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WATER LEVELS AND ARTESIAN PRESSURES
IN
OBSERVATION WELLS IN MONTANA

by

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U. S. Geological Survey

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MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY
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Table 1.--U. S. Geological Survey Water-Supply Papers in which water-level measurements in federal observation wells in Montana have been published.

Year	Water-Supply Paper	Year	Water-Supply Paper
1935	777	1948	1130
1936	817	1949	1160
1937	840	1950	1169
1938	845	1951	1195
1939	886	1952	1225
1940	910	1953	1269
1941	940	1954	1325
1943	990	1955	1408
1944	1020	1956-60	1760
1947	1100		

In addition to the permanent observation wells, project observation wells are established in connection with each areal study. Water-level measurements made periodically in these wells are published in project reports. When a study is completed, selected project observation wells are added to the network of permanent observation wells. Figure 1 shows study

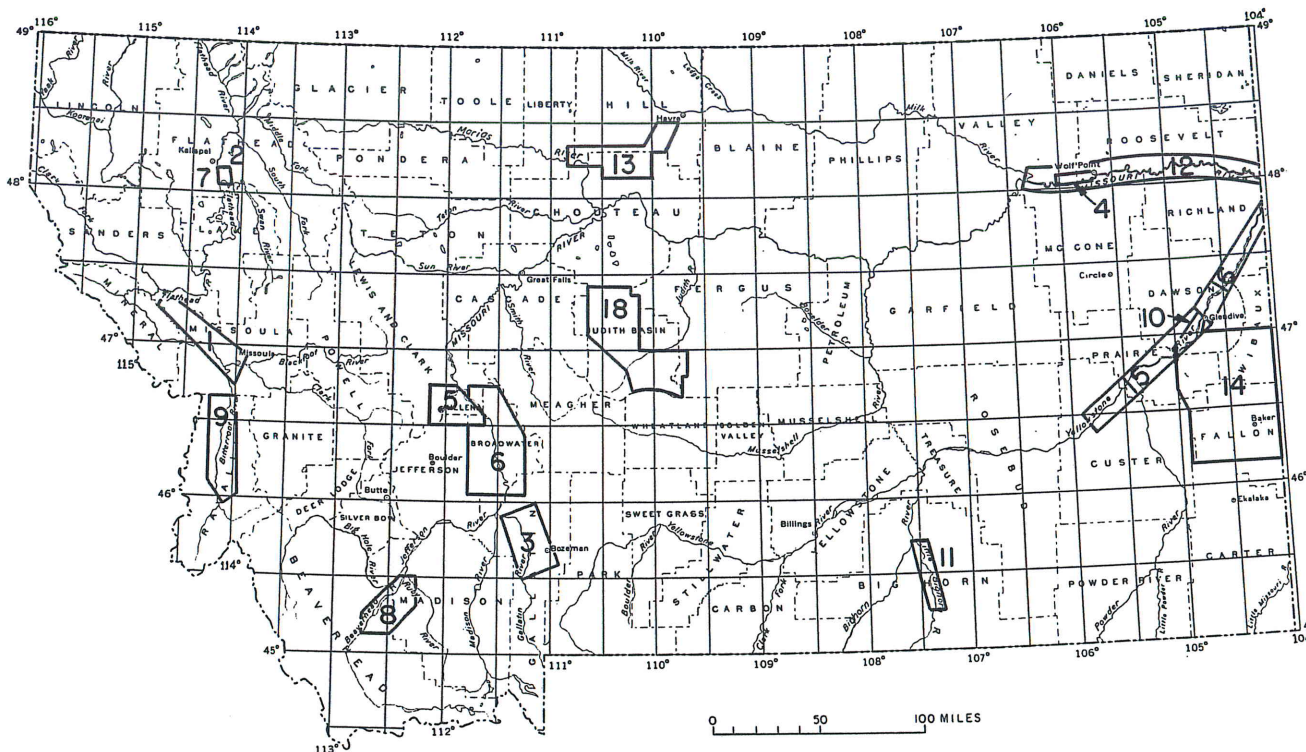


Figure 1.--Areas in Montana for which project reports that contain periodic water-level measurements have been published. (Numbers on map correspond to the report reference numbers shown in "References cited".)

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Management. The well number shows the location of the well by quadrant, township, range, section, and position within the section. A graphic illustration of this method of well numbering is shown in Figure 3. The first letter of the well number gives the quadrant of the Montana principal meridian and base-line system in which the well is located. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters that follow the section number show the location of the well within 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 quadrant. If two or more wells are located within the same 40-acre tract, consecutive digits beginning with 1 are added to the well number. For example, well B-9-20-21ad1 is in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 9 N., R. 20 W., and is the first well inventoried in that 40-acre tract.

