in 2 hrs.
18.134	do.	-	55	7	5,650	45.3	4-11-56	QTg	P,w	S	Good.
18.321	do.	Old	47	24	5,638	Dry	do.	(Qal)	N	(D,S)	Dug, rock cribbing.
19.333	State of New Mexico (Della Cureton)	(1880)	19	36	5,650	Dry	do.	(Qal)	N	-	Dug, wood cribbing; went dry in past few years; Indian ruins nearby.
20.141	Della Cureton	Old	58	6	5,539	50.6	do.	Qal	P,w	(D),S	Never has failed; 12 to 14 in. gold fish in overflow ground tank.
20.333	do.	-	24	24	5,580	Dry	do.	(Qal)	N	(D,S)	Dug, rock cribbing.
20.343	do.	-	42	6	5,557	31.2	do.	Qal	P,w	S	Good.
21.341	C. O. & Fred Prevost	Old	29	6	5,479	21.1	4-12-56	Qal	P,w	(D),S	Nearby dug well dry at depth of 12.4 ft; erosion around tree trunks adjacent to stream channel show creek has lowered bed 10 to 15 ft in recent years.
21.423	do.	-	43+	6	5,503	-	do.	Qal	P,w	S	Could not get tape line past 43 ft, dry at that depth.
27.443	Mildred Morrow	-	14	6	5,380	p 12.9	do.	Qal	P,w	D,S	Pumping ½ gpm and sucking air but never has gone dry; T 18°C.
28.234	C. O. & Fred Prevost	1955	150	16	5,430	8.5	do.	Qal	C,g	Irr	Paul Jones; yield 100 gpm when tested.
30.222	Della Cureton	Old	19	42	5,595	Dry	4-11-56	(Qal)	N	(D,S)	Dug, concrete cribbing.
31.321	do.	-	100	6	5,705	p 80.6	do.	p6g	P,w	S	Lee Childress; wl rising about 0.3 ft per min 15 min after mill shut down; recovery 3.5 ft at that time; east well of two.
33.223	do.	1957	386 R	5½	5,500	125	12-16-57	Tr	-	(S)	Lee Childress; cased 386 ft; yield about 4 gpm; perlite in cuttings.
33.333	Robert Cureton	1957	101	6	5,525	34.2	6- 7-68	Qal/p6g	P,w	S	Lee Childress; Smith Windmill; wl restd 16 ft when drilled, yield 5 gpm.
35.311	McDonald Bros.	1948	40 R	16	5,349	18.2	4-12-56	Qal	T,b	Irr	Lee Childress; yield 800 gpm on test.
21.16. 2.434	O. E. Grubb	-	25	36	5,830	p 24.5	3-11-55	Qal	P,e,w	D,S	Dug, wood cribbing; No. 1 house well-north well of two.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
21.16. 8.313	State of New Mexico (Della Cureton)	-	37	7	5,898	p 36.1	4-10-56	Qal	P,w	S	Pump sucking air but yielding no water; subsequently destroyed by flood.
9.331	Robert Cureton	1959	250	6	6,125	175.2	6- 7-68	pGg	P,w	S	Lee Childress; Divide Windmill
11.212	O. E. Grubb	-	18	24	5,820	13.9	3-11-55	Qal	P,w	D,S	Dug, tile cribbing; No. 2 house well-south well of two.
22.342	Robert Cureton	-	250	6	6,043	157.1	6- 7-68	Qal/pGg	P,w	S	Lee Childress; Whitetop Windmill.
* 24.322	Della Cureton	-	76	7	5,715	52.1	4-10-56	Qal/TKi	P,w	D,S	Dug, backfilled around casing; dd 4.8 ft at 5 gpm; recovery complete in 48 min; T 16°C.
24.322a	do.	-	68	24-8	5,712	53.2	do.	Qal/TKi	P,w	S	Dug to 51.4 ft, drilled to 68.3 ft.
24.322b	do.	-	76	6	5,710	p 53.6	do.	Qal/TKi	P,w	S	Intermittent pumping before measurement; recovery 2 ft after 10 min.
31.143	Damon Dunagon	-	43	-	5,850	38.7	5-26-55	Qal/pGg	P,w	D,S	Dug; good; does not pump out; T 18°C.
* 31.144	do.	-	44	-	5,875	38.1	do.	Qal/pGg	N	(S)	Dug.
22.13.28.341	Jess Thorn	-	505 R	-	4,932	482.0	6- 8-55	Qab	P,w	S	In Luna Co.; 2.25 mi east of Grant Co. line; dd below 490 ft.
22.14. 1.443	A. L. Frost	-	615 R	6	5,069	554.4	6-16-55	QTg	P,w	S	Rock cuttings on waste pile indicate well drilled entirely in sediments.
15.122	McDonald Bros.	1945	737 R	5½	5,204	712.4	do.	QTg	P,w	S	Lee Childress; cased 737 ft; yield 10 gpm on bailer test; main water 715 to 725 ft; drilled in gravel to 550 ft; then in conglomerate.
19.121	do.	-	40	6	5,116	30.6 35.1	6-17-55 8-24-56	Qal	P,w	S	Floodflow in nearby channel will cause wl to rise about 5 ft.
29.241	State of New Mexico (McDonald Bros.)	-	147	8	5,120	119.0	6-14-55	Tr	N	(D)	Supplied water for perlite mine operation.
30.424	McDonald Bros.	-	36	6	5,034	30.2 29.5	6-17-55 8-24-56	Qal	P,w	S	Water level rises sharply after floodflow in streambed.
* 36.223	State of New Mexico (Jess Thorn)	-	545	6	4,972	p522.7 517.2	6- 3-55 6- 8-55	Qab	P,w	S	Pumping 2.5 gpm.
22.15. 2.123	State of New Mexico (McDonald Bros.)	-	20	8	5,290	19.4	4-12-56	Qal	N	D,S	-
2.432	McDonald Bros.	Old	15	6	5,249	8.6	do.	Qal	P,w	S	Dug, backfilled around casing; good; T 16°C.
9.232	Jess Thorn	1897	25	10	5,406	21.1	8-23-56	pGg	P,w	(S)	Not in use; windmill over mine shaft 200 ft SE provides stock water.
12.134	McDonald Bros.	(1936)	20	30	5,210	17.4	4-12-56	Qal	N	(D)	Dug, culvert cribbing; supplied water for CCC camp.
12.344	do.	-	35	7	5,200	18.7	6-21-55	Qal	P,w	D,S	Lee Childress; will pump out; wl may rise 12 ft after floodflow in channel; found volcanic rock (perlite) at 35 ft.
* 13.232	do.	-	23	6	5,270	14.8	6-17-55	Qal	P,w	S	Lee Childress; drilled to 38 ft in old dug well, backfilled around casing; will pump out during drought; T 16°C.
17.322	Carrie Bounds	1916	10	72	5,440	9.5	8-23-56	Qal	P,w	D,S	Dug to 80 ft, no cribbing; filled by floods; wl fluctuates seasonally.
† 17.322a	do.	1948	425 R	6	5,438	72.9	do.	Qal/pGg	P,w	D,S	Lee Childress; yield 1.5 gpm and static wl 16.2 ft when drilled; will suck air if pumped steadily; mill shut off about 1 hour before measurement; water found at 17 ft and possibly 115 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
22.15.19.222	State of New Mexico (Jim Bounds)	1966	45	6	5,440	20.9	8-24-56	Qal/p6g	F,w	D,S	Harry Wilders; cased 50 ft; yield about 15 gpm; granite at 20 ft.
* 26.134	Jess Thorn	Old	21	-	5,149	14.1	6-10-55	Qal	P,w	S	-
28.444	do.	-	35	6	5,176	17.3	do.	Qal	P,w	S	Across draw from abandoned dug well; granite exposed 70 ft away.
35.112	do.	-	46	6	5,106	p 23.1	6-10-55	Qal	P,w	S	Volcanic rocks exposed in draw near well.
† 22.16.14.243	Carrie Bounds	1956	269 R	6	5,745	52.1	8-24-56	p6g	P,w	S	C. L. Wright; cased 19 ft; yield about 6 gpm on bailer test.
15.344	Clarence Bilbo	Old	40	-	5,722	Dry	6- 3-68	(p6m)	P,w	(S)	Dug, Jones Well.
17.131	-	-	-	-	5,580	-	-	Qal	P,w	S	Walker Windmill.
18.331	Freeman McWhorter	-	36	9	5,240	33.7	5-17-55	p6m	P,w	S	Dug; backfilled around casing; will pump out.
* 20.423	Bilbo and Johnson	-	50+	-	5,390	42.8	5-13-55	p6g	P,w	S	Dug, dry in winter; adjacent 7-in. cased hole dry at total depth of 24 ft.
27.333	Carrie Bounds	1935	85	6	5,325	81.0	do.	p6g	P,w	S	Water level lower appreciably in time of drought.
34.444	Jenaro Bilbo	-	24	-	5,097	p 22.4	do.	p6g	P,w	S	Dug, may go dry in winter.
36.313	Clarence Bilbo	1956	130	6	5,247	85	6- 3-68	Qal/p6m	P,w	S	Hideout Windmill.
22.17. 2.222	Freeman McWhorter	-	100 R	-	5,450	p 85.2	5-17-55	p6g	P,w	D,S	In Hidalgo Co., 1.1 mi west of Grant Co. line; dug.
2.222a	do.	-	98 R	6	5,450	51.4	do.	p6g	N	N	In Hidalgo Co., 1.1 mi west of Grant Co. line; will pump out.
13.433	do.	-	108	9	5,280	102.4	5-16-55	p6m	N	(S)	In Hidalgo Co. ½ mi west of Grant Co. line; drilled to 250 ft; south well of three.
13.433a	do.	-	200	9	5,280	48.6	do.	p6m	N	(S)	In Hidalgo Co. ½ mi west of Grant Co. line; middle well of three.
23.13. 9.121	J. N. Parker	-	410	6	4,806	p388.6	6- 3-55	Qab	P,w	S	In Luna Co. 2.3 mi east of Grant Co. line.
18.143	Jess Thorn	-	415+	6	4,800	p397.1	6- 7-55	Qab	P,w	S	In Luna Co. 0.3 mi east of Grant Co. line.
19.444	George Jarrell	-	347	-	4,734	330.8	6- 2-55	Qab	P,w	S	In Luna Co. 1 mi east of Grant Co. line; not used recently.
29.343	J. N. Parker	-	328	6	4,697	318.0	do.	Qab	P,w	S	In Luna Co. 1.3 mi east of Grant Co. line; Sibling Well.
23.14. 7.444	George Jarrell	1918	30	-	4,870	27.0 27.4	10-30-39 5-31-55	Qal	P,w	D,S	Dug; granite found at 34 ft; west well of two.
7.444a	do.	-	28	-	4,870	p 27.0	do.	Qal	P,e,w	D,S	Dug 30 ft; did not reach granite.
* 8.211	Jess Thorn	-	19	-	4,950	17.0 p 16.4	10-30-39 6- 2-55	Qal	P,w	-	Dug; T 17°C; north well of 2; south well also dug, 18 ft deep.
17.111	George Jarrell	-	32	-	4,880	31.6	5-31-55	p6g	P,w	S	Dug; wl rises in fall of year, bedrock found at 6 ft.
19.231	do.	-	35	-	4,805	p 32.0	do.	Qal	P,w	S	Dug; wl rises in fall of year, an older dug well is located 15 ft east.
26.222	do.	-	52	-	4,760	Dry	6- 8-55	(Qab)	N	(S)	No casing, size of pile of drill cuttings indicates hole may have been as much as 200 ft deep in bolson fill.
* 31.143	State of New Mexico (George Jarrell)	-	425	-	4,782	p188.9	4-27-55	Qab	P,w	S	Meyers; Big Box Windmill; weak.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
23.15. 2.332	State of New Mexico (Jim Bounds)	-	36	6	5,002	19.4	5-27-55	Qa1	P,w	S	Igneous rock crops out 50 ft east of well.
4.112	Jim Bounds	-	70	6	5,135	45.3	5-26-55	p6g	P,w	S	Granite crops out 60 ft east of well.
9.332	Clarence Bilbo	-	-	6	4,981	p 60.3	6- 3-68	p6g	P,w	S	Lucky Windmill.
22.143	Bilbo and Johnson	-	29	6	4,830	Dry	4-27-55	(Qab)	N	(S)	Hole may have caved.
22.332	do.	-	96	7	4,796	p 87.7	4-26-55	Qab	P,w	S	Will pump out.
25.432	State of New Mexico (Bilbo & Johnson)	-	76	7	4,742	40.6	4-27-55	Qab	M	(S)	East of present windmill; old dug well a few feet to south.
* 25.432a	do.	-	165	-	4,742	p 84.0	do.	Qab	P,w	S	Will pump out; wl recorded to 73 ft in 40 min, still rising; T 21°C.
27.244	Clarence Bilbo	-	175	6	4,815	70	6- 3-68	Qab	P,w	S	Ball Windmill; yields about 3 gpm, pump set at 164 ft.
* 28.234	Bilbo and Johnson	-	96	7	4,750	p 62.0	4-26-55	Qab	P,w	D,S	Good, T 20°C.
28.234a	do.	-	95 ⁺	-	4,750	-	do.	Qab	P,g,w	D,S	Good.
W 31.111	Bureau of Land Management (Bilbo & Johnson)	-	470	6	4,659	p442.8	4-25-55	Qab	P,w	S	Good; T 28°C.
*23.16.28.124	State of New Mexico (Bilbo & Johnson)	-	297	7	4,455	p260.4	4-25-55	Qab	P,w	S	Drilled to 350 ft; good; T 21°C.
*23.17.25.211	Bilbo & Johnson	-	161	6	4,299	120.8	do.	Qab	P,w	S	In Hidalgo Co. 0.5 mi west of Grant Co. line; good.
25.444	do.	-	129	5	4,299	117.0	4-11-55	Qab	P,w	S	In Hidalgo Co. 200 ft west of Grant Co. line; good.
24.13.19.131	State of New Mexico (George Jarrel)	1915	231	-	4,554	188 193.9	9-12-13 3-14-55	Qab	P,w	D,S	In Luna Co. about 100 ft east of Grant Co. line; west well of three; water found in clay and gravel at 209 ft.
* 19.312	do.	-	252	8	4,554	p219.4	do.	Qab	P,w	D,S	In Luna Co. about 170 ft east of Grant Co. line; Deming Drilling Co.; middle well of three.
24.14.12.333	do.	-	370 R	-	4,614	-	4-11-55	Qab	P,w	S	No in use, mill broken, east well of two.
* 12.333a	do.	-	287	6	4,614	231.9	do.	Qab	P,w	S	Rept drilled to 360 ft; T 24°C; west well of two.
13.433	George Jarrell	1917	198	6	4,571	230 Dry	1939 3-22-55	(Qab)	P,w	(D,S)	Pushel & Tilch; drilled 350 ft; believed caved above wl.
20.321	do.	1936	285	6	4,587	265.4 265.0	10-25-39 3- 8-55	Qab	P,w	S	J. F. Tilch; good; never has pumped out.
24.232	do.	1916	270 R	9	4,560	209.1	10-23-39	Qab	N	(D)	C. W. Pushel; Wilna Station; was good when in use.
25.242	J. T. Baker	-	68	12	4,519	Dry	3- 9-55	(Qab)	N	(S)	No casing; drilled 400 ft; did not get enough water for stock well.
28.222	Claude Bowlin	1933	265	-	4,582	p238.7	3-14-55	Qab	P,e	D,PS	Wright; drilled about 300 ft; pump on 3 min when wl measured.
* 29.423	Connor & Cox	1938	254	4	4,535	223.7 223.4	10-25-39 3- 8-55	Qab	P,w	S	A. P. Rosser; cased 40 ft; good; main water found 230 to 232 ft; T 22°C.
32.444	State of New Mexico (J. T. Baker)	-	210	6	4,499	p191.7 188.8	10-24-39 3- 8-55	Qab	P,w	S	Good; never has pumped out.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATI-GRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
24.14.34.244	Claude Guess	1939	189 R	6	4,511	128.8 140	10-23-39 3- 9-55	Qab	P,w	D	C. W. Ford; will pump out.
34.333	do.	-	240	6	4,497	p187.8	3- 8-55	Qab	P,w	S	C. W. Ford; drilled 325 ft; good; main water at 240 ft.
24.15. 8.132	S. C. Phillips	-	400 R	-	4,583	300	4-1955	Qab	P,w	S	-
13.444	State of New Mexico (George Jarrell)	1918	305	5	4,604	257.8 245.2	10-29-39 5-12-55	Qab	P,w	S	-
17.334	J. M. Phillips	-	420	-	4,536	333.2	4-26-55	Qab	P,g,w	D,S	-
19.234	Kipp Estate	-	400 R	-	4,506	300	1913	Qab	P,w	S	Unable to get measuring line past 7 ft; water found at 301 ft rose 50 ft.
† * 19.421	Southern Pacific Co.	Old	610 R	-	4,506	300 305.5	do. 3- 3-55	Qab	T,r	RR	One of two wells, 25 ft apart; the two wells together rept would yield about 170 gpm during the pumping periods of 8 to 14 hrs a day.
19.421a	do.	Old	610 R	-	4,506	300	1913	Qab	P	RR	One of two well 25 ft apart; equipped with stream pump; not used for many years.
22.321	State of New Mexico (J. M. Phillips)	Old	400 R	-	4,545	200.4	11- 2-39	Qab	N		Weak; new well drilled to 400 ft, 1957; conglomerate at 230 ft, rock at 400 ft.
* 33.214	B. F. Hassell	1929	336 R	6	4,491	276 290	10-1939 3-10-55	Qab	P,g,w	D,S	Louis Ellison; cased 336 ft; good; T 24°C.
* 33.232	do.	(1939)	600 R	10	4,488	288.3	3-14-55	Qab	C,g	Ind	McBee Drilling Co; drilled to supply water for hiway construction; dd 90 ft at 400 gpm; T 20°C.
† 24.16. 7.124	Collins Walker	1967	150+	-	4,307	150.4	1- 3-68	Qab	T,b	Irr	McAfee.
7.344	do.	1960	1,004	16	4,313	140.0	6- 8-60	Qab	T,b	Irr	Green Machinery Co., yield was 300-400 gpm at original depth of 640 ft, and about 875 gpm after deepening to 1,004 ft in late 1960; wl rose when deepened.
8.212	C. J. McBee	1966	1,000	20-12	4,359	-	-	Qab	T,b	Irr	L. C. Jones; perf. 554 to 900 ft.
† 8.322	do.	1966	960	16	4,346	176.3 174.6	11- 8-66 1- 3-68	Qab	T,b	Irr	W. B. McAfee; cased 594 ft.
† 8.344	do.	1960	1,000	16	4,343	151.0 162.6	12-21-60 11- 8-66	Qab	T,b	Irr	McBee Drilling Co.; plan to drill to 1,500 ft.
9.122	Jessie Glaze	Old	300	-	4,401	-	-	Qab	P,w	S	Glaze Windmill; had been used with pump jack to irrigate about 2 acres of fruit trees (now dead).
13.424	Tom Cox	-	317	-	4,510	p300.8	4-26-55	Qab	P,w	S	-
* 17.111	Kipp Estate	1948	166 R	6	4,332	145 142.6	1949 4-11-55	Qab	P,w	S	Brown & Sedford; Cooper Well; dug to 130 ft; drilled to 175 ft; clay from 131 to 150 ft; gravel, 150 to 156 ft, clay 156 to 160 ft, water bearing sand, 160 to 175 ft; T 20°C.
23.311	Tom Cox	-	-	-	4,422	-	4-12-55	Qab	P,w	S	-
27.234	Kipp Estate	-	215	6	4,391	198.2	do.	Qab	P,g,w	S	Kelly Well; will pump out using pump jack with gasoline engine.
30.122	Leo Ruzecka	1964	805	16-12	4,311	128.8	12-30-64	Qab	T,b	Irr	McAfee and Wright; cased 16 in. to 350 ft, 12 in. to 805 ft; well no. 5.
30.222	Rex Kipp, Jr.	1964	805	16-12	4,321	134.8 150.0	6-24-64 12-28-66	Qab	T,b	Irr	McAfee and Wright; cased 16 in. to 384 ft, perforated 184 to 384 ft, cased 12 in. 363 to 805 ft; perforated 535 to 805 ft; well no. 1.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
24.16.30.223	Leo Ruzecka	1967	-	-	4,314	-	-	Qab	T,b	Irr	-
30.322	Rex Kipp Jr.	1963	800	16-12	4,304	117.2 127.2	12-31-63 12-28-66	Qab	T,b	Irr	McAfee and Wright; 354 ft of 16 in. casing, 267 ft of 12 in.; well no. 2.
30.342	Leo Ruzecka	1966	796	16-14	4,300	-	-	Qab	T,b	Irr	Berl Wright; 500 ft of 16 in. casing, 300 ft of 14 in.
30.422	do.	1963	650+	16	4,315	133.7	11-13-63	Qab	T,b	Irr	McBee Drilling Co. to 650 ft; cased to 350 ft; rept deepened by McAfee and Wright; well no. 6.
30.442	do.	1963	800+	16	4,310	133.7 142.1	10-31-63 1- 5-66	Qab	T,b	Irr	McAfee and Wright to 800 ft; cased to 356 ft, perforated 156 to 355 ft; rept deepened by Wright in 1966; well no. 6½.
30.443	do.	-	-	16	4,302	153.7	1- 3-68	Qab	T,b	Irr	-
31.122	L. L. Darr	1957	597 R	16	4,295	102.2	1-11-58	Qab	T,b	Irr	Jim McBee; cased 597; perforated from 103 to bottom; dd 125 ft at 1,200 gpm.
31.123	do.	1962	163	6	4,289	103.2	1-28-63	Qab	S,e	D	McBee Drilling Co.
† 31.124	Mildred Johnson	1957	598	16	4,293	100	1957	Qab	T,b	Irr	Jim McBee; cased to 598 ft, perforated 100 to 598 ft; rept yield 1,550 gpm from 250 ft pumping level, 1,200 gpm from 229 ft pumping level.
31.222	Leo Ruzecka	1963	510	20	4,307	100.2 124.4 139.6 148.2	3-25-63 11-13-63 12-28-66 1- 3-68	Qab	T,b	Irr	McBee Drilling Co.; cased to 505 ft, perforated 275 to 502 ft; well no. 3.
31.322	do.	1965	810	16	4,290	140.6 133.8 125.3	1- 5-66 12-28-66 1- 3-68	Qab	T,b	Irr	Bert Wright; pump connected to power in spring, 1966; well no. 7.
31.422	do.	1963	650	16	4,300	121.5	10-31-63	Qab	T,b	Irr	McBee Drilling Co.; cased to 322 ft; well no. 4.
24.17.35.232	Kipp Estate	-	92 R	6	4,263	76 72.3	1913 3-17-55	Qab	P,w	S	L. B. Wells; in Hidalgo Co., 1.3 mi west of Grant Co. line; west well of two.
25.13.16.344	Frank Porcher	-	170+	8	4,488	162.3	6- 7-55	Qab	P,w	S	In Luna Co., 2.2 mi east of Grant Co. line.
25.14. 3.111	Wallace Moore	1934	270 R	8	4,495	p188.9	3- 8-55	Qab	P,w	D,S	Bud Arrington; cased 270 ft; good; main water-bearing bed at 240 ft.
12.321	J. T. Baker	1947	181	6	4,456	p150.1	3- 9-55	Qab	P,w	S	C. J. McBee; much white mineral encrustation on end of discharge pipe.
15.312	Wallace Moore	1928	146	8	4,428	118.5 119.7	10-28-39 3- 4-55	Qab	P,w	S	Good; much white mineral encrustation on end of discharge pipe.
w 16.432	State of New Mexico (Connor & Cox)	Old	160	6	4,420	112.2	do.	Qab	P,w	S	Good; south well of two; T 18°C.
16.432a	do.	-	140+	6	4,420	p126.9	3-29-55	Qab	P,w	S	Pumped 10 gpm steadily for 3 weeks to supply hiway construction.
18.222	do.	1933	278	6	4,435	201.9 p220.1	10-29-39 3- 4-55	Qab	P,w	S	A. P. Rosser; good; deepened from 265 ft. after 1939.
21.241	State of New Mexico (Wallace Moore)	Old	-	12	4,432	126.4	10-28-39	Qab	N	(S)	Well found filled and casing pulled in 1955.
* 31.214	Diamond A Ranch	-	254	6	4,428	220.9 220.0	do. 3- 3-55	Qab	P,w	S	South Murray Well; will pump out; T 24°C.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
25.14.31.214a	Diamond A Ranch	-	240 R	6	4,428	234.3	3- 3-55	Qab	P,w	S	North Murray Well; will pump out; pumping just prior to measurement.
25.15. 4.444	State of New Mexico (J. T. Baker)	-	253	6	4,444	247.2	10-29-39	Qab	P,w	S	Good; dd 1.1 ft at 5 gpm after 25 min; mineral crust on discharge pipe.
6.222	R. B. May	-	242+	7	4,438	239.5	do.	Qab	P,w	S	Sucking air, pumping no water upon arrival at well; could not get past past 243 ft, dry at that depth; with mill shut off, wl recovered to 239.5 in one hour.
15.313	State of New Mexico (Wallace Moore)	-	230 R	8	4,402	199.4 p204.5	11- 2-39 3-24-55	Qab	P,w	D,S	Cased 230 ft; good after being deepened; north well of two.
15.313a	do.	-	231 R	6	4,400	197.7 p202.8	11-2-39 3-24-55	Qab	P,w	D,S	Good; south well of two.
24.243	do.	-	237	5	4,403	225 225.3	11- 2-39 3- 4-55	Qab	P,w	S	Drilled and cased to 240 ft, good since being deepened about 1938.
* 28.333	Ora Warren	1918	164	6	4,359	142.7	3-29-55	Qab	P,w	S	Never has pumped out; T 19°C.
31.411	Diamond A Ranch	Old	146 R	6	4,344	147	9-18-13 3-31-55	Qab	P,w	S	Never has pumped out; could not get tape line past 70 ft in 1955.
25.16. 2.244	State of New Mexico (Shelby Phillips)	1949	213 R	6	4,378	183.1	4- 7-55	Qab	P,w	S	Mimbres Valley Drilling Co.; good; main water-bearing bed at 202 ft.
W 6.414	do.	-	165	6	4,291	p108.7	4- 8-55	Qab	P,w	S	T 19°C.
* 22.111	Shelby Phillips	-	155 R	6	4,318	130.1	4- 7-55	Qab	P,w	D,S	Will suck air if pumped steadily; T 21°C.
22.111a	Kipp Estate	-	166	8	4,320	130 128.3	1913 4- 7-55	Qab	N	(RR)	Former supply well for Arizona and New Mexico R.R. (dismantled).
23.233	Ora Warren	1931	165	7	4,341	146.9	3-31-55	Qab	P,w	(S)	Good; pumping system out of order.
26.234	State of New Mexico (Diamond A Ranch)	Old	163 R	6	4,333	163 p134.3	9-18-13 3-31-55	Qab	P,w	S	Hudson Well; good; west well of two; east well filled.
* 28.221	Kipp Estate	-	140 R	6	4,315	94.3	4- 7-55	Qab	P,w	S	South Brockman Well; T 19°C.
* 28.221a	do.	-	-	-	4,315	91	1913	Qab	P,w	N	North Brockman well; not currently in use.
25.17.11.342	Jim Hall	-	-	6	4,317	74.3	3-17-55	Qab	P,w	D,S	In Hidalgo Co., 1.6 mi west of Grant Co. line.
26.13.19.333	Frank Porcher	-	160	5	4,862	81.7	6- 9-55	T1	N	(S)	In Luna Co. just over Grant Co. line.
26.14.23.212	Tom Ellender	-	300	8	4,838	276.5	6-12-68	T1	P,w	S	Turkey Knob Windmill.
* 28.422	State of New Mexico (Diamond A Ranch)	1949	550 R	5	4,749	380+	3- 2-55	T1	P,w	S	Youngblood; Baker Well; could not get line below 380 ft, muddy at that depth; probably has caved around column; never has pumped out T 21°C.
*26.15.15.331	Bureau of Land Management (Diamond A Ranch)	Old	264 R	6	4,427	227	1913	Qab	P,g	S	West Black Mountain Well; could not get line below 67 ft.
* 15.331a	do.	Old	348 R	5	4,427	218.2	3- 3-55	Qab	P,w	S	East Black Mountain Well; good; could not get line below 280 ft; T 19°C.
* 34.341	do.	-	300 R	5	4,490	-	3- 1-55	Qab	P,w	S	South Wells; west well of two; could not get line below 27 ft.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
26.15.34.341a	Bureau of Land Management (Diamond A Ranch)	-	291	5	4,490	Dry	3- 1-55	(Qab)	P,g	S	South Wells; east well of two; will pump out; muddy at 291; probably has caved around column at about wl.
26.17.14.121	do.	-	198 R	6	4,415	176.6	3-17-55	Qab	P,w	S	In Hidalgo Co., 1.6 mi west of Grant Co. line; called O'Neal Well.
27.13.17.421	R. B. Faulkner	1946	280 R	10	4,975	153.4	2-10-55	T1	P,w	S	Jim Ham; in Luna Co., 1.9 miles east of Grant Co. line; will pump out; north well of two.
17.421a	do.	1948	480 R	10	4,975	168.0	do.	T1	P,w	S	Jim Ham; in Luna Co., 1.9 miles east of Grant Co. line; will pump out; south well of two; water found at 250 ft; later deepened and shot with dynamite.
27.14.26.213	K. W. Donaldson	Old	450	6	4,670	432.1	1-31-55	Qab	N	(S)	W. J. Wamel; drilled in bolson fill; limestone pebbles in cuttings from bottom; adjacent well caved at 185 ft.
29.321	do.	Old	435 R	6	4,575	77.9	do.	Qab	P,g	S	Will pump out; wl has not changed appreciably in past 25 years.
27.15. 8.124	State of New Mexico	1947	1,070 R	-	4,605	-	-	-	N	-	Oil test, Seyfreid No. 1; log indicates bolson fill to bottom of hole.
25.421	Adams	1917	455 R	6	4,518	p315.4	2- 7-55	Qab	P,w	S	Cased 450 ft; yield 12 gpm with windmill.
* 26.223	State of New Mexico (M. J. Donaldson)	1912	350	10	4,487	293.0	2- 4-55	Qab	P,w	S	Good; T 23°C.
* 26.434	Southern Pacific Co.	Old	400 R	16	4,475	283	1954	Qab	T,e	RR	Rosco Moss; West Well; has been pumped steadily at rate of 25 gpm.
† 26.444	do.	1914	695 R	13	4,475	290 284.7	5-31-51 2- 7-55	Qab	T,d	RR	East Well; maintained primarily as a standby well; dd 12 ft after pumping 90 gpm for 12 hrs.
26.444a	do.	(1914)	656 R	12	4,475	300 284.4	1950 3- 7-55	Qab	N	(FS)	Middle Well; used for standby purposes—to be equipped with new pump.
34.232	Diamond A Ranch	Old	370 R	6	4,465	274.2 274.6	do. 12- 7-55	Qab	P,w	S	Harry Ikes; never has pumped out.
* 35.333	do.	Old	350 R	-	4,446	253	8-21-13	Qab	-	-	Formerly Two-mile Well; found destroyed in 1955.
36.232	State of New Mexico (J. C. McKinney)	1929	340 R	8	4,515	314.7	2- 4-55	Qab	P,e	D	Floyd Myers; pumped at 5 gpm.
36.243	State of New Mexico (Diamond A Ranch)	-	422 R	4	4,520	324.1	do.	Qab	P,w	D,S	Pumped for 12 hrs at 7 gpm and did not pump out.
*27.16. 5.334	Diamond A Ranch	1941	60 R	6	4,533	40.7 36.7 37.8	2-15-55 12-15-55 5-23-56	Qab	P,w	S	Harley Morris; Mangold Well; cased to ft; never has pumped out; T 18°C.
6.114	do.	-	124	6	4,525	98.7	2-17-55	Qab	N	(D,S)	Would pump out quickly.
* 8.143	do.	Old	60 R	6	4,442	38 29.4 p 32.8	10- 5-13 12-15-55 6- 5-56	TKh	P,w	S	Flanagan Well; hole found caved around pump column at 37 ft in 1955.
8.231	do.	Old	-	4	4,553	17	10- 5-55	-	N	(S)	Found caved at 10 ft in 1955; only remaining well of three at the old Pothook ranch (abandoned).
10.133	do.	Old	46 R	6	4,625	39.3 38.4	2-16-55 12-15-55	Qab	P,w	S	Huntley Well; reliable; white mineral crust on end of discharge pipe.

