

STATE OF MONTANA

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BUREAU OF MINES AND GEOLOGY

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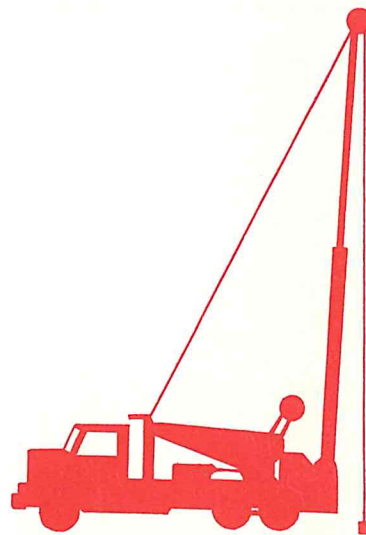
BULLETIN 53

September, 1966

BASIC WATER DATA REPORT NO. 3
KALISPELL VALLEY, MONTANA

by

Alex Brietkrietz



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This report contains water records collected and compiled during the period 1963-65 by the U. S. Geological Survey during the course of an investigation of the water resources of the Kalispell Valley. The report is intended to serve two purposes: (1) to make available to the general public basic ground-water data useful in planning the wise development and proper management of the water resources; and (2) to supplement an interpretive report that will be published later as a Bulletin of the Montana Bureau of Mines and Geology. The location of the Kalispell Valley is shown on Figure 1.

To facilitate the location of wells, springs, and pothole lake measurement sites on Plate 1, they are assigned numbers in accordance with the U. S. Bureau of Land Management's system of land subdivision. A graphical illustration is shown in Figure 2. The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian--A indicates the northeast quadrant, B the northwest quadrant, C the southwest quadrant, and D the southeast quadrant. In the Kalispell Valley all townships are north of the base line and all ranges are west of the principal meridian and thus all well numbers are preceded by B. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lower case letters that follow the section number show the location of the well in the quarter section (160-acre tract) and the quarter-quarter section (40-acre tract). These subdivisions are designated a, b, c, and d in a counterclockwise direction, beginning in the northeast tract. If two or more wells are located in the

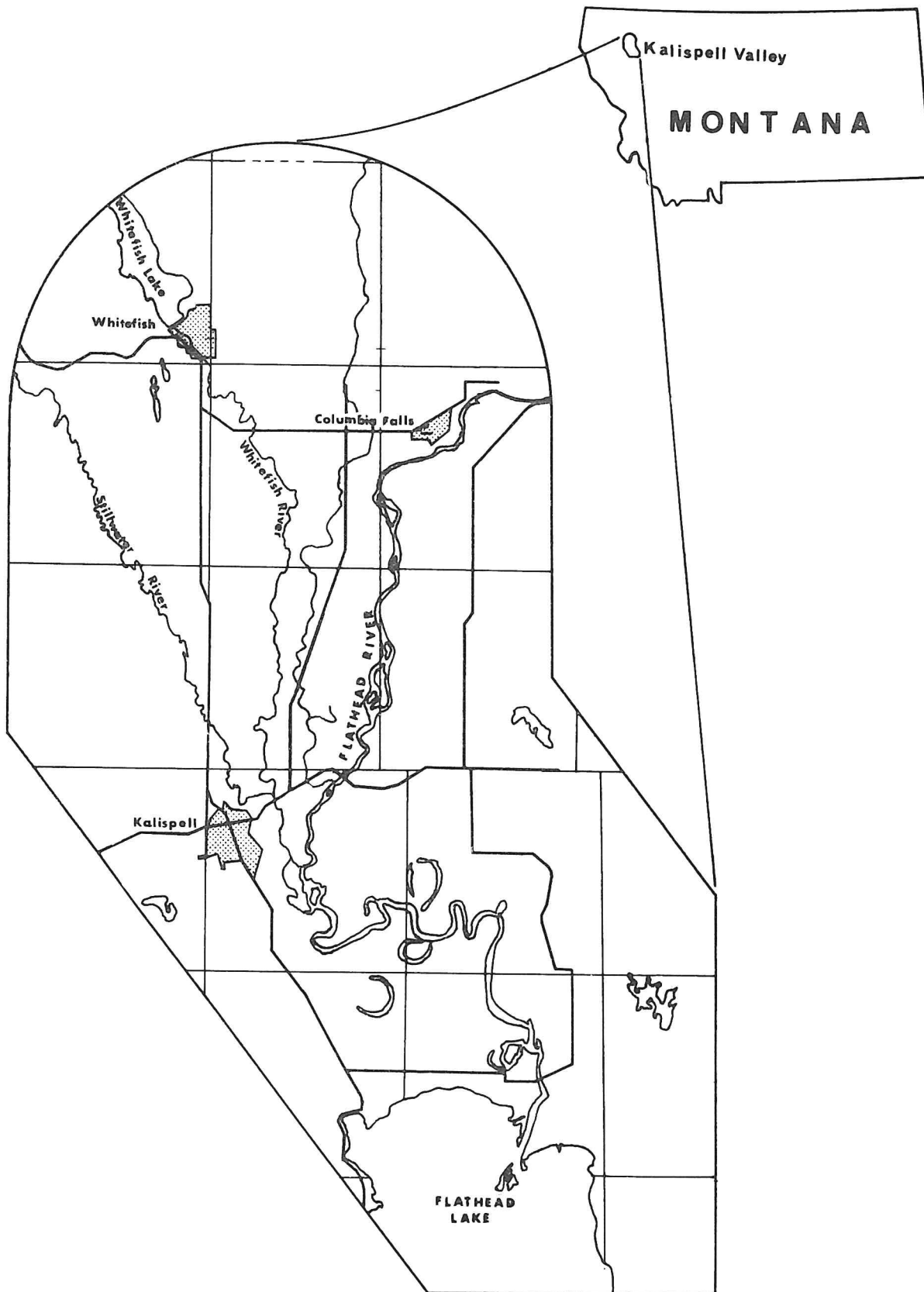
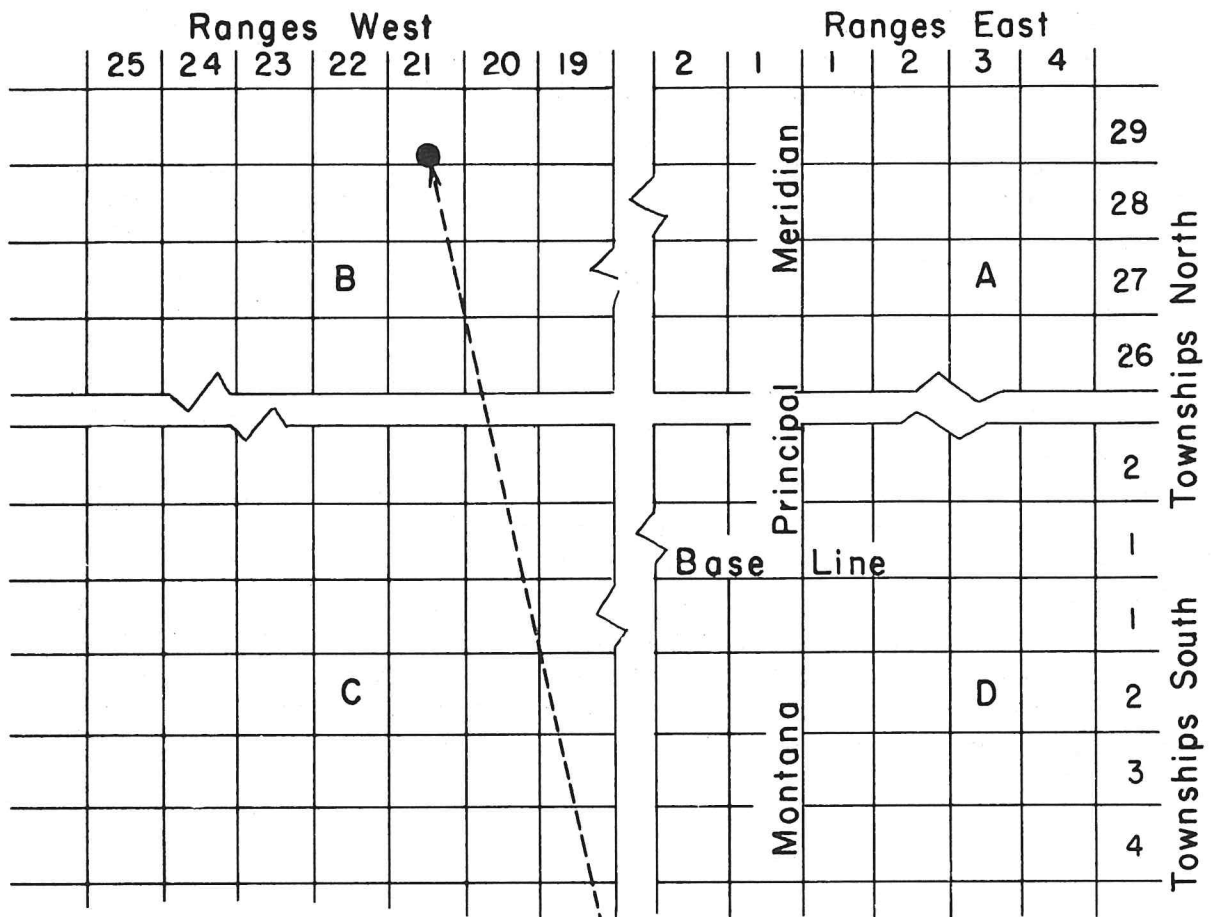


Figure 1. --Map of Kalispell Valley showing outline of study area and principal towns and drainage features.



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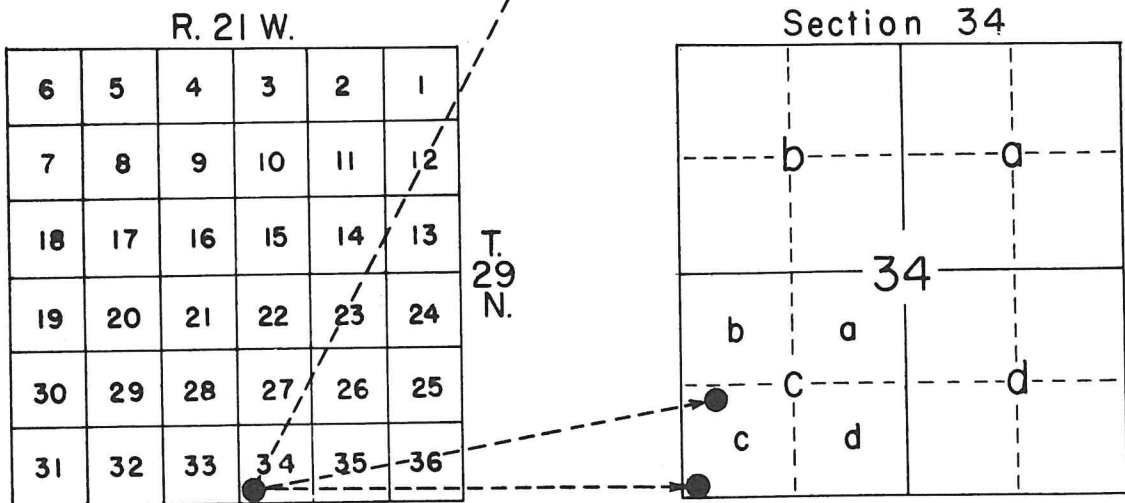


Figure 2. --Sketch showing well-numbering system.

same 40-acre tract, consecutive numbers beginning with 1 are added to the well number. Thus, the second well inventoried in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 29 N., R. 21 W., would be numbered B29-21-34cc2.

The report will be helpful in determining conditions likely to be found in drilling a new well. The person considering a new well can locate the proposed well site on Plate 1 and examine the records of wells in the vicinity. From Table 1 he can determine how successful nearby wells have been. From Table 2 he can determine the type of rock material likely to be encountered, and from Table 3 he can obtain some idea as to what the seasonal fluctuation of the depth to ground water might be. Table 4 shows fluctuations of the water level in three pothole lakes, which reflect depth to ground water in their vicinity. Additional water-level measurements between Kalispell and the head of Flathead Lake may be found in the following U. S. Geological Survey Water-Supply Papers: 777 (for years 1928-35); 817 (1936); 840 (1937); 845 (1938); 886 (1939); 910 (1940); 940 (1941); 990 (1942-43); 1020 (1944); 1100 (1947); 1130 (1948); and 1160 (1949). The report may also be helpful when repairing wells and in construction work when the type of material below ground level and the depth to the water table are significant. These and other uses of this basic data report will be facilitated upon release of the interpretive report.

Table 1.--Records of wells and springs, Kalispell Valley, Montana

Well number: See text for explanation of well-numbering system.
 Type of well: B, bored; Dn, driven; Dr, drilled; Du, dug; Sp, spring.
 Depth of well: Measured depths are given in feet and tenths below land surface; reported depths are given in feet.
 Type of casing: B, brick; Br, bedrock; C, concrete; G, galvanized iron; P, steel pipe; R, rock lined; W, wood.
 Type of pump: C, centrifugal; Cy, cylinder; J, jet; N, none; P, pitcher pump; S, submersible; T, turbine.
 Type of power: E, electric; G, gasoline; H, hand operated; N, none.
 Use of water: D, domestic; F, fish hatchery; Fp, fire protection; Gi, garden irrigation; I, irrigation; In, industrial; N, not being used; O, observation of water-level fluctuations; P, public; S, stock.
 Description of measuring point: Bdp, bottom of discharge pipe; Fs, floor surface; Hc, hole in casing; Hpb, hole in pump base; Ls, land surface; Tca, top of casing; Tco, top of cover; Tp, top of platform; Tpc, top of pit curb; Tvc, top of well cap.

Depth to water: Water levels expressed in feet, tenths, and hundredths are measured; those in whole feet are reported. For flowing well whose static head is known, a "+" precedes the water level; a flowing well whose static head is not known is indicated by "Flows."
 Remarks: A, abandoned; Ca, water sample collected for chemical analysis; Y, yield in gallons per minute; D, drawdown in feet produced by pumping at yield shown; F, natural flow in gallons per minute (m, measured; r, reported); Ff, flowed when first drilled; in, inadequate supply; KFL, well used to study effects of surface water changes on the water table between Kalispell and Flathead Lake; L, log of well given in table 2; Ogt, oil or gas test; Or, observation well equipped with recording gage; T, temperature in degrees Fahrenheit; Tw, test well.

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude		
B26-19- 7bb	Raymond Romain	1965	Dr	150	8	P	J	E D	Tca	.5	-----	1.20	9-15-65	Ff
B26-20-12aa	A. B. Casper	1953	Dr	150	8	P	S	E D	Ls	---	---	Flows	-----	
12dd1	Lloyd Brynie	1958	Dr	110	7	P,Br	J	E D	Tvc	.2	-----	28.65	9-15-65	L, Y 1 at 106 feet
12dd2	-----do-----	1957	Dr	190	7	P,Br	J	E D	Ls	---	3,060	30	-----	L; Y 5; D 155
B27-19-16aa	Lloyd Bothman	----	Du	14.4	36	C	N	N N	Tco	0	3,052	7.65	4-29-65	A
16cb	Olander Slethaug	----	Dn	22.7	1 1/2	P	N	N N	Tca	-4.5	3,051	6.40	4-29-65	In
17aa	Lloyd Hockerson	----	Du	20	36	C	J	E D	Tca	3.0	3,060	21.20	4-29-65	
17ba	A. E. Miller	----	Dr	176	7	P	Cy	E D	Tca	1.0	3,053	55.05	4-29-65	
17cd	Donald Evenson	----	Du	27	32	C	J	E D	Tca	0	3,063	22.40	4-29-65	
20aa1	Herb Scott	----	Dn	17	1 1/4	P	C	E Gi	Tca	1.7	3,064	14.80	4-29-65	
20aa2	Douglas Potts	1957	Dr	243	6	P	S	E D	Ls	---	---	84	-----	L
20bd	Hilda Lee	1956	Dr	253	7	P	S	E D	---	---	---	---	-----	
20ca	-----do-----	1954	Du	30	32	C	J	E D	Tca	0	3,077	24.20	4-29-65	
28bb	-----do-----	----	du	15	----	C	C	E D	Tca	0	3,055	10.06	4-29-65	
B27-20-	Frederick Butterfield	1962	Dr	142	7	P	--	E D	Ls	---	---	---	-----	L
2ab	Echo School	----	Dr	105	4	P	J	E D	Tca	-6.0	-----	78.36	7- 8-64	
2cc	Ken Funk	1940	Dr	167	8	P	N	N D	Ls	---	---	Flows	-----	F 500 r; Ogt; T 50
3ab	Walter Robbin	----	Dr	125	7	P	--	D, S	Ls	---	---	+27.5	9-20-65	Ca; T 49
3cd	Roy Cooper	1938	Dr	235	7	P	J	E D	Ls	---	---	+5.1	9-21-65	F 4 m; T 50
3dc	Ken Funk	1959	Dr	213	7	P	J	E D, S	Ls	---	---	+4.0	9-21-65	T 49
4dd	Walter Compton	----	Dr	260	7	P	J	E D, S	Ls	---	---	+6.3	9-21-65	F 0.5 m; T 50
5aa	U.S. Geological Survey	1928	B	16.6	1 1/2	P	N	N N	Tca	0	2,899	9.34	8- 7-63	KFL
5ab	-----do-----	1928	B	20.9	1 1/2	P	N	N N	Tca	.5	2,907	14.36	8- 7-63	KFL
5bb	-----do-----	1928	B	22.2	1 1/2	P	N	N N	Tca	1.5	2,906	14.00	8- 6-63	KFL
5da	-----do-----	1928	B	11.3	1 1/2	P	N	N N	Tca	.6	2,900	8.01	8- 7-63	KFL
5dd	-----do-----	1928	B	15.4	1 1/2	P	N	N N	Tca	.6	2,902	10.16	8- 7-63	KFL
6ab	-----do-----	1928	B	9.3	1 1/2	P	N	N N	Tca	.6	2,896	.60	6-10-65	KFL
6ac1	Charles Weaver	----	Dr	585	6-4	P	N	N N	Tca	0	-----	13.06	8- 6-64	A; L
6ac2	-----do-----	----	Dr	100	4-3	P	Cy	E N	Tca	-5.0	-----	8.60	8- 6-64	In
6bb	U.S. Geological Survey	1928	B	12.8	1 1/2	P	N	N N	Tca	2.2	2,896	4.09	8-19-63	KFL
7ba	Bureau of Reclamation	----	B	10.3	3	G	N	N N	Tca	0	2,901	9.20	6- 7-65	
7bd	Henry Ficken	1944	Dr	275	7-5	P	J	E D, S	Ls	---	---	+2.0	9-27-65	F 0.75 m; T 50
7db	Bureau of Reclamation	----	B	13.3	3	G	N	N N	Tca	.6	2,902	12.87	8- 8-63	
8aa	Art Ballenger	1948	Du	35	36	C	J	E D, S	---	---	---	---	-----	L; Ca
8ba	George Risdal	----	Du	12.7	34	C	Cy	H O	Tca	.7	2,898	8.42	10- 7-64	Or
8da	U.S. Geological Survey	1928	B	19.9	1 1/2	P	N	N N	Tca	.5	2,903	12.94	8- 7-63	KFL
8dd	-----do-----	1928	B	14.4	1 1/2	P	N	N N	Tca	.2	2,898	9.14	8- 7-63	KFL
10ab	L. H. Sutherland	1938	Dr	145	6	P	J	E D	Ls	---	---	+12.2	9-20-65	F 8 r; T 49
11ba	Parker Bros.	----	Du	31.0	----	G	Cy	H O	Tca	0	-----	26.26	8-20-63	A
11bb	Tom Heinke	1965	Dr	220	7	P	S	E D	Tca	.7	-----	23.80	10- 6-65	
13bd	Joe Bruch	----	Dr	327	7	P	J	E D, S	Tpc	0	-----	95.70	10- 7-64	
13cd	Little Brown Church	1957	Dr	285	7	P,Br	S	E D	Ls	---	---	54	-----	L; Y 10
14bb	Kaurin Johnson	----	Dr	214	7	P	J	E D, S	Ls	---	---	+11.7	9-20-65	F 2 m; T 50
16aa	Pete Well	----	Dn	-----	----	P	C	E S	Tpc	.5	2,893	4.90	6-10-65	
1/cc	U.S. Geological Survey	1928	B	9.6	1 1/2	P	N	N O	Tca	1.5	2,897	6.66	8- 8-63	KFL
17dc	-----do-----	----	Dr	274.5	7	P	N	N N	Tca	1.5	-----	3.84	9-28-65	A; Ogt
18ad	Bureau of Reclamation	----	B	14.1	3	G	N	N N	Tca	1.5	2,903	14.04	8- 8-63	
19ab	U.S. Geological Survey	1928	B	11.6	1 1/2	P	N	N N	Tca	.5	2,898	7.13	8- 6-63	KFL
19ac	-----do-----	1928	B	10.1	1 1/2	P	N	N N	Tca	.7	2,896	5.07	8- 6-63	KFL
19bb	-----do-----	1928	B	19.8	1 1/2	P	N	N N	Tca	1.0	2,905	13.34	8- 8-63	KFL
20aa	-----do-----	1928	B	11.0	1 1/2	P	N	N N	Tca	1.0	2,895	6.88	8- 6-63	KFL
20ab	Roman Zeller	----	Dn	18	3	P	C	E S	Ls	---	---	10	-----	Ca
20da	U.S. Geological Survey	1928	B	9.7	1 1/2	P	N	N N	Tca	2.5	2,895	3.99	8- 8-63	KFL
21aa	-----do-----	1928	B	12.5	1 1/2	P	N	N N	Tca	1.0	2,898	7.35	10- 7-64	KFL