The well number is followed by the owner's name, the type of well (water-table or artesian), and the geologic setting or geologic formation. The diameter is reported in inches (in.) and the depth in feet (ft.) below land-surface datum (lsd). All levels are read from a measuring point (MP), which is related to either lsd or mean sea level (msl). Altitude of MP, where known, is given in feet above msl. Water levels are in feet below lsd, except where a plus (+) sign indicates a level above lsd.

OCCURRENCE OF GROUND WATER

Ground water occurs in open spaces known as voids, interstices, pore spaces, joints, fractures, or solution channels in the rocks mantling the state. The size, shape, character, and distribution of the open spaces determine, to a great extent, the occurrence of ground water. The open spaces are generally interconnected and act as conduits through which water constantly moves. Part of the water falling on, or flowing over, the ground seeps into the soil zone and percolates downward, recharging the ground-water reservoir. The water in the reservoir moves laterally at a slow rate until it is discharged to the earth's surface through springs, wells, and effluent streams, or to the atmosphere by evaporation and plant transpiration. Under natural conditions, over a long period of time, the amount of water that is added to ground-water storage is in approximate equilibrium with the amount that is discharged.

Local geology determines whether the water in the underground reservoir is under water-table or artesian conditions. "Water-table conditions" means that the upper surface of the reservoir (water table) is not confined, is at atmospheric pressure, and is free to move up or down as changes in storage occur. The water level in a well that is hydraulically connected with the water-bearing material coincides with the water table. "Artesian conditions"

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INTRODUCTION

A continuing program of systematic collection of records of water levels in selected observation wells has been made part of a program for the investigation of the ground-water resources of Montana by the U. S. Geological Survey in cooperation with the Montana Bureau of Mines and Geology. This report is planned as the first in a series of annual reports of water-level records for all permanent observation wells in Montana. The intent of the water-level-measurement program is to provide long-term continuous records of fluctuations of the water level in representative wells in the various aquifers throughout the state. The records will facilitate the prediction of trends in ground-water levels that indicate changes in storage; aid in the prediction of base flow of streams; provide information for use in basic research; and serve as a framework to which other types of hydrologic data may be related.

The systematic collection of data on ground-water levels in Montana was begun in 1947 under a federal program to develop a nationwide observation-well network. It continued under this program until 1964, when state funds were made available through the State Engineer to expand the network. In 1965 the observation-well network was made a part of the cooperative ground-water program of the Montana Bureau of Mines and Geology. Before 1956, water-level measurements were published annually by the U. S. Geological Survey as water-supply papers. Since 1956, the records of water levels in the federal network of observation wells have been published in 5-year increments. Those water-supply papers in which measurements of water levels in federal observation wells in Montana have been published are listed in Table 1.

means that water is confined under pressure greater than atmospheric so that the water level in a well penetrating the water-bearing materials will rise in the well above the top of the confined zone. The rise represents the head in the water-bearing materials at the well.

FLUCTUATIONS OF THE WATER LEVEL

In Montana, water-level fluctuations generally are cyclical, reflecting seasonal changes in the amount of water in storage, which varies because of differences in rates of recharge and discharge (Fig. 4, 5, and 6). The water levels generally rise during the spring and summer and decline during the fall and winter. Long-term trends in water-level fluctuations may be impressed locally on the seasonal cycle. These trends reflect deficient or surplus recharge over a period of years, owing to natural climatic variations or to man-induced variations such as a change in irrigation pattern, land drainage, or pumping from wells.

The seasonal trend is illustrated by the graphs of water levels in Figure 4. Two of the wells (B-9-20-21ad1 and B-13-20-14ac) are in intermontane basins of western Montana and the third is in the Yellowstone River basin of eastern Montana. The pattern of water-level fluctuations is similar in all three wells, because water for recharge is available at each well at about the same time. The magnitude of fluctuation differs, owing to differences in the quantity of water available for recharge, the geologic setting of the well, and the permeability of the materials in which the well is drilled.