Table 12--Records of wells in Grant County--Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
*27.16.15.332	Diamond A Ranch	Old	60 R	6	4,690	44.3 42.0	2-16-55 12-15-55	Qab	P,w	S	Ringbone well; good; T 19°C.
16.422	do.	(1943)	1,490 R	-	4,660	32	(1943)	Kr	N	-	Winger-Berry; Berry No. 1; Oil-test hole; well apparently drilled entirely in andesite and shale of probable Cretaceous age; some water from 35 to 42 ft, 70 to 80 ft; much water from 580 to 595 ft, rose to 32 ft; water sand, 920 to 950; some water, 980 to 986.
24.224	State of New Mexico (Diamond A Ranch)	1948	750 R	12	4,712	-	-	Tr(?)	N	(S)	Youngblood; yielded water for a short time after drilling, then went dry; could not get line below 46 ft in 1955.
* 28.244	May Livingston	Old	21	-	4,900	16.2	2-16-55	Qal	P,w	S	Dugout well; dug; T 19°C. igneous rock crops out nearby.
29.123	do.	Old	102	-	4,690	57.9	do.	TKh	P,w	S	Dug.
36.321	Fowles Estate	-	-	-	4,850	60	1935	Kh/TKi	P,g	N	Silver King shaft of National Group of claims; water not potable.
27.17.25.133	Diamond A Ranch	Old	200	6	4,458	166.3	2-17-55	Qab	P,w	S	In Hidalgo Co., 0.9 mile west of Grant Co. line; weak, will pump out.
28.14. 6.111	A. E. Bader	1950	400 R	7	4,470	354	5-24-52	Qab	P,w	S	F. H. Boone; cased 40 ft; good; will not pump out; blue rock, 340 to 380 ft.
* 15.333	Richard Faulkner	1949	101	8	4,890	34.4	1-27-55	Ta	P,w	D,S	John Wright; yield 4.5 gpm on test; drilled in porphyry 0 to 70 ft; blue slate 70 to 85 ft; sand 85 to 86.5 ft.
15.333a	do.	1949	117	10	4,888	31.9	do.	Ta	N	(S)	Sandy clay 0 to 85 ft; blue lime 35 to 85 ft; "talc" 84 to 105 ft; red clay 105 to 150 ft.
16.131	State of New Mexico (Clem Donaldson)	-	45	-	4,755	30.6	1-26-55	Ta	P,w	S	-
17.223	Clem Donaldson	-	51	-	4,735	28.4	1-26-55	Ta(?)	P,w	(S)	Dug, mill out of order; intrusive rock crops out near well.
21.112	Richard Faulkner	1937	119	6	4,880	55.8	do.	TKi	P,w	(S)	In Hidalgo Co., just over the Grant Co. line; will not supply enough water for 30 head of cattle; wl was 70 ft at time of drilling.
21.112a	do.	-	144 R	6	4,882	56.7	do.	TKi	P,w	(S)	Cased 20 ft; not in use because water supply inadequate.
21.231	do.	1900	42	3	4,985	38.2	1-27-55	Qal	P,w	S	In Hidalgo Co., 0.4 mi south of Grant Co. line; dug; usually contains water only after periods of rainfall; backfilled around stovepipe casing.
22.111	Bureau of Land	1942	104	8	4,890	89.3	1-29-55	Ta	N	(S)	In Hidalgo Co., 300 ft south of Grant Co. line; Guy Morse; cased 15 ft; tailings indicate well penetrated grayish green porphyry rock; mill removed because water supply inadequate.
*28.15.15.243	Diamond A Ranch	1935	290 R	6	4,430	245.7	2- 3-55	Qab	P,w	S	Four Mile Well; will pump out with gasoline-powered pump; two older wells destroyed; T 22°C.
*28.16. 1.211	Fowles Estate	(1929)	250 R	-	4,825	50	1935	TKi	N	N	American Mine shaft; 125 to 150 gpm pumped from 250 ft level.
9.311	May Livingston	-	52	8	4,755	18.8 16.3	2-14-55 12-22-55	Ks	P,w	D,S	Jim Wright; north well of three; two south wells are dug.
* 9.311a	do.	Old	22	-	4,756	17.2	4-15-55	Qal	P,w	D,S	Easternmost of two dug wells of similar depth.
21.233	A. E. Boyder	Old	12	-	4,950	7.7	do.	TKi	C,g	S	In Hidalgo Co., 0.5 mi south of Grant Co. line; Livermore "Spring", dug concrete cribbing; never has gone dry.
* 24.232	May Livingston	Old	20	-	4,820	12.2	2-7-55	Qal	P,w	S	In Hidalgo Co., 0.25 mi south of Grant Co. line; Howells well; dug; T 16°C; limestone crops out near well.