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks	
										Description	Distance above or below (-) land surface (feet)	Altitude			
B27-20-21ab	-----do-----	1928	B	8.7	1 1/2	P	N	N	N	Tca	.2	2,893	6.47	8- 3-63	KFL
22ac	-----do-----	1928	B	16.9	1 1/2	P	N	N	O	Tca	.7	2,897	9.03	8- 8-63	KFL
22ad	Don Taylor	----	Dr	86	5	P,Br	Cy	E	D	Tca	-3.5	-----	20.20	8-30-65	In
22bd	U.S. Geological Survey	1928	B	8.6	1 1/2	P	N	N	N	Tca	.5	2,896	7.74	8- 8-63	KFL
23ba	Stanley Ottosen	----	Sp	-----	-----	-----	-----	E	D,S	---	---	2,935	Flows	-----	
24bd	Henry Eslick	1949	Dr	154	7	P	--	E	D	Ls	----	----	50	-----	L
25ab	Edwin Anderson	1963	Dr	137	7	P,Br	S	E	D	Ls	----	----	48	-----	L; Y 6; D 74
25cb	Ronald Munter	----	Sp	-----	-----	C	--	E	D,S	---	---	-----	Flows	-----	F 1.5 m
25cc	J. Hofert Co.	----	Dr	215	6-4	P	S	E	I	Twc	-6.0	-----	38.52	9-15-65	L; Y 12
26ab	Fred Bjork	1956	Dr	195	7	P,Br	S	E	D,S	Ls	----	----	30	-----	L; Y 25; D 95; Ca
26da	John Robinson	1965	Dr	160	7	P,Br	S	E	D	Ls	----	----	72	-----	L; Y 4; D 83
36ad1	Pacific Power & Light	1920	Du	24	72	P,Br	T	E	P	Ls	----	----	8	-----	Y 500
36ad2	-----do-----	1920	Du	24	72	P,Br	T	E	P	Ls	----	----	8	-----	Y 250
B27-21-1ba	Jim Weaver	1964	Dr	346	7	P	S	E	D,S	Twc	.3	-----	6.90	2- 5-65	L; Y 50; D 4
1dd	U.S. Geological Survey	1928	B	12.4	1 1/2	P	N	N	N	Tca	.6	2,892	3.01	8-19-63	KFL
34a	-----do-----	1965	Dn	10.1	3/4	P	N	N	N	Tca	.3	2,901	7.29	4- 7-65	KFL
4ad	Bureau of Reclamation	----	B	14.30	3	G	N	N	N	Tca	.7	2,910	14.25	5-26-64	
5ba	Harold Fuller	1965	Dr	150	7	P,Br	S	E	D	Ls	----	----	98	-----	L; Y 5; D 42
10aa	U.S. Geological Survey	1965	Dn	3.8	3/4	P	N	N	N	Tca	.4	2,896	1.06	4-26-65	
10dd	-----do-----	1965	Dn	20.0	3/4	P	N	N	N	Tca	1.0	2,913	17.85	4-26-65	
11ab	-----do-----	----	Du	19.5	34	C	Cy	H	N	Tco	1.0	2,910	17.70	8-20-65	
12ab	Henry L. Ficken	1964	Dr	480	7	P	S	E	D,S	Ls	----	----	+6.3	9-27-65	L; F 5 m; Ca; T 53.5
12ad	Bureau of Reclamation	----	B	9.9	3	G	N	N	O	Tca	1.0	2,898	8.19	8- 7-63	
12ca	-----do-----	----	B	11.0	3	G	N	N	N	Tca	.6	2,894	6.15	8- 7-63	
12cd	J. O. Blasdel	----	Du,Dn	20	36, 1 1/4	C,P	--	E	D,S	Ls	----	----	12	-----	Ca
13bd	Bureau of Reclamation	----	B	12.9	3	G	N	N	N	Tca	0	2,898	7.34	8- 7-63	
13cd	U.S. Geological Survey	1928	B	20.1	1 1/2	P	N	N	N	Tca	0	2,908	15.58	8- 6-63	KFL
14cb	Marlin Newnam	1959	Dr	265	7	P	J	E	D	Ls	----	----	-----	-----	L; Y 17 at 260 feet
23aa	Bureau of Reclamation	----	B	17.8	3	G	N	N	N	Tca	1.4	2,911	18.95	6- 7-65	
23ab	U.S. Geological Survey	1928	B	9.7	1 1/2	P	N	N	N	Tca	2.0	2,895	1.74	6- 7-65	KFL
24cb	Somers School	1964	Dr	464	6	P,Br	S	E	D	Tca	2.0	-----	12.37	8- 6-64	L; Y 33; D 89
26cc	Michael Behrens	1965	Dr	123	7	P,Br	S	E	D	Ls	----	----	80	-----	L; Y 8; D 22
35dd	Walfred Newgard	1964	Dr	99	7	P,Br	S	E	D	Ls	----	----	29	-----	L; Y 15, D 17
B28-19-7cc	Mt. Brook School	1961	Dr	137	7	P	S	E	D	Twc	-6.0	-----	112.22	7- 7-64	L; Y 17
B28-20-1ba	Edward Foster	1953	Dr	61	6	P	J	E	D	Twc	-4.0	-----	34.25	7- 7-64	
2ab	A. C. Kauffman	1961	Dr	100	7	P	J	E	D,S	Twc	-3.5	3,050	58.48	7- 7-64	
2bb	Dewitt Clark	1954	Dr	198	10	P	T	E	I	Ls	----	----	69	-----	L; Y 65; D 26
3ab	Floyd Neumann	----	Dr	200	7	P	S	E	D	Tco	0	3,059	74.25	8-11-64	
3bb	James Byrne	----	Dr	165	7	P	S	E	D	Twc	-5.0	3,051	65.00	7- 7-64	Ca
3cd1	Ken Odegard	1963	Dr	202	7	P	S	E	D,S	Twc	.5	2,992	32.85	7- 8-64	L, Y 20; D 85
3cd2	-----do-----	----	Dr	90	4	P	N	N	N	Tca	1.0	2,992	30.96	7- 8-64	In
3dd1	Elizabeth Gestring	----	Dr	105	4	P	J	E	D	Twc	-5.0	3,021	51.65	7- 8-64	
3dd2	Mennonite Church	1961	Dr	212	7	P,Br	S	E	D	Twc	-8.0	3,019	48.00	8- 2-65	L; Y 40; D 25
4ab	Melvin Vestre	----	Dr	155	7	P	J	E	D,S	Twc	-5.0	2,995	21.88	7- 8-64	
4bb	A. W. Reimer	----	Dr	80	7	P	C	E	D,S	Tca	-5.0	2,971	1.24	6-17-64	
5dc	Leona Stevens	----	Dr	183	6	P	J	E	D	Tca	-6.3	2,968	15.75	6-17-64	
6ba	Charles Haskin	1950	Dr	67	7	P	J	E	D	Tca	-7.5	-----	13.35	6-16-64	
6bc	William Fulbright	----	Dr	212	6	P	J	E	D,S	Twc	-6.0	-----	15.80	5-20-64	
6dd	C. E. Sheldon	1948	Dr	196	7	P	J	E	D,S	Twc	-5.0	2,951	9.50	5-20-64	
7aa	Bureau of Reclamation	----	B	16.9	3	G	N	N	N	Tca	.2	2,946	14.70	4-19-65	
7ab	J. K. Sheldon	----	Sp	-----	-----	C	C	E	D,S	Tco	0	2,924	4.10	4-19-65	
7dc	Eugene Jaquette	1910	Dr	270	4	P	J	E	D	Tca	0	2,964	24.70	6-17-64	
8ad	Victor Hoylman	----	Du	33	28	B	Cy	G	S	Tco	.3	2,971	27.70	6-17-64	
8bb	Glen McGuire	----	Dr	165	5	P	Cy	G	N	Tco	0	2,975	33.70	5-21-64	A
8cd	U.S. Geological Survey	1965	Dn	20.3	3/4	P	N	N	N	Tca	.7	2,948	10.77	4-27-65	
8da	George Hubbard	----	Dr	225	4	P	J	E	D	Tpc	0	2,967	18.20	6-17-64	
9aa	Mary Gorton	1946	Dr	71	7	P	J	E	D,S	Ls	----	----	7	-----	L
9bb	Harry Gorton	----	Dr	175	4	P	J	E	D	Tca	-7.0	2,963	9.55	6-17-64	
10ad	Raymond Zimmerman	1963	Dr	145	7	P	S	E	D,S	Twc	1.5	2,981	20.15	8-21-63	Y 25; D 48
10bc	Joe Pokorski	1963	Dr	114	7	P	J	E	D,S	Twc	1.0	2,962	9.20	6-18-64	L; Y 25; D 69
10dc	G. B. Wright	----	Dr	93	6	P	J	E	D,S	Ls	----	2,929	+10.1	9-17-65	F 5 m; T 46.5
10dd1	Creston Fish Hatchery	1957	Dr	103	12-8-7	P	J	E	D,F	Ls	----	2,922	+18.2	9-22-65	L; F 10 m; T 46.5
10dd2	-----do-----	1958	Dr	300	20-18-14	P	T	E	F	Ls	----	2,943	Flows	-----	L; Y 700; F 200 r; T 47. Originally flowed 450 gpm
11ac	Norman Kauffman	----	Dn	108	2 1/2	P	N	N	N	Tca	0	3,000	35.92	7- 8-64	A
11cb	C. L. Hollinberger	1953	Dr	60	7	P	J	E	D	Tca	1.5	2,956	13.20	7- 8-64	L; Y 25; D 52
11db	-----do-----	1959	Sp	-----	-----	---	---	I,S	---	---	---	-----	Flows	-----	F 900 r
14cd	George Russell	1944	Dr	110	7	P	Cy	E	D,S	Tca	1.5	2,946	6.65	6-18-64	
15ab	Arnold Grob	1959	Dr	75	7	P	J	E	D,S	Ls	----	2,931	+5.7	9-21-65	L; Y 50; F 10 r; T 46.5