Trends in water-level fluctuations impressed on the seasonal cycle are shown in Figures 5 and 6. The graph of water-level measurements for well A-14-16-15bb shows sharp peaks caused by heavy precipitation or snowmelt and some sharp lows probably caused by pumping water from the materials in which the well is located. The graph for well A-28-57-28dd shows the effect of above-normal precipitation for 1953-55 and below-normal for 1956-58. Departures from normal precipitation after 1958, however, do not correlate as well with trends shown on the graph. A surplus of recharge from 1957 to 1966 is shown by the graph for well A-7-47-13dd. It is probably caused by increased recharge from irrigation. Pumping water from nearby wells is reflected in the graphs for wells A-10-58-18dc and A-12-56-23dc. The magnitude of the lowering of the water levels overshadows any seasonal cycle that may have occurred.

areas in Montana for which reports that contain periodic water-level measurements have been published. References for the reports are keyed to the numbers shown on Figure 1 and are listed in the "References cited".

Figure 2 shows the location of the wells for which records are included in this report, and Table 2 contains unpublished water-level measurements for each of the wells through the 1966 water year. The record of water-level measurements is published on the basis of the water year to facilitate comparison with streamflow records. The water year is the 12-month period ending September 30 of each year. It is designated by the calendar year in which it ends. Thus, the year that ends September 30, 1966, is called the 1966 water year. For the sake of completeness and earlier accessibility, this report also includes water-level records of the federal observation wells for the period January 1961 to September 1966, which will be published in a water-supply paper.

DESCRIPTION OF WELLS

The tabulation of water-level data is preceded by a description of the well (Table 2). Each well is assigned a number based on its location within the system of land subdivision used by the U.S. Bureau of Land

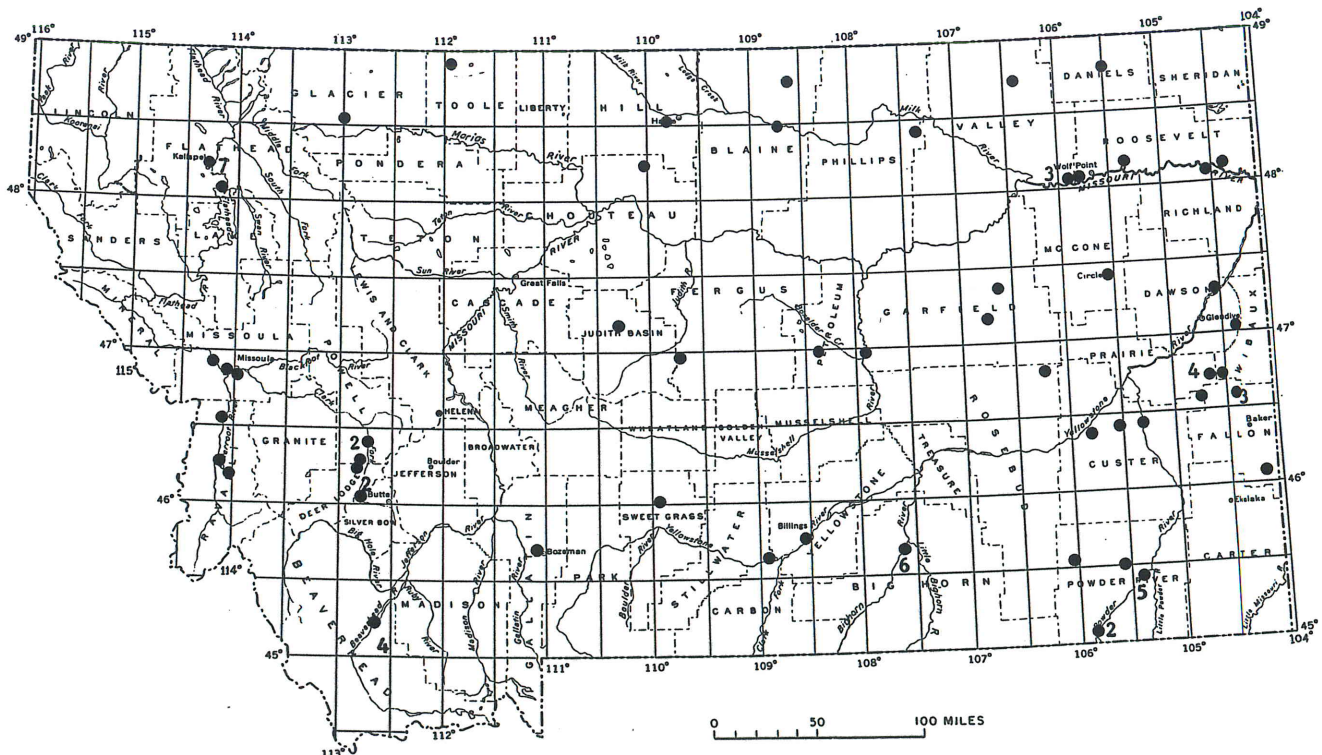
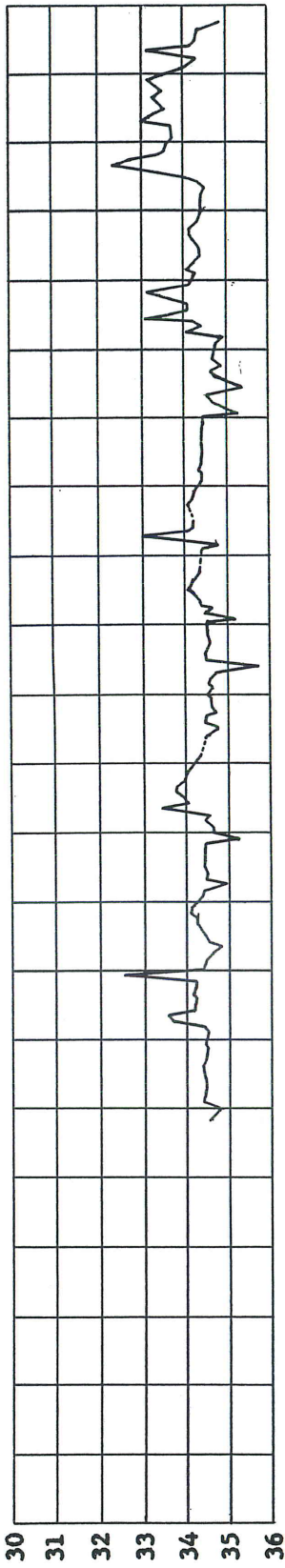
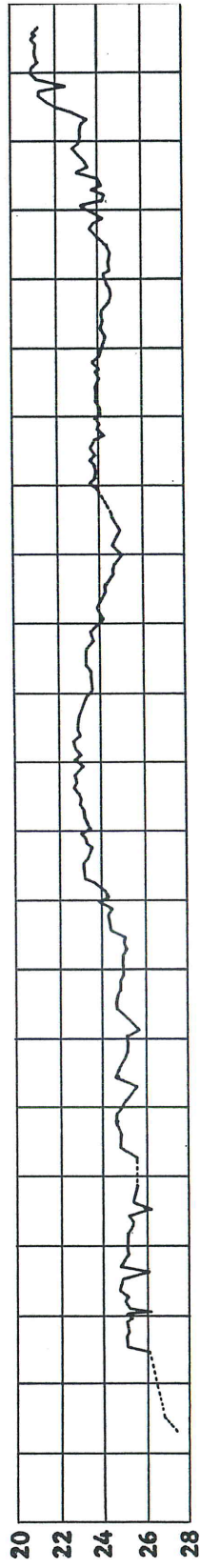