Table 12—Records of wells in Grant County—Continued

LOCATION NUMBER	OWNER OR TENANT	YEAR COMPLETED	DEPTH OF WELL (FEET)	DIAMETER OF WELL (INCHES)	ALTITUDE ABOVE MEAN SEA LEVEL (FEET)	WATER LEVEL		STRATIGRAPHIC UNIT	METHOD OF LIFT AND POWER SOURCE	USE OF WATER	REMARKS
						DEPTH BELOW LAND SURFACE (FEET)	DATE				
*29.15, 4.233	Diamond A Ranch	Old	260 R	6	4,385	-	-	Qab	P,w	S	In Hidalgo Co., 3.3 mi south of Grant Co. line; Eight Mile wells; north well of two; will pump out with gasoline driven pump.
4.233a	do.	Old	210+	4	4,385	203 196.3	1913 2- 9-55	Qab	P,w	S	In Hidalgo Co., 3.3 mi south of Grant Co. line; south well of two; had been pumping lightly - off 40 min before wl measured.

Table 13 –Records of springs in Grant County, N. Mex.

EXPLANATION

Location number: See explanation in text. An asterisk before the location number indicates chemical analysis given in table 3.

Altitude: Altitude of land surface at spring orifice; interpolated from topographic map.

Stratigraphic unit: Kb, Beartooth Quartzite; Kc, Colorado Formation; p g, granite and granite-like rocks; M, limestone and shale; Qal, alluvium; QTg, Gila Conglomerate; Tba, basalt and basaltic andesite flows; TKab, andesite breccia; TKd, dacite flows; TKr and Tr, rhyolite and related volcanic and sedimentary rocks; Tl, latite and related volcanic and sedimentary rocks; Trp, Rubio Peak Formation; Ts, gravel, sand, and tuff.

Yield: Yields mostly estimated unless otherwise indicated in “Remarks.”

Use of water: D, domestic; Irr, irrigation; N, none; PS, public supply; S, stock.

Remarks: dd, drawdown; rept, reported or reportedly; T, temperature, given in degrees centigrade ($^{\circ}\text{C}$). One degree of centigrade is equal to 1.8° of Fahrenheit. To convert $^{\circ}\text{C}$ to $^{\circ}\text{F}$, multiply the $^{\circ}\text{C}$ by $9/5$ (or 1.8) and add 32.

Table 13—Records of springs in Grant County—Continued

Location number	Owner or tenant	Name	Topographic situation	Altitude of land surface (feet)	Structure	Character of opening	Stratigraphic unit	Yield (gpm)	Date of visit	Use of water	Remarks
* 13.13.5.241	D. A. Campbell	Gila Hot Springs	Slope	5,600	Fault zone	Multiple	Tba	150	6-23-57	D, S, Irr.	T 64°C; water piped to lodge and summer homes; flow rept to be steady; tufa deposits.
* 10.121	M. R. Faulkes	Hunting Lodge Spring	Stream bank	5,590	do.	Single	Tba	10	do.	D	T 52°C; water piped to hunting lodge and swimming pool; flow rept to be steady.
13.20.26.224	John Henry	-	do.	5,320	-	do.	Tl	1	2-22-56	S	T 10°C; believed to come from tuff under thin cover of alluvium; dug out and concreted; no deposits or odor.
* 14.20.6.111	Irvin Goats	-	Slope	5,240	-	do.	QTg	1 to 2	6-9-55	D, S	T 18°C; dug out, boxed, and covered.
* 14.21.11.322	C. C. Harkey	Mule Spring	Flat	5,365	-	do.	QTg	low	1-27-56	S	T 16°C; seep flow, volume undetermined; rept has never gone dry; stretch of creek nearby has perennial flow even during periods of drought.
* 15.11.31.132	Hub Estes	Laney Spring	Stream bed	6,350	-	do.	QTg	5	10-19-55	D, S	T 13°C; flow rept has not decreased appreciably in recent years.
15.17.19.411	Lewis Brown	-	Flat	4,565	-	do.	QTg	10	9-27-55	D, S	T 18°C; flow rept to be steady; dug out, boxed, piped to house; no deposits or odor.
28.131	Arthur Howard	-	Slope	4,540	Horizontal beds	do.	QTg	1	9-14-55	S	Rept dependable.
* 29.134	J. M. Dickerson	-	Canyon wall	4,500	do.	do.	Qtg	3	9-9-55	D, S	Issues as seep from bed of gravel overlying bed of clay; dug out and concreted.
30.222	J. F. Dickerson	Cliff Warm Springs	Slope	4,577	Low-dipping beds	do.	QTg	30	9-14-55	D, S Irr.	T 25°C; issuing from joint in sandstone; flow rept to be steady.
* 16.12.34.344	U.S. Forest Service	-	do.	6,925	-	Single	Kc	low	10-21-54	PS	T 16°C; no flow evident but spring pool rept always to contain water; dug out, concreted, and covered.
16.15.15.142	Town of Silver City	Dorsey Springs	Canyon wall	5,360	Fault zone(?)	Multiple	QTg	120	4-2-54	S	Flow varies appreciably - was low during past 3 years but has increased recently; dug out and concreted; no deposits or odor.
* 26.412	do.	Allen Springs	Stream bank	5,770	-	do.	IM	80	do.	S	T 26°C; flow measured at 80 gpm; but rept has fluctuated between 50 and 200 gpm, depending upon annual precipitation; former water supply for Silver City; dug out and concreted over to form collecting gallery; some travertine deposits on rocks.
16.17.34.212	Fate McCauley	Spring Canyon Warm Spring	do.	4,430	-	Single	Tr	90	4-26-55	D, S	T 29°C; dug out, concreted, sealed; 3-inch pipe to tanks on terrace 30 ft. above spring, thence to house and fields; water rept will rise in pipe column to total height of 60 ft.
16.18.16.133	J. J. Norris	-	-	5,300	-	-	Tba	30 to 40	Not visited	S	Flow rept dependable; one of the source-springs of Sycamore Creek.
* 34.332	Lewis Patterson	Clark Spring	Stream bed	5,525	Low-dipping beds	Single	Tr	½ to ¾	7-28-55	S	T 20°C; flow rept to be steady and dependable; issues from sandstone underlying volcanic rock; dug out, concreted, piped to stock tank.
* 16.21.20.321	T. T. Waddell	Bitter Creek Spring	do.	4,800	-	-	TKd	-	9-20-41	-	
* 17.13.2.411	State of New Mexico	No. 10 Spring	Stream bank	6,640	Flat beds	Single	Tr	10	2-4-55	PS, D	T 16°C; One of several springs furnishing water for Fort Bayard Hospital; flow rept to be steady.
14.421	Fort Bayard Hospital	-	Gully	6,350	Low-dipping beds	do.	TKab	-	8- -54	M	Flow rept less than 5 gpm.

Table 13—Records of springs in Grant County—Continued

Location	Owner or tenant	Name	Topographic situation	Altitude of land surface (feet)	Structure	Character of opening	Stratigraphic unit	Yield (gpm)	Date of visit	Use of water	Remarks
17.14.11.112	Asa Johnson	-	Gully bank	6,499	Low-dipping beds	Multiple	Kc	low	2-12-54	D	Has seepage flow, but rept always some water; 3 orifices dug out, concreted over, water piped to house.
22.313a	Ed Allison	Langstroth Spring	Stream bank	6,110	do.	Single	Kc	do.	2-17-54	H	Forms large pool dug out and covered by spring house; no surface out-flow but water level in spring pool fluctuates; flowing well nearby.
17.15.20.222	Randolph Frank	Ash Spring	Canyon wall	5,710	Joints	Multiple	p6g	¼ to 1	8-23-54	S	T 22°C; flow rept has been appreciably greater in past years.
34.232	W. T. Sherman	Fleming Spring	Canyon floor	5,910	-	do.	Kb	20	7-15-54	D, S	Rept flow about 30-40 gpm in 1938; water used to operate minnow farm.
*17.16.5.414	Fred Foster	Foster Spring	Stream bed	4,720	Low-dipping beds	do.	QTg	20	4-15-55	S	Flow collected from broad area of seepage, piped to hydraulic ram, lifted to stock tanks, flow reptd to be steady.
9.311	John McMillen	Mangas Springs	Stream bank and channel	4,750	do.	do.	QTg	100 at main group of springs	4-14-55	S	Water seeps from top of slope and stream bank over a broad area, and rises in the stream channel; source of perennial flow of Mangas Creek. See table 2 for streamflow measurements at gaging station about ½ mile below main group of springs; no improvements.
17.19.9.142	Earl Anderson	-	Slope	5,020	Beds dipping 30°NE	Single	Tr	1	8-23-55	D, S	Flows from joints in rhyolite; rept never has gone dry but does fluctuate; in use for about 50 years; piped to house.
9.143	Charles Anderson	-	Bottom of arroyo	4,820	Joints	do.	Tr	3 to 4	do.	S	Unimproved.
25.242	Robert Martin	High Lonesome Spring	Canyon floor	4,875	-	-	Tr	-	Not visited	S	Rept to have low but dependable flow.
26.211	Charles Blakey	Blakey Spring	do.	4,885	Joints	Seep	Tr	3 to 4	8-22-55	S	T 22°C; flow from joints in andesite in bed of creek, fluctuates but never has gone dry; water collected in trap and pumped to tanks with a windmill.
*17.20.16.230	-	Thanksgiving Spring	Gulch	5,200	-	-	TKr(?)	100	10-5-41	-	Located in gulch near Thanksgiving Mine.
*18.9.31.742	H. B. Hinton	Carrizo Tubs	Stream bed	5,750	-	Seep	QTg	7	3-25-57	S	T 22°C; with rises into alluvium in creek bed from underlying conglomerate; channel cleaned out with bulldozer concrete box emplaced and recovered, water piped to troughs.
* 34.142	do.	Goat Spring	Stream bed at base of cliff	5,810	Beds dipping 30°SE	Multiple	QTg	20	3-21-57	S	T 19°C; flow from joints in conglomerate.
*18.10.13.111	Ernestine Wheaton-Smith	Mimbres Hot Springs	Slope	5,740	Joints	Single	Tr	10	6-22-57	Irr.	T 58°C; flow rept to be steady; dug out, concreted, covered, piped to greenhouse.
* 13.111a	do.	do.	do.	5,740	do.	Multiple	Tr	20	do.	D, S, PS	T 58°C; flow from about 25 seeps and orifices, 3 of which are dug out, concreted, covered, and piped to house and cabins.
* 13.111b	do.	Mimbres Cold Spring	do.	5,735	Fault zone(?)	do.	Tr	1 to 3	do.	D, S	T 26°C; 3 orifices dug out, concreted, covered, and piped to house and cabins.
*18.12.7.221	American Smelting & Refining Co.	-	do.	5,850	Low-dipping beds	Single	Tlc	4 to 5	9-15-54	D	Dug out, concreted, covered, piped to tank.

Table 13--Records of springs in Grant County--Continued

Location	Owner or tenant	Name	Topographic situation	Altitude of land surface (feet)	Structure	Character of opening	Stratigraphic unit	Yield (gpm)	Date of visit	Use of water	Remarks
* 18.13.23.133	L. H. Cron	-	Valley floor	5,750	Valley fill	Single	Qal	5 to 10	5-26-54	S	Has one principal orifice surrounded by large area of boggy ground. Water is ponded in valley fill behind a bedrock dam.
18.18.6.141	Robert Martin	Tank Draw Spring	Bed of stream channel	4,720	Beds dipping 25°NE & fault zone	do.	Tr	10	8-24-55	S	Water piped to trough; in use since 1880 but rept has gone dry during early summer of some years.
17.121	do.	Smith Spring	Canyon floor	4,405	Joints and fractures	Multiple	p6g	3 to 5	do.	S	Water piped to trough; rept in use since 1890's and dry only once in 1947.
19.10.24.212	H. B. Hinton	Y-Bar Spring	Stream bank	5,400	Low-dipping beds	do.	Q1g	20	4-24-57	D, S	Has two orifices dug out, concreted, covered, and piped to the Y-Bar (Nan Ranch) headquarters buildings; supplies water for 5 hours, extensive grounds, stock, and swimming pool; iron stain on ground.
19.12.19.113	Kennecott Copper Corp.	Apache Tejo Springs	Stream valley	5,390	Fault zone(?)	-	FM	0	6-8-54	-	Flow rept averaged 1,350 gpm from June, 1912 to Aug. 1913, but all water was lost when the orifice was dynamited in Aug. 1913 to increase the flow; the spring was an important watering place for the Indians before white men came, and later for travelers between Deming and Silver City.
* 19.19.18.311	Fuller Ranch	-	Mouth of canyon	3,980	-	Seep	Tba	5 to 10	7-7-41	S	T 24°C; at mouth of wash entering Gila River.
* 20.11.17.332	Boy Scouts of America	Lindaver Spring	Stream channel	5,020	Flat-lying beds	Single	Trp	20	1-27-55	S	T 18°C; water issues from gravel overlying rhyolitic tuff exposed by downcutting of stream channel; rept never has gone dry although other spring pools in immediate vicinity have gone dry in recent years; flow 45 gpm in 1952.
20.11.18.314	Kennecott Copper Corp.	Warm Springs	Plain	5,025	do.	do.	Trp	Dry	do.	-	Once maintained a perennial lake covering several acres but the flow is rept to have ceased shortly after development of the Warm Springs well field.
* 20.11.20.243	do.	Faywood Hot Spring	Tufa hill on plain	5,030	Fault zone(?)	do.	Trp	30	11-9-54	S	T 53.3°C; natural flow averaged 30 gpm on meter test by Kennecott Corp in 1952, and on a pump test yielded 47 gpm, at 52.8°C with dd of 23.5 ft. to bottom of concrete-lined spring pool; spring at one time was popular resort and water was bottled and sold throughout the southwest region; tufa deposits about the spring are radioactive. See chemical analysis.

Table 14 –*Chemical analyses of water from wells, springs, and rivers in Grant County, N. Mex.*

(Analyses by U.S. Geological Survey unless otherwise noted. Chemical constituents are in milligrams per liter which are approximately equivalent to parts per million for water having a specific conductance less than 10,000, or having less than 7,000 parts per million dissolved solids.)

EXPLANATION

Location number: See explanation in text.

Stratigraphic unit: Kc, Colorado Formation; p g, granite and granite-like rocks; M, limestone and shale; Qab, alluvium and bolson deposits; Qal, alluvium; QTg, Gila Conglomerate; Qtg, terrace gravel; Tba, basalt and basaltic andesite flows; TKa, andesite and related volcanic rocks; TKd, dacite flows; TKh, Hidalgo volcanics; TKi, intrusive rocks; TKr, rhyolite flows; Ti, latite flows; Tr, rhyolite flows; Trp, Rubio Peak Formation; Ts, gravel, sand, and tuff.