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude		
B28-20-15ad	Ben Gordon	----	Dr	90	7	P	J	E D	Ls	----	2,929	+3.5	9-17-65	F 3 m; T 48
15bc	Lester Mahugh	1960	Dr	174	7	P	J	E D	Ls	----	2,952	+3.9	9-17-65	F 6 m; T 47
15bd	J. C. Hochstetler	1910	Dr	65	4	P	J	E D	Fs	.5	2,939	6.23	6-18-64	Flows in well pit
15cb1	Experiment Station	1963	Dr	164	7	P	J	E D	Ls	----	2,952	+4.6	9-21-65	L; Y 30; D 30; T 48
15cb2	-----do-----	----	Dr	70	6	P	Cy	E O	Tca	-5.7	2,946	8.69	5-11-65	In
15cb3	Creston Store	1963	Dr	168	7	P	J	E D, O	Twc	1.0	2,954	5.06	12- 4-63	L; Ca
15cb4	William Lang	1954	Dr	159	6	P	J	E D	Ls	----	Flows	-----	-----	-----
15db	Gordon Broeder	1958	Dr	103	7	P	J	E D	Ls	----	2,923	+9.6	9-17-65	L; F 3 m; T 48
16aa1	Hollis Young	1944	Dr	98	7	P	J	E D	Ls	----	2,954	Flows	-----	-----
16aa2	-----do-----	----	Du	38	36	R	Cy	H N	Tco	1.0	2,958	6.70	6-18-64	A
16ad	Creston School	1963	Dr	163	7	P	J	E D	Twc	1.0	2,955	5.20	6-18-64	Y 30; D 0; flowing Aug. 1965
16ca	U.S. Geological Survey	1965	Dr	279	7	P	J	N O	Tca	.5	2,953	50.92	6-24-65	Y 20; D 1; Tw
16cc	Silas Mast	1945	Dr	166	6	P	J	E D, S	Tca	-8.0	2,946	6.70	6-18-64	-----
16dd	Fred Broeder	1951	Dr	155	7	P	--	D	Ls	----	2,946	Flows	-----	T 47
18bd1	C. A. Tuckett	----	Du	57.6	8	C	N	N N	Tca	0	2,960	52.77	9-18-63	A
18bd2	-----do-----	1945	Dr	405	7-5	P	J	E D, S	Tca	-5.0	2,955	19.30	6-17-64	Ca
18cc	Fred Alton	1921	Dr	312	4	P	S	E D	Hc	-6.5	2,964	26.80	9-18-63	-----
20aa	Silas Mast	-----	Sp	-----	-----	--	--	S	-----	-----	2,907	Flows	-----	-----
20cb	B. C. Volin	1961	Dr	465	7	P	N	N D, S	Ls	----	-----	+39.1	9-22-65	L; F 11 r; T 53
20dc	Clyde Pederson	1958	Dr	208	7	P	J	E D, S	Ls	----	-----	+39.0	9-22-65	Y 30; F 30 r; Ca; T 51
22aa	Broeder Bros. Lumber Company	1957	Dr	111	7	P	S	E D, In	Ls	----	2,920	+12.1	9-21-65	L; Y 30; D 60; F 5 r; Ca; T 50
22bc	Homer Montpetit	1949	Dr	171	7	P	J	E D	Ls	----	2,899	+24.5	9-17-65	F 4 m; T 49
23ba	George Russell	1964	Du	18	-----	G	J	E D	Tca	0	-----	5.56	6-18-64	-----
23bb	Phillip Buck	-----	Sp	-----	-----	--	--	E, I	-----	-----	-----	-----	-----	F 100 r
23ca	William Calbick	-----	Dr	133	7	P	--	E D, S	Ls	----	-----	-----	-----	-----
23cc	-----do-----	----	Sp	-----	-----	--	--	E D	-----	-----	-----	-----	-----	F 80 m; T 47
25dc	Menno Miller	----	Dr	100	5	P	J	E D	Tca	-5.0	-----	72.60	4-30-65	-----
26bb	Russell Buck	1956	Dr	124	7	P	J	E D	Ls	----	-----	-----	-----	L; Y 5; D 50; F 0.5 r
27dd	William Ambrose	1943	Dr	147	7	P	J	E D, S	Fs	1.0	-----	31.82	7- 8-64	-----
30db	Howard Robocker	1965	Dr	600	7	P	N	N N	-----	-----	-----	-----	-----	In; L
31ad	U.S. Geological Survey	1928	B	20.5	1 1/2	P	N	N N	Tca	.5	2,906	13.00	8- 7-63	KFL
32da	-----do-----	1928	B	14.6	1 1/2	P	N	N N	Tca	.7	2,900	7.67	8- 7-63	KFL
34aa	John Olson	1962	Dr	141	7	P	S	E D, GI	Twc	-3.0	-----	11.05	7- 8-64	L; Y 30; D 3
34bb	William Calbick	-----	Dr	53	5	P	Cy	G O	Tpc	.3	-----	8.50	8-20-63	-----
34ca	-----do-----	----	Dr	157	5	P	Cy	H N	Tca	.4	-----	-----	-----	-----
34cc	John Aadsem	1943	Dr	195	6	P	J	E D, S	Tca	1.0	-----	+1.0	9-21-65	F 0.25 m; T 48.5
35aa	Gregory Bruyer	----	Dr	100	4	P	J	E D, S	Tca	2.5	-----	30.60	7-13-64	-----
B28-21-1ca	Bonneville Power	1959	Dr	110	7	P	J	E D	Ls	----	-----	+7.3	9-29-65	L; Y 17; D 43; F 1.5 r
1cb1	Ray Kent	1951	Dr	124	7	P	J	E D	Twc	.5	-----	2.32	5-20-64	Ca; Ff
1cb2	John Kloeckl	----	Dn	26.8	2	P	N	N N	Tpc	0	-----	9.18	5-20-64	A
1cb3	Mayo Shultz	----	Dr	115	4	P	C	E D	Ls	----	-----	-----	-----	F 8 r
1dd	U.S. Geological Survey	1965	Dn	19.5	3/4	P	N	N N	Tca	1.5	2,934	15.82	4-27-65	-----
2ad	Carl Dahlgren	1965	Dr	110	7	P	--	D, S	Tca	1.0	-----	+2.3	8-10-65	-----
2ca	Robert Seymour	1963	Dr	166	7	P	S	E D	Ls	----	-----	78	-----	L; Y 15; D 6
2cd1	Nels Lindstrom	----	Dn	17.8	1 1/4	P	C	E Gi	Tca	0	2,921	11.70	10- 6-64	-----
2cd2	Don Barnum	----	Dr	171	7	P	J	E D	Twc	-7.5	2,923	20.27	10- 6-64	-----
2dd	John Zaara	1936	Dn	28.5	2	P	N	N N	Tca	-5.0	2,924	11.50	5-20-64	Ca
3ab	U.S. Geological Survey	1963	Dn	9.4	3/4	P	N	N O	Tca	1.2	2,916	6.67	8- 5-63	-----
3ac	Emil Struck	----	Du	12	-----	--	C	E S	Tco	.2	2,915	6.46	6- 1-65	-----
3bb	Evergreen Fire Dept.	----	Du	9.0	36	C	--	Fp	Tco	0	2,915	6.20	8- 5-63	-----
3cb	Ellsworth Wilson	1948	Du	12.6	36	C	J	E D, GI	Tco	1.0	2,914	8.97	5-21-64	Reportedly pumped 110 gpm
4ac	Robert Eickert	----	Du	11.5	28	C	C	E D	Tco	-3.5	2,909	5.27	5-21-64	-----
4bc	Dick Toft	----	Dn	26	2	P	C	E D	Tco	-4.5	2,909	2.20	5-21-64	-----
4bd	-----do-----	----	Dn	13.7	2	P	P	H N	Tca	2.5	2,918	11.40	7-15-63	A
4cb	Ubal Landry	----	Du	10	32	C	J	E Gi	Tco	-3.5	2,906	.25	5-21-64	-----
4dc	Snappy Service Senter	----	Du	18.4	7	P	J	E D, O	Tca	-3.7	2,908	4.20	7-17-63	-----
5cb1	Lee Hanson	1963	Dr	124	7	P	S	E D	Twc	-4.5	-----	69.00	8-13-64	L; Y 15; D 5
5cb2	-----do-----	----	Dr	86.5	3	P	N	N N	Tpc	1.0	-----	27.10	8-13-64	In
5dd	Evergreen Water District	1965	Dr	105	7	P	N	N N	Ls	----	-----	3	-----	L; Y 700; D 4; Tw
6ba	Jerome Wildgren	1961	Dr	254	7	P	S	E D	Twc	-5.5	-----	65.50	8-22-65	L; Y 10; D 145
6da	City of Kalispell	1913	Sp	17	240x288	C	C	E P	---	-----	-----	-----	-----	Y 4,500; Ca
7bb	Phoebe Kirkland	----	Du	27.0	34	C	--	N N	Tca	.3	2,990	21.75	5-20-64	-----
7dd	City of Kalispell	1954	Dr	330	16-10	P	T	E P	---	-----	-----	34	-----	Y 1,200; D 67; Ca
8aa	Mike Greer	----	Du	9.2	-----	--	C	E D	Tpc	2.0	2,918	7.78	7-16-63	-----
8dd	Henry Jacobson	----	Du	14.6	-----	--	--	D	Tca	-4.5	2,904	5.46	6- 2-65	-----
9aa	Tom O'Neil	----	Dr	19.0	7	P	--	N	Tpc	0	2,912	8.04	6- 2-65	A
9ba	-----do-----	----	Lu	12.7	30	C	--	E D	Tca	.7	2,912	8.67	6- 2-65	-----
10cd	Welden Peterson	----	Dr	18	7	P	Cy	H N	Tca	0	2,906	4.65	6-18-64	-----
11cb1	Joe Kinshella	1940	Dr	170	6	P	J	E D	Tca	.5	2,908	4.30	6-18-64	Y 7
11cb2	-----do-----	1946	Dr	1,475	12-7	P	N	N N	---	-----	-----	-----	-----	A; Ogt
11db	Nancy Bjorge	----	Dr	30	7	P	J	E D	Tca	.5	2,914	10.83	6-18-64	-----

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude		
B28-21-12ab	Willis Gorton	1962	Dr	204	7	P	S	E D	Ls	0	-----	+13.2	9-22-65	L; Y 30; D 70; F 2 m;
12ac	-----do-----	1964	Dr	264	10	P	S	E I	Ls	0	-----	+11.7	9-22-65	T 49.5 L; Y 400; D 150; F 17 r;
12cb	Earl Smith	1962	Dr	125	7	P	C	E D, S	Tpc	.5	2,942	19.68	5-21-64	T 50
12da	Paul Walchi	1903	Du, Dn	25	10, 1 1/2	G, P	C	E D, S	Tco	-7.0	2,921	5.66	6-17-64	L; Y 50; D 18
13ab	A. J. Sparr	-----	Dr	160	7	P	J	E D, S	Tca	-4.0	2,962	43.80	5-21-64	
13ad	Lee Folkes	-----	Dr	164	6	P	J	E D	Tca	-8.0	2,956	23.58	6-17-64	
13ca	C. H. Downes	-----	Dr	125	4	P	S	E D	Twc	-5.5	2,955	46.90	6-18-64	
13cc	Egan School	-----	Dr	130	7	P	J	E D	Twc	-4.0	2,957	50.17	6-18-64	
14dd	Claire Wendt	1964	Dr	259	7	P	S	E D	Twc	.6	2,961	55.90	10- 7-64	L; Y 15; D 90
15aa	John DeYong	1963	Dr	22	7	P	C	E D, S	Tca	1.5	2,910	9.90	6-18-64	L; Ca
15da	-----	-----	Dr	26.4	7	P	P	H D	Tca	0	2,901	8.13	6- 8-65	
16cb	-----	-----	Dn	22.5	1	P	N	N N	Tca	1.5	2,900	8.00	7-18-63	A
17ad	Larry Lowman	-----	Dr	20	7	P	J	E D	Tco	0	2,905	8.27	6- 2-65	
17dd1	Bruce Fynskov	-----	Du	29.2	-----	G	P	H N	Tca	1.7	2,939	29.04	7-18-63	A
17dd2	Harold Oesch	1963	Dr	264	7	P	J	E D	Tpc	0	2,939	23.80	8-21-65	
19aa1	Alex Purdy	1956	Dr	163	7	P	J	E D	Twc	0	2,923	8.57	5-27-64	
19aa2	Russell Anderson	1963	Dr	173	7	P	S	E D	Twc	-4.5	2,921	7.64	5-27-64	L; Y 17; D 142
19bb1	Victor Peterson	1962	Dr	47	7	P	N	N N	Tca	1.7	-----	20.12	7-25-63	In
19bb2	R. H. Kruckenber	-----	Dr	180	5	P	J	E D	Tpc	0	-----	61.05	9-10-65	
19bc1	Ray Peterson	1963	Dr	125	7	P, Br	J	E D	Ls	-----	-----	25	-----	L; Y 7; D 85
19bc2	Kenneth Kirkpatrick	1963	Dr	129	7	P, Br	S	E D	Twc	-6.2	-----	79.95	9-10-65	L; Ca
19dd	Harry Keith	-----	-----	-----	7	P	J	E D	Tca	-5.0	2,935	19.52	5-27-64	
20aa	Snarlie Tvedten	-----	Dr	62	4	P	Cy	E D	Tca	-6.5	-----	48.10	5-25-64	In
20ba	J. R. Johnson	-----	Du	30.5	-----	B	C	E G	Tco	-6.0	2,924	8.57	7-25-63	
20bb	City of Kalispell	1964	Dr	383	16-10	P	T	E P	Tca	3.7	-----	11.38	5-26-64	L; Y 1,585; D 47; Ca
20da	Joseph DiMeo	1957	Dr	248	7	P	-----	E D	Ls	-----	-----	16	-----	L; Y 15
20db1	Valley Transfer & Storage	1964	Dr	249	7	P	J	E D	Twc	-5.7	-----	12.55	9- 9-65	L; Y 25; D 55; Ca
20db2	-----do-----	-----	Dr	36.4	7	P	N	N N	Tpc	0	-----	21.00	9-10-65	In
20dd	Abraham Jones	-----	Du	16.0	34	C	P	H O	Tco	2.0	2,921	15.32	7-18-63	
23ca	Orvin S. Anderson	-----	Dn	30.0	1 1/2	P	N	N N	Tca	-6.0	2,902	8.85	10- 6-64	Ca
23da	Nellie Stock	-----	Dn	28.0	2	P	J	E D	Tca	-4.0	2,905	11.67	10- 7-64	
27ab	Richard Rippberger	-----	Dr	264	7	P	J	E S	Ls	-----	2,901	+3.7	9-27-65	T 50
27cc	Chauncey Smith	1955	Dr	208	7	P	S	E D	Ls	-----	-----	+4.7	9-22-65	L; T 49.5
28bb	Joe Medaris	1961	Dr	191	5	P	-----	E D	Ls	-----	-----	4	-----	L; Y 10; D 76
28db	Bureau of Reclamation	-----	B	8.2	3	G	N	N N	Tca	.5	2,901	6.90	6-10-65	
29bc1	Don Schultz	-----	Dr	123	7	P	J	E D	-----	-----	-----	-----	-----	
29bc2	O. W. Nelson	-----	Dr	88	7	P	J	E D	Fs	.5	-----	12.30	5-27-64	
29cc	Scott Phelps	1957	Dr	65	7	P	J	E D	Ls	-----	-----	10	-----	L; Y 10
30bd	Ed Word	1946	Dr	69	6	P	C	E D, S	Tca	.5	-----	4.77	5-27-64	
30dd	-----do-----	1955	Dr	69	7	P	-----	E D	Ls	-----	-----	2	-----	
33bb	Circle K. Packing	1964	Dr	239	8	P	T	E In	Twc	2.0	-----	6.10	5-26-64	Y 40; D 9
33cd1	Mel Kujich	1965	Dr	184	7	P	-----	E D	Tca	1.5	-----	10.98	9-27-65	
33cd2	-----do-----	-----	Dn	34.5	2	P	J	E D	Tpc	.3	-----	21.98	9-27-65	Ca
34bc	U.S. Geological Survey	1928	Du	14	36x48	W	N	N N	Tco	3.0	-----	12.51	8- 7-63	KFL
34cd	-----do-----	1965	Dn	10.1	3/4	P	N	N N	Tca	.4	2,895	3.47	6-10-65	
35bc	Homer Cooper	-----	Dn	22	2	P	M	N N	Tca	-7.5	2,899	11.53	4- 7-65	
35cb	Robert Sanders	1965	Dr	312	7	P	J	E D, S	Ls	-----	+2.6	-----	9-27-65	L; F 4 m; Ca; T 51
35cc	Bureau of Reclamation	-----	B	9.2	3	G	N	N N	Tca	.3	2,898	7.26	5-26-64	
B28-22-36dd	U.S. Geological Survey	1928	B	19.7	1 1/2	P	N	N N	Tca	.6	2,904	12.93	8- 7-63	KFL
lad	City of Kalispell	1956	Dr	340	6	P	T	E P	Ls	-----	144	-----	-----	L; Y 200
1bc	Melvin Boulden	-----	Dr	185	6	P	S	E D	Twc	-4.5	-----	106.74	9-28-64	
1cc	Frank Tabaka	1944	Dr	232	6	P	J	E D	Ls	-----	106	-----	-----	
1dc	Sunset Development Co.	1957	Dr	152	6	P	S	E D	Twc	0	2,996	65.42	7-24-63	L; Y 300; supplies 25 families
1dd1	Leslie Gunderson	-----	Du	25.8	30	C	-----	N	Tpc	1.5	-----	21.58	5-20-64	A
1dd2	Jack Jones	-----	Du	29.6	-----	C	J	E D	Tco	.5	2,998	26.82	5-20-64	
1dd3	Sunset Development Co.	-----	Dr	135	7	P	S	E D	Twc	2.0	2,998	65.20	8- 2-65	Standby well
2bc	Paul Crosswiler	-----	Dr	152	7	P	S	E D, S	Twc	1.1	-----	85.17	9-29-64	
4ad	Gustafson Bros.	-----	Du	38	48-36	C, P	Cy	E S	Fs	0	-----	24.82	9-29-64	
4da	Sterling Rygg	-----	Dr	90	7	P	J	E D	Tca	-6.2	-----	48.00	9-29-64	
10aa1	Chester Corneliuson	-----	Du	14.3	12	G	C	E D	Tca	-4.3	-----	3.35	4-21-65	
10aa2	Ory Armstrong	1883	Sp	-----	-----	-----	-----	D, I	-----	-----	Flows	-----	-----	Y 1,350 r
11ca	Skyline Dairy	1963	Dr	152	7	P	-----	E In	Ls	-----	65	-----	-----	L; Y 150; D 75
11cd	Ray Hall	1965	Dr	255	7	P	S	E D	Ls	-----	165	-----	-----	L; Y 10; D 50
11da1	Russell Greer	1964	Dr	136	7	P	S	E D	Tca	0	2,983	47.94	5-21-64	
11da2	-----do-----	-----	Du	14.2	32	C	J	E D	Tpc	0	2,983	9.46	5-21-64	
12cb	Ruben Bloomer	-----	D	20	30	C	-----	E O	Tca	1.8	2,980	9.90	7-24-63	
12cc	-----	1965	Dr	125	7	P	S	E D	Twc	-3.5	-----	28.50	8-11-65	
12dc	Orley's Supperclub	1963	Dr	242	7	P	S	E D	Ls	-----	55	-----	-----	L; Y 100; D 195
13ba	Great Northern Ry.	1959	Dr	111	7	P	-----	E S	Ls	-----	36	-----	-----	L; Y 15; D 2