Figure 2. --Location of observation wells. (Number near symbol indicates number of observation wells in vicinity.)

A-14-16-15bb



A-28-57-28dd



A-7-47-13dd

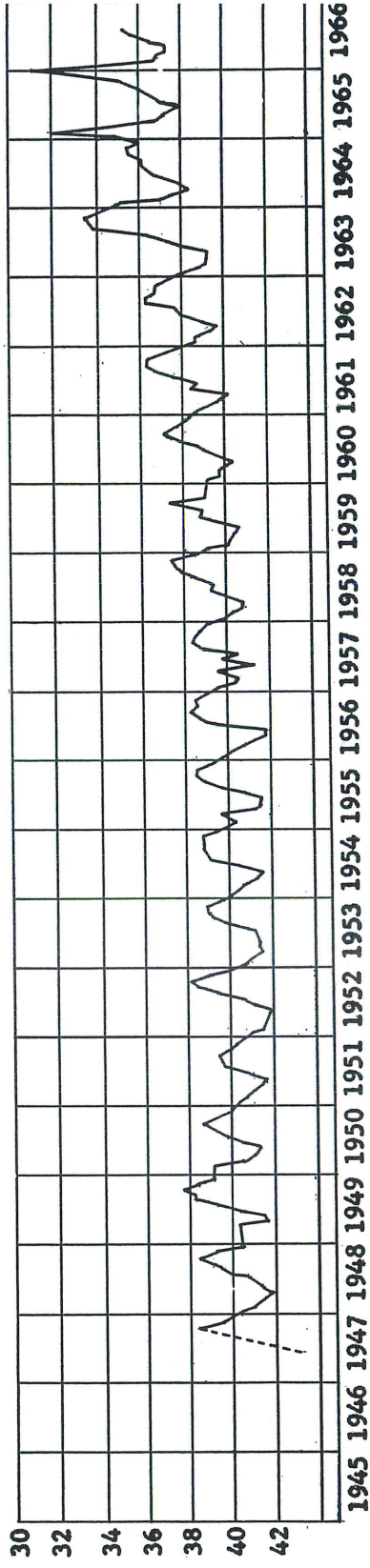


Figure 5. --Graphs of water levels in wells A - 14-16-15bb, A - 28-57-28dd, and A-7-47-13dd.