Table 14—Chemical analyses of water from wells, springs, and rivers in Grant County—Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature (°F) (°C)		Silica (SiO ₂)	Iron (Fe)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃	Non-carbonate	Percent sodium	Sodium-adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH
								In solution	Total											Milligrams per liter (mg/l)	Tons per acre-foot						
13.13. 5.241	D. A. Campbell ^{1/} (Gila Hot Spring)	-	Tba	6-23-57	147	64	33	0.04	0.07	11	0.2	129		109	0	40	104	12	0.5	369	0.52	28	0	91	11	653	8.2
	do. ^{2/}	-	Tba	7-25-62	147	64	68	.00	-	12	.0	121	3.6	106	0	45	102	9	.7	421	.57	30	0	88	9.6	638	7.5
10.121	M. R. Faulkes (Hunting Lodge Hot Spring)	-	-	6-23-57	126	52	-	-	-	-	-	-	-	108	0	22	59	-	-	-	-	15	-	-	-	432	8.1
13.18.13.443	R. S. Rice	20	Qal	6- 9-55	-	-	-	-	-	-	-	-	-	60	-	-	2.5	-	-	-	-	49	-	-	-	120	7.1
13.19. 8.244	U.S. Forest Service	58	Qal	10-26-55	-	-	-	-	-	-	-	-	-	155	0	-	7.2	-	-	-	-	176	49	-	-	407	6.9
35.123	L. R. Spires	399	QTg	4-29-55	76	24	76	.03	-	32	12	17		167	0	16	7.2	.6	.5	244	.33	130	0	22	.6	316	7.6
13.20.30.141	Boyn Zumwalt	77	Qal/Tl	4- 3-56	-	-	-	-	-	-	-	-	-	90	10	-	9.5	-	-	-	-	100	0	-	-	312	8.7
34.213	John Henry	75	Tl	6- 9-55	73	23	-	-	-	-	-	-	-	136	-	-	16	-	-	-	-	153	42	-	-	332	7.4
13.21.29.312	A. M. Traynor	35R	Qal	4-24-56	-	-	-	-	-	-	-	-	-	76	0	-	6.0	-	-	-	-	88	26	-	-	258	7.4
14.13.32.134	Sapillo Creek	-	-	10-16-55	73	23	-	-	-	-	-	-	-	186	0	-	1.8	-	-	-	-	142	0	-	-	347	8.2
33.342a	Heart Bar Ranch, Inc.	21	Qal	10-16-55	62	17	-	-	-	-	-	-	-	214	0	-	3.5	-	-	-	-	194	18	-	-	-	7.5
14.16.30.132	Gila River	-	-	6- 6-55	55	13	47	.01	.47	26	6.2	42		132	0	31	22	3.6	.7	240	.33	90	0	50	1.9	358	7.6
14.17. 3.312	Lawrence Shelley	135R	QTg	6- 9-54	60	16	19	.95	-	22	3.6	97		102	0	5.1	1.0	.2	.6	116	.15	70	0	23	.5	172	7.6
31.214	A. R. Freeman	150	QTg	9-12-55	-	-	-	-	-	-	-	-	-	116	33	-	7.0	-	-	-	-	4	0	-	-	379	9.4
14.18. 8.422	E. M. Stevens	158	QTg	10- 5-55	-	-	-	-	-	-	-	-	-	163	0	-	1.8	-	-	-	-	106	0	-	-	267	7.7
33.213	J. T. Hollimon	1,900R	QTg	4-29-55	65	18	55	.04	-	9.1	2.8	51		162	0	4.3	4.0	1.0	.3	205	.28	34	0	77	3.3	270	7.9
14.20. 6.111	Ervin Goats (Spring)	-	QTg	6- 9-55	65	18	-	-	-	-	-	-	-	184	-	4.0	-	-	-	-	-	132	0	-	-	302	7.4
18.442	Sam Means Estate	75	QTg	1-24-56	60	16	-	-	-	-	-	-	-	152	0	-	6.5	-	-	-	-	151	26	-	-	340	7.0
26.311	Wilkinson & Johnson	18R	Qal	2-23-56	58	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.21. 1.431	C. C. Harkey	78R	QTg	6- 9-55	60	16	53	.01	-	56	8.8	31		153	0	9.9	18	.4	45	292	.38	176	50	17	.4	394	7.9
11.322	C. C. Harkey (Mule Spring)	-	QTg	1-27-56	61	16	-	-	-	-	-	-	-	152	0	-	6.0	-	-	-	-	81	0	-	-	251	8.0
15.11.31.132	Hub Estes (Laney Spring)	-	QTg	10-19-55	56	13	-	-	-	-	-	-	-	167	0	-	3.3	-	-	-	-	156	3	-	-	131	7.1
15.12.15.433	Hub Estes	19	Qal	4-27-55	-	-	51	.25	-	45	9.8	15		211	0	3.9	4.2	.3	1.7	252	.32	153	0	18	.5	347	7.4
15.16.21.122	Joe Hooker	55	QTg	6-17-55	-	-	-	-	-	-	-	-	-	288	0	-	3.0	-	-	-	-	222	0	-	-	465	7.7
23.322	do.	197R	QTg	6-23-55	74	23	-	-	-	-	-	-	-	290	0	-	6.5	-	-	-	-	-	-	-	-	-	-
15.17.26.323	Thurman Yates	118	Qcg/QTg	4-29-55	65	18	27	.03	-	40	10	15		184	0	9.2	6.5	.6	2.5	198	.27	141	0	18	.5	330	7.7
27.111b	Phelps Dodge Corp.	300R	QTg	7-14-62	92	33	48	.00	-	3.0	.1	150		130	24	103	18	21	.1	435	.59	8	0	98	23	665	9.0
28.331	Cliff Consolidated School	30R	Qal	4-29-55	69	21	44	.12	-	32	15	85		324	0	30	12	3.2	.0	383	.51	142	0	56	3.0	590	7.6
29.442	J. B. Horn	410R	QTg	9- 9-55	68	20	60	.01	.07	2.0	.2	88		183	21	4.5	2.0	1.0	2.3	280	.37	6	0	90	16	289	-
30.222	J. F. Dickerson (Cliff Warm Spring)	-	QTg	9-14-55	77	25	-	-	-	-	-	-	-	123	14	-	5.2	-	-	-	-	72	0	-	-	256	8.1
31.312	J. F. Bennett	24	Qal	9- 2-55	-	-	-	-	-	-	-	-	-	205	0	-	10	-	-	-	-	152	0	-	-	316	7.3

Table 14—Chemical analyses of water from wells, springs, and rivers in Grant County—Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature (°F)	Silica (SiO ₂)	Iron (Fe)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃	Non-carbonate	Percent sodium	Sodium-adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH
							In solution	Total											Milligrams per liter (mg/l)	Tons per acre-foot						
15.18. 2.333 ^{3/}	Bessie Crumbley	450R	QTg	7- -49	-	1.7	-	22	5.5	119	-	58	646	12	14	-	-	1,315	1.79	78	-	-	-	-	-	
4.211	A. V. Youngblood	101	QTg	4-29-55	67	19	50	0.02	23	12	11	142	0	4.0	3.5	0.2	5.2	167	.24	107	0	18	3.4	240	7.8	
11.423	Charles O'Donnell	77	Qal/QTg	9-28-55	62	17	-	-	-	-	-	195	0	-	4.5	-	-	-	-	120	0	-	-	344	7.7	
12.314	J., M., & R. Crumbley	30	Qal	9-28-55	-	-	-	-	-	-	-	1,390	0	15	-	-	-	-	-	128	0	-	-	2,130	7.9	
15.19. 3.433	L. R. Spires	532	Te	9-15-55	69	21	-	-	-	-	-	134	0	-	3.8	-	-	-	-	84	0	-	-	228	7.8	
18.211	Huling Means	6	Qal	11- 4-55	62	17	53	-	19	9.3	11	88	0	28	4.5	.2	.5	170	.23	86	14	21	1	214	6.8	
16.11. 7.214	U.S. Forest Service	-	QTg	4-29-55	-	51	1.4	-	26	10	5.1	124	0	7.7	2.5	.1	4.1	a168	.23	106	4	9	1	226	7.3	
8.311	W. A. Fowler	184	Qal/QTg	6-19-57	57	14	-	-	-	-	-	105	0	-	3.0	-	-	-	-	101	15	-	-	-	7.1	
28.313	Bear Creek	-	-	5-24-55	65	18	29	.01	27	14	17	183	0	3.9	4.0	.4	2.5	202	.26	125	0	23	1	310	7.0	
28.314	Mimbres River	-	-	5-24-55	60	16	61	.01	28	6.6	14	143	0	3.9	4.0	.3	.5	196	.26	97	0	24	6	240	7.5	
16.12.34.344	U.S. Forest Service (Spring)	-	Kc	10-21-54	60	16	-	-	-	-	-	256	0	-	6.0	-	-	-	-	-	-	-	-	521	-	
16.15.26.412	Town of Silver City (Allen Springs)	-	FM	4- 2-54	78	26	18	-	78	19	18	587	0	20	38	.8	2.4	a404	.55	355	38	10	-	621	-	
16.16.21.442	Phelps Dodge Corp.	355+	QTg	4-19-55	-	-	-	-	-	-	-	192	0	-	10	-	-	-	-	127	0	-	-	388	7.5	
30.212	do.	25	Qal	4-19-55	-	-	-	-	-	-	-	238	0	-	8	-	-	-	-	209	14	-	-	471	7.3	
16.17. 4.342	Gila River	-	-	6- 6-55	60	16	41	.00	54	14	44	260	0	36	21	2.2	1.5	352	.47	192	0	33	1.4	537	7.5	
9.242	Roy Clark	36R	QTg	6- 6-55	86	30	40	.09	.12	7.5	1.0	126	241	0	51	16	8.0	1.6	363	.50	22	0	92	12	551	7.9
25.311	Phelps Dodge Corp.	380R	Tr	6-24-55	67	19	-	-	-	-	-	189	0	-	6.2	-	-	-	-	136	0	-	-	33k	7.1	
34.212	Fate McCauley (Spring Canyon Warm Spring)	-	Tr	4-26-55	84	29	32	.04	18	3.0	92	232	0	38	8.5	.1	.1	311	.42	58	0	78	5.3	472	7.9	
16.18.20.444	Lewis Patterson	640R	Tr	7-28-55	65	18	71	.17	4.2	34	24	12	228	0	13	4	.5	2.6	260	.37	184	0	12	4	386	7.5
34.332	Lewis Patterson (Clark Spring)	-	Tr	7-28-55	68	20	-	-	-	-	-	212	0	-	8.8	-	-	-	-	158	0	-	-	389	7.2	
16.19.11.414	Noel Rankin	440R	Tr	9-16-55	67	19	-	-	-	-	-	144	0	-	3.5	-	-	-	-	89	0	-	-	244	7.3	
16.20.10.114	Sam Means	338	Tba	1-25-56	66	19	-	-	-	-	-	189	0	-	4.5	-	-	-	-	143	0	-	-	305	7.9	
16.21. 1.443	do.	328	Ts	1-25-56	62	17	45	-	46	14	6.9	213	0	7.0	3.2	.2	.7	226	.31	172	0	8.0	.2	343	7.4	
20.321a	T. T. Waddell (Bitter Creek Spring)	-	TKd	9-20-41	-	-	-	-	536	67	62	164	0	1,519	21	1.1	.8	2,290	3.11	1,610	-	-	-	2,550	-	
26.114	Lon Moore	113	TKa	3- 8-56	66	19	40	.04	5.8	207	71	30	289	0	589	17	.2	.0	1,170	1.5	808	572	8.0	.5	1,420	7.2
17.10.19.332	S. C. Galaz	28	QTg	4-28-55	-	47	.05	-	58	14	9.9	227	0	12	7.2	.2	18	302	.38	202	16	10	.3	427	7.3	
17.11. 5.144	Frank & John Kenley	96	QTg	8-29-56	-	-	-	-	-	-	-	208	0	-	5	-	-	-	-	184	14	-	-	363	7.9	
14.131	Atanacio Heredia	350R	QTg	8-27-56	63	17	-	-	-	-	-	218	0	-	7	-	-	-	-	178	0	-	-	373	7.5	
24.141	Wigwam Ranches, Inc.	310R	QTg/QTg	4-28-55	58	14	45	.11	46	10	9.0	194	0	8.6	3.6	.1	2.7	231	.30	156	0	11	.3	331	7.2	
24.244	do.	105R	QTg	4-28-55	58	14	-	-	-	-	-	230	0	-	8	-	-	-	-	210	22	-	-	441	7.1	
17.12.18.224	D. H. Crumbley	240R	Kc	9-22-54	-	-	-	-	-	-	-	395	0	-	16	-	-	-	-	305	0	-	-	785	-	
20.244a	U.S. Forest Service (T & M Dairy)	500R	FM	4-27-55	-	17	.06	-	89	20	6.2	316	0	46	6.5	.5	.2	361	.46	304	45	4.0	.2	569	7.2	

Table 14--Chemical analyses of water from wells, springs, and rivers in Grant County--Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature		Silica (SiO ₂)	Iron (Fe) In solution		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃		Percent sodium	Sodium-adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH	
					(°F)	(°C)		Total												Milligrams per liter (mg/l)	Tons per acre-foot	Calcium	Non-magnesium carbonate					
17.12.24.441	Forest Delk	290R	PM	10-25-54	-	-	-	-	-	118	-	-	-	403	0	-	8	-	-	-	-	-	-	-	-	-	665	-
27.131	John Trevarrow	559R	TKs(?)	1-13-55	-	-	-	-	-	-	-	23	326	0	77	121	-	138	-	-	-	580	313	8.0	-	1,240	7.3	
29.242 ^{4/}	U.S. Smelting Refining & Mining Co.	675R	PM(?)	10-20-54	63	17	24	-	-	280	34	94	226	0	778	34	0.3	2.4	1,360	1.85	841	656	20	1.4	1,670	-		
32.444 ^{5/}	American Smelting & Refining Co.	2,100R	TK1/PM	9-22-54	90	32	18	.01	-	80	19	53	235	0	189	11	1.6	.8	4,495	.67	293	100	28	1.4	784	-		
17.13. 2,000 ^{6/}	State of New Mexico (Springs)	-	Tr	11-10-52	-	-	50	.01	-	35	12	14	192	0	2.8	4.2	.1	.5	214	.29	137	9	18	-	303	7.8		
2.411	State of New Mexico (No. 10 Spring)	-	Tr	2- 4-55	60	16	59	-	-	-	-	12	166	0	4.1	3.0	.1	4.8	-	-	123	0	17	.5	274	7.4		
5.111	W. G. Massingill	20	TK1	8-17-54	56	13	-	-	-	-	-	-	336	0	-	87	-	-	-	-	710	0	-	-	1,720	-		
6.142 ^{7/}	-	-	TK1	4-14-54	-	-	20	.02	-	288	59	81	385	0	616	24	2.7	.2	41,220	-	812	496	19	-	-	-		
7.231	Emmett Fitzpatrick	26	TK1	8-17-54	-	-	-	-	-	-	-	-	239	0	-	33	-	-	-	-	865	0	-	-	1,790	-		
17.14.10.432	Vernel Clark	68	Kc	2-16-54	-	-	19	-	-	213	56	40	228	0	618	12	.1	.2	41,070	1.46	762	575	10	-	1,340	-		
15.343	D. H. Crumbley	200R	Kc	4-20-57	-	-	18	-	-	167	31	42	286	0	351	24	.4	.2	4,775	1.05	544	310	14	-	-	-		
21.323	E. L. Allison	693	Kc	8-11-54	-	-	-	-	-	-	-	-	322	0	-	14	-	-	-	-	385	121	-	-	837	-		
26.444	C. H. Aspen	82	Kc	7-17-54	-	-	-	-	-	-	-	-	366	0	-	13	-	-	-	-	-	-	-	-	636	-		
34.321	Silver City (infiltration gallery)	-	Qa1	12-28-49	-	-	29	-	-	124	30	24	248	0	242	20	.1	1.2	4,592	.81	433	230	11	-	880	-		
17.15. 7.313 ^{8/}	John McMillen	96	QTg	4-20-57	63	17	35	.03	-	104	7.3	16	2.0	327	0	34	6.5	.2	21	398	-	289	22	11	-	612	7.4	
20.222	Randolph Frank (Ash Spring)	-	p6g	8-23-54	72	22	15	-	-	71	21	11	200	0	110	4	1.2	1.2	4,332	.45	264	100	9	.3	526	-		
17.16. 5.332	Mangas Creek	-	-	6- 6-55	60	16	12	.01	-	35	12	29	141	0	51	11	.3	.7	236	.31	132	16	32	1.1	377	8.3		
5.414	Fred Foster (Foster Spring)	-	QTg	4-15-55	-	-	-	-	-	-	-	-	224	0	-	8	-	-	-	-	137	0	-	-	436	7.6		
9.334	John McMillen	178R	Qa1	6- 1-55	65	18	31	-	-	55	14	21	208	0	33	8.5	.3	27	305	.4	194	24	19	.7	458	7.5		
11.113 ^{9/}	do.	286	QTg	4-14-55 4-20-57	- 66	- 19	- 31	- .03	- -	- 26	- 22	- 19	- 1.8	212 214	0 0	8.6 6.7	7.0 7.8	- .5	- 4.7	- 224	- -	166 155	0 0	21 21	- -	365 369	7.6 7.7	
16.323	State of New Mexico (John McMillen)	60+	Qa1	8-27-54	-	-	-	-	-	-	-	-	221	0	-	9.0	-	-	-	-	-	-	-	-	-	482	-	
24.113a ^{10/}	John McMillen	275R	QTg	4-20-57	65	18	29	.01	-	42	23	17	1.4	244	0	7.8	8.2	.6	13	146	-	199	0	16	-	432	7.7	
27.143	Elmo McMillen	104	QTg	9- 7-54	-	-	-	-	-	-	-	-	196	0	-	9.0	-	-	-	-	178	18	-	-	440	-		
17.17. 5.431	Halpin McCauley	97	Tr	5-23-55	67	19	-	-	-	-	-	-	62	-	-	6.0	-	-	-	-	102	-	-	-	258	7.1		
17.18. 9.442	U.S. Forest Service (Tom McCauley & sons)	128	Tr	7-28-55	65	18	38	.02	18	312	43	75	258	0	845	18	1.0	.3	1,520	1.99	956	744	15	1.1	1,760	6.7		
22.332	Tom McCauley & sons	134	Tr	7-28-55	-	-	-	-	-	-	-	-	404	17	-	9.0	-	-	-	-	34	0	-	-	736	8.6		
17.19.21.213	Charles Blakey	78R	TKa	3-11-56	61	16	42	.03	1.0	64	24	27	340	0	13	13	.3	7.3	360	.49	258	0	19	.7	568	7.4		
17.20. 5.111	Thygerson Bros.	20R	TKa	8- 6-55	-	-	58	-	-	260	111	92	287	0	964	39	1.1	9.6	1,740	2.28	1,100	870	15	1.2	1,970	7.6		
16.230	Thanksgiving Springs	-	TKr(?)	10- 5-41	-	-	-	-	-	79	35	35	-	333	23	61	27	1.5	.4	4,426	.58	341	-	-	-	703	-	
17.21. 2.444	U.S. Forest Service (Thygerson Bros.)	60+	TKd	9- 6-55	-	-	-	-	-	-	-	-	336	0	-	18	-	-	-	-	490	214	-	-	1,040	6.9		