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Depth to water level below measuring point (feet)	Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude			
B28-22-14ab	-----	1965	Dr	-----	7	P	S	E D	Twc	.5	-----	146.60	8-27-65		
15ab	George Stroisch	1951	Dr	130	7	P	J	E D	Tca	.7	-----	16.90	8-27-65	Ff	
23ab	Charles Cassert	1953	Dr	187	6	P	--	E D	---	---	-----	-----	-----	L	
B29-20-3ba	Griffin Mattheisen	1956	Dr	475	6-4	P	J	E D	Twc	-5.0	3,040	9.20	6-23-64	L; Ca	
3cb	Elmer Howell	1950	Du	12	48x48	W	C	E D	Tca	.5	3,042	8.20	6-22-64		
3da	Bob Lingle	----	Du	12.5	34	C	C	E D	Tca	1.5	-----	12.48	8-11-64		
3db	Samuel Orem	----	Du	8.0	26	C	N	N N	Tco	1.0	3,041	7.10	8-11-64		
3dc	Frank Fisher	1952	Dr	378	6	P	J	E D, S	Tca	-5.0	3,037	5.50	6-22-64		
4aa1	H. G. Casterline	----	Dn	21.0	2	P	N	N N	Tca	-3.5	3,052	4.30	8-23-63	A	
4aa2	-----do-----	----	Dr	160	4	P	J	E N	Tca	-3.5	3,052	66.97	9-19-63	A	
4ab	Jake Brinkerhoff	----	Dr	70	----	P	Cy	H D	Tp	1.0	3,057	10.96	7- 6-64		
4bb	William Trebas	----	Dn	60.0	3	P	Cy	H N	Tca	.3	3,059	27.86	8-26-63	A	
4cb	G. A. Westphal	1959	Dr	162	7	P	S	E D	Twc	-5.5	3,067	51.90	8-10-64		
4cc	Charles Pemble	1942	Dr	157	6	P	S	E D	Twc	-4.0	3,058	44.80	8-10-64	L	
4da	J. E. Sparks	1940	Dr	76	2	P	C	E D	Tpc	0	3,046	15.50	6-22-64		
5ab	Adolph Mitsch	----	Dr	64	4	P	Cy	E D	Tca	.5	-----	23.75	8-10-64		
5ac	James Peters	1940	Du	28	48x48	W	Cy	H S	Tca	0	-----	6.92	4-19-65		
5bb1	Robert Poil	----	Du	17	32	C	C	E D, S	Tca	1.5	3,056	9.80	6-16-64		
5bb2	-----do-----	----	Dr	151	7	P	N	N N	Tca	0	3,054	80.30	8- 2-65		
5cc	Louis Blanchet	----	Du	16.2	48	W	Cy	E D, S	Tco	1.0	3,050	13.18	8-22-63		
5da	Fay Pemble	1963	Dr	131	7	P	S	E D	Twc	-5.0	3,073	57.25	7- 6-64	L; Y 15; D 3	
6ad	William Kaatz	----	Du	13.5	36	C	Cy	H D	Tca	1.0	3,061	13.73	8-10-64	In	
7ad1	Joseph Ford	----	Du	25	30-18	C	J	E D, S	Tpc	2.0	-----	17.30	6-15-64		
7ad2	-----do-----	----	Du	12.5	96x96	C, W	Cy	H N	Tco	1.5	3,045	6.80	6-15-64		
7db	K. C. Dummwebber	----	Du	-----	12	G	C	E D, S	Tca	-6.5	3,040	.90	4-15-65		
8aa	Dale Prichard	----	Du	20	----	C	C	E D, S	Tco	-3.5	3,059	10.80	6-22-64		
8ab1	Robert Cornell	----	Dr	104	6	P	J	E D	Tca	-4.0	3,053	72.40	6-22-64		
8ab2	Jack Taylor	1963	Du	13.0	----	G	--	E D	Tpc	2.2	3,058	12.75	6-22-64		
8cb	Earl Zimmerman	1964	Dr	178	7	P	S	E D	Tca	1.0	3,053	73.20	6-22-64	L; Y 16; D 40	
9ab	Don Reynolds	----	Du	13.2	33	C	Cy	H S	Tco	2.0	-----	10.27	8-11-64		
9ac1	Arthur Johnson	1958	Dr	177	7	P	S	E D	Twc	0	3,050	65.42	8-26-64	L; Y 20; D 35; Ca	
9ac2	-----do-----	----	Du	9.0	36	C	Cy	H O	Tco	.5	3,051	7.58	8-26-64		
9bb	Douglas Carter	----	Du	15.5	48x48	W	C	E S	Tco	1.0	-----	5.40	8-11-64		
9bc	Frank Radabah	----	Dr	175	7	P	J, S	E D, S	Twc	-5.5	3,056	75.00	6-22-64	Supplies two families	
9cb	Deer Park School	1940	Dr	160	6-4	P	J	E D, S	Twc	-8.0	3,064	84.70	6-22-64	L	
9cc	Henry Sullivan	----	Du	25	33	C	J	E D	Tca	-3.0	3,064	15.33	6-22-64	Ca	
9cd	Jerry Cigliana	1960	Dr	119	4	P	S	E D	Twc	-4.0	3,040	11.63	7- 7-64		
9dc1	Jim Harrington	1962	Dr	126	4	P	S	E D	Twc	-4.5	3,048	16.64	7- 7-64	Y 11; D 38; Ca	
9dc2	-----do-----	----	Du	13.0	----	W	C	E N	Tca	0	3,052	8.65	7- 7-64	A	
10cb1	Edward Bailey	----	Du	30	30	C	--	E N	Tca	1.5	3,066	7.72	6-23-64	In	
10cb2	Jack Johnston	1964	Dr	169	7	P	J	E D	Twc	-3.0	3,061	72.80	6-23-64	Y 13; D 75	
10da	Carl Wilke	----	Sp	-----	----	--	--	I, S	---	---	-----	Flows	-----		
16ba	A. F. Olsen	----	Du	12	36	C	C	E D	Tco	2.0	3,045	5.77	7- 7-64		
16bb	Sumrfit Civic Assoc.	----	Du	14	33	C	C	E D	Tca	-5.5	3,049	5.93	6-15-64		
16bd	Dan Buffine	----	Dr	125	6	P	S	E D	Twc	-3.0	3,040	25.37	8- 6-64		
16cb	George Wendt	1916	Dr	128	4	P	S	E D	Tca	-4.5	3,048	38.60	7- 6-64		
17ab	Otto Wendt	----	Du	9.0	36x36	W	J	E D	Tco	2.0	3,052	7.86	6-15-64		
17ad	Kenneth Eckleberry	----	Du	5.8	----	W	N	N N	Tco	.8	3,045	5.20	7- 6-64	A	
17dd	Harold Clarke	----	Du	7.0	----	W	C	E D	Tco	-1.5	3,034	3.28	7- 6-64		
18aa1	William Anderson	----	Du	18.0	56	C	J	E O	Tpc	0	3,050	16.64	8-22-63	In	
18aa2	-----do-----	1964	Dr	176	7	P	S	E D	Tpc	0	3,050	77.95	8-10-64	L; Y 20; D 18; Ca	
18da	Jim Harrington	----	Sp	-----	----	--	--	E D	---	---	2,992	Flows	-----		
19aa1	John Brocken	1916	Dr	185	4	P	J	E D	Ls	-----	-----	70	-----		
19aa2	-----do-----	----	Du	15.7	----	W	N	N N	Tca	1.5	3,021	9.80	8- 4-64		
20ab	Fairview Cemetery	----	Dr	142	7	P	S	E I	Twc	1.0	3,032	48.50	6-22-64	Y 25; D 50	
20ca	Ernest Fagerland	----	Dr	100	4	P	J	E D	Tpc	0	-----	20.00	6-16-64		
20dc	Raymond Austin	----	Du	21	72	B	C	E D, S	Tco	1.5	-----	9.67	6-15-64		
21ab	Clarke Bros.	1951	Dr	154	7	P	J	E D, S	Twc	-5.0	3,057	58.60	6-23-64	Y 8	
21bd	Harold Yaeger	1965	Dr	-----	----	P	--	I	Tca	0	-----	64.43	9-13-65		
21cd	Agnes Davis	----	Sp	-----	----	W	Cy	G S	Tca	-----	3,008	Flows	-----		
22ab	Chris Lauman	----	Du	17.0	----	C	--	E D	Tpc	0	3,034	13.05	6-23-64		
22ba	Boyd Blackmer	1954	Dr	192	7	P	J	E D	Tca	-5.0	3,056	68.75	8-11-64		
22db	Earl Weaver	1946	Dr	465	7	P	J	E D	Ls	-----	-----	20	-----		
22dc	Raymond Bunker	----	Du	26.8	----	G	J	E D	Tca	0	3,048	20.28	8-11-64		
26bb	Glen Conklin	1949	Dr	422	7	P	J	E D	---	---	-----	-----	-----	L; flows in spring	
27ad	Buford McIntyre	----	Dr	217	6	P	J	E D	Tca	-5.5	3,001	11.36	6-23-64		
27bb	M. L. Bear	1961	Dr	194	7	P	S	E D, S	Ls	-----	-----	65	-----	L; Y 12; D 100	
27cb	Harold Small	1952	Dr	506	12-10	P	T	E I	Hpb	1.3	-----	67.84	8-22-63	L; Y 1,500	
27da	Arthur Weaver	----	Dr	187	6	P	Cy	G S	Tca	.5	3,010	16.90	6-23-64		
28bd	Arthur Wittney	1914	Dr	200	6	P	S	E D	Twc	-4.0	3,008	41.66	7- 6-64		
28ca	Harold Yaeger	1953	Dr	194	7	P	J	E D	Ls	-----	-----	51	-----	L; Y 25; D 89	

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude		
R29-20-29ac1	Art Motichka	1938	Dr	142	4	P	J	E D, S	Ls	-----	-----	22	-----	
29ac2	U.S. Geological Survey	1965	Dn	19.8	3/4	P	N	N N N	Tca	1.2	2,980	18.32	4-27-65	
29bd	John Byrne	-----	Dr	151.5	5	P	N	N O	Tca	2.5	2,983	24.56	9-17-63	Or
29cd	-----	1958	Dr	198	7	P	J	E D	Twc	-6.0	2,978	23.03	8- 9-65	Y 30; D 28
30da	R. A. Roussele	1945	Dr	156	7	P	J	E D, S	Tca	0	2,982	37.34	6-15-64	
31ad	Frank Logan	-----	Dr	204	6	P	S	E D, S	Tpc	0	2,984	40.80	6-15-64	
32bd1	Henry Isch	1939	Dr	180	7	P	J	E D	Twc	-7.5	2,976	26.47	5-25-64	
32bd2	-----do-----	-----	Du, Dn	35-40	-----	P	Cy	H N	Tca	.7	2,984	29.00	8- 9-65	A
32dd	E. R. Beeman	1917	Dr	225	4	P	J	E D	Tca	-5.0	2,977	24.10	6-16-64	
33ca	Clarence Haines	1957	Dr	189	7	P	S	E D	Twc	-5.3	-----	14.38	8-10-65	L; Y 35; D 33; Ca
33cd	Bureau of Reclamation	-----	B	6.7	3	G	N	N N	Tca	1.2	2,978	5.52	6-11-64	
33dc	Clifford Haines	1965	Dr	232	7	P	S	E D	Twc	.7	-----	23.60	8-10-65	L; Y 10; D 90
35cd1	James Snell	1948	Dr	168	7	P	Cy	E D	Tca	-4.0	3,061	74.40	7- 7-64	
35cd2	Cayuse Prairie School	1965	Dr	145	7	P	S	E D	Twc	1.0	-----	75.28	8- 9-65	L; Y 20; D 10
35dd1	Herb Lerew	-----	Dr	130	4	P	Cy	E S	Tca	-4.0	3,059	72.34	7- 7-64	
35dd2	-----do-----	1964	Dr	167	7	P	S	E D	Ls	-----	-----	90	-----	L; Y 15; D 14
36cd	F. Myrtle Sands	-----	Dr	83	6	P	J	E D	Twc	-8.0	3,048	55.00	7- 7-64	
36dc	Henrietta Sands	1963	Dr	90	7	P	J	E D	Twc	-5.5	3,044	49.58	7- 7-64	L; Y 10; D 4
B29-21-2aa	Ted Homann	-----	Du	12.5	-----	C	C	E D	Tco	-3.0	2,960	6.85	9-23-64	Ca
2ba	LaSalle School	-----	Du	14.7	34	C	C	E D	Tca	-3.5	2,961	7.78	8-27-63	
2ca	Elmer Olsen	1964	Dn	13.0	4	P	C	E D	Tca	.5	2,957	8.93	9-23-64	
3db	Tri-City Speedway	-----	Du	7.8	-----	--	P	H --	Tco	0	2,955	4.41	8-12-63	
4ab	Harley Fredenberg	1954	Du	15.9	84x84	W	C	E I, O	Tca	0	2,962	10.60	7-16-63	L; Y 660
4bb	Henry Tetrault	-----	Du	25.6	32	C	J	E D, S	Tpc	.4	2,983	23.80	8-12-64	
4cd	Robert Howard	-----	Du	11.5	30	C	C	E D	Tca	1.0	2,956	6.67	7-16-63	
4db	Charles Hull	1963	Du	17	48	C	C	E I	Tco	1.0	2,958	8.54	7-16-63	Y 410; D 0.5
5ab	Henry Tetrault	-----	Sp	-----	-----	--	--	S	---	-----	2,983	Flows	-----	F 1 m; T 45.5
5ba1	Donald Carlson	1963	Dr	173	7	P	J	E D, S	Twc	1.0	3,036	95.13	8-27-63	Y 15; D 94
5ba2	-----do-----	-----	Du	27.0	-----	C	N	N N	Tco	2.7	3,036	19.24	8-12-64	In
5cb	W. F. Linch	-----	Du	16.0	72x96	C	Cy	E D, S	Tca	0	3,028	7.94	8-12-64	
5cd1	Paul Gibbs	1953	Dr	131	7	P	S	E D	Twc	-5.0	3,024	77.88	8-12-64	L; Y 30; D 50
5cd2	-----do-----	-----	Dr	16.5	-----	--	S	E N	Fs	0	3,026	8.18	8-12-64	In
6aa1	John Bowdish	1940	Dr	229	6	P	S	E D, S	Twc	-3.5	-----	133.20	8-28-63	
6aa2	-----do-----	-----	Du	12.6	30	C	P	H N	Tca	2.0	-----	10.62	8-27-63	A
6cb	Roger Flint	1964	Dr	569	8	P	S	E D	Ls	-----	-----	240	-----	Y 37; D 80; T 50.5
6db	John Schrade	-----	Dr	171	7	P	J	E D, S	Twc	-5.3	-----	148.36	8-18-65	
6dc	Koenig Bros.	1965	Du	14	-----	C	C	E S	Tca	1.2	-----	2.73	5-13-65	
7cd	-----do-----	-----	Du	11.0	44	C	C	E S	Tca	0	3,016	7.13	7-23-63	
7dd	Robin Street	1920	Du	18.5	60	C	J	E D, S	Tca	0	3,032	12.20	8-12-64	Ca
8ac	Joe Lintz	-----	Dr	145	7	P	J	E D, S	Tca	0	3,049	77.28	7-22-63	
8bb	Carl Patterson	-----	Du	24.1	18	C	Cy	H O	Tca	1.0	3,032	14.42	8-28-63	
8bc1	Arnold Kaiser	1960	Du	9.4	36x36	C	Cy	H D	Tca	0	3,027	7.62	7-22-63	
8bc2	William Schroeder	1948	Du	12.5	34	C	Cy	E D, S	Tpc	1.5	3,028	10.64	8-12-64	
8bd	-----	1965	Du	11.3	36	C	C	E D	Tpc	0	3,031	10.30	7-20-65	
8dc	U.S. Geological Survey	1965	Dn	9.9	3/4	P	N	N N	Tca	.7	3,030	9.80	5-13-65	
9bc	Robert Howard	1913	Du	9	36	C	--	E D	Tca	0	2,951	5.80	8-20-64	
9bd	Cort Walters	-----	Du	9.1	36x36	W	N	N N	Tco	.5	2,953	6.80	8-20-64	A
9da	Edward Kiesow	-----	Du	8.0	-----	C	C	E I	Tco	1.2	2,952	6.10	7-22-63	
10ad	Earl Fritz	-----	Du	7.5	-----	W	--	-- I	Tca	-3.0	2,949	2.45	9-23-64	
10bc	Albert Friedt	-----	Dn	16.9	3 1/2	P	N	N N	Tca	.3	2,951	4.90	8-20-64	
10dd	James Edmiston	1963	Du	12.0	-----	C	T	E I	Hpb	.3	2,944	3.38	9-23-64	
11ba	-----do-----	1950	Du	12.9	48	C	T	E I	Hpb	2.0	2,954	5.62	8-28-63	Y 600
11bc	Dolf Schulstad	1957	Dr	19.0	12	P	C	E I	Tco	.3	2,952	7.00	9-23-64	L; Y 650
14aa	Norman Borgen	-----	Dn	15.7	3	P	Cy	E S	Tpc	0	2,947	8.35	6- 3-65	
14cd	Lorn Eid	-----	Du	14.8	24	C	C	E D	Tca	-4.5	2,940	8.68	9-23-64	
15cb	James Edmiston	1961	Du	11.0	48	C	T	E I, O	Hpb	0	2,938	4.76	8-27-63	Y 1,200; Ca
15cd1	Byron Metcalf	1947	Du	12	15	C	J	E D	Tco	-4.2	2,936	6.80	9-23-64	
15cd2	Harvey Aluminum Co.	-----	Dr	154	7	P	--	-- --	---	-----	-----	-----	-----	L; Tw
16ba	Paul Birky	1959	Dr	26.7	7	P	C	E I	Tpc	1.5	2,948	8.62	8-18-64	
17ab	U.S. Geological Survey	1965	Dn	16.6	3/4	P	N	N N	Tca	4.4	3,034	12.84	5-13-65	
17ad	Alvin Tronstad	-----	Sp	-----	-----	--	--	-- S	---	-----	-----	Flows	-----	F 5 r
17ba	U.S. Geological Survey	1965	Dn	9.8	3/4	P	N	N N	Tca	.7	3,024	4.83	5-13-65	
17bb1	Alfred Rufenach	-----	Du	15.4	34	C	--	E S	Tca	1.0	3,031	13.07	8-12-64	
17bb2	-----do-----	1953	Dr	167	7	P	S	E D	Ls	-----	-----	85	-----	
17cc1	James Murphy	-----	Du	6.8	56	C	Cy	H O	Tco	2.0	3,021	3.00	5-18-64	Or
17cc2	-----do-----	-----	Du	11.0	48x96	W	Cy	N N	Tco	0	3,022	5.60	6- 9-64	A
18dd	Emil Sirucek	-----	Dr	8.6	-----	G	C	E D, S	Tpc	0	3,020	4.27	4-14-65	
19ba	George Trankle	-----	Dr	300	7	P	Cy	E D, S	Twc	-6.0	3,022	90.80	8-13-64	
19cb1	S. A. Amundson	1954	Dr	286	7	P	S	E D, S	Twc	-7.0	3,018	85.90	7-22-63	L; Y 15; D 40; Ca
19cb2	-----do-----	-----	Du	100	-----	B	Cy	-- N	Tca	0	3,025	46.54	7-22-63	A
19da	Bauer Bros.	1913	Dr	284	4	P	S	E D, S	Twc	-8.0	3,048	124.20	8-12-64	
19dc	U.S. Geological Survey	1965	Dn	8.0	3/4	P	N	N N	Tca	2.5	3,019	8.05	5-12-65	
20bb	Mannington Street	1930	Du	9.3	56	C	Cy	N N	Tca	0	3,020	4.60	5-18-64	A
20bc	Pine Grove School	-----	Du	8.2	48	G	C	E D	Tpc	0	3,020	6.70	8-12-64	Ca
20cc	Lutheran Cemetery	1957	Dr	278	6	P	S	E O	Twc	-5.0	3,022	95.57	7-16-63	L; Y 15; D 42