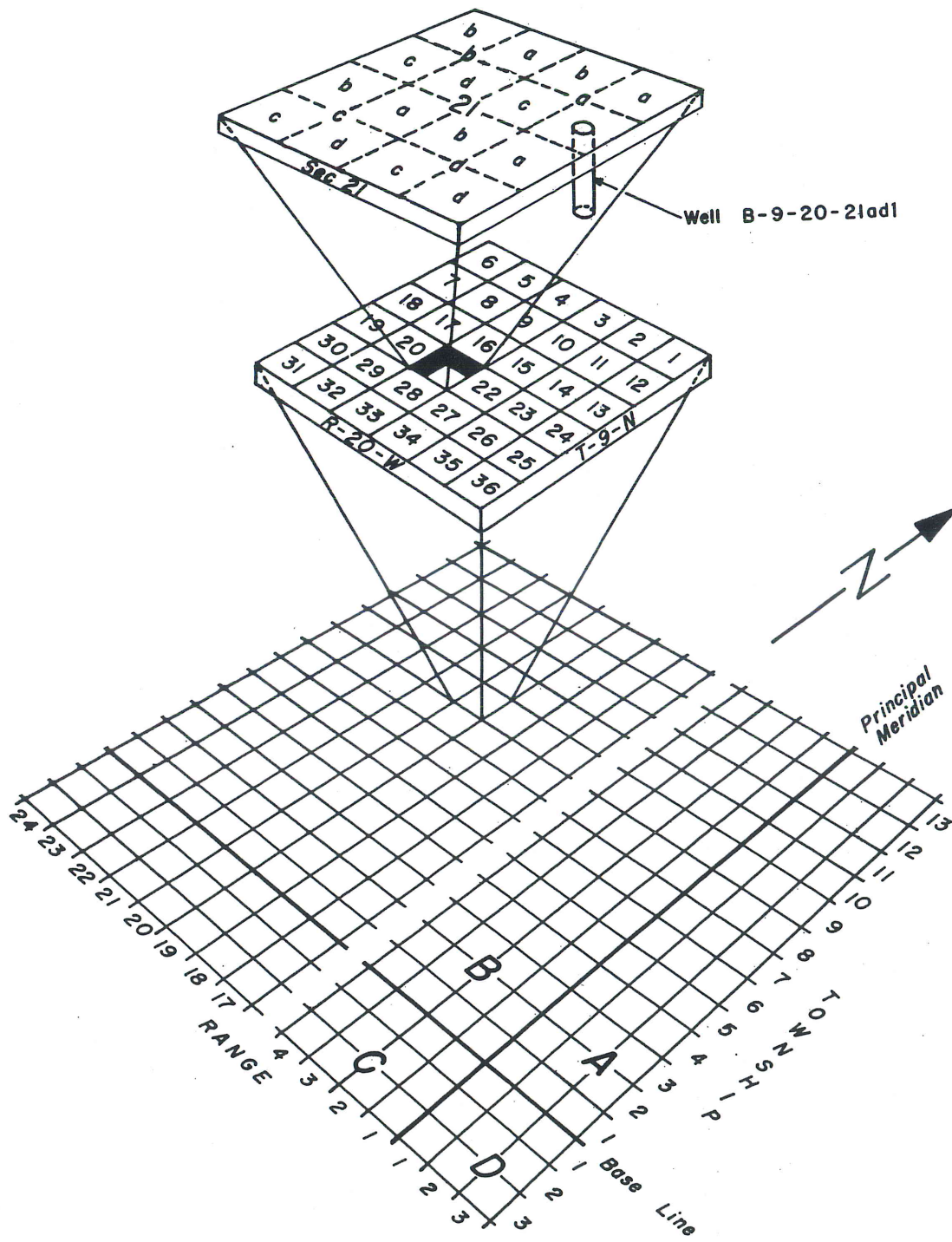


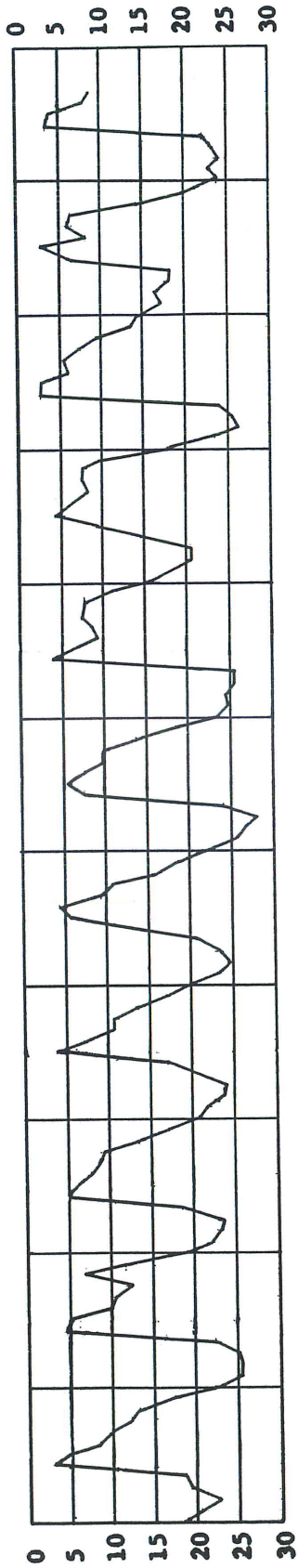
Figure 3. --Sketch showing well-numbering system.