Table 14—Chemical analyses of water from wells, springs, and rivers in Grant County—Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature (°F) (°C)		Silica (SiO ₂)	Iron (Fe)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃	Percent sodium	Sodium-adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH
								In solution	Total											Milligrams per liter (mg/l)	Tons per acre-foot					
18. 9.17.313	State of New Mexico (Roy Gunter)	99	Qal(?)	8-16-52	-	-	39	-	-	-	-	13	714	0	11	8	0.6	34	-	-	200	30	14	-	600	-
28.114	do.	182	QTg	6-10-52	72	22	52	-	-	53	4.8	11	148	6	23	12	-	4.0	a239	0.33	152	20	14	-	341	-
30.343	Roy Gunter	173	QTg	6-10-52	71	22	55	-	-	45	4.4	36	150	17	26	13	-	14	a284	.39	130	0	37	-	389	-
31.342	H. B. Hinton (Carizzo Tubs Spring)	-	QTg	6-10-52	72	22	-	-	-	-	-	-	160	0	-	9.0	5.2	-	-	-	66	-	-	-	347	-
34.141	H. B. Hinton (Goat Spring)	-	QTg	3-21-57	66	19	-	-	-	-	-	-	110	0	-	9.0	-	-	-	-	132	0	-	-	191	7.4
18.10. 8.433	Ranchos de San Juan	148	Tr	6-11-52	66	19	39	-	-	56	10	20	246	0	9.5	6.0	1.0	.8	a263	.36	180	0	-	-	392	-
8.443	do.	22	QTg	6-11-52	52	11	41	-	-	74	12	16	241	10	33	9.0	.3	8.8	a323	.44	234	20	13	-	475	-
13.111	Ernestine Wheaton-Smith (Mimbres Hot Springs)	-	Tr	6- 5-52	137	58	53	-	-	12	2.6	86	77	18	65	17	16	0	a308	.42	40	0	82	-	452	-
13.111a	do.	-	Tr	6- 5-52	136	58	-	-	-	-	-	-	75	20	-	16	16	-	-	-	9.0	-	-	-	450	-
13.111b	Ernestine Wheaton-Smith (Mimbres Cold Springs)	-	Tr	6- 5-52	79	26	-	-	-	-	-	-	83	14	-	17	16	-	-	-	11	-	-	-	451	-
15.111	Lucio DeLaO	150R	QTg	6-11-52	64	18	-	-	-	39	3.5	17	147	7	9.1	3.0	1.0	.5	a187	.25	112	0	25	-	268	-
16.113	Ranchos de San Juan	50R	Tr	6-11-52	-	-	40	-	-	163	44	26	267	30	91	70	.4	225	a821	1.12	588	318	9.0	-	1,210	-
17.224	Walter McCown	33	QTg(?)	6-11-52	68	20	54	-	-	40	10	32	128	11	29	15	.3	43	a297	.40	141	18	33	-	402	-
17.224a	do.	35R	QTg(?)	6-11-52	62	17	45	-	-	55	13	10	163	10	15	9	-	13	-	-	190	40	-	-	343	-
20.313	Ranchos de San Juan	100R	Trp	6-11-52	63	17	-	-	-	-	-	37	230	0	41	24	.4	14	-	-	198	10	29	-	527	-
23.111	Frank Sorelle	21	Qal	6- 5-52	54	12	-	-	-	-	-	80	238	0	59	18	10	.1	-	-	135	0	56	-	579	-
29.233	W. T. Graham	75	Trp	8-12-52	72	22	62	-	-	-	-	38	376	0	12	7.0	.4	4.4	-	-	253	0	24	-	583	-
34.131	V. S. Dominguez	73	Tr	8-12-52	-	-	49	-	-	-	-	38	212	0	37	7.0	.2	17	-	-	154	0	35	-	434	-
18.12. 7.221	American Smelting & Refining Co. (spring)	-	Ts	9-15-54	-	-	-	-	-	-	-	-	36	0	-	3.0	-	-	-	-	98	68	-	-	290	-
18.13. 2.321	M. T. Parra	26R	Qal	4-26-54	-	-	33	-	-	68	29	6	263	0	68	8.0	.8	2.0	a344	.47	288	73	4	-	-	-
8.133	E. S. Montoya	270R	QTg(?)	5-18-54	-	-	20	-	-	21	5.8	72	188	0	19	38	1.4	1.6	a271	.37	36	0	67	3.6	442	-
8.313	T., F., & J. Pugmire	207	QTg	5-18-54	68	20	-	-	-	-	-	-	169	0	-	26	-	-	-	-	-	-	-	-	390	-
14.221a	Town of Bayard	100+	QTg	3-21-55	-	-	28	-	-	73	28	23	265	0	68	31	.3	17	a398	.54	291	80	14	.6	640	7.8
15.434	State of New Mexico (Town of Central)	472	QTg	10- 4-54	68	20	-	-	-	44	-	-	204	0	17	12	-	-	-	-	-	-	-	-	399	-
15.444	do.	387R	QTg	11- 3-54	67	19	-	-	-	51	-	-	248	0	-	7	-	-	-	-	-	-	-	-	461	-
22.222	L. H. Cron	744R	Qal/QTg	8-30-54	67	19	35	0.17	-	42	13	18	198	0	13	10	.4	9.1	a238	.32	158	0	20	.6	374	-
23.133	L. H. Cron (Spring)	-	Qal	5-26-54	-	-	40	-	-	78	14	21	308	0	26	12	-	.7	a343	.47	252	0	15	.06	554	-
18.14. 6.111	State of New Mexico (James Turner)	287	pGg	7-15-54	64	18	-	-	-	-	-	-	353	0	-	30	-	-	-	-	-	-	-	-	658	-
11.233	R. C. Cloudt	137	QTg	5-15-54	-	-	31	-	-	58	16	26	206	0	18	29	.6	21	a321	.44	210	42	21	.8	510	-

Table 14—Chemical analyses of water from wells, springs, and rivers in Grant County—Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature (°F) (°C)		Silica (SiO ₂)	Iron (Fe)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃	Calcium magnesium	Non-carbonate	Percent sodium	Sodium adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH
								In solution	Total											Milligrams per liter (mg/l)	Tons per acre-foot							
18.14.27.433	Elmo McMillen	166	QTg	3-9-54	-	-	31	-	-	66	27	6	179	-	28	21	0.8	101	a369	.50	276	129	5.0	-	586	-		
30.324 ^{11/}	Marvel Woodward (Town of Silver City)	895R	QTg	4-21-54 9-27-56	69 70	21 21	32 31	0.01 .02	0.02	57 54	11 14	18 14	241 246	0	7.8	13 9.5	.7 .5	1.1 1.0	a260 247	.35 .34	187 192	0	18	14	5	415 421	- 7.4	
30.343	do.	835	QTg	6-20-58	71	22	30	.00	.08	46	7.6	22	3.0	208	0	7.5	14	.7	1.9	224	.32	146	0	24	8	369	7.9	
18.15.10.441	do.	659R	QTg	10-12-54	68	20	-	-	-	37	-	-	-	228	0	8.4	10	-	-	-	-	-	-	-	-	395	-	
11.300 ^{12/}	do.	-	QTg	12-28-49	-	-	37	-	-	36	19	21	224	0	7.8	11	.8	5.1	a248	.34	168	0	21	-	-	387	-	
11.313a ^{13/}	do.	597R	QTg	11-11-54	68	20	28	-	-	36	16	24	2.8	219	0	6.7	14	.4	7.1	243	.33	156	0	-	-	394	8.1	
25.442a ^{14/}	Marvel Woodward	600R	QTg	4-21-57	64	18	26	.01	-	62	7.8	13	1.6	194	0	20	22	.5	1.9	264	-	187	28	11	-	423	7.5	
29.313	Mangas Cattle Co.	100R	QTg	3-26-54	63	17	35	-	-	82	9.6	13	-	157	0	119	9.0	.4	8.4	a353	.48	244	116	11	-	514	-	
18.16.13.124	Lucy Fleming	148	QTg	8-31-54	66	19	-	-	-	-	-	-	-	236	0	-	26	-	-	-	-	-	-	-	-	562	-	
18.18.23.312	Gila River	-	-	6-6-55	55	13	40	.03	.25	48	13	53	-	246	6	37	22	2.4	.4	351	.47	174	0	40	1.7	523	8.4	
29.422a	Elma Wright	75	Qal	8-15-55	62	17	40	-	-	46	15	42	-	238	0	38	19	2.0	1.8	312	.44	176	0	34	1.4	508	7.2	
32.224	Grant Harper	67	Qal	8-15-55	64	18	-	-	-	-	-	-	-	242	0	-	20	-	-	-	-	176	0	-	-	529	7.7	
33.132a	Roy Harper	122	QTg	8-3-55	-	-	-	-	-	-	-	-	-	207	0	-	18	-	-	-	-	144	0	-	-	417	7.8	
18.19.1.433a	State of New Mexico (Robert Martin)	101R	QTg	3-11-56	71	22	-	-	-	-	-	-	-	276	0	-	6.0	-	-	-	-	288	2	-	-	472	7.7	
37.731	State of New Mexico (Calvin Martin)	48R	QTg	9-7-55	66	19	-	-	-	-	-	-	-	206	0	-	5.0	-	-	-	-	74	0	-	-	378	7.2	
18.20.8.223	Calvin Martin	75R	Tr	3-7-56	-	-	-	-	-	-	-	-	-	398	0	62	49	-	-	-	-	324	0	-	-	849	7.6	
19.9.34.211	W. B. Hinton	30R	(Qal)	6-4-52	63	17	-	-	-	-	-	25	-	269	0	18	8.0	.4	9.3	-	-	205	0	21	-	480	-	
19.10.9.112	State of New Mexico (Leedro Eby)	56	Ts	8-12-52	63	17	67	-	-	-	-	50	-	334	0	22	8.0	.8	5.4	-	-	205	0	33	-	557	-	
9.334	Leedro Eby	81	Qal/Trp	8-12-52	-	-	57	-	-	-	-	53	-	276	0	51	16	.4	17	-	-	200	0	37	-	580	-	
21.244	do.	120R	Trp	8-12-52	62	17	58	-	-	-	-	50	-	276	0	25	9.0	.6	4.6	-	-	160	0	41	-	485	-	
22.434	Clyde Wooton	26	Qal	6-12-52	-	-	-	-	-	-	-	46	-	288	0	67	39	.8	103	-	-	346	110	22	-	872	-	
31.434	Roy Gunter	30R	Qtg	8-13-52	72	22	47	-	-	-	-	65	-	226	0	33	3	.6	10	-	-	92	0	-	-	426	-	
33.221	Maria Soliz	735R	Qal/Trp	4-19-57	73	23	-	-	-	-	-	-	-	108	19	42	13	-	-	-	-	5	0	-	-	382	9.2	
19.12.8.231	Kennecott Copper Corp.	440R	QTG/Ts	1-19-55	65	18	-	-	-	-	-	-	-	198	0	-	58	-	-	-	-	1,030	868	-	-	1,670	7.5	
19.113b ^{15/}	do.	405R	PM	1-10-52	-	-	31	.0	-	54	17	78	-	327	0	70	23	-	-	400	.54	204	0	44	2.4	-	-	
19.134	do.	370R	PM	1-10-52	-	-	26	.0	-	66	19	54	-	256	0	110	33	-	-	464	.63	242	32	35	1.7	-	-	
33.431	do.	645R	QTg	1-18-55	76	24	-	-	-	-	-	-	-	154	0	56	9.0	-	-	-	-	167	41	-	-	392	7.4	
19.13.18.141a	Sarah Smith	164	QTg	5-28-54	66	19	-	-	-	-	-	-	-	190	0	-	18	-	6.0	-	-	-	-	-	-	439	-	
24.214	Kennecott Copper Corp.	127	QTg	6-8-54	69	21	-	-	-	-	-	-	-	153	0	-	21	-	-	-	-	-	-	-	-	448	-	
29.421a	J. L. McCauley	221	QTg	6-4-54	61	16	35	-	-	57	15	26	-	196	0	55	16	.6	21	a322	.44	204	43	21	8	495	-	
19.14.1.311	Elmer Salars	168	QTg	3-9-54	-	-	34	-	-	38	22	12	-	188	0	17	16	.4	19	a250	.34	186	32	12	-	389	-	
19.15.10.324	Phelps Dodge Corp.	1,200R	QTg	3-15-54	-	-	40	-	-	56	9.8	12	-	150	-	64	8.0	1.2	1.4	a266	.36	180	57	12	-	392	-	
14.222 ^{16/}	do.	683R	QTg	1919	-	-	31.3	.2	-	48	3.3	17.7	-	187	-	4.7	10.0	-	-	184	-	134	-	-	-	-	-	

Table 14—Chemical analyses of water from wells, springs, and rivers in Grant County—Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature		Silica (SiO ₂)	Iron (Fe)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃	Non-carbonate	Percent sodium	Sodium-adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH
					(*F)	(°C)		In solution	Total											Milligrams per liter (mg/l)	Tons per acre-foot						
19.17.29.312b	J. S. Culberson	270R	QTg	8-15-55	65	18	29	0.01	0.40	41	13	21	211	8	4.3	14	0.8	5.0	228	0.34	156	0	78	1.0	400	8.4	
19.18. 6.114	Elma Wright	109	QTg	8- 3-55	-	-	-	-	-	-	-	-	197	0	-	20	-	-	-	-	152	0	-	-	449	7.9	
19.19. 1.142 ^{17/}	Phelps Dodge Corp.	24	QTg	4- -55	-	-	-	-	-	70	16	46	6.8	256	3	72	36	-	-	369	.50	-	79.4	-	600	-	
10.231	Charles Anderson	79R	QTg	8-22-55	68	20	-	-	-	-	-	-	277	0	-	27	-	-	-	-	188	0	-	-	629	7.8	
18.320	Fuller Ranch (Spring)	-	Tba	7- 7-41	75	24	-	-	-	47	13	37	-	236	0	32	13	2.0	1.8	a262	.36	171	-	-	439	-	
18.341	Gila River	-	-	6- 6-55	65	18	43	.01	-	50	14	53	244	16	35	21	1.8	.4	360	.48	182	0	39	1.7	535	8.7	
35.224a	Fred Anderson	340R	QTg	8-22-55	80	27	-	-	-	-	-	-	174	0	11	-	-	-	-	-	41	0	-	-	384	8.2	
19.21. 6.214	Gila River	-	-	5-23-55	70	21	26	.01	1.4	25	13	109	256	5	78	32	2.4	2.7	425	.57	116	0	67	4.4	672	8.4	
20.10.19.114	Mimbres River	-	-	5-24-55	70	21	52	.00	.20	71	20	40	292	0	75	17	.8	4.0	434	.58	259	20	25	1.1	631	7.8	
20.11.17.332	Boy Scouts of America (Lindauer Spring)	-	Trp	1-27-55	64	18	65	-	-	-	-	33	227	0	24	8.0	.2	5.7	-	-	197	0	27	1.0	495	7.4	
18.112	Kennecott Copper Corp.	-	Qab/Is	6- 3-55	72	22	49	.33	-	31	14	27	210	0	8.4	7.0	.5	1.9	251	.33	135	0	30	1.0	357	7.7	
20.243	Kennecott Copper Corp. (Faywood Hot Spring)	-	Trp	6- 5-52	129	54	-	-	-	-	-	91	282	0	50	18	7.0	.1	-	-	129	0	41	-	606	-	
	^{18/}	-	-	11- 9-54	128	53	-	-	-	37	8.5	-	282	0	-	17	-	-	-	-	128	0	-	-	600	-	
	^{19/}	-	-	4-19-57	128	53	43	.01	-	38	7.3	85	7.8	278	0	52	16	6.8	2.2	384	-	125	0	58	-	605	7.4
30.113 ^{20/}	Kennecott Copper Corp.	350R	Qab	8-28-52	70	21	38	-	-	38	9.9	25	-	185	0	19	13	-	-	301	.41	136	0	29	.9	-	-
20.12.19.123b	John Stark	575R	Qab	2-11-55	67	19	25	-	-	28	14	31	145	0	47	11	.3	1.3	a240	.33	128	8	35	1.2	375	7.7	
20.13.13.121	do.	512R	Qab	11-10-54	69	21	-	-	-	24	-	-	163	0	-	10	-	-	-	-	-	-	-	-	331	-	
31.214	Walter Hightower	222	Qab	2-11-55	-	-	-	-	-	-	-	-	159	0	-	18	-	-	-	-	181	50	-	-	413	7.4	
20.14. 1.432	James McCauley	405R	-	2-15-55	-	-	-	-	-	-	-	-	167	0	-	11	-	-	-	-	155	18	-	-	354	7.6	
6.433	Howard Burris	400R	Qab	2-15-55	-	-	-	-	-	-	-	-	125	0	19	11	-	-	-	-	126	14	-	-	289	7.7	
33.334	Marie Frost	96R	Qab	2-23-55	-	-	35	-	-	52	12	7.1	194	0	35	16	1.1	11	a280	.38	179	20	22	.8	440	7.2	
20.15.20.313	Frank McCauley	150	p6g	3-23-55	62	17	28	-	-	89	16	14	307	0	56	24	1.2	18	a417	.57	288	36	20	.9	667	7.5	
28.424	Harry McCauley	42R	Qal	3- 8-55	62	17	-	-	-	-	-	-	209	0	-	8.0	-	-	-	-	-	-	-	-	447	7.3	
20.16.13.111	U.S. Forest Service	19	Qal	9-25-55	-	-	-	-	-	-	-	-	90	0	-	4.0	-	-	-	-	95	22	-	-	241	6.6	
20.17.23.141	Jim Cureton	151	Qab	3-22-55	-	-	26	-	-	52	10	19	175	0	36	8.2	.5	21	a259	.35	170	27	19	.6	405	7.2	
36.344	Damon Dunagon	21	Qal	3-25-55	-	-	-	-	-	-	-	-	273	0	-	9	-	-	-	-	298	74	-	-	607	7.3	
21.12. 3.433a	Frank McCauley	111	Qab	2- 9-55	63	17	-	-	-	-	-	-	203	0	59	15	-	-	-	-	200	34	-	-	495	7.6	
21.15.27.443	Mildred Morrow	14	Qal	4-12-56	64	18	-	-	-	-	-	-	242	0	-	12	-	-	-	-	161	0	-	-	473	7.8	
21.16.24.322	Della Cureton	76	Qal/TK1	4-10-56	60	16	32	.00	.40	39	9.5	20	155	0	26	11	1.0	9.3	a222	.30	136	10	24	.7	328	6.9	
31.144	Damon Dunagon	43	Qal/p6g	5-27-55	64	18	-	-	-	-	-	-	283	-	-	12	-	-	-	-	260	28	-	-	589	7.6	
22.14.36.223	State of New Mexico (Jess Thorn)	545	Qab	6- 8-55	-	-	28	.17	-	38	3.2	31	256	0	13	10	.6	3.1	190	.27	92	0	43	1.4	291	7.8	
22.15.13.232	McDonald Bros.	23	Qal	6-17-55	61	16	66	-	-	44	19	8.5	314	0	67	15	1.2	2.6	a276	.60	212	0	40	1.9	643	7.4	
26.134	Jess Thorn	21	Qal	6-22-55	-	-	-	-	-	-	-	-	308	0	-	22	-	-	-	-	235	0	-	-	617	7.7	