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude		
B29-21-21bd	A. C. Holden	1953	Dr	21.5	7	P	J	E D, Gi	Tco	.5	2,936	8.20	7-16-63	Ca
21cd1	Arden Olson	----	Du	12.0	34	C	J	E D	Tco	-4.5	2,924	5.47	8-18-64	
21cd2	Clarence Robinson	----	Du	9.1	28	C	J	E D	Tca	-3.0	-----	3.87	8-18-64	
22aa	James Edmiston	----	Du, Dn	-----	36, 1 1/2	C, P	C	E D	Tpc	0	2,940	9.70	9-23-64	
22bc	-----do-----	1958	Dr	50	12	P	T	E I	Hpb	.5	2,936	9.10	8-28-63	L; Y 600
22dc	Burt Wollan	----	Dr	16.0	7	P	--	E D	Tpc	0	2,934	13.38	9-24-64	
26ba	Ray Nockleby	----	Du	13.0	24x28	C	Cy	H S	Tca	0	2,932	12.07	8-18-64	
27ac	Harold Osterman	----	Du	12.7	-----	G	Cy	H N	Tco	0	2,926	10.95	7-15-63	A
27cd	Frank Eickert	1959	Dn	13	4	P	C	E D	Tca	-4.5	2,920	5.96	5-21-64	
28ab	Vernon Birky	1947	Dr	21	7	P	J	E D	Tca	-4.5	2,926	3.66	8-18-64	
28bd	Howard Tracht	----	Du	17.0	30	C	Cy	H N	Tca	0	2,930	14.68	7-15-63	A
28cb1	Paul Heil	----	Dn	23.0	3	P	C	E S	Tca	0	2,926	14.66	9-26-63	
28cb2	Ruben Morton	1962	Dn	20	3	P	J	E S	Tca	1.0	2,926	14.83	9-26-63	
28cc	-----do-----	----	Dr	20.2	7	P	C	E I	Tca	0	2,923	8.53	6- 2-65	
28cd	Mark Kaufman	----	Dn	20	2	P	Cy	E D	Tca	-4.2	2,919	6.20	7-15-63	
28db	Shelby Snell	----	Du	21	-----	C	Cy	H S	Tco	0	2,927	13.64	8-20-64	
28dc	Flathead Co.	----	Dn	11.0	1 1/2	P	N	N N	Tca	.5	2,923	10.39	5-20-64	A
29ca	William Treweek	1916	Sp	-----	-----	--	--	N S	-----	-----	-----	-----	-----	Flows
30cb	Glacier Memorial Gardens	1962	Dr	277	7	P	S	E D	Tvc	-7.4	-----	43.15	7-22-63	L; Y 50
30cc	-----do-----	1965	Dr	-----	7	P	S	E D	Tca	2.0	2,998	58.82	7-30-65	
30cd	Ted Borgen	1949	Dr	303	7	P	J	E D	Tca	-7.0	2,989	53.66	8-13-64	L; Y 20; D 62
32aa	Robert Hatlen	----	Dn	19.0	3	P	J	E Gi	Tpc	0	2,926	13.60	5-21-64	
32ab	George Bruyer	1953	Dr	312	7	P	J	E D, S	Tvc	-7.0	-----	85.25	8-13-64	L; Y 10
32cc	Ted Holmquist	----	Dr	125	2	P	Cy	E D	Tpc	.2	-----	84.50	8-18-65	
32dd1	Flathead Co.	1963	Dn	-----	1 1/2	P	N	N N	Tca	0	-----	5.85	7-22-63	A
32dd2	-----do-----	----	Dn	-----	1 1/2	P	N	N N	Tca	0	-----	7.08	7-22-63	A
32dd3	-----do-----	1963	Dn	-----	1 1/2	P	N	N N	Tca	0	2,914	7.03	7-22-63	A
33aa1	Karen Taft	----	Du	5.5	10	G	P	H S	Tca	2.0	2,919	6.32	5-20-64	
33aa2	L. A. Walters	----	Dn	15	4	P	--	E S	Tca	1.3	2,920	7.80	6- 1-65	
33ad	Kenneth David	1963	Dn	14.0	3	P	C	G Gi	Tca	1.5	2,918	7.38	5-20-64	
33bd	Harley Maurer	1955	Du	11.4	36-16	C	C	E I	Tco	-8	2,917	7.65	9-26-63	Y 80
33cb	E. M. Robocker	1951	Dr	16.5	5	P	J	E D	Tpc	0	2,916	6.23	5-21-64	
33cc	U.S. Geological Survey	1963	Dn	9.4	3/4	P	N	N O	Tca	1.2	2,915	7.58	8- 5-63	
33cd	Lions Club	----	Du, Dn	19.0	8-4	C, P	C	E O	Tca	1.0	2,919	10.29	8- 6-63	
33da	Marvin Woolard	----	Dn	21.0	1 1/2	P	N	N N	Tca	-1.0	2,918	7.42	5-21-64	A
33db1	Jim Rowe	----	Du, Dn	20.0	3	P	C	E D	Tpc	0	2,918	8.20	7-15-63	
33db2	Gerald Caudill	----	Dn	21	3	P	J	E D	Tca	-3.5	2,912	2.72	5-21-64	
33dc	Henry Behmerwohld	----	----	26.5	4	P	--	E D	Tpc	0	2,919	11.08	7-15-63	
34ca1	Verna Hosford	----	Du	11.8	18	G	--	E N	Tpc	.5	2,923	11.44	7-16-63	A
34ca2	-----do-----	1964	Dr	20	7	P	--	E D	-----	-----	7	-----	-----	L
34cb	Edward Pagel	----	Du	26	34	C	J	E D	Tca	1.0	2,922	10.26	5-21-64	
34cc1	Evergreen Alliance Church	----	Dr	19.0	6	P	N	N O	Tca	2.0	2,919	10.79	9-18-63	
34cc2	-----do-----	----	Du	11.5	-----	W	Cy	E Gi	Tco	2.0	2,919	11.35	9-18-63	Ca
34cd1	Evergreen Fire Dept.	1963	Dr	24	8	P	N	N Fp	Bdp	4.5	2,922	12.86	8- 5-63	Y 500; D 6
34cd2	Evergreen Water District	1965	Dr	338	7	P	N	N N	-----	-----	-----	-----	-----	L; Tw
35bb	Ferry Keller	1953	Du	16	36	C	C	E D	Tco	.5	2,928	13.76	9-23-64	
36dd	-----do-----	----	----	13.5	6	P	N	N N	Tca	1.0	-----	13.02	8-29-63	
B29-22-1da	John Olsen	----	Du	21.8	-----	--	--	E D	Tpc	.5	-----	12.65	8-13-64	
3cd	Robert Harvey	----	Sp	-----	-----	--	C	E D, I	-----	-----	-----	-----	-----	Ca
4cd	-----do-----	----	Dr	-----	6	P	Cy	G N	Tca	1.0	-----	62.97	7-17-64	A
5ad	Charles Carda	1895	Dr	180	4	P	J	E D, S	Tpc	0	-----	170.48	9-27-65	
7dd	D. S. Brewer	1946	Dr	78	6	P	J	E D, S	Tvc	1.0	-----	67.75	4-23-65	
8ad	Fred Harvey	1964	Dr	211	7	P	S	E D, S	Tca	2.5	-----	176.40	7-17-64	
8dc	W. T. Gottlob	----	Dr	70	6	P	J	E D, S	Tca	1.3	-----	50.66	4-23-65	
8dd	Sparks School	----	Dr	70	7	P	N	N O	Tca	1.0	-----	57.42	8-12-63	
9cc	Tutvedt Bros.	1965	Dr	72	7	P	Cy	G S	Tca	.6	-----	56.50	4-21-65	
9dd	Erwin Woessner	1951	Dr	94	6	P	J	E D	Tvc	1.0	-----	78.20	4-21-65	
10dc1	Hans Tutvedt	1958	Dr	263	7	P	S	E D, S	Tvc	-7.2	-----	111.20	8-25-65	L; Y 12; D 105; Ca
10dc2	-----do-----	1965	Dr	198	7	P	S	E S	Tvc	0	-----	118.00	8-25-65	
11dd	Ray Spurzem	1946	Dr	230	6	P	Cy	E D	-----	-----	20	-----	-----	L
12bc	Larry Rasmussen	----	Dr	90	7	P	J	E D	Tca	-5.7	-----	54.70	10- 1-64	
12da	Karl Patterson	----	Dr	180	6	P	S	E D, S	Tca	0	3,035	98.53	8-13-64	
13ba	U.S. Geological Survey	1965	Dn	9.2	3/4	P	N	N N	Fs	1.4	3,010	8.78	5-13-65	
13bb	Koenig Bros.	1956	Dr	234	6	P	S	E D, S	-----	-----	80	-----	-----	
13dd1	Charles Martin	1918	Dr	287	4	P	Cy	N N	Tca	1.0	3,034	97.15	8-30-65	A
13dd2	-----do-----	----	Du	24.9	30	C	J	E O, S	Tca	1.0	3,028	21.07	7-17-63	
14bb	Fred Krueger	----	Dr	220	4	P	S	E D, S	Tvc	-4.0	-----	100.85	10- 6-64	
15ad1	Krueger Estate	----	Dr	100	6	P	J	E D	Fs	1.2	-----	61.57	10- 6-64	
15ad2	-----do-----	----	Du	23.8	-----	G	Cy	N N	Tco	0	-----	22.36	10- 6-64	A
16ac	Leslie Cooper	----	Dr	26	4	P	J	E D	Tca	-7.5	-----	22.35	4-21-65	
16cc	James Hanson	1945	Dr	87	7	P	N	N N	Tca	1.0	-----	83.02	9-13-65	A
17ab	Sigvald Nordtome	1965	Dr	52	7	P	J	E D	Tca	.5	-----	37.30	4-20-65	L; Y 20; D 1
17dd	James Hanson	----	Du	21.5	48	G	C	E I	Tca	-5.0	-----	12.54	4-21-65	
21bb	Grant Nielsen	1962	Du	22.4	36	C	J	E D	Tpc	0	-----	17.80	4-21-65	L; Y 66; D less than 1; Ca

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude		
B29-22-22bb	J. W. Clark	1942	Dr	89	6	P	J	E D, S	Ls	----	----	50	-----	L; Y 25; D 1
23ba	Dick Knox	----	Dr	-----	7	P	Cy	E D	Tpc	1.0	-----	53.42	7-23-63	
24ca	Howard Tracht	1960	Dr	227	7	P	J	E D, S	Tpc	0	-----	50.90	8-26-65	L; Y 10; D 65
24dd	S. A. Amundson	1965	Dr	246	7	P	S	E D	Ls	----	-----	80	-----	L; Y 20; D 28
25ad	Floyd Johnson	1956	Dr	202	7	P	S	E D, S	Twc	1.0	-----	38.87	8-22-65	L; Y 20; D 43
25cb	Vernon Johnson	1965	Dr	194	7	P	S	E D, S	Tca	2.0	-----	115.88	1- 5-65	
27cc	Harry Pauli	----	Du	10.8	36	W	Cy	E D	Tco	.3	-----	6.87	9-28-64	
27dc	Arne Grovo	1962	Dr	195	7	P	S	E D	Ls	----	-----	107	-----	L; Y 10; D 13
27dd	Charles O'Boyle	1900	Du	130	6	P	Cy	E D, S	Ls	----	-----	40	-----	Ca
28ac	Elizabeth Coclet	1902	Du	170	36	C	Cy	E D	Tco	1.0	-----	145.90	8-25-65	Blowing well
28dd	Milton Stiles	1945	Dr	180	5	P	S	E D, S	Twc	.5	-----	140.45	8-24-65	
29ba	Dennis Rasmussen	----	Dr	72	7	P	J	E D	Tca	-5.4	-----	44.85	4-21-65	
32aa	West Valley School	----	Dr	198	7	P	S	E D	Tpc	0	-----	126.77	8-25-65	
32ab	Rosa Walter	1910	Du	40	----	C	J	E D	Tpc	.5	-----	37.25	5- 4-65	
32ad	Paul Grosswiler	----	Du	51.3	----	--	J	E D	Tpc	1.0	-----	47.17	9-29-64	
33ab	Milton Stiles	1948	Dr	240	7	P	S	E D	Tpc	.6	-----	169.00	8-24-65	
33ba	M. L. Timmreck	----	Du	136	7	P	J	E D	Tpc	.5	-----	72.57	9-29-64	
34cc	Erney Hartsoch	----	Dr	-----	7	P	J	E D	Tco	-6.5	-----	19.10	9-28-64	
34cd	Arnold Nommensen	----	Sp	-----	----	--	C	E I	---	---	-----	Flows	-----	Ca
34dd	Knut Garness	1948	Du	25.7	60	B	J	E D, S	Fs	.5	-----	7.40	9-29-64	
35bb	Paul Grosswiler	----	Dr	209	4	P	S	E D	Twc	-5.0	-----	89.07	9-28-64	
35dd1	Carl Grosswiler	----	Dr	200	4	P	Cy	E N	Tca	-5.3	-----	115.68	9-28-64	
35dd2	-----do-----	1958	Dr	198	7	P	S	E D, S	Ls	----	-----	140	-----	L; Y 22; Ca
36bc	-----do-----	1933	Dr	162	7	P	S	E D, S	Twc	-4.2	-----	78.60	9-28-64	
36da	State Forester	1958	Dr	205	7	P	S	E D	Ls	----	-----	73	-----	L
B30-20-2ca1	Anaconda Aluminum Co.	1954	Dr	175	16	P	T	E In	Tca	----	3,140	122.13	8-14-54	L; Y 1,508; D 5
2ca2	-----do-----	1954	Dr	162	16	P	T	E In	Tca	----	3,123	105.48	10-28-54	L; Y 903; D 9
2cb	-----do-----	1954	Dr	119	16	P	T	E In	Tca	----	3,107	90.49	3-15-54	L; Y 242; D 16
3da	-----do-----	1954	Dr	116	16	P	T	E N	Tca	----	3,105	93.70	1- 54	A; L; Y 555; D 5
3dd1	-----do-----	1956	Dr	69	18	P	T	E In	Tca	----	3,022	11.00	11- 6-56	L; Y 1,400; D 2
3dd2	-----do-----	1957	Dr	60	18	P	T	E In	Tca	----	3,022	11.00	1-30-57	L; Y 1,000; D 2
5cd	Richard Dougherty	1963	Dr	145	7	P	S	E D	Ls	----	-----	80	-----	L; Y 10; D 35
6cb	Dale Fowler	1964	Dr	225	7	P	S	E D	Ls	----	-----	197	-----	L; Y 8; D 13
7da	James Carlson	----	Dr	-----	7	P	J	E D	Tca	1.2	-----	50.53	8-31-65	
8ca	Plum Creek Lumber Co.	1958	Dr	420	7	P	S	E D	Ls	----	-----	54	-----	L; Y 60; D 76
8da	City of Columbia Falls	1954	Dr	32	16	P	T	E P	Ls	----	-----	11	-----	L; Y 1,400
9cb	-----do-----	1954	Dr	35	16	P	T	E P	Ls	----	-----	11	-----	Y 1,400
15aa	Ray Schott	1965	Dr	57	7	P	S	E D	Tca	.5	-----	42.38	4-19-65	L; Y 20; D 2
15ac	William Einarson	1955	Du	32	36	C	J	E D	Tca	0	-----	18.78	4-19-65	
15ba	Willie Stella	1949	Dr	310	6	P	J	E D	Ls	----	-----	80	-----	Supplies 14 families
15bd	Rex Worrail	----	Dr	329	8-6	P	J	E D	Ls	----	-----	46	-----	Supplies 10 families
17dd	Goldie Shefstad	----	Du, Dn	9.3	1 1/4	P	P	H N	Tca	5.3	3,007	11.62	6- 4-65	A
18ba	Columbia Falls Cemetery	1960	Dr	222	7	P	S	E I	Ls	----	-----	78	-----	L; Y 50; D 6
18cb	St. Richard Cemetery	1961	Dr	204	7	P	S	E I	Ls	----	-----	72	-----	L; Y 40
18dd	-----do-----	----	Sp	-----	----	--	--	N	---	---	3,005	Flows	-----	T 47
19ad	Emil Nelson	----	Dr	-----	7	P	Cy	E D	Tca	-7.0	3,050	69.80	6-25-64	
19ba	-----do-----	----	Du	14.0	----	G	Cy	H N	Tca	0	-----	6.55	6- 4-65	A
19dc	Kenneth Mitchell	1964	Du	16	48	C	N	N I	Tca	-1.0	2,979	5.00	6-25-64	
19dd	-----do-----	----	Sp	-----	----	C	J	E D, S	---	---	2,984	Flows	-----	F 60 r; Ca; T 46.5
20bb	Emil Nelson	----	Du	18.7	----	C	Cy	H D	Tco	0	3,070	15.20	6-25-64	
20ca	Gerald Gifford	----	Dr	32	7	P	J	E D	Tca	1.0	3,040	11.23	6-25-64	
20da	Dulane Fulton	1962	Dr	154	7	P	S	E D	Ls	----	-----	80	-----	L; Y 10; D 20
20dc	J. G. Morris	----	Dr	120	4	P	J	E D, S	Tca	-6.0	-----	78.50	8-10-64	
21aa	Arnold Sundberg	----	Dr	40	6	P	J	E D	Tco	.5	3,079	32.54	8-11-64	
21ca	-----do-----	----	Du	16.8	----	C	C	E D	Tca	-7.5	-----	6.60	8-10-64	
21cb	Bob Harner	----	Du	18	----	C	J	E D	Tca	1.0	-----	14.90	8-10-64	
21da	Bill Potter	1964	Dr	32	7	P	J	E D	Twc	-6.0	3,066	17.53	6-24-64	L; Y 20; D 6; Ca
21db	Dan Wiltrout	1957	Du	25.0	----	C	J	E D	Tca	-6.0	3,064	16.85	6-24-64	
22db	Hubert Hellman	----	Du	23.0	34x34	C	J	E D, S	Tca	-11.0	3,041	2.17	8-11-64	
22dc	John Jensen	----	Du	36.7	24	C	J	E D, S	Tca	0	3,065	27.90	8-11-64	
27bd1	John Ladenburg	1963	Dr	445	7	P	S	E D	Twc	-5.0	3,071	44.50	6-24-64	L; Y 20; D 4; Ca; T 66
27bd2	-----do-----	----	Du	23.5	----	C	N	N N	Tca	0	3,069	19.65	6-24-64	A
27cc	Howard White	1959	Dr	505	8-7-5	P	N	N N	Tca	.5	-----	10.77	6-24-64	A; L
28ac	Barton Pettit	----	Dn	12.0	1 1/2	P	N	N G1	Tpc	.5	3,064	8.53	6-24-64	
28ca	Everett Baker	----	Du	20.9	44x44	C	J	E G1	Tca	1.8	3,080	21.50	8-26-63	
28cb	Dan Sullivan	----	Du, Dn	26	2	P	Cy	H D	Tca	1.0	3,073	14.30	8-23-63	
28cd	Everett Baker	1946	Dr	165	7	P	J	E D	Tca	-6.0	3,065	37.33	6-24-64	
29ba	Warner Gifford	1964	Dr	126	7	P	S	E D, S	Twc	1.0	3,049	69.00	6-25-64	L; Y 20; D 18
29bc1	Fred Huso	----	Du	25.5	33	C	N	N N	Tco	2.5	-----	11.05	6-25-64	In
29bc2	-----do-----	1962	Dr	117	7	P	S	E D	Ls	----	-----	90	-----	L; Y 10; D 8
29cc1	L. S. Murphy	1945	Dr	104	6	P	J	E D	Tca	-2.5	3,044	31.30	6-24-64	
29cc2	-----do-----	1904	Du	15.0	42x42	C	J	E G1	Tca	0	3,047	7.85	8-10-64	