Table 2.--Well descriptions and water-level measurements

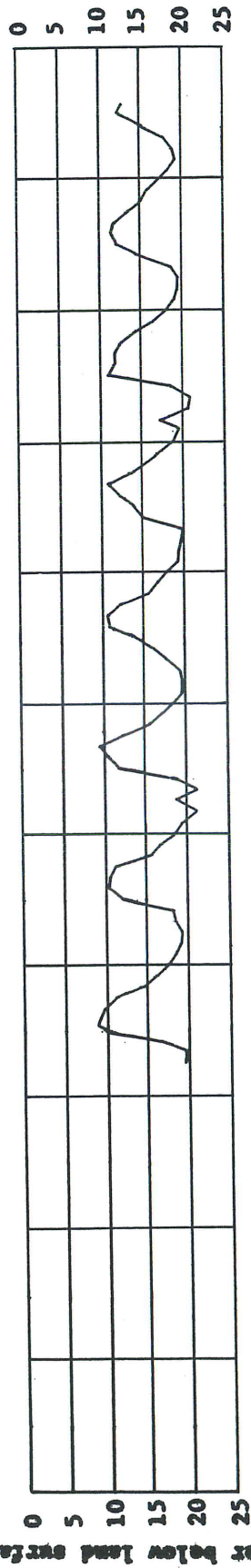
Water levels are reported in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level	Date	Water level
<u>Beaverhead County</u>				<u>Big Horn County</u>			
<p>C-6-7-30cc. U. S. Geol. Survey. Drilled observation artesian well in terrace deposits of Tertiary age, diameter 1 1/2 inches, depth 270 feet. MP top of pipe which is 2.0 feet above lsd. Highest water level 245.84 below lsd, Feb. 10, 1966; lowest 248.94 below lsd, Aug. 8, 1965. Records available: 1965-66.</p>				<p>A-1-33-31cd. Wm. Moore. Dug unused water-table well in terrace deposits, diameter 48 inches, depth 27.3 feet, cased with wood, concrete top. MP top of cover, 1.0 foot above lsd and 2,991 feet above msl. Highest water level 19.09 below lsd, May 10, 1966; lowest 22.09 below lsd, Aug. 6, 1958. Records available: 1957-66.</p>			
June 28, 1965	247.4*	Feb. 10, 1966	245.84	Sept. 26, 1957	21.93	July 28, 1960	21.68
Aug. 8	248.94	Mar. 4	246.8*	Dec. 17	21.96	Aug. 30	21.69
Oct. 15	245.91	Apr. 5	246.11	Mar. 18, 1958	21.90	Oct. 4	21.67
Dec. 4	246.29	June 8	246.19	June 6	22.00	Jan. 11, 1961	21.70
Jan. 5, 1966	246.6*	Aug. 2	246.04	July 2	21.95	Feb. 28	21.74
* Measured by U. S. Bureau of Reclamation				Aug. 6	22.09	Apr. 5	21.78
<p>C-6-8-18cc. U. S. Bureau of Reclamation. Drilled observation water-table well in alluvial deposits of Quaternary age, diameter 1 1/4 inches. MP top of pipe 2.7 feet above lsd. Highest water level 7.69 below lsd, Aug. 3, 1966; lowest 14.59 below lsd, Apr. 9, 1965. Records available: 1965-66.</p>				Sept. 5	21.73	June 5, 1962	21.82
Feb. 2, 1965	12.61	Feb. 10, 1966	11.03	Oct. 1	21.78	Sept. 10	21.66
Apr. 9	14.59	Apr. 5	12.32	Feb. 4, 1959	21.69	Apr. 25, 1963	21.81
May 31	13.06	June 8	12.15	Apr. 30	21.54	July 25	21.61
Oct. 13	8.97	Aug. 3	7.69	June 2	21.53	Nov. 1	21.38
Dec. 7	9.55					July 2	21.52
				Aug. 4	21.53	Apr. 1, 1964	21.18
				Sept. 3	21.48	Aug. 12	20.32
				Oct. 1	21.48	Nov. 10	19.75
				Nov. 3	21.35	Mar. 3, 1965	19.60
				Dec. 11	21.44	July 8	19.39
				Feb. 5, 1960	21.47	Oct. 28	19.17
				Apr. 13	21.51	Feb. 4, 1966	19.19
				June 1	21.59	May 10	19.09
				June 28	21.62	Sept. 1	19.12