Table 14—Chemical analyses of water from wells, springs, and rivers in Grant County—Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature		Silica (SiO ₂)	Iron (Fe)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃	Non-carbonate	Percent sodium	Sodium-adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH
					(°F)	(°C)		In solution	Total											Milligrams per liter (mg/l)	Tons per acre-foot						
22.16.20.423	Bilbo & Johnson	50+	P6g	5-27-55	-	-	25	0.05	-	94	22	77	221	0	169	73	2.8	17	586	0.79	325	144	31	1.7	910	8.1	
23.14. 8.211	Jess Thorn	19	Qa1	5- 2-55	63	17	-	-	-	-	-	-	321	-	-	12	-	-	-	-	218	0	-	-	620	7.4	
25.432a	Bilbo & Johnson	165	Qab	5-16-55	69	21	34	-	-	15	6.1	89	214	0	34	38	1.8	10	329	.46	62	0	77	5.4	535	8.2	
31.143	State of New Mexico (George Jarrell)	425	Qab	5-16-35	-	-	-	-	-	-	-	-	143	-	-	745	-	-	-	-	140	0	-	-	3,860	7.3	
23.15.28.234	Bilbo & Johnson	96	Qab	5-26-55	68	20	-	-	-	-	-	-	250	-	-	25	-	-	-	-	230	90	-	-	562	7.4	
31.111	Bureau of Land Management (Bilbo & Johnson)	470	Qab	5-16-55	82	28	34	.15	.15	44	11	123	229	0	193	23	2.8	3.5	553	.75	164	0	41	4.2	820	8.0	
23.16.28.124	State of New Mexico (Bilbo & Johnson)	297	Qab	5-17-55	70	21	-	-	-	-	-	-	199	-	26	-	-	-	-	-	80	-	-	-	775	7.6	
23.17.25.211	Bilbo & Johnson	129	Qab	4-21-55	-	-	-	-	-	-	-	-	214	0	-	37	-	-	-	-	71	0	-	-	773	8.1	
24.13.19.312	State of New Mexico (George Jarrell)	252	Qab	4-21-55	-	-	-	-	-	-	-	-	178	0	-	14	-	-	-	-	19	0	-	-	417	8.4	
24.14.12.333a	do.	287	Qab	5-16-35	75	24	41	.33	.33	6.0	.9	95	197	5	31	12	1.0	3.1	280	.40	18	0	92	9.6	407	8.5	
29.423	Conner & Cox	254	Qab	4-21-55	71	22	-	-	-	-	-	-	175	0	-	33	-	-	-	-	52	0	-	-	436	7.8	
24.15.19.421	Southern Pacific Co.	610	Qab	4-21-55	-	-	30	-	-	36	10	34	170	0	16	22	.4	21	268	.34	131	0	36	1.3	-	7.4	
33.214	B. F. Hassell	336R	Qab	4-21-55	76	24	-	-	-	-	-	-	149	0	41	33	-	-	-	-	152	30	-	-	436	7.9	
33.232	do.	600R	Qab	3-14-55	68	20	-	-	-	-	-	-	145	0	38	33	-	-	-	-	142	23	-	-	420	8.2	
24.16.17.111	Kipp Estate	166R	Qab	4-22-55	68	20	-	-	-	-	-	-	190	0	-	26	-	-	-	-	148	0	-	-	417	7.7	
25.14.16.432	State of New Mexico (Conner & Cox)	160	Qab	4-21-55	64	18	48	-	-	67	21	114	200	0	208	46	.6	67	726	.91	254	90	49	3.1	997	7.6	
31.214	Diamond A Ranch	254	Qab	4-21-55	74	23	-	-	-	-	-	-	322	0	-	18	-	-	-	-	24	0	-	-	625	8.2	
25.15.28.333	Ora Warren	164	Qab	4-22-55	67	19	-	-	-	-	-	-	330	0	-	25	-	-	-	-	114	0	-	-	814	7.7	
25.16. 6.414	State of New Mexico (Shelby Phillips)	165	Qab	4-21-55	67	19	-	-	-	-	-	-	249	0	-	54	-	-	-	-	190	0	-	-	978	7.7	
22.111	Shelby Phillips	155R	Qab	5-16-55	70	21	51	-	-	45	14	168	307	0	205	42	1.4	3.4	685	.92	170	0	68	5.5	1,010	7.8	
28.221	Kipp Estate	140R	Qab	4-22-55	66	19	-	-	-	-	-	-	413	0	-	81	-	-	-	-	206	0	-	-	1,850	7.6	
28.221a	do.	91+	Qab	1913	-	-	-	-	-	31	22	280	398	0	365	50	-	-	1,023	1.39	168	-	-	-	-	-	
26.14.28.422	State of New Mexico (Diamond A Ranch)	550R	T1	3-23-55	70	21	-	-	-	-	-	44	175	0	19	17	-	19	-	-	108	0	47	1.8	404	7.7	
26.15.15.331	Bureau of Land Management (Diamond A Ranch)	264R	Qab	1913	-	-	-	-	-	30	11	31	146	0	35	22	-	-	280	.38	170	-	-	-	-	-	
15.311a	State of New Mexico (Diamond A Ranch)	348R	Qab	4-21-55	66	19	-	-	-	-	-	-	160	0	-	21	-	-	-	-	118	0	-	-	906	7.0	
34.341	Bureau of Land Management (Diamond A Ranch)	300R	Qab	1-23-55	-	-	-	-	-	-	-	-	315	0	109	30	-	-	-	-	29	0	-	-	841	7.6	
27.15.26.223	State of New Mexico (M. J. Donaldson)	350R	Qab	3- 8-55	73	23	34	-	-	7.2	1.4	205	262	0	177	40	2.4	11	607	.83	24	0	95	18	927	7.9	
26.434	Southern Pacific Co.	400+	Qab	5-10-55	-	-	36	.22	.23	12	4.1	206	260	0	199	42	3.6	8.6	632	.87	47	0	91	13	975	8.2	
35.333	Diamond A Ranch	350R	Qab	1913	-	-	-	-	-	29	5.2	128	142	0	206	21	-	-	528	.53	95	-	-	-	-	-	

Table 14—Chemical analyses of water from wells, springs, and rivers in Grant County—Continued

Location number	Owner, tenant, or name	Depth of well (feet)	Stratigraphic unit	Date collected	Temperature		Silica (SiO ₂)	Iron (Fe)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids		Hardness as CaCO ₃		Percent sodium	Sodium-adsorption ratio (SAR)	Specific conductance (micro-mhos at 25°C)	pH
					(°F)	(°C)		Total	In solution											Milligrams per liter (mg/l)	Tons per acre-foot	Calcium	Non-carbonate				
27.16. 5.334	Diamond A Ranch	60R	Qab	2- 2-55	65	18	-	-	-	-	-	-	-	292	0	741	102	-	-	-	-	740	500	-	-	2,040	7.2
8.143	do.	60R	TKh	1913	-	-	-	-	130	57	-	98	-	332	0	392	63	-	-	955	-	560	-	-	-	-	-
15.332	do.	60R	Qab	3-23-55	67	19	-	-	-	-	-	-	-	354	0	-	9	-	-	-	-	400	110	-	-	872	7.2
28.244	May Livingston	21	Qal	5-10-55	67	19	-	-	-	-	-	-	-	269	-	-	9	-	-	-	-	432	212	-	-	855	7.4
28.14.15.333 ^{21/}	Richard Faulkner	101	Ta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	640	0.85	340	-	-	-	-	-
28.15.15.243	Diamond A Ranch	290R	Qab	3-15-55	72	22	-	-	-	-	-	-	-	199	0	-	19	-	-	-	-	170	1	-	-	773	7.3
28.16. 1.211	Fowles Estate (American Mine shaft)	250R	TKi	1935	-	-	34	-	-	562	55	-	56	95	0	1,529	30	-	-	2,310	3.14	-	-	-	-	-	7.0
9.311a	May Livingston	22	Qal	4- 5-55	-	-	-	-	-	-	-	-	-	354	0	-	15	-	-	-	-	344	54	-	-	822	7.3
24.232	do.	20R	Qal	5-10-55	61	16	30	-	98	21	-	24	-	343	0	76	11	0.6	7.8	466	.59	331	50	14	0.6	686	7.5
29.15. 4.233	Diamond A Ranch	260R	Qab	1913	-	-	-	-	43	28	-	96	-	253	0	151	46	-	-	546	.74	222	-	-	-	-	

1/ Contains B, 0.07 ppm.

2/ Contains Al, 0.31 ppm; Mn, 0.00 ppm; Li, 0.03 ppm.

3/ Sample collected by Lee Childress and analyzed by N. Mex. Minerals Lab.,

Silver City, N.Mex.; includes iron and aluminum oxides, 3.1 ppm.

4/ Contains Zn, 1.5 ppm; Cu, 0.0 ppm; Pb, 0.00 ppm.

5/ Contains Zn, 0.3 ppm; Cu, 0.0 ppm; Pb, 0.04 ppm.

6/ Collected at water tower; composite of all springs furnishing water to the Fort Bayard Hospital.

7/ Contains Zn, 0.5 ppm; Cu, 0.05 ppm; Pb, 0.0 ppm.

8/ Contains Al, 0.1 ppm; Mn, 0.0 ppm; PO₄, 0.10 ppm.

9/ Contains Al, 0.00 ppm; Mn, 0.00 ppm; PO₄, 0.10 ppm.

10/ Contains Al, 0.1 ppm; Mn, 0.00 ppm; PO₄, 0.10 ppm.

11/ Contains Zn, 0 ppm; Cu, 0 ppm; Pb, 0 ppm.

12/ Composite of water from wells 1, 2, 3, and 4 in the Franks Ranch well field.

13/ Contains Al, 0.1 ppm.

14/ Contains Al, 0.1 ppm; Mn, 0.0 ppm; PO₄, 0.00.

15/ Collected and analyzed by Kennecott Copper Corp.

16/ Analysis by Crouse Laboratories.

17/ Collected and analyzed by the Soil Conservation Service

18/ Contains Cu, 0.0 ppm; Pb, 0.0 ppm; Zn, 0.0 ppm.

19/ Contains Al, 0.0 ppm; Mn, 0.00 ppm.

20/ Collected and analyzed by the Kennecott Copper Corp.

21/ Source of data: letter from the state chemist.

Table 15 — Driller's Logs of Selected Wells in Grant County

Logs of wells listed in this table show the type of rock material penetrated by the well. The logs were obtained from owners and drillers, and the description of the rocks is mostly the terminology of the driller. Consequently, the terms used to describe the rock materials do not have the same meaning in all the logs; in fact, in some logs the terms depart from the standard usage. Driller's terms believed not to have been used in the regular sense are placed in quotations, and the possible or probable proper rock type or term is enclosed in brackets.

Stratigraphic designations shown in most of the well logs were made by the author on the basis of a comparison of the driller's log data with the known sequence of rocks in the vicinity of the well. Stratigraphic designations in logs of wells drilled for the Kennecott Copper Corp. in the vicinity of Santa Rita and Hurley were made by company geologists who logged the wells at the time of drilling.

The depths of wells as indicated in the logs may not be the same as the measured depths given in table 12. Wells are subject to sanding and caving, even though cased, and the original depth seldom remains unchanged.

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
<u>Well 13.17.32.424a</u> R. S. Rice			"Red bed"; [iron-stained sandstone]	100	250
Quaternary:			Rock, red; water from 343-350	100	350
Alluvium (Qal):			Gumbo, brown	50	400
Boulders and clay	30	30			
Tertiary and Quaternary:			<u>Well 14.19.29.133</u> Huling Means		
Gila Conglomerate (QTg):			Quaternary:		
Conglomerate	340	370	Alluvium (Qal):		
Tertiary:			Soil and boulders	5	5
Basalt and basaltic andesite flows (Tba):			Tertiary and Quaternary(?):		
Rock, broken	40	410	Gila Conglomerate (QTg):		
Rock, red; (water at 500 ft)	105	515	Conglomerate, brown; large boulders	60	65
Rock, granitic-type, soft [rhyolite?]	100	615	Conglomerate, red, soft	10	75
			Conglomerate; some water at 405 ft	330	405
<u>Well 13.19.15.333</u> L. R. Spires			Tertiary:		
Quaternary:			Basalt and basaltic andesite flows (Tba):		
Alluvium (Qal):			"Malpais" [basalt?], black; about 3 gpm at 425	80	485
Soil, silt, and sand	20	20	Conglomerate (brown boulders)	20	505
Tertiary and Quaternary(?):			Rock [latite], gray; granulated texture, translucent grains	170	675
Gila Conglomerate (QTg):			"Malpais", bright red; 21 gpm; [probably scoriaceous and rubbly zone at base of latite flow]	15	690
Sandstone, light red, soft; seep at 155 ft wets cable but water does not accumulate	285	305	"Malpais" [latite], brown	23	713
Conglomerate, hard	155	460			
Conglomerate, red; red and green rocks bound with clay	52	512	<u>Well 14.19.36.443</u> L. R. Spires		
Conglomerate, red, hard	23	535	Tertiary and Quaternary(?):		
<u>Well 13.19.36.241</u> L. R. Spires			Gila Conglomerate (QTg):		
Quaternary:			Conglomerate	110	110
Alluvium (Qal):			Boulders and conglomerate	150	260
Soil and rocks	12	12	Conglomerate	25	285
Tertiary and Quaternary(?):			Clay, light red; [lake bed]	10	295
Gila Conglomerate (QTg):			Conglomerate and boulders	40	335
Conglomerate, gray, sandy, soft	38	50	Basalt and basaltic andesite flows (Tba):		
Conglomerate, red, sandy	125	175	Lava, red; water at 335 ft	15	350
Sandstone, red	275	450	Lava, dark gray, solid; water increasing, wl at 327 ft	10	360
Gravel and sand, gray	25	475	Lava, dark gray, softer	10	370
Sandstone, red; water at 570 ft to 580 ft, increasing to about 10 gpm; wl 530 ft	123	598	Lava, red	5	375
<u>Well 14.18.13.233</u> R. M. Hawkins			<u>Well 14.20.7.343a</u> Wilkinson and Johnson		
Tertiary and Quaternary:			Quaternary:		
Gila Conglomerate (QTg):			Alluvium (Qal):		
Boulders, brown; [and sandstone]	15	15	Dirt	7	7
"Shale" [?], blue	25	40	Tertiary and Quaternary(?):		
"Red bed"; [iron-stained sandstone]	30	70	Gila Conglomerate (QTg):		
"Shale" and "red bed", red and blue	80	150			

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Conglomerate, reddish brown	83	90	Sandstone [tuff?]	24	268
Conglomerate, tar	55	145	Conglomerate, red	12	280
Conglomerate, reddish brown; 18 gpm at 180 ft	50	195	Conglomerate, gray, soft	20	300
			Conglomerate, hard	30	330
			Lava, red, soft	25	355
			Lava, brown	8	363
			Lava, black	2	365
<u>Well 14.20.12.342</u> Huling Means			Lava, dark gray, hard; water at about 365 ft	49	414
Quaternary:			Lava, dark gray, softer; water increased from 425 to 430 ft	29	443
Alluvium (Qal):			Lava, red; water increased	8	451
Soil	10	10			
Tertiary and Quaternary(?):					
Gila Conglomerate (QTg):					
Sandstone	415	425			
Basalt, black; about 1/2 gpm on top of basalt	25	450			
Basalt, rotted; or tuff, soft	20	470			
Conglomerate, hard	158	628			
<u>Well 15.17.35.442</u> Wilson Brown			<u>Well 16.20.34.242</u> George Schale		
Quaternary:			Quaternary:		
Alluvium (Qal):			Alluvium (Qal):		
Silt, fine	36	36	Gravel and sand	35	35
Tertiary and Quaternary(?):			Cretaceous and Tertiary:		
Gila Conglomerate (QTg):			Volcanic rocks (TKa):		
Conglomerate, cavey	9	45	Lava, decomposed	13	48
Clay and gravel	50	95	Lava, black, hard	10	58
Conglomerate	209	304	Lava, decomposed; 2-1/2 gpm	12	70
			Lava, black, hard	49	119
<u>Well 15.20.31.413</u> George Schale			<u>Well 17.11.13.343</u> Wigwam Ranches, Inc.		
Quaternary:			Quaternary:		
Alluvium (Qal):			Alluvium (Qal):		
Soil and clay	6	6	Silt and sand	7	7
Tertiary and Quaternary(?):			Gravel, pea	29	36
Basalt and basaltic andesite flows (Tba):			Gravel, coarse	3	39
"Malpais" [basalt?], black, varied, dense to honeycomb [vesicular]	374	380	Gravel, pea	16	55
Gila Conglomerate (QTg):					
Conglomerate, brown; gravelly	10	390			
"Malpais" [basalt], black	10	400			
Conglomerate, brown; water found at 420 ft, rose to about 400 ft	40	440			
<u>Well 16.18.19.231a</u> Ruby Wallace			<u>Well 17.11.24.141</u> Wigwam Ranches, Inc.		
Quaternary:			Quaternary:		
Alluvium (Qal):			Alluvium (Qal):		
Boulders and clay	30	30	Soil	1	1
Tertiary and Quaternary(?):			Gravel, loose; and rocks	19	20
Gila Conglomerate(?) (QTg):			Tertiary and Quaternary(?):		
Sandstone	70	100	Gila Conglomerate (QTg):		
Conglomerate; water at 110 ft	130	230	Gravel, dark gray; cemented	35	55
Tertiary:			Sand, light red; and gravel	255	310
Rhyolite and related volcanic and sedimentary rock (Tr):					
"Malpais" [rhyolite]	80	310			
Sandstone, water-bearing	20	330			
<u>Well 16.19.11.414</u> Noel Rankin			<u>Well 17.12.23.413</u> Kennecott Copper Corp.		
Tertiary:			Mississippian and Pennsylvanian:		
Rhyolite and related volcanic and sedimentary rocks:			Limestone and shale (MPM):		
"Pumma Conglomerate" [volcanic conglomerate]	148	148	Limestone, blue	190	190
Conglomerate, hard, slanting	22	170	Shale	32	222
Conglomerate, limey	48	218	Limestone, blue	213	435
Sandstone [tuff?]	25	243	Shale	12	447
Boulder	1	244	Limestone, blue	240	687
			Cretaceous and Tertiary:		
			Intrusive igneous rock (TKi):		
			Sill "quartz" [quartz diorite?]	33	720
			Mississippian and Pennsylvanian:		
			Limestone and shale (MPM):		
			Clay; fault zone(?)	22	742
			Sand, gray	22	764
			Limestone	40	804
			Devonian:		
			Percha Shale (Dp):		
			Sand, black	18	822
			Shale, blue	59	881
			Shale	27	908
			Shale and limestone, mixed	90	998