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Depth to water level below measuring point (feet)	Date of measurement	Remarks
										Description	Distance above or below (-) land surface (feet)	Altitude			
B30-20-29cd	Clarence Lapp	1953	Du	13.1	36	C	J	E D	Tco	.5	3,062	9.43	8-23-63		
30aa	George Lapp	----	Sp	----	----	--	--	E D,I	----	----	Flows	-----			
30da	Ed Lewis	1947	Dr	120	6	P	S	E D,S	Tvc	-7.0	3,048	72.10	6-25-64		
30dd	George McClain	----	Du	20	33	C	C	E GI	Tca	3.0	3,050	19.80	6-24-64		
31aa	Ray Bartlett	----	Dr	109	7	P	J	E D	Tco	.5	3,051	69.70	6-24-64		
32cb	Lewis Robinson	----	Du	21.5	33	C	Cy	E D	Tco	.5	3,065	10.34	6-25-64	Ca	
32da1	Leslie Zabel	----	Dr	53	6	P	J	E D	Tvc	-5.5	3,064	13.50	6-24-64		
32da2	-----do-----	----	Du	26.2	36	C	J	E GI	Tco	1.0	3,069	10.40	6-24-64		
32dc	Arthur Peters	----	Dr	160	7	P	S	E D	Tvc	-4.5	-----	69.75	6-25-64		
32dd	Ray Zabel	1962	Dr	175	7	P	S	E D	Tvc	-3.0	3,064	80.00	6-25-64	L; Y 10; D 25	
33bb	George Mattheisen	1939	Dr	125	7	P	J	E D	Tca	-7.0	-----	72.90	8-10-64		
33bc	Henry Benner	----	Dr	165	6	P	S	E D	Tco	-4.0	3,069	86.57	6-24-64	Ca	
33dc1	Kenneth Loveall	----	Dr	208	7	P	S	E D	Tco	-7.0	-----	62.67	8- 6-64		
33dc2	-----do-----	----	Dr	168	7	P	S	E D	Tvc	-3.0	-----	67.62	8- 6-64		
34bd	Edward Hoffman	1956	Dr	425	7-5-4	P	J	E D	Tvc	1.5	3,052	13.20	6-23-64		
34ca	O. C. Hall	----	Du	14.0	----	C	C	E D,S	Tca	0	3,051	8.80	6-23-64	Ca	
34cc	Samuel Orem	1956	Du	30	36	C	J	E D	Tca	3.0	3,056	19.10	8-11-64		
B30-21-	3da Anton Braig	----	Du	13.8	44	C	Cy	E S	Tco	2.0	-----	13.20	10- 7-64		
3dc	Edward Motichka	----	Du	12	36	G	C	E D	Tco	-4.5	-----	.75	4-20-65		
4bd	John Reimer	----	Du	21.2	36	C	--	E D	Tca	1.4	-----	5.70	4-20-65		
4dd	David Doyle	----	Du	20.8	36	C	Cy	H D	Tco	.7	3,065	13.89	9-25-63		
5bb1	Tony Rambur	----	Du	21.2	6	C	J	E N	Tca	-2.2	3,022	9.72	10- 7-64	In	
5bb2	-----do-----	1964	Dr	211	7	P	--	E D	Ls	-----	-----	66	-----	L; Y 10; D 64	
5cb	Sara Line	----	Du	21	----	C	J	E D	Tco	0	3,027	15.25	10- 7-64		
8ac	Charles Callner	----	Du	39	36	C	J	E D,S	Tco	.8	-----	8.20	5- 4-65		
8ca	Walter Bros.	----	Du	41.4	----	--	--	E N	Tco	0	-----	15.08	9-25-63	A	
9aa1	J. C. Doyle	1963	Dr	118	7	P	J	E D	Tvc	-3.5	3,056	14.05	10- 5-64	L; Y 12	
9aa2	-----do-----	----	Du	20.5	----	C	--	N	Tco	0	3,060	13.26	10- 5-64	A	
9cd	C. B. Conger	----	Sp	-----	-----	--	C	E D	Tco	0	-----	5.68	9-13-65		
9dd	Roy Nock	----	Du	24	----	C	J	E GI	Tca	.8	3,062	14.70	9-24-64	Ca	
10ad	Carl Enevold	----	Du	20.2	----	C	J	E D	Tpc	0	3,065	16.20	10- 7-64		
10bc	Lloyd Anderson	----	Du	20	36	C	Cy	H D	Tco	1.2	3,060	12.46	10- 7-64		
10ddl	James Foot	----	Dr	164	7	P	J	E D	Tco	1.0	3,063	27.65	9-24-64		
10dd2	-----do-----	----	Du	22.7	36	C	N	N N	Tco	1.0	3,063	19.20	9-24-64	A	
11aa	R. J. Ronseth	----	Du	16.8	30x30	C	Cy	E D	Tca	1.2	3,065	15.12	10- 7-64		
11ba	Warren Motichka	1957	Dr	153	7	P	J	E D,S	Tvc	.4	3,060	28.50	10- 7-64		
11da	Clarence Purdy	----	Sp	-----	----	W	C	E D	Tco	0	3,006	.60	4-20-65		
12dd	James Choate	1964	Dr	161	7	P	S	E D	Tvc	-5.6	-----	65.58	8-31-65	L; Y 15; D 25	
13da	Don Crosswhite	----	Dr	203	7	P	S	E D	Tvc	-5.5	-----	65.80	9-24-64		
14ca1	Leonard Motichka	1954	Dr	134	6	P	S	E D,S	Tpc	0	-----	11.58	12- 9-65	L; Y 50	
14ca2	-----do-----	----	Du	20	12	C	Cy	H N	Tca	0	-----	18.74	12- 9-65	A	
15ba	-----do-----	----	Du	13.5	36	C	C	E S	Tco	.2	2,999	11.05	9-23-64		
15cd	Jay Waterbury	----	Du	10.2	30	C	C	E D	Tca	0	2,990	6.63	4-28-65		
15da	Charles Keller	----	Du	18	36	C	J	E S	Tco	.7	3,063	15.12	9-24-64		
16bd	Clifton Dull	----	Dr	190	7	P	S	E D	Tpc	1.0	-----	59.78	9-23-64		
16da	Ancil Conn	----	Du	22	42	C	J	E D,S	Tco	-7.0	3,037	3.34	9-23-64		
17ab	Grace Beller	----	Du	45	36	C	--	E D	Tco	1.0	-----	43.16	9-25-63		
17ad	Pete Van Aken	----	Du	19.2	----	C	--	E D	Tca	2.8	-----	11.30	4-14-65		
21ca	Arthur Carlson	----	Dr	290	7	P	S	E D,S	Tvc	2.0	-----	110.76	8-19-65		
21dd	Jay Penny	----	Du	16.7	36	C	--	E D	Tco	0	3,047	12.78	8-12-64	Ca	
22aa	Charles Keller	----	Du	20.4	36	C	N	N N	Tca	-6.7	2,990	9.42	9-24-64		
22dc	Mark Hodgson	----	Dn	21.5	1 1/2	P	N	N N	Tca	-4.5	2,991	10.72	8-27-63	A	
24ac	Paul Lynn	----	Du	18.0	----	W	N	N I	Tca	0	2,987	14.08	9-24-64		
24bb	Ernest Helseth	----	Dr	360	----	P	N	N N	Tca	1.0	-----	11.63	8-12-63	A; Ogt	
24da	-----do-----	----	Dn	12.6	1 1/2	P	P	H N	Tca	1.0	-----	8.90	9-24-64	A	
24db	-----do-----	----	Du	-----	36	C	J	E N	Tco	-4.0	2,982	3.43	6- 4-65	A	
24dc	John Lynn	----	Du	17.5	36	C	Cy	H D	Tco	.2	-----	13.32	9-24-64		
25bb	-----do-----	----	Dn	23.6	1 1/2	P	P	H D	Tca	1.6	2,989	21.72	8-27-63		
25cd	-----do-----	----	Du	17.4	----	C	C	E N	Tpc	.8	2,974	15.52	9-23-64	A	
25dd	-----do-----	1942	Dr	870	12-5	P	N	N N	----	-----	-----	-----	-----	A; L; Ogt	
26ba	Alfred Hoye	1926	Du	22.1	36	C	Cy	E D	Tca	.7	2,987	19.00	9-23-64	Ca	
26dd	A. G. Goudy	----	Du	28	----	C	J	E D	Tca	1.0	2,971	14.10	9-24-64		
27bb	Hugh Kinner	----	Du	28.6	36	C	Cy	H N	Tca	.5	3,049	18.10	8-12-64	A	
27da	Ronald Kizer	----	Dr	129	6	P	J	E D	Tvc	0	-----	27.10	9-24-64		
28ba1	Robert Patterson	1952	Dr	257	7-5	P	S	E D,S	Tvc	-5.0	3,050	111.48	8-27-63	L; Y 8; D 66; Ca	
28ba2	-----do-----	----	Du	26.2	36	C	N	N N	Tca	-3.0	3,052	17.07	10- 1-63	A	
28ca	Vincent Lidstrom	----	Du	21.8	----	C	Cy	E D	Tca	0	3,043	11.43	8-12-64		
28cd	L. E. Johnson	----	Du	25.7	30	C	Cy	G D	Tca	0	3,043	22.52	8-12-64		
32cd	John Bowdish	1953	Du	11.6	84x84	W	Cy	G S	Tco	2.0	-----	12.50	8-28-63		
33ca	Joe Bock	----	Du	54.7	30	C	J	E D	Tca	0	-----	50.62	8-12-64	In	
34cb	Lee Nelson	----	Du	27.5	36	C	J	E D	Tco	1.0	2,985	25.30	8-12-64		

Well number	Owner or tenant	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Type of casing	Type of pump	Type of power	Use of water	Measuring point			Date of measurement	Remarks	
										Description	Distance above or below (-) land surface (feet)	Altitude			
B30-21-34da	Harley Fredenberg	1960	Dr	159	7	P	S	E S		Twc	.8	2,967	19.55	11- 2-64	L; Y 13; D 96
34dc	-----do-----	1951	Du	13.3	96x192	W	C	E I		Tp	0	2,960	9.55	9-23-64	Y 660
35ba	Francis Poulson	-----	Du	14.3	36	C	C	E I		Tca	.7	2,967	12.08	9-24-64	
35bc	-----do-----	-----	Du	13.2	36	C	C	E I		Tca	0	2,964	10.07	9-24-64	
36cb	James Edmiston	-----	Du	17.2	60	C	N	N I,0		Tca	0	2,969	12.77	9-28-63	Y 1,200
B30-22-1aa	Larry Jensen	----	Dr	335	7	P	S	E O		Twc	1.5	3,036	56.22	9-25-63	
1db	Mormon Church	1965	Dr	223	7	P	--	E D		Tca	1.0	-----	57.45	8- 4-65	L; Y 20; D 32
12ab	J. LaMar Angus	1964	Dr	293	7	P	S	E D		Twc	.5	3,042	78.67	4-20-65	L; Y 7; D 200; Ca
12ac	Clifford Peterson	----	Dr	48	6	P	J	E D		Tca	.5	-----	Flows	4-20-65	
12dd1	James Bjornstad	1964	Dr	94	7	P	S	E D		Twc	-3.0	-----	57.44	8-13-64	L; Y 20; D 6
12dd2	Joe Bjornstad	1955	Dr	76	6	P	J	E D		Tca	-3.0	-----	66.47	5- 4-65	
13ab	Roger Motichka	1957	Dr	146	7	P	S	E D		Tpc	0	-----	78.10	8-13-64	L
13da	Bert Hamlin	----	Dr	115	7	P	J	E D,S		Tca	.5	-----	59.04	5- 4-65	
13dd	Don Odegaard	1963	Dr	347	7	P	S	E D		La	-----	-----	270	-----	L; Y 6; D 30
25aa	Happy Valley Development	1963	Dr	370	7	P	S	E D,0		Twc	1.3	3,228	294.67	8-27-63	Ca
26cc	-----	----	Du	31.5	----	W	Cy	H N		Tpc	1.0	-----	4.66	9- 1-65	A
27ab	Arnold Sorenson	1891	Du	15.7	48x60	W	P	H N		Tco	0	-----	1.52	9- 1-65	A
28cd	Kuhns School	----	Du	-----	6	G	N	N N		Tca	1.0	-----	7.77	8-13-63	A
28db	A. R. Sorenson	1957	Dr	360	6	P	--	E D,S		---	-----	-----	-----	-----	L
34cd	John Horn	1963	Dr	246	7	P	J	E D		La	-----	-----	4	-----	L; Y 50; D 31
B31-21-25ad	James Winegar	1963	Dr	402	7	P	S	E D		La	-----	-----	300	-----	L; Y 6; D 60
28ad	Leon Gray	----	Du	16.9	12	G	J	E D		Tpc	.6	-----	15.22	10- 7-64	
28cc	L. H. Kaeding	1959	Dr	247	7	P	--	E D		La	-----	-----	+31.9	9-23-65	L; F 7 r; Ca; T 46
28dd	John Voerman	----	Du	17.2	36	C	--	E D		Tca	1.0	-----	3.60	4-23-65	
29cd1	W. P. Erbes	----	Dr	-----	7	P	J	E D,S		La	-----	-----	+36.4	9-23-65	
29cd2	-----do-----	----	Du	37.2	----	C	N	N N		Tco	1.0	-----	13.74	10- 7-64	A
33ab	Victor Zander	1954	Dr	142	6	P	J	E D,S		Twc	0	-----	6.00	10- 7-64	Y 25
33cb	John Robinson	----	Dr	21	7	P	C	E D		Tca	-2.7	-----	8.38	10- 7-64	
34ca	Edgar Nelson	1963	Dr	153	7	P	S	E D,S		La	-----	-----	100	-----	L; Y 20; D 45
B31-22-24ca	Viking Lodge	1964	Dr	144	7	P	S	E D		La	-----	-----	2	-----	L; Y 60; D 38

Table 2.--Drillers' logs of wells, Kalispell Valley, Montana
(Thicknesses and depths below land surface are given in feet.)

Thick- ness		Depth		Thick- ness		Depth		Thick- ness		Depth	
<u>B26-20-12dd1</u>											
Boulders, cemented gravel, and gravel...											
50		50									
60		110									
<u>B26-20-12dd2</u>											
Boulders, cemented gravel, and clay....											
108		108									
82		190									
<u>B27-19-20aa2</u>											
Gray silt.....											
167		167									
70		237									
6		243									
<u>B27-19-28da</u>											
Clay.....											
127		127									
2		129									
11		140									
2		142									
<u>B27-20-6ac1</u>											
Silt; vegetation gas at 360'; pine cones and needles from about 300'-370'.....											
585		585									
<u>B27-20-8aa</u>											
Topsoil.....											
1		1									
4		5									
30		35									
<u>B27-20-13cd</u>											
Silt.....											
148		148									
62		210									
42		252									
33		285									
<u>B27-20-24bd</u>											
Sand and clay.....											
50		50									
98		148									
6		154									
<u>B27-20-25ab</u>											
Hardpan.....											
40		40									
97		137									
at		137									
<u>B27-20-25cc</u>											
Silt.....											
209		209									
6		215									
<u>B27-20-26ab</u>											
Sandy clay.....											
75		75									
5		80									
115		195									
<u>B27-20-26da</u>											
Overburden.....											
3		3									
7		10									
148		158									
2		160									
<u>B27-21-1ba</u>											
Sandy silt.....											
22		22									
318		340									
5		345									
1		346									
<u>B27-21-5ba</u>											
Hardpan and boulders....											
32		32									
118		150									
<u>B27-21-12ab</u>											
Sand and silt.....											
411		411									
65		476									
4		480									
<u>B27-21-14cb</u>											
Sandy silt.....											
150		150									
110		260									
5		265									
<u>B27-21-24cb</u>											
Sand.....											
12		12									
98		110									
50		160									
105		265									
<u>B27-21-26cc</u>											
Hardpan, cobbles.....											
21		21									
76		97									
25		122									
1		123									
<u>B27-21-35dd</u>											
Topsoil.....											
5		5									
62		67									
32		99									
<u>B28-19-7cc</u>											
Gravel and boulders....											
36		36									
98		134									
2		136									
11		147									
<u>B28-20-2bb</u>											
Topsoil.....											
4		4									
65		69									
108		177									
6		183									
<u>B28-20-3cd1</u>											
Topsoil.....											
3		3									
17		20									
169		189									
3		202									
<u>B28-20-3dd2</u>											
Sand.....											
32		32									
44		76									
120		196									
11		207									
5		212									
<u>B28-20-9aa</u>											
Silt.....											
60		60									
11		71									
<u>B28-20-10bc</u>											
Topsoil.....											
4		4									
106		110									
4		114									
<u>B28-20-10dd1</u>											
Sand, silt, clay.....											
75		75									
28		103									
<u>B28-20-10dd2</u>											
Silty clay.....											
85		85									
60		145									
40		185									
<u>B28-20-11cb</u>											
Topsoil.....											
6		6									
34		40									
18		58									
2		60									
<u>B28-20-15ab</u>											
Topsoil.....											
2		2									
45		47									
12		59									
<u>B28-20-15cb1</u>											
Silt.....											
27		27									
97		124									
15		139									
<u>B28-20-15cb3</u>											
Topsoil.....											
3		3									
8		11									
54		65									
28		93									
67		160									
8		168									
<u>B28-20-15db</u>											
Sand and clay.....											
99		99									
4		103									
<u>B28-20-20cb</u>											
Topsoil.....											
2		2									
42		44									
376		420									
43		463									
2		465									

Table 2.--Drillers' logs of wells, Kalispell Valley, Montana--cont'd.
(Thicknesses and depths below land surface are given in feet.)