				<p>D-1-33-10cd. U. S. Geol. Survey. Drilled observation water-table well in terrace deposits, diameter 4 1/2 inches, depth 46 feet. MP top of casing 0.50 foot above lsd and 2,923.5 feet above msl. Highest water level 12.34 below lsd, Sept. 1, 1966; lowest 18.03 below lsd, Apr. 25, 1963. Records available: 1958-66.</p>			
				Aug. 5, 1958	13.56	Jan. 11, 1961	16.52
				Sept. 30	13.59	Feb. 27	17.09
				Feb. 4, 1959	16.72	Apr. 4	17.57
				Apr. 29	17.02	June 5, 1962	14.74
				June 2	14.70	Sept. 10	13.57
				July 2	13.88	Apr. 25, 1963	18.03
				Aug. 3	13.18	July 25	13.61
				Sept. 3	12.86	Nov. 1	14.79
				Oct. 2	13.68	Apr. 1, 1964	17.63
				Nov. 3	14.87	Aug. 12	13.25
				Dec. 11	14.63	Nov. 10	15.19
				Feb. 3, 1960	16.41	Mar. 3, 1965	16.58
				Apr. 13	17.20	July 8	14.40
				June 1	13.87	Oct. 28	14.34
				June 29	13.68	Feb. 4, 1966	16.64
				July 28	13.08	May 10	14.80
				Aug. 30	13.33	Sept. 1	12.34
				Oct. 3	14.13		
				<p>D-1-33-19da. L. J. Torske. Dug stock water-table well in terrace deposits, diameter 60 inches, depth 25.1 feet, cased with concrete. MP 0.10 foot above lsd and 3,034.1 feet above msl. Highest water level 17.59 below lsd, Mar. 3, 1965; lowest 22.18 below lsd, Oct. 4, 1960. Records available: 1957-66.</p>			
<p>C-7-8-3bd2. U. S. Bureau of Reclamation. Drilled observation water-table well in colluvium, diameter 1 1/4 inches, depth 40.5 feet. MP top of pipe, 2.0 feet above lsd and 5,031.6 feet above msl. Highest water level 11.05 below lsd, Aug. 4, 1965; lowest 25.29 below lsd, Apr. 5, 1966. Records available: 1965-66.</p>							
May 31, 1965	18.44	Feb. 9, 1966	18.74				
Aug. 4	11.05	Mar. 3	19.2*				
Oct. 13	16.67	Apr. 5	25.29				
Nov. 15	17.6*	June 8	13.76				
Dec. 4	18.08	July	14.3*				
Jan. 5, 1966	18.7*	Aug. 3	12.34				
* Measured by U. S. Bureau of Reclamation							
<p>C-7-9-24dd. U. S. Bureau of Reclamation. Drilled observation water-table well in alluvium. MP top of pipe, 2.0 feet above lsd. Highest water level 7.34 below lsd, Aug. 2, 1965; lowest 23.30 below lsd, Apr. 4, 1966. Records available: 1965-66.</p>							
Apr. 6, 1965	23.29	Feb. 8, 1966	21.70				
May 30	15.10	Mar. 2	22.9*				
Aug. 2	7.34	Apr. 4	23.30				
Oct. 12	11.15	June 7	11.66				
Nov. 15	12.5*	July	12.7*				
Dec. 3	14.09	Aug. 2	9.99				
Jan. 4, 1966	18.6*						
* Measured by U. S. Bureau of Reclamation							