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Well 17.12.23.413a Kennecott Mississippian and Pennsylvanian: Limestone and shale (IPM): (Upper part of Magdalena Group)			(Montoya Limestone)		
Limestone, blue	15	15	Limestone, blue gray; with thin quartz stringers	10	940
Shale, red and green	25	40	Limestone, blue gray; with stringers of calcite	130	1070
Limestone, blue	40	80	Limestone, blue and gray, hard	45	1115
Limestone and shale; mixed	20	100	Limestone, blue gray; partly silicified	30	1145
Limestone, blue; some shale	15	115	Limestone, blue gray, hard	135	1280
Limestone, gray	25	140	Calcite	5	1285
Shale, black; sandy	5	145	(El Paso Limestone)		
Limestone, blue; silicified	30	175	Limestone, blue to gray	105	1390
Shale, black	10	185	Limestone, light gray; cherty	5	1395
(Lower part of Magdalena Group)			Chert	6	1401
Limestone, hard; water found at 237 ft, rose 40 ft	55	240	Limestone, light gray; with some calcite and chert	56	1457
Limestone; calcite in crevices	127	367	Limestone, blue; with some cal- cite and chert; fissures, 1483 to 1485, 1491 to 1493; water, 1511 to 1516, 1525 to 1527	93	1550
"Scum", black (coal?)	5	372	Limestone, gray; with calcite	15	1565
Limestone with calcite	13	385	Limestone, blue; with calcite	5	1570
Limestone and "porphyry"; mixed [sill?]	5	390	Limestone, gray; with calcite; water from 1598 to 1600, 1758 to 1762	210	1780
Porphyry, brown and green [sill]	25	415	Shale, blue-black; calcareous	15	1795
Limestone, blue	20	435	Limestone, gray; with calcite	15	1810
Porphyry, sill	20	455	Limestone, blue-black, shaly	20	1830
Limestone, dark blue	25	480	(Bliss Sandstone)		
Limestone, crystalline	30	510	"Quartz", black, (iron and man- ganese)	5	1835
Limestone and shale; mixed	20	530	"Quartz", white	5	1840
Shale, black	10	540	"Quartz", gray; with pyrite	5	1845
Shale and limestone; with quartz vein	5	545	"Quartz", gray black; with pyrite	25	1870
Shale and limestone; with cal- cite; hole caving at 552 ft (Lake Valley Formation)	25	570	Shale, black	15	1885
Limestone, gray; crystalline	30	600	"Quartz", black and white; with pyrite	5	1890
Limestone, black and blue	55	655	"Quartz", gray; pyrite, possibly sediments	35	1925
Limestone, mottled; with pink calcite	15	670	Precambrian:		
Limestone, blue gray; with calcite	10	680	Precambrian rocks (Granite and granite-like rocks, pEg):		
Limestone, blue; with blue- black clay	5	685	Igneous, probably	75	2000
Devonian:			Granite, gray; much mica	50	2050
Percha Shale (Dp):			Granite, pink; much mica	30	2080
Shale, black; with varying quantities of blue-black clay	81	766	Granite, pink; less mica	35	2115
Cretaceous and Tertiary:			Well 17.12.24.432 Kirk Frost		
Intrusive rocks (TKi):			Quaternary:		
"Quartz" [quartz-diorite sill]	18	784	Alluvium (Qal):		
Devonian:			Soil	6	6
Percha Shale (Dp):			Mississippian and Pennsylvanian:		
Shale, black; hole caving 745 to 875 ft	26	810	Limestone and shale (IPM):		
Shale, black; calcareous, some pyrite	65	875	Limestone, reddish	12	18
Cambrian, Ordovician and Silurian:			Limestone, yellow, chalky	10	28
Dolomite, limestone, and sand- stone (SOE):			Limestone, varicolored	60	88
(Fusselman Limestone)			Limestone, talcy	1	89
Limestone, gray; siliceous	10	885	Limestone, gray, soft; water seep at 90 ft	5	94
Limestone, blue gray; with quartz; water-bearing from 891 to 900 ft; wl at 750 ft	20	905	Limestone, hard to medium hard, alternating; water seep at 147 ft and at 193 ft	167	261
Limestone, blue; with black shale calcite	25	930	Limestone, gray; water at 267 ft yielded about 1 gpm	6	267
			Limestone, hard to medium hard	27	294
			Limestone, very hard	7	301

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Limestone, medium hard; water from 315 to 320 ft yielded about 1-1/2 gpm	49	350	Conglomerate, reddish brown, cavey [rounded limestone pebbles in clay]; test bailed at 1-1/2 gpm	10	310
<u>Well 17.13.24.323</u> Veterans Administration			<u>Well 17.14.34.323</u> Town of Silver City		
Quaternary:			Quaternary:		
Alluvium (Qal):			Alluvium (Qal):		
Sand and gravel, gray	26	26	Sand; wash	60	60
Cretaceous:			Cretaceous:		
Sedimentary and interbedded volcanic rocks:			Colorado Formation (Kc):		
(Colorado Formation, Kc)			Sandstone	125	185
Shale, gray	5	31	Sandstone, water bearing;		
Sandstone, gray	19	50	2 bbl/min	15	200
Shale, gray	10	60	"Slate" [shale]	80	280
Shale, gray, hard	21	81	Sandstone	15	295
Shale, dark gray	4	85	"Slate" [shale]; sandy	80	375
Sandstone	11	96	"Slate" [shale]	25	400
Shale, gray	14	110	Sandstone, red; 4 bbl/min		
Sandstone	23	133	(water)	20	420
Shale, gray	7	140	Sandstone	55	475
Sandstone, gray, hard	15	155	"Slate" [shale]	20	495
Shale, gray	39	194	Sandstone	15	510
Sandstone, gray	23	217	"Slate" [shale]	20	530
Shale, gray	21	238	Sandstone	130	660
(Beartooth Quartzite, Kb)			"Slate" [shale]	25	685
Quartzite, gray, hard	32	270	Sandstone	5	690
Sandstone, gray	48	318	"Slate" [shale]	10	700
Shale, gray	51	369	Sandstone	10	710
Shale, black	16	385	"Slate" [shale]	40	750
Mississippian and Pennsylvanian:			Sandstone	155	905
Limestone and shale (IPM):			"Slate" [shale]	10	915
Limestone and shale, gray	85	470	Sandstone	75	990
Limestone and shale, dark gray	158	628	"Slate" [shale]	55	1045
Sandstone, hard	60	688	Sandstone, very hard	60	1105
Limestone, gray	39	727	"Slate"	110	1215
Shale, gray	33	760	Sandstone, black; and "slate"		
Shale, red (base of Syrena)	8	768	[shale]	80	1295
Limestone, gray	155	923	Beartooth Quartzite [Kb]:		
<u>Well 17.14.32.233</u> James Turner			"Flint", black; mixed with		
Cambrian, Ordovician, and Silurian:			quartz [Quartzite]	70	1365
Dolomite, limestone, and sandstone (SOE):			Sandstone; 200 ft of water in hole	5	1370
Limestone, gray	50	50	Sandstone, gray; 600 ft of water in hole	10	1380
Limestone, brown, broken	10	60	Sandstone, white; water flowing		
Limestone, brown; creviced [9-in bit wedged]	15	75	5 gpm	5	1385
Limestone, brown, broken	45	120	Sandstone, black, very hard	75	1460
Limestone, gray	5	125	Permian:		
Limestone, reddish brown, soft	20	145	Abo Formation (Pa):		
Limestone, light brown; and chert, hard	10	155	Rock, red; "lime" formation [limestone]; increase in water	15	1475
Limestone, brown, hard	5	160	Pennsylvanian:		
Chert, tan, hard	15	175	Syrena Formation (IPM):		
Chert, reddish brown, very hard; creviced at 200 ft, bit wedged	25	200	Limestone	110	1585
Limestone, reddish brown, shaley; first water (1/2 gpm) at 220 ft	35	235	"Slate" [shale]	15	1600
Limestone, gray; creviced at 260 ft	25	260	Limestone	130	1730
Limestone, reddish brown, some water at 280 ft (yield 1 gpm), T. 72°F	20	280	Limestone and "slate" [shale]	50	1780
Limestone, reddish brown, soft; water at 290 ft	20	300	Limestone	85	1865
			<u>Well 17.16.9.343</u> John McMillen		
			Quaternary:		
			Alluvium (Qal):		
			Gravel, sand, and boulders; water at 21 ft	45	45
			Tertiary and Quaternary(?):		
			Gila Conglomerate (QTg):		

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Conglomerate	52	97	Conglomerate, gray	140	180
Gravel	3	100	Conglomerate, hard	83	263
Conglomerate, gray	78	178	Cretaceous and Tertiary:		
			Intrusive rocks (TKi):		
			Rock, gray, dark [quartz monzonite]	41	304
<u>Well 17.21.5.323</u> J. L. Phillips			Mississippian and Pennsylvanian:		
Cretaceous and Tertiary:			Limestone and shale (PM):		
Volcanic rock (TKa):			Limestone	18	322
Lava, light gray	60	60	Shale, yellow	20	342
Lava, blue gray; 1 gpm of water at about 70 ft	45	105	Limestone, gray; sandy	8	350
Lava, black; 3 gpm of water at about 120 ft	47	152	Sandstone, yellow; and shale	5	355
			Shale, blue; sandy; wl at 27.5 ft	5	360
<u>Well 17.21.23.343a</u> Thygerson Bros.			Devonian:		
Quaternary:			Percha Shale (Dp):		
Alluvium (Qal):			Shale, dark gray	105	465
Gravel and sand	8	8	Limestone, light gray; and shale	21	486
Cretaceous and Tertiary:			Shale, dark gray	23	509
Volcanic rocks (TKa):			Shale, dark gray, soft	3	512
Rock, soft [tuff or weathered andesite]	26	34	Shale, dark gray, hard	53	565
Lava, gray, hard [andesite]; 12 gpm of water	36	70	Shale, dark gray; sandy	25	590
			Shale, light gray; cavey	35	625
			Shale, dark gray	7	632
			Shale, gray; gumbo; and fine gray sand to hard light-gray sand	8	640
<u>Well 18.10.34.424a</u> L. S. Dominguez			Cretaceous and Tertiary:		
Quaternary:			Intrusive rocks (TKi):		
Alluvium (Qal):			"Quartzite", light gray, hard [quartz monzonite]	10	650
Soil and boulders	5	5	Devonian:		
Clay and water-worn boulders	10	15	Percha Shale (Dp):		
Sand and small gravel	5	20	Shale, dark gray, hard	10	660
Tertiary and Quaternary(?):			Shale, light gray; copper staining	2	662
Basalt and basaltic andesite flows (Tba):			"Hard gray" [shale?]	16	678
Basalt; water seep on top	5	25	Shale, dark gray, softer	4	682
Clay, reddish, changing to yellow	5	30	Cretaceous and Tertiary:		
Basalt; about 1/2 gpm of water	25	55	Intrusive rocks (TKi):		
Gila Conglomerate (QTg):			"Quartz", light gray, hard, and pyrite [Quartz Monzonite]	16	698
Clay, red	15	70	Devonian:		
Sandstone	5	75	Percha Shale (Dp):		
Clay, yellow	15	90	Shale, gray, hard	4	702
Sand and gravel; bailed 30 gpm; water rose to 16 ft after casing placed	5	95	Sand, sharp, hard; wl at 53 ft	18	720
Clay, chalk white [possibly volcanic ash or bentonite]	5	100	Cambrian, Ordovician, and Silurian:		
			Dolomite, limestone and sandstone (SOE):		
			Dolomite, light gray	5	725
<u>Well 18.13.15.434</u> Town of Central			Limestone, dark gray, hard; wl at 48 ft	19	744
Tertiary and Quaternary(?):			<u>Well 18.14.11.233</u> R. C. Cloudt		
Gila Conglomerate (QTg):			Quaternary:		
Conglomerate and clay; first water at about 168 ft	230	230	Alluvium (Qal):		
Rock, "shelf"; and sand	20	250	Soil and gravel	20	20
Sand, hard; and conglomerate	30	280	Tertiary and Quaternary(?):		
Conglomerate, hard; sandy	30	310	Gila Conglomerate (QTg):		
Rock, gray [weathered quartz monzonite intrusive]	15	325	Conglomerate	35	55
Rock, gray, hard [quartz monzonite intrusive]	90	415	Sandstone and conglomerate; about 5 sandstone beds 2 to 4 ft thick in the conglomerate; first water found at about 60 ft	85	140
Rock, gray, hard; with white veins [calcite in quartz monzonite]	40	455			
Rock, gray, very hard [unaltered quartz monzonite intrusive]	18	473	<u>Well 18.14.27.434</u> Elmo McMillen		
<u>Well 18.13.22.222</u> L. H. Cron			Quaternary:		
Tertiary and Quaternary(?):			Alluvium (Qal):		
Gila Conglomerate (QTg):			Soil, sand, and gravel	35	35
Conglomerate, light red; wl at 27.5 ft	40	40	Tertiary and Quaternary(?):		
			Gila Conglomerate (QTg):		

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Conglomerate, gray; water at 96 ft, 120 to 122 ft, 128 ft, and 143 ft; wl at 87 ft	173	208	Conglomerate; wl 192 ft	172	238
Conglomerate and gravel, dark gray	16	224	Conglomerate, hard	26	264
Clay, light red	13	237	Conglomerate, soft; water bearing from 264 to 268 ft, 280 to 285 ft	34	298
Conglomerate, hard	20	257	Conglomerate, hard	24	322
Conglomerate and light-red clay	28	285	Conglomerate, soft; water bearing	8	330
Conglomerate, hard	10	295	Conglomerate, light red	22	352
Conglomerate, light red	10	305	Conglomerate, gray; water bearing 362 to 366 ft	14	366
Conglomerate, gray	85	390	Sand, gray; and clay, cavey	19	385
Conglomerate, light red	230	620	Sand, light red; and clay, cavey; water from 435 to 442 ft	71	456
Conglomerate, red	135	755	Conglomerate, light red	30	486
Conglomerate, gray, soft; cavey	3	758	Conglomerate, hard; slanting; large boulders deflect drill bit	39	525
Conglomerate, hard	10	768	Conglomerate, light color	18	543
Sand, gray; clayey; cavey	27	795	Conglomerate, soft	44	587
Conglomerate, red	240	1035	Conglomerate, hard; slanting	27	614
"Diorite", [sill?] light green	17	1052	Conglomerate, soft	19	633
Conglomerate, red	228	1280	Conglomerate, hard; water bearing from 640 to 642 ft; boulders causing drilling difficulties from 654 to 658 ft	26	659
Conglomerate, gray, cavey from 1357 to 1367 ft and 1390 to 1395	115	1395			
<u>Well 18.14.28.141</u> A. V. Hayes (USNR Mining & Minerals, Inc.)			<u>Well 18.15.11.323</u> Town of Silver City		
Tertiary and Quaternary(?):			Quaternary:		
Gila Conglomerate (QTg):			Alluvium (Qal):		
Conglomerate and brown clay	400	400	Fill, valley	5	5
[Unreported] First water at 400 ft	60	460	Tertiary and Quaternary(?):		
Tertiary:			Gila Conglomerate (QTg):		
Basalt and basaltic andesite flows (Tba):			Sandstone [and conglomerate]	240	245
"Malpais" [basaltic andesite?]	120	580	Gravel, cemented; water bearing	30	275
Rock, red [Scoria?]	20	600	Sandstone	10	285
"Ash", "malpais", red [tuff?]	100	700	Gravel, cemented; water bearing	30	315
<u>Well 18.14.30.324</u> Silver City			Gravel, cemented	140	455
Tertiary and Quaternary(?):			"Water" (?)	5	460
Gila Conglomerate (QTg):			Gravel, cemented	102	562
Conglomerate, yellow, soft; containing much feldspar	30	30	Gravel, water bearing	1	563
Conglomerate, tan; mostly small fragments of volcanic rocks in matrix of weathered feldspar and quartz	205	235	Gumbo, sticky	3	566
Conglomerate, dark tan; water found at 304 ft, yield about 10 gpm in first 25 ft, increasing with depth; wl 300 ft	70	305	Gravel; water(?)	3	569
Conglomerate, gray; harder	90	395	Gumbo, gray; sticky	11	580
Conglomerate, dark tan; harder	24	419	Water level at 245 ft		
Conglomerate, light, softer; much feldspar and quartz material; water at 433 ft, 460 to 470 ft, 535 to 538 ft; test-pumped at 600 ft depth, dd 144 ft at 375 gpm	381	800	<u>Well 18.15.34.224</u> Marvel Woodward		
Conglomerate, harder	15	815	Cretaceous:		
Conglomerate, softer	75	890	Sedimentary and interbedded volcanic rocks:		
Conglomerate, gray; very hard	5	895	(Colorado Formation, Kc)		
<u>Well 18.15.10.441</u> Silver City			Soil and clay [weathered shale]	12	12
Quaternary:			Shale, dark gray; some water at 33 ft	89	101
Alluvium (Qal):			Shale, light gray to light green	7	108
Sand and small gravel	66	66	Shale, dark gray; water at 115 ft	51	159
Tertiary and Quaternary(?):			"Quartzite", [sandstone], light gray, hard	20	179
Gila Conglomerate (QTg):			Shale, dark gray	3	182
			Shale, light gray	8	190
			Shale, light gray, soft	5	195
			Shale, light gray	15	210
<u>Well 18.18.16.338</u> R. R. Blakey			<u>Well 18.18.16.338</u> R. R. Blakey		
Quaternary:			Quaternary:		
Alluvium (Qal):			Alluvium (Qal):		
Sand and gravel			Sand and gravel	40	40
Tertiary and Quaternary:					