Thick- ness Depth		Thick- ness Depth		Thick- ness Depth	
<u>B28-20-22aa</u>		<u>B28-21-12ab</u>		<u>B28-21-20bb--continued</u>	
Gravel.....	18 18	Surface loam.....	4 4	Cemented gravel.....	42 295
Cement gravel, boulders	27 45	Sand.....	7 11	Gravel.....	11 306
Sand and boulders.....	20 65	Silt.....	169 180	Cemented gravel.....	32 338
Sand and gravel.....	36 101	Soft clay.....	13 193	Gravel.....	5 343
Gravel.....	10 111	Cemented gravel.....	7 200	Cemented gravel.....	9 352
		Sand and gravel.....	4 204	Gravel.....	38 390
<u>B28-20-26bb</u>		<u>B28-21-12ac</u>		<u>B28-21-20da</u>	
Gravel, sand, clay.....	11 11	Sandy silt.....	52 52	Topsoil and clay.....	31 31
Sandy clay.....	17 28	Gray silt.....	103 155	Silt.....	9 40
Sand.....	4 32	Gray clay.....	36 191	River mud.....	65 105
Cemented gravel.....	64 96	Heavy clay with gravel..	7 198	Silt.....	21 126
Boulders and clay.....	23 119	Brown hardpan, seep		Gray cemented gravel....	41 167
Gravel and sand.....	5 124	water.....	50 248	Brown cemented gravel....	72 239
		Gravel and sand; casing		Gray cemented gravel....	6 245
<u>B28-20-30db</u>		perforated.....	16 264	Sand and gravel.....	3 248
Silt.....	600 600				
<u>B28-20-34aa</u>		<u>B28-21-12cb</u>		<u>B28-21-20db1</u>	
Sandy silt.....	79 79	Surface loam.....	3 3	Topsoil.....	2 2
Gravel and silt.....	13 92	Sandy loam.....	24 27	Clay.....	88 90
Gray silt.....	10 102	Fine sand.....	18 45	Dry gravel.....	21 111
Gravel with silt.....	38 140	Soft clay.....	65 110	Hardpan; some water	
Gravel and sand.....	1 141	Cemented gravel.....	10 120	at 165'.....	75 186
		Gravel.....	5 125	Sand and silt.....	54 240
				Gravel and sand.....	9 249
<u>B28-21-1ca</u>		<u>B28-21-14dd</u>		<u>B28-21-27cc</u>	
Dark hard clay.....	18 18	Sandy silt.....	42 42	Clay and sand.....	208 208
Silty sand.....	6 24	Gray silt.....	117 159	Gravel.....	at 208
River mud.....	72 96	Gray hardpan.....	54 213		
Cemented gravel.....	11 107	Brown hardpan, seep		<u>B28-21-28bb</u>	
Sand and gravel.....	3 110	water.....	45 258	Clay.....	28 28
		Gravel and sand.....	1 259	Silt.....	7 35
<u>B28-21-2ca</u>				River mud.....	65 100
Topsoil.....	2 2	<u>B28-21-15aa</u>		Brown cemented gravel....	36 136
Clay.....	16 18	Topsoil.....	2 2	Dirty sand, some water...	9 145
Sandy silt.....	42 60	Sand and gravel.....	20 22	Brown cemented gravel....	42 187
Silt.....	75 135			Brown sand.....	4 191
Sand, water.....	29 164	<u>B28-21-19aa2</u>			
Gravel and sand.....	2 166	Topsoil.....	2 2	<u>B28-21-29cc</u>	
		Clay.....	86 88	Clay.....	25 25
<u>B28-21-5cb1</u>		Cement gravel, seepage		Cement gravel.....	20 45
Tan silt.....	121 121	at 111'.....	37 125	Clay and gravel.....	13 58
Gravel and sand.....	3 124	Clay and gravel.....	32 157	Gravel.....	7 65
		Tight cement gravel....	6 163	Bedrock.....	at 65
<u>B28-21-5dd</u>		Gravel.....	10 173		
Gravel fill.....	3 3			<u>B28-21-35cb</u>	
Boulders.....	3 6	<u>B28-21-19bcl</u>		Dug well.....	32 32
Silt.....	44 50	Topsoil and rock.....	2 2	Silt.....	276 308
Hard packed gravel and		Bedrock.....	123 125	Gravel and sand.....	6 314
sand.....	10 60				
Gravel and sand, water-		<u>B28-21-19bc2</u>		<u>B28-22-1ad</u>	
bearing.....	14 74	Hardpan.....	85 85	Topsoil.....	2 2
Hard packed gravel and		Bedrock.....	44 129	Gravel.....	39 41
sand, water.....	5 79			Sand and gravel.....	11 52
Gravel and sand, water-		<u>B28-21-20bb</u>		Boulders and cement	
bearing.....	6 85	Soft white clay.....	63 63	gravel.....	9 61
Hard packed gravel and		Sand and clay streaks...	37 100	Sand and rew rocks.....	14 75
sand, some water....	20 105	Boulders.....	6 106	Yellow clay.....	4 79
		Hard cemented gravel....	32 138	Fine sand, wet.....	36 115
<u>B29-21-6ba</u>		Boulders.....	5 143	Gravel.....	16 131
Clay.....	58 58	Sand, gravel, boulders..	26 169	Gravel and rock.....	29 160
Silt.....	5 63	Sand, gravel, boulders		Quicksand.....	20 180
Gray cemented gravel...	72 135	and clay layers.....	22 191	Clay and large rocks....	16 196
Brown cemented gravel...	30 165	Clay, small boulders....	19 210	Sand, little water.....	26 222
Clay and boulders....	25 190	Gravel, rock and		Fine sand, little water..	15 237
Brown cemented gravel..	60 250	boulders.....	13 223	Clay and small rocks....	17 254
Brown sand.....	4 254	Cemented gravel and		Clay and sand, little	
		boulders.....	26 249	water.....	9 263
		Clay layer.....	4 253	Sand and little clay....	16 279

Table 2.--Drillers' logs of wells, Kalispell Valley, Montana--cont'd.
(Thicknesses and depths below land surface are given in feet.)

Thick- ness Depth		Thick- ness Depth		Thick- ness Depth	
<u>B28-22-1ad--continued</u>		<u>B29-20-9ac1</u>		<u>B29-20-33ca--continued</u>	
Sand, little water.....	8 287	Surface loam.....	8 8	Glacial wash.....	34 172
Clay.....	6 293	Fine sand, water.....	4 12	Gray cemented gravel....	9 181
Clay and sand.....	7 300	River mud.....	66 78	Sand and gravel.....	8 189
Fine sand, water.....	20 320	Cemented gravel.....	24 102		
Fine sand and gravel, water.....	20 340	Rocky blue clay.....	71 173	<u>B29-20-33dc</u>	
		Gravel, sand and water..	4 177	Silt.....	6 6
				Hardpan.....	135 141
<u>B28-22-1dc</u>		<u>B29-20-9cb</u>		Gravel with mud.....	41 182
Sandy clay.....	20 20	Sand.....	40 40	Hardpan.....	46 228
Clay with rock.....	80 100	Clay.....	118 158	Hard packed gravel and sand.....	4 232
Hardpan.....	48 148	Gravel.....	2 160		
Brown gravel.....	4 152				
		<u>B29-20-18aa2</u>		<u>B29-20-35cd2</u>	
<u>B28-22-11ca</u>		Dug well.....	21 21	Topsoil.....	1 1
Clay.....	12 12	Sandy silt, water.....	41 62	Sand and gravel.....	59 60
Silt.....	11 23	Gray silt.....	91 153	Coarse sand.....	30 90
Gray hardpan.....	73 96	Gray hardpan.....	19 172	Fine silty sand.....	25 115
Brown hardpan.....	28 124	Gravel and sand.....	4 176	Coarse sand and gravel..	25 140
Brown sand, some water.	2 126				
Brown hardpan.....	18 144	<u>B29-20-26bb</u>		<u>B29-20-35dd2</u>	
Brown sand and gravel..	8 152	Clay.....	385 385	Sandy silt.....	23 23
		Fine sand and silt, some water.....	18 403	Silt with gravel.....	15 38
<u>B28-22-11cd</u>		Red clay.....	2 405	Silt.....	24 62
Gray hardpan.....	140 140	Cemented gravel.....	11 416	Sandy silt.....	33 95
Brown hardpan.....	38 178	Sand and gravel.....	4 420	Gray hardpan.....	64 159
Brown hardpan, seep water.....	76 254			Brown hardpan.....	7 166
Gravel and sand.....	1 255	<u>B29-20-27bb</u>		Gravel and sand.....	1 167
		Surface loam.....	5 5	<u>B29-20-36dc</u>	
<u>B28-22-12dc</u>		Sand.....	27 32	Light clay.....	15 15
Clay and boulders.....	80 80	River mud.....	33 65	Hardpan and boulders....	35 50
Gray hardpan.....	105 185	Cemented gravel.....	126 191	Brown hardpan.....	28 78
Brown hardpan.....	49 234	Ledge rock.....	2 193	Coarse sand.....	10 88
Brown sand and gravel..	8 242			Gravel and sand.....	2 90
		<u>B29-20-27cb</u>		<u>B29-21-4ab</u>	
<u>B28-22-13ba</u>		Surface loam.....	5 5	Topsoil.....	5 5
Dark clay.....	6 6	Gray and yellow river mud.....	43 48	Coarse sand and gravel..	11 11
Light colored clay.....	25 31	Sand and gravel - 25 gallons per minute....	17 65	<u>B29-21-5cd1</u>	
Light colored hardpan..	68 99	Cemented gravel.....	77 142	Clay.....	12 12
Brown hardpan.....	11 110	Fine sand.....	6 148	Silt.....	20 32
Gravel and sand.....	1 111	Coarse sand and gravel, water.....	12 160	River mud.....	78 110
		Sand.....	5 165	Gray hardpan.....	12 122
<u>B28-22-23ab</u>		Dirty sand.....	9 174	Brown hardpan.....	6 128
Hardpan and boulders...	69 69	Cemented gravel.....	18 192	Sand and gravel.....	3 131
Hardpan.....	77 146	Gravel, water.....	5 197	<u>B29-21-11bc</u>	
Decomposed bedrock....	26 172	Fine sand.....	7 204	Surface loam and clay...	10 10
Shattered bedrock.....	15 187	Cemented gravel.....	141 345	Gravel.....	9 19
		Fine sand.....	5 350	Clay.....	1 20
<u>B29-20-3ba</u>		Gray clay and rocks....	61 411		
Silt.....	460 460	Fine sand.....	11 422	<u>B29-21-15cd2</u>	
Hardpan.....	13 473	Sandy clay.....	10 432	Sandy clay.....	6 6
Gravel and sand.....	2 475	Cemented gravel.....	28 460	Sandy clay and rocks....	2 8
		Blue clay and rocks....	25 485	Cemented gravel.....	3 11
<u>B29-20-4cc</u>		Glacial drift.....	21 506	Gravel, water.....	8 19
Sand.....	40 40			Sand.....	6 25
Clay.....	115 155	<u>B29-20-28ca</u>		Soft clay.....	55 80
Gravel.....	2 157	Clay and boulders.....	61 61	Sandy silt.....	4 84
		Cemented gravel.....	127 188	Soft clay.....	70 154
<u>B29-20-5da</u>		Fine sand.....	2 190		
Sandy silt.....	28 28	Sand and gravel.....	4 194	<u>B29-21-19cb1</u>	
Gray silt.....	94 122			Clay topsoil.....	4 4
Clay with gravel.....	8 130	<u>B29-20-8cb</u>		Clay and rocks.....	4 8
Gravel and sand.....	1 131	Topsoil.....	4 4	Clay.....	16 24
		Dry sand.....	26 30	Boulders and clay.....	74 98
<u>B29-20-8cb</u>		Silty clay.....	125 155	Gray cemented gravel....	62 160
Silt and sand.....	12 167	Silt and sand.....	12 167	Brown cemented gravel...	50 210
Sand and gravel.....	11 178	Sand and gravel.....	11 178	Brown sandy clay.....	71 281
				Sand and gravel.....	5 286

Table 2.--Drillers' logs of wells, Kalispell Valley, Montana--cont'd.
(Thicknesses and depths below land surface are given in feet.)

Thick- ness Depth		Thick- ness Depth		Thick- ness Depth	
<u>B29-21-20cc</u>		<u>B29-22-17ab</u>		<u>B30-20-2cal--continued</u>	
Gray silt.....	143 143	Hardpan and cobbles.....	45 45	Gravel and sand.....	11 99
Gray hardpan.....	47 190	Gravel and sand.....	7 52	Gravel, fine sand, silt and clay.....	28 127
Brown hardpan.....	87 277	<u>B29-22-21bb</u>		Clay and gravel.....	5 132
Gravel and sand.....	1 278	Topsoil.....	1 1	Clay, silt and gravel...	10 142
<u>B29-21-22bc</u>		Clay.....	1 2	Coarse sand, gravel and boulders.....	6 148
Loam and clay.....	9 9	Clay and rock.....	4 6	Clay, sand and gravel...	21 169
Sand and gravel.....	15 24	Sand, gravel and rock mixed.....	17 23	Gravel.....	4 173
Coarse sand.....	12 36	<u>B29-22-22bb</u>		Fine and coarse sand and silt.....	10 183
Soft clay.....	14 50	Soil and sand.....	10 10	Fine sand and silt.....	2 185
<u>B29-21-30cb</u>		Gravel.....	44 54	<u>B30-20-2ca2</u>	
Clay.....	50 50	Hard packed clay.....	30 84	Rock and gravel.....	30 30
Silt and sand.....	24 74	Gravel and sand.....	5 89	Sand and small gravel...	8 38
Soft clay.....	61 135	<u>B29-22-24ca</u>		Rock, gravel and sand...	10 48
Silt and sand.....	115 250	Surface loam.....	4 4	Gravel and sand.....	6 54
Cemented gravel.....	21 271	Clay.....	56 60	Clay and gravel.....	2 56
Coarse sand and gravel.	6 277	River mud and silt.....	145 205	Coarse sand and small gravel.....	4 60
<u>B29-21-30cd</u>		Silt.....	19 224	Gravel and clay.....	4 64
Topsoil and yellow clay	5 5	Gravel.....	3 227	Large rock, gravel and sand.....	6 70
Sandy clay.....	55 60	<u>B29-22-24dd</u>		Large rock and clay....	7 77
Sand, some water.....	10 70	Silt and clay.....	221 221	Medium rock, gravel and sand.....	3 80
Soft clay and silt.....	190 260	Gray hardpan.....	7 228	Coarse sand and small rock.....	21 101
Quicksand, water.....	30 290	Gravel and sand, some water.....	3 231	Coarse gravel.....	5 106
Cemented gravel.....	11 301	Brown hardpan, seep water.....	14 245	Gravel and sand.....	6 112
Gravel and sand.....	2 303	Gravel and sand.....	1 246	Rock, sand and gravel...	21 133
<u>B29-21-32ab</u>		<u>B29-22-25ad</u>		Rock, gravel, sand and clay.....	3 136
Sand.....	80 80	Clay and rocks.....	14 14	Gravel and sand.....	3 139
Cement gravel and clay.	214 294	Gravel.....	10 24	Gravel and clay.....	1 140
Sand and gravel.....	11 305	Sandy clay.....	172 196	Gravel, sand, rocks and cemented gravel.....	6 146
Gravel and coarse sand.	7 312	Sand and gravel.....	6 202	Gravel and clay.....	1 147
<u>B29-21-34ca2</u>		<u>B29-22-27dc</u>		Gravel, sand and cemented gravel.....	4 151
Sand.....	11 11	Dug well.....	80 80	Gravel and clay.....	1 152
Gravel.....	9 20	Tan hardpan.....	102 182	Sand and small gravel...	7 159
<u>B29-21-34cd2</u>		Brown hardpan.....	13 195	Rock, gravel and sand...	9 168
Gravel and sand; not water bearing.....	17 17	Gravel and sand.....	at 195	Sand and gravel.....	3 171
Gravel and sand; water; static water level 17 feet.....	16 33	<u>B29-22-35dd2</u>		<u>B30-20-2cb</u>	
Gray silt.....	85 118	Clay and gravel.....	60 60	Gravel, rock and clay streaks.....	42 42
Gray hardpan, seep water.....	15 133	Cement gravel and boulders.....	80 140	Gravel and clean sand...	3 45
Brown hardpan, seep water.....	205 338	Brown cement gravel....	40 180	Gravel and boulders....	3 48
<u>B29-22-10dc1</u>		Sand.....	18 198	Rock, sand, some sandy clay.....	21 69
Clay.....	7 7	<u>B29-22-36da</u>		Coarse gravel and sand..	15 84
Dry sand.....	27 34	Clay.....	46 46	Hard fine sand.....	2 86
Gray cemented gravel...	80 114	Hardpan.....	39 85	Coarse gravel and sand..	24 110
Clay and boulders.....	51 165	Muddy sand and gravel...	10 95	Fine gravel and sand...	3 113
Brown cemented gravel..	15 180	Hard packed gravel.....	5 100	Coarse rock and sand....	2 115
Clay and boulders.....	15 195	Gray hardpan.....	55 155	Cemented rock and sand..	2 116
Clay.....	15 210	Brown hardpan.....	49 204	Gravel rock and sand....	19 135
Some water.....	4 214	Sand and gravel.....	1 205	<u>B30-20-3da</u>	
Gray cemented gravel...	18 232	<u>B30-20-2cal</u>		Sand, gravel and boulders.....	85 85
Soft river mud.....	27 259	Coarse rock and gravel..	35 35	Loose sand and gravel...	10 95
Sand and gravel.....	4 263	Sand and gravel.....	4 39	Sand and medium gravel..	20 115
<u>B29-22-11dd</u>		Clay and gravel.....	3 42	Fine sand.....	4 119
Fine silty sand.....	40 40	Gravel and sand.....	14 56	Fine, brown, silty sand.	61 180
Gravel.....	2 42	Clay and gravel.....	4 60	Gray, silty clay.....	20 200
Silty, sandy, bluish material.....	183 225	Clay and rock.....	10 70		
Gravel.....	5 230	Gravel and sand.....	2 72		
		Clay and gravel.....	3 75		
		Rock and gravel.....	13 88		