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Gila Conglomerate (QTg):			Sand and clay	4	138
Conglomerate; first water at			Gravel and clay; water at 153 ft	19	157
60 ft, weak, got stronger;			Mississippian and Pennsylvanian:		
final yield 10 gpm	80	120	Limestone and shale (MPM):		
Well 19.9.2.412 John Watson			Limestone, dark brown to white;		
Tertiary and Quaternary:			6 ft bed of sandstone at about		
Gila Conglomerate (QTg):			282 ft	187	344
Topsoil	14	14	Limestone, mottled	6	350
"Lime", gray	48	62	Limestone, sandy	22	372
Sandstone, brown	74	136	Limestone, pink, mottled	18	390
"Lime", gray	205	341	Limestone, light brown	30	420
Sand; water	6	347	Limestone, brown; lower part		
"Lime", gray	13	360	hard	51	471
Sand; water	1	361	Limestone, yellow	30	501
"Lime", gray	45	406	Limestone, gray; hard	25	526
Sand; water	14	420	Limestone, dark gray; hard	12	538
Sandstone, brown	20	440	Limestone, gray; hard	30	568
Sand; water	11	451	Clay-shale, yellow	8	576
Well 19.10.27.234 Leedro Eby			Limestone, brown; mottled; hard	45	621
Quaternary:			Limestone, hard	10	631
Alluvium (Qal):			Limestone, brown	10	641
Soil, sand, and gravel	20	20	Limestone, reddish brown to		
Cretaceous and Tertiary:			black	45	686
Volcanic rocks (TKa):			Limestone, brown; hard	4	690
Not recorded by driller--out-			Shale, light brown; hard	39	729
crops nearby and geologic			Limestone; shaley	9	738
section of area indicate this			Limestone, blue; shaley; and		
interval comprised of flow			gravel	2	740
rocks agglomerates, and tuffs	130	150	Limestone; shaley	9	749
"Shale", blue; with gravel and			Shale, light brown	19	768
boulders [tuff?]	52	202	Sandstone	3	771
"Shale", yellow [tuff?]	17	219	Shale, light, brown	4	775
"Shale", blue; sandy [tuff?]	22	241	Limestone, gray; and sand	4	779
Cretaceous(?):			Limestone, mottled; and sand	9	788
Sedimentary and interbedded vol-			Limestone, brown; shaley	41	829
canic rocks:			Shale, brown and blue	2	831
Limestone, gray; sandy	26	267	Limestone, mottled; shaley	4	835
Permian(?):			Devonian:		
Abo(?) Formation (Pa):			Percha Shale (Dp):		
Conglomerate, red	23	290	Shale, blue and gray; with some		
Conglomerate, gray; some lime-			red limestone; fossils at 850 ft	82	917
stone	15	305	Shale, black	30	947
Clay, gray; sandy	33	338	Shale, gray; with some red clay	35	982
Shale, red; and boulders	12	350	Shale, black	92	1074
Mississippian and Pennsylvanian:			Cambrian, Ordovician, and Silurian:		
Limestone and shale (MPM):			Dolomite, limestone, and sand-		
Limestone, brown	8	358	stone (SOE):		
Well 19.12.19.132a Kennecott Copper			Limestone, brown	136	1210
Corp.			Sandstone, brown	4	1214
Quaternary:			Limestone, brown	108	1322
Bolson fill (Qab):			"Soapstone" [clay or shale]	1	1323
Clay	5	5	Limestone, brown	7	1330
Gravel and clay	10	15	Shale, dark gray	13	1343
Gravel, sand, and clay	20	35	Limestone, brown	186	1529
Clay	5	40	Limestone, gray; mottled	3	1532
Gravel and sand	5	45	Limestone, brown	100	1632
Clay	2	47	Limestone, dark gray; hard	18	1650
Sand and gravel	10	57	Limestone, brown and gray	30	1680
Clay, sand, and gravel	7	64	Limestone, brown; silicious	5	1685
Gravel and clay	38	102	Limestone, brown	375	2060
Clay, sand, and gravel	3	105	Limestone, brown; and yellow		
Gravel and clay	4	109	clay seams	20	2080
Gravel	7	116	Shale	5	2085
Gravel, sand, and clay	5	121	Limestone, gray	19	2104
Clay and gravel	13	134	Limestone, blue	8	2112
			Limestone, gray and brown	17	2129
			Limestone, brown	39	2168
			Limestone, gray to dark gray	55	2223

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Sandstone, brown	32	2255	<u>Well 19.14.1.143a</u> Elmer Salars		
Limestone, brown	35	2290	Quaternary:		
Limestone, brown and blue	24	2314	Alluvium (Qal):		
Sandstone, brown; hard	7	2321	Soil and gravel	18	18
Rock [sandstone?], gray; hard	33	2354	Tertiary and Quaternary(?):		
Limestone, blue	10	2364	Gila Conglomerate (QTg):		
Rock [sandstone?], blue gray	26	2390	Gravel, cemented	54	72
Sandstone, brown	42	2432	Gravel and boulders, cemented (intervals from 260 to 275 ft and from 505 to 520 ft cored)	581	653
Precambrian:			Boulders, cemented	25	678
Precambrian rocks:			Gravel and boulders, cemented (interval from 678 to 688 ft cored)	152	830
(Granite and granite-like rocks, pCg)			Gravel, cemented; and few boulders	155	985
Granite	13	2445	Gravel and boulders, cemented (cored)	18	1003
<u>Well 19.12.29.222</u> Kennecott Copper Corp.			Cuttings and cores at site are composed of 95 or more percent light-colored, angular to sub-rounded volcanic rocks of varied types imbedded in a matrix of fine to coarse sand and angular gravel mixed with tuffaceous clay. (See fig. 28a.)		
Quaternary:					
Bolson fill (Qab):					
Sand, reddish brown; and gravel	135	135			
Tertiary and Quaternary(?):					
Gila Conglomerate (QTg):					
Conglomerate	145	280			
Fines, black	20	300			
Conglomerate, pink and gray	65	365			
Conglomerate; clay binder; clay content increasing with depth	210	575			
<u>Well 19.12.30.411</u> Kennecott Copper Corp.			<u>Well 19.15.10.221</u> Silver City		
Quaternary:			Quaternary:		
Bolson fill (Qab):			Alluvium (Qal):		
Sand, reddish brown; and gravel impregnated with clay	110	110	Soil, sand, and gravel	35	35
Same formation but with showing of black and white conglomerate; water found at 230 ft	120	230	Tertiary and Quaternary(?):		
Clay content increasing with depth	225	455	Gila Conglomerate (QTg):		
Formation compacting with depth	15	470	Sand, gravel, and boulders	70	105
Color change from reddish brown to tan	93	563	Sand, hard; and gravel	112	217
Color change, tan to brown	121	684	Sand, hard; gravel; and clay	180	397
Very hard solid strata	5	689	Sand	3	400
Gravel, brown; and clay	15	704	Clay, hard; and gravel (cored)	9	409
Conglomerate, light red to tan, compacted; probably "andesite" [rhyolitic]	6	710	Sand, hard; gravel; and clay	37	446
Narrow seams of decomposed "granite" [probably rhyolite] in the conglomerate	61	771	Sand, hard; gravel; and clay (cored)	10	456
"Granite" stratas disappear; reacts to acid, indicating presence of lime; water found at 902 ft	141	912	Sand, hard; gravel; and clay	264	720
Tertiary:			Clay and gravel (cored)	8	728
Andesite and related volcanic rocks (Trp):			Clay, hard; and gravel	23	751
"Andesite" [rhyolite, Trp]	48	960	Sand, hard; clay; and gravel	114	865
Clay, tenacious; and decomposed "granite"	4	964	Sand, hard; clay; gravel; and boulders	169	1034
"Andesite" [rhyolite Trp]	43	1007	Clay, hard; gravel; and boulders	61	1095
Tenacious clay and decomposed "granite"	8	1015	Clay and gravel (cored)	4	1099
"Andesite", pink [rhyolite, Trp] decomposed; drilling halted because of severe caving	193	1208	Clay, hard; gravel; and boulders	53	1152
			Sand, hard; gravel; clay; and boulders; bottom 5 ft cored	28	1180
			<u>Well 19.15.12.242</u> Frank Holman		
			Tertiary and Quaternary(?):		
			Gila Conglomerate (QTg):		
			Conglomerate, yellow, soft	85	85
			Conglomerate, gray, gravelly; trace of water at about 90 ft	37	122
			Conglomerate, light pink; trace of water at about 153 ft	31	153
			Conglomerate, gray; traces of water at 208 and 372 ft	237	390
			Conglomerate, cavey; and much water from 520 ft [may have drilled into fault zone]	158	548

Table 15, continued

Stratigraphic	Thick (ft)	Depth (ft)	Stratigraphic	Thick (ft)	Depth (ft)
<u>Well 19.15.25.321</u> Mangas Cattle Co.			<u>Well 20.11.18.422</u> Kennecott Copper Corp.		
Tertiary and Quaternary(?):			Quaternary:		
Gila Conglomerate (QTg):			Alluvium (Qal):		
Gravel	140	140	Topsoil; light brown	8	8
Clay	30	170	Bolson fill (Qab):		
Gravel	100	270	"Conglomerate"; sand and gravel with clay binder	42	50
Precambrian:			Tertiary and Quaternary(?):		
Precambrian rocks:			Gila Conglomerate (QTg):		
(Granite and granite-like rocks, pEg)			Conglomerate, grayish tan; with clay binder; compacting with depth	85	135
Granite, decomposed	30	300	Conglomerate, dark reddish, hard	25	160
<u>Well 19.19.10.221</u> Fred Anderson			Conglomerate, reddish, soft; with high clay content	20	180
Quaternary:			Conglomerate, dark gray	20	200
Alluvium (Qal):			Conglomerate, light brown	23	223
Soil; mud, and gravel; water at 20 and 30 ft	37	37	Conglomerate, dark red, soft	7	230
Gravel, water bearing	4	41	Clay, dark reddish, pure	13	243
Clay and gravel	6	47	Conglomerate, alternate layers of red and tan with clay binder, and containing quartz crystals	69	312
Sand and gravel	8	55	Conglomerate, reddish, with tenacious clay binder	38	350
Tertiary and Quaternary(?):			<u>Well 20.11.19.111</u> Kennecott Copper Corp.		
Gila Conglomerate (QTg):			Quaternary:		
Conglomerate, cemented	18	73	Bolson fill (Qab):		
<u>Well 20.11.17.314</u> Boy Scouts of America			"Conglomerate"; sand and gravel with clay binder	285	285
Quaternary:			Tertiary and Quaternary(?):		
Alluvium (Qal):			Gila Conglomerate (QTg):		
Topsoil, brown; sand; and gravel	20	20	Conglomerate, tan, hard	30	315
Boulders, brown, hard; and gravel	3	23	Tertiary:		
Color changed, brown to tan	2	25	Rhyolite and related volcanic and sedimentary rock (Tr):		
Tertiary and Quaternary(?):			Rhyolite, red, hard	85	400
Gila Conglomerate (QTg):			<u>Well 20.11.34.444</u> Triple S Land Corp.		
Conglomerate, tan; compacting with depth	85	110	Quaternary:		
Conglomerate; increasing sand content	10	120	Alluvium (Qal):		
Conglomerate, dark reddish brown; with sand and tenaceous clay binder	110	230	Topsoil and boulders	2	2
Same formation, but with increasing clay content	20	250	Tertiary and Quaternary(?):		
<u>Well 20.11.17.331</u> Boy Scouts of America			Bolson fill (Qab):		
Quaternary:			Rock [caliche zone?], white	2	4
Alluvium (Qal):			Clay, gravel, and boulders	13	17
Topsoil, brownish	17	17	Conglomerate	41	58
Sand, brown; and gravel	3	20	Sand and gravel	42	100
Tertiary:			Clay, gravel, and sand; water at 206 ft	106	206
Rhyolite and related volcanic and sedimentary rocks (Tr):			Sand	18	224
Rhyolite, brownish, hard; high in iron	10	30	<u>Well 20.17.22.242</u> Brock Cattle Co.		
"Sand" [tuff?], tan	1	31	Quaternary:		
Boulders, brown, hard	4	35	Alluvium (Qal):		
Rhyolite, purple, hard	10	45	Soil	5	5
Sand and gravel	2	47	"Sandy"	80	85
Sand, gray, fine	2	49	Alluvium and bolson deposits (Qab):		
"Sand" [tuff?], brown; and rhyolite	2	51	Sand, red	78	163
Rhyolite, hard	4	55	Clay, red; and sand	99	262
"Magnetite"	85	140	Clay and sand	38	300
Conglomerate, tan, hard; and blue shale	90	230	<u>Well 21.15.33.223</u> Della Cureton		
Conglomerate, dark brown; and gray shale	130	360	Quaternary:		
			Alluvium (Qal):		
			Valley fill	10	10

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Tertiary:			Soil	3	3
Rhyolite and related volcanic and sedimentary rocks (Tr):			Bolson fill (Qab):		
Perlite (Author's note: part of the extensive McDonald Ranch perlite deposit reported by Ballman (1960, p. 17)), gray; some water at 150 ft	320	330	"Cement" [caliche]	7	10
"Andesite" [rhyolite?], red, decomposed; 1/4 gpm of water	20	350	Clay	40	50
Perlite, gray; water at 370 ft, 4 gpm	36	386	Sand and gravel	10	60
			"Cement" [caliche]; and gravel	5	65
			Clay	5	70
			"Cement" [caliche]; and gravel	20	90
			Sand, "running" [loose]	10	100
			Clay	3	103
			"Cement" [caliche]; and gravel	114	217
			Gravel, "running" [loose]	5	222
			Clay	10	232
			Gravel, cemented	14	246
			Gravel, "running" [loose]	10	256
			Gravel, cemented	20	276
			Clay	24	300
			Gravel, water bearing; wl at 300 ft	10	310
			Clay	30	340
			Gravel, water bearing	10	350
			Clay	14	364
			Gravel, water bearing	4	368
			Clay	34	402
			Gravel	4	406
			Clay	56	462
			Gravel, water bearing	2	464
			Clay	60	524
			No record [presumed to be mostly clay containing beds of gravel as in the overlying deposits]	86	610
Well 22.15.17.322a Carrie Bounds			Well 24.16.7.124 Collins Walker		
Quaternary:			Quaternary:		
Alluvium (Qal):			Alluvium and bolson fill (Qab):		
Soil, sand, and gravel; wl 12 ft	22	22	Topsoil	5	5
Precambrian:			Clay, sandy	13	18
Precambrian rocks:			Clay	7	25
(Granite and granite-like rocks, pEg)			Sandy	30	55
Granite, decomposed	18	40	Clay	25	80
"Lime" [decomposed granite], light gray, soft	39	79	Clay, sandy	50	130
"Talc and quartz" [decomposed granite feldspar may be partly kaolinized], light gray; water at 115 ft	70	149	Sand, gravel, and water	8	138
"Lime" [decomposed granite], light gray; and quartz	14	163	Clay, sandy	42	180
"Granite", yellow, light	22	185	Clay	55	235
"Granite", gray, light	5	190	Sand	10	245
"Lime", light gray; and quartz [decomposed granite]	135	325	Clay	80	325
"Granite", pink	9	334	Clay, sandy; and gravel	375	700
"Granite", gray; locally soft and cavey	31	365	Clay	10	780
"Granite", pink	6	371	Tertiary and Quaternary:		
Feldspar [unweathered granite], pink, harder	16	387	Gila Conglomerate (QTg):		
Feldspar [unweathered granite], pink, hard	38	425	Conglomerate	190	900
Well 22.16.14.243 Carrie Bounds			Well 24.16.8.322 C. J. McBee		
Quaternary:			Quaternary:		
Alluvium (Qal):			Alluvium and bolson fill (Qab):		
Soil	5	5	Clay, sandy; and gravel	6	6
Gravel	15	20	Clay	29	35
Bolson fill (Qab):			Clay, sandy; and gravel	75	110
"Sandstone" [arkose]	30	50	Gravel	8	118
Precambrian:			Clay, sandy	42	160
Precambrian rocks:			Sand and gravel; and water	20	180
(Granite and granite-like rocks, pEg)			Clay, sticky	40	220
Granite, gray	20	70	Clay, sandy; and gravel	15	235
Granite, pink; first water, 1/2 gpm, 78 to 81 ft	20	90	Clay, sandy	35	270
Granite, dark gray	70	160	Clay	70	340
Granite, light "blue"	20	180	Clay, sandy	90	430
Granite, pink, soft; second water, 3/4 gpm, 180 to 188 ft; third water, 4-1/2 gpm, 250 to 255 ft, rose 30 ft	80	260	Clay, sandy; and gravel	150	580
Granite, fine grained, very hard	9	269	Tertiary and Quaternary:		
Well 24.15.19.421 Southern Pacific Co.			Gila Conglomerate (QTg):		
Quaternary:					
Alluvium (Qal):					

Table 15, continued

Stratigraphic unit	Thick (ft)	Depth (ft)	Stratigraphic unit	Thick (ft)	Depth (ft)
Conglomerate; some clay	60	640	Water lowered 6 ft	10	500
Conglomerate	50	690	Water came to original level	15	515
Conglomerate; some clay	170	860	Rock, red; hard all the way	77	592
Clay, sandy	30	890	Rock, softer	3	595
Sand and gravel; and water	6	896	Rock, red	3	598
Conglomerate; some clay	24	920			
Clay, sticky	20	940	<u>Well 27.15.26.444</u> Southern Pacific		
"Rock" [basalt?] and water	20	960	Co.		
<u>Well 24.16.8.344</u> C. J. McBee			Quaternary:		
Quaternary:			Bolson fill (Qab):		
Alluvium and bolson fill (Qab):			Clay and gravel	45	45
Topsoil	5	5	Clay and chunks of "malpais"		
Clay and gravel	575	580	[basalt]	15	60
Tertiary and Quaternary:			Basalt (Qb):		
Gila Conglomerate (QTg):			"Malpais" [basalt], decomposed;		
Conglomerate and black malpais			and red dirt	18	78
[Tba?]	420	1000	"Malpais" [basalt], decomposed	21	99
<u>Well 24.16.31.124</u> Mildred Johnson			Bolson fill (Qab):		
Quaternary:			Gravel, coarse	36	135
Alluvium and bolson fill (Qab):			Gravel and boulders	48	183
Topsoil	8	8	Gravel and "malpais" [basalt]		
Clay	22	30	boulders	10	193
Sand and gravel	5	35	Tertiary and Quaternary(?):		
Clay	15	50	Basalt and basaltic andesite		
Clay, white; and caliche	10	60	flows (Tba):		
Sand and gravel	5	65	"Rock" [probably basalt]	15	208
Clay	25	90	Gila Conglomerate(?) (QTg?):		
Gravel and sand	5	95	Conglomerate, boulders; water at		
Clay	15	110	360 ft	156	364
Sand and gravel	15	125	Gravel, small	16	380
Tertiary and Quaternary:			Clay, hard; and rock, soft,		
Gila Conglomerate (QTg):			white; water at 425 ft	75	455
Conglomerate	58	183	Gravel and sand	41	496
Conglomerate, very hard	32	215	Sand, soft; water at 500 ft	14	510
Conglomerate	25	240	Clay and gravel	58	568
Conglomerate, very hard	115	355	"Rock"	4	572
Conglomerate, harder	20	375	Clay and gravel	26	598
Conglomerate, softer	60	435	Clay and boulders; water at		
Latite and related volcanic and			611 ft	13	611
sedimentary rocks (T1):			Gravel, water bearing	4	615
Rock, broken [latite?]	25	460	Gravel and boulders	10	625
Rock, red, hard; some quartz;			Clay and gravel	20	645
water raised 2 ft	20	480	Clay and boulders	26	671
Water raised 5 ft	10	490	Clay, gumbo, and boulders	10	681
			Clay and boulders	11	692
			Clay, gumbo	3	695