Table 3.--Water levels in observation wells, Kalispell Valley, Montana
(In feet above (+) or below land surface.)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
<u>B27-20-8ba</u>				<u>B27-21-12ad</u>			
Apr. 5, 1965	5.10	Aug. 9, 1965	7.42	Nov. 5, 1963	7.43	Jan. 4, 1965	7.10
12	5.21	16	7.58	Dec. 3	7.50	Feb. 3	7.08
19	5.18	23	7.62	Jan. 6, 1964	7.50	Mar. 1	4.04
26	4.51	30	7.22	Feb. 3	7.57	Apr. 5	5.56
May 3	4.66	Sept. 6	7.16	Mar. 3	7.47	May 3	5.57
10	4.88	13	7.13	Apr. 1	7.04	June 1	5.92
17	5.04	20	7.02	May 29	6.85	28	6.08
24	5.18	27	6.87	July 1	6.92	Aug. 8	6.47
31	5.37	Oct. 4	6.82	Aug. 3	7.12	30	6.13
June 7	5.54	11	6.79	Oct. 1	7.43	Sept. 28	6.45
14	5.73	18	6.77	Nov. 2	7.48	Nov. 1	6.60
21	5.82	25	6.78	30	7.48	Dec. 8	6.57
28	5.92	Nov. 1	6.78				
July 5	6.12	8	6.78				
12	6.30	15	6.77				
19	6.58	22	6.78				
26	6.92	29	6.80				
Aug. 2	7.22	Dec. 8	6.79				
<u>B27-20-11ba</u>				<u>B28-20-15cb2</u>			
May 11, 1965	24.10	Aug. 3, 1965	24.60	May 17, 1965	14.45	Aug. 9, 1965	15.00
17	24.18	9	24.60	24	14.50	16	15.12
24	24.22	16	24.77	June 1	14.56	23	15.20
June 1	24.28	30	24.63	7	14.79	30	15.08
7	24.30	Sept. 13	24.52	14	14.38	Sept. 13	15.08
14	24.30	20	24.45	21	14.13	20	15.13
21	24.18	27	24.38	28	14.14	27	15.16
28	24.15	Nov. 1	24.30	July 12	14.44	Nov. 1	15.63
July 12	24.19	Dec. 8	24.14	19	14.92	Dec. 8	15.95
19	24.27			Aug. 3	14.92		
<u>B27-20-17cc</u>				<u>B28-20-15cb3</u>			
Oct. 1, 1963	4.80	Jan. 4, 1965	3.82	Dec. 4, 1963	4.06	Nov. 2, 1964	2.00
Nov. 5	4.67	Feb. 3	3.53	Jan. 6, 1964	5.38	30	1.80
Dec. 3	4.73	Mar. 1	1.82	Feb. 3	5.75	Jan. 4, 1965	2.43
Jan. 6, 1964	4.63	Apr. 5	2.50	Mar. 3	6.00	Feb. 3	1.90
Feb. 3	4.63	May 3	2.82	Apr. 1	6.80	Mar. 1	2.52
Mar. 3	4.37	June 1	3.90	May 29	4.45	Apr. 5	1.70
Apr. 1	4.87	28	4.04	July 1	2.30	May 3	1.50
May 29	3.83	Aug. 2	4.84	Aug. 3	1.88	Aug. 2	+1.00
July 1	3.97	30	4.00	Oct. 1	1.64		
Aug. 3	4.28	Sept. 28	3.42				
Oct. 1	4.30	Nov. 1	3.62				
Nov. 2	4.18	Dec. 8	3.42				
30	4.20						
<u>B27-20-22ac</u>				<u>B28-20-34bb</u>			
Nov. 30, 1964	7.99	June 28, 1965	6.50	Nov. 5, 1963	8.20	June 1, 1965	4.68
Jan. 4, 1965	7.31	Aug. 2	7.47	Dec. 3	8.23	7	5.10
Feb. 3	6.93	30	6.75	Jan. 6, 1964	8.06	14	5.52
Mar. 1	5.73	Sept. 28	6.70	Feb. 3	7.85	21	5.34
Apr. 5	5.10	Nov. 1	6.84	Apr. 1	5.87	28	5.58
May 3	4.00	Dec. 8	6.63	May 29	4.53	July 12	6.00
June 1	5.95			Aug. 3	5.22	19	6.30
				Oct. 1	6.00	Aug. 3	6.88
				Nov. 2	6.17	9	7.00
				30	5.80	16	7.13
				Jan. 4, 1965	3.80	23	7.16
				Feb. 3	3.00	30	5.95
				Mar. 1	1.65	Sept. 13	5.80
				Apr. 5	2.58	20	5.60
				May 3	2.67	27	5.40
				17	2.74	Nov. 1	5.60
				24	4.40	Dec. 8	5.42

Table 3.--Water levels in observation wells, Kalispell Valley, Montana--cont'd.
(In feet above (+) or below land surface.)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
<u>B28-21-3ab</u>				<u>B29-20-18aa1</u>			
Aug. 29, 1963	5.87	Nov. 2, 1964	5.36	Oct. 1, 1963	16.72	Jan. 4, 1965	16.48
Oct. 1	5.94	30	5.29	Nov. 5	16.82	Feb. 3	16.48
Nov. 5	6.00	Jan. 4, 1965	5.00	Dec. 3	16.94	Mar. 1	15.93
Dec. 3	6.01	Feb. 3	4.70	Jan. 6, 1964	17.04	Apr. 5	15.27
Jan. 6, 1964	4.96	Mar. 1	4.44	Feb. 3	17.18	May 3	15.26
Feb. 3	5.02	Apr. 5	4.68	Mar. 3	17.28	June 1	15.22
Mar. 3	5.80	May 3	3.48	Apr. 1	17.38	28	15.23
Apr. 1	5.52	June 1	3.54	May 29	16.56	Aug. 2	15.28
May 29	3.56	28	3.70	July 1	16.43	30	15.39
June 11	+0.70 (flood)	Aug. 2	5.15	Aug. 3	16.27	Sept. 28	15.48
July 1	4.85	30	5.30	Oct. 1	16.30	Nov. 1	15.60
Aug. 3	4.20	Sept. 28	5.28	Nov. 2	16.42	Dec. 8	15.78
Oct. 1	5.40	Dec. 8	5.06	30	16.56		
<u>B28-21-4dc</u>				<u>B29-20-29bd</u>			
Oct. 1, 1963	8.65	Apr. 1, 1964	8.52	Sept. 16, 1963	24.56	Oct. 5, 1964	23.98
Nov. 5	8.65	May 29	6.20	23	24.60	12	23.89
Dec. 3	8.70	July 1	5.55	30	24.73	19	24.05
Jan. 6, 1964	8.43	Aug. 3	8.04	Oct. 7	24.93	26	23.89
Feb. 3	8.45	Oct. 1	8.42	14	24.95	Nov. 2	23.94
Mar. 3	8.63	Nov. 2	8.43	21	24.97	9	23.96
<u>B28-21-20dd</u>				28	25.10	16	24.26
Oct. 1, 1963	13.40	Jan. 4, 1965	13.72	Nov. 4	25.15	23	24.28
Nov. 5	13.45	Feb. 3	13.90	11	25.46	30	24.21
Dec. 3	13.53	Mar. 1	13.27	18	25.37	Dec. 7	24.35
Jan. 6, 1964	13.60	Apr. 5	12.98	25	25.64	14	24.16
Feb. 3	13.67	May 3	13.10	Dec. 2	25.77	21	24.02
Mar. 3	13.70	June 1	13.23	9	25.61	28	23.95
Apr. 1	13.16	28	13.28	16	25.60	Jan. 4, 1965	24.08
May 29	13.60	Aug. 2	13.02	23	25.61	11	24.17
July 1	13.65	30	13.17	30	25.65	18	24.20
Aug. 3	13.67	Sept. 28	13.30	Jan. 6, 1964	25.44	25	23.86
Oct. 1	13.78	Nov. 1	13.42	13	25.66	Feb. 1	23.93
Nov. 2	13.84	Dec. 8	13.55	20	25.47	8	23.87
30	13.88			27	25.69	15	23.95
<u>B28-22-12cb</u>				Feb. 3	25.89	22	23.89
Oct. 1, 1963	8.77	Jan. 4, 1965	8.45	10	25.82	Mar. 1	23.97
Nov. 5	8.87	Feb. 3	8.30	17	25.94	8	23.88
Dec. 3	8.90	Mar. 1	7.78	24	26.11	15	23.60
Jan. 6, 1964	8.87	Apr. 5	6.78	Mar. 2	26.11	22	23.52
Feb. 3	8.86	May 3	6.40	9	26.21	29	23.51
Mar. 3	8.77	June 1	7.10	16	26.44	Apr. 5	23.50
Apr. 1	8.13	28	7.14	23	26.46	12	23.63
May 29	7.62	Aug. 2	7.55	30	26.81	19	23.55
July 1	7.90	30	7.74	Apr. 6	26.98	26	23.46
Aug. 3	8.25	Sept. 28	7.88	13	27.00	May 3	23.07
Nov. 2	8.88	Nov. 1	8.02	20	26.84	10	22.84
30	8.88	Dec. 8	7.93	27	26.84	17	22.49
<u>B29-20-9ac2</u>				May 2	26.54	24	22.11
Oct. 1, 1963	7.36	Jan. 4, 1965	6.02	18	26.27	31	21.77
Nov. 5	7.52	Feb. 3	5.72	25	25.90	June 7	21.59
Dec. 3	7.60	Mar. 1	5.10	22	23.54	14	21.40
Jan. 6, 1964	7.68	Apr. 5	4.56	29	23.24	21	21.02
Feb. 3	7.72	May 3	4.05	July 6	23.15	28	20.98
Mar. 3	7.68	June 1	4.50	13	23.08	July 5	21.02
Apr. 1	7.15	28	4.54	20	23.08	12	20.96
May 29	6.08	Aug. 2	5.46	27	23.22	19	20.90
July 1	6.06	30	5.48	Aug. 3	23.29	26	21.03
Aug. 3	6.46	Sept. 28	5.78	9	23.42	Aug. 3	21.21
Oct. 1	6.90	Nov. 1	5.90	16	23.50	9	21.22
Nov. 2	6.95	Dec. 8	5.76	24	23.66	16	21.37
30	6.82			31	23.56	23	21.41
				Sept. 7	23.54	30	21.45
				14	23.68	Sept. 6	21.57
				21	23.77	13	21.64
				28	23.78	20	21.72
						27	21.69
						Oct. 4	21.77
						11	21.96

Table 3.--Water levels in observation wells, Kalispell Valley, Montana--cont'd.
(In feet above (+) or below land surface.)

<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>
<u>B29-21-33cd--continued</u>				<u>B29-22-8dd--continued</u>			
May 3, 1965	8.00	Aug. 30, 1965	9.08	June 28, 1965	51.56	Sept. 20, 1965	52.83
June 1	7.70	Sept. 28	9.18	July 5	51.53	27	52.99
28	7.45	Nov. 1	9.28	12	51.54	Oct. 4	53.17
Aug. 2	8.85	Dec. 8	9.31	19	51.60	11	53.32
				26	51.70	18	53.48
				Aug. 2	51.83	25	53.67
				9	51.95	Nov. 2	53.85
				16	52.12	8	53.99
				23	52.27	15	54.16
				30	52.41	22	54.32
				Sept. 6	52.54	29	54.48
				13	52.68	Dec. 9	54.70
<u>B29-21-34cc1</u>				<u>B29-22-13dd2</u>			
Sept. 24, 1963	8.97	June 29, 1964	6.19	Oct. 1, 1963	16.69	July 1, 1964	19.30
30	8.99	July 6	6.65	Nov. 5	16.75	Aug. 3	19.50
Oct. 7	9.01	July 13	7.16	Dec. 3	16.84	Oct. 1	18.83
14	9.01	20	7.53	Jan. 6, 1964	16.90	Nov. 2	17.15
21	8.91	27	7.96	Feb. 3	17.00	30	17.20
28	8.88	Aug. 3	8.25	Mar. 3	17.07	Jan. 4, 1965	17.25
Nov. 5	9.00	10	8.47	Apr. 1	17.03	Feb. 3	17.32
11	9.02	17	8.56	May 29	18.80		
18	9.05	24	8.66				
25	9.07	31	8.70				
Dec. 2	9.09	Sept. 21	8.72				
9	9.00	28	8.73				
16	8.80	Oct. 5	8.74				
23	8.68	12	8.71				
30	8.62	19	8.68				
Jan. 6, 1964	8.60	26	8.68				
Feb. 3	8.59	Nov. 2	8.70				
10	8.72	9	8.71				
17	8.87	16	8.73				
24	8.95	23	8.74				
Mar. 2	8.98	30	8.69				
9	8.91	Dec. 7	8.58				
16	8.70	14	8.58				
23	8.69	21	8.57				
30	8.76	28	8.49				
Apr. 6	8.80	Jan. 4, 1965	8.49				
13	8.72	11	8.49				
20	8.60	18	8.44				
27	8.67	25	8.42				
May 18	7.79	Feb. 1	8.37				
25	7.28	8	8.35				
June 1	7.20	15	8.34				
8	6.75	Mar. 1	8.04				
9	+3.00	8	8.00				
	(flood)	15	7.73				
15	4.33	Apr. 5	8.18				
22	5.67						
<u>B29-22-8dd</u>				<u>B30-21-36cb</u>			
Oct. 1, 1963	56.90	Dec. 1, 1964	57.69	Oct. 1, 1963	13.90	May 29, 1964	8.16
Nov. 5	57.18	Jan. 5, 1965	57.96	Nov. 5	14.45	July 1	7.55
Dec. 3	57.40	11	57.96	Dec. 3	14.90	Aug. 3	10.10
Jan. 6, 1964	57.58	18	57.97	Jan. 1, 1964	13.76	Oct. 1	12.80
Feb. 3	57.76	25	57.97	Feb. 3	13.28	Nov. 2	13.20
Apr. 1	57.96	Feb. 1	57.98	Mar. 3	14.27	30	13.40
May 29	56.93	8	57.98	Apr. 1	13.84		
July 1	56.10	15	57.99				
20	56.57	22	57.99				
27	56.51	Mar. 1	57.99				
Aug. 3	56.47	Apr. 6	56.54				
10	56.46	12	56.20				
17	56.47	19	55.95				
Sept. 22	56.80	26	55.62				
28	56.86	May 3	55.18				
Oct. 5	56.95	10	54.62				
12	57.04	17	53.91				
19	57.13	24	53.21				
26	57.22	31	52.59				
Nov. 2	57.32	June 7	52.12				
9	57.41	14	51.82				
16	57.51	21	51.65				
<u>B30-22-1aa</u>				<u>B30-22-25aa</u>			
				Nov. 5, 1963	54.39	Jan. 4, 1965	54.48
				Dec. 3	54.52	Feb. 3	54.46
				Jan. 6, 1964	54.34	Mar. 1	54.62
				Feb. 3	54.44	Apr. 5	54.45
				Mar. 3	54.36	May 3	54.20
				Apr. 1	54.50	June 28	54.39
				May 29	55.18	Aug. 2	54.60
				July 1	55.35	30	54.22
				Aug. 3	55.83	Sept. 28	53.67
				Oct. 1	55.30	Nov. 1	53.54
				Nov. 2	55.05	Dec. 8	53.38
				30	54.66		

Table 4.--Water-level measurements in Pothole Lakes, Kalispell Valley, Mont.
 (Staff-gage readings, in feet, from arbitrary datum as of 5-10-65)

<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>
<u>Echo Lake (27-19-8db)</u>					
May 10, 1965	0.00	July 12, 1965	4.30	Sept. 13, 1965	3.57
May 17	0.46	July 19	4.15	Sept. 20	3.78
May 24	0.88	July 26	4.12	Sept. 27	3.39
June 1	1.42	Aug. 2	4.12	Oct. 18	2.58
June 7	1.58	Aug. 9	4.13	Nov. 12	1.72
June 14	2.18	Aug. 16	4.12	Nov. 16	1.67
June 21	2.84	Aug. 23	4.17	Dec. 21	1.17
June 28	3.46	Aug. 30	4.09		
July 6	4.08	Sept. 6	3.83		

<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>
<u>Cabin Lake (28-19-25da)</u>					
May 10, 1965	0.00	July 12, 1965	3.61	Sept. 13, 1965	5.50
May 17	0.22	July 19	3.98	Sept. 20	5.50
May 24	0.52	July 26	4.72	Sept. 27	5.44
June 1	1.16	Aug. 2	4.70	Oct. 18	4.94
June 7	1.46	Aug. 9	4.92	Nov. 3	4.86
June 14	2.02	Aug. 16	5.10	Nov. 16	4.43
June 21	2.52	Aug. 23	5.34	Dec. 21	3.66
June 28	2.88	Aug. 30	5.44		
July 6	3.41	Sept. 6	5.50		

<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>	<u>Date</u>	<u>Water level</u>
<u>Plummers Lake (28-20-14da)</u>					
May 10, 1965	0.00	July 12, 1965	3.71	Sept. 13, 1965	3.62
May 17	0.24	July 19	3.82	Sept. 20	3.54
May 24	0.64	July 26	4.04	Sept. 27	3.42
June 1	1.18	Aug. 2	4.08	Oct. 18	2.85
June 7	1.54	Aug. 9	4.02	Nov. 3	2.70
June 14	2.02	Aug. 16	3.98	Nov. 16	2.52
June 21	2.56	Aug. 23	4.00	Dec. 21	1.92
June 28	2.82	Aug. 30	3.92		
July 6	3.47	Sept. 6	3.72		

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