B-9-20-21ad1



B-13-20-14ac



D-1-26-9bb

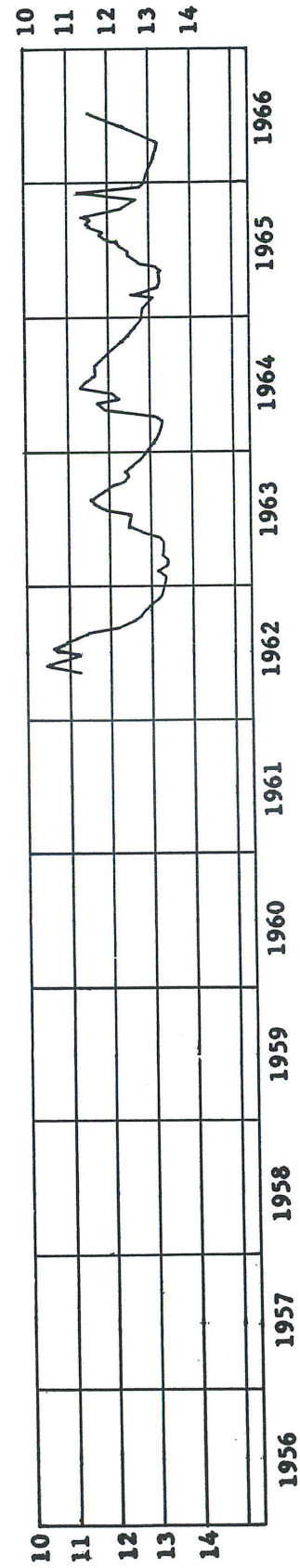


Figure 4. --Graphs of water levels in wells B-9-20-21ad1, B-13-20-14ac, and D-1-26-9bb.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
A-29-13-21aa2--Continued				A-7-47-13dd--Continued			
Feb. 2, 1961	17.49	Dec. 30, 1963	18.88	July 13, 1966	35.63	Sept. 7, 1966	35.25
Mar. 2	17.40	Jan. 30, 1964	18.46	Aug. 3	35.63		
Mar. 30	17.33	Feb. 26	18.52	A-7-50-8ba. L. J. Rolf. Drilled unused artesian well in Hell Creek Formation, diameter 4 inches, depth 700 feet, cased with pipe. MP top of casing at lsd and 2,944 feet above msl. Records available: 1965.			
Apr. 12	17.57	Mar. 30	18.44	July 30, 1965	398.20		
Apr. 26	17.30	May 2	25.37	A-8-51-23dd. Glenn Lowry. Drilled domestic and stock water-table well in terrace deposits of the Powder River, diameter 4 inches, depth 54.3 feet, cased with pipe. MP top of casing, 0.30 foot above lsd. Records available: 1965-66.			
June 1	18.87	May 27	25.58	June 1, 1965	40.20	Sept. 27, 1966	40.83
June 5	23.65	June 21	18.89	A-10-55-25dc. Bill Almy. Drilled stock artesian well in Fox Hills Sandstone and Hell Creek Formation, diameter 4 inches, depth 1,150 feet, steel casing. MP top of casing, 0.5 foot above lsd. Elevation of lsd 2,609 feet above msl. Records available: 1962 and 1966.			
June 14	18.63	July 26	24.77	Oct. 4, 1962	54.45	Sept. 13, 1966	(a)
Oct. 10	18.40	Oct. 1	21.24	May 2, 1966	58.82		
Feb. 3, 1962	17.49	Dec. 3	18.38	a pumping - unable to measure			
Mar. 7	17.42	Jan. 9, 1965	18.32	<u>Daniels County</u>			
May 6	20.22	Feb. 4	18.15	A-35-47-12cd. State of Montana. Dug unused water-table well in deposits of Pleistocene age, diameter 48 inches, depth 31 feet, cribbed with wood and stone. MP top of plank cover, 1.50 feet above lsd. Highest water level 13.20 below lsd, July 28, 1953; lowest 16.24 below lsd, Jan. 2, 1964. Records available: 1947-66.			
June 14	19.28	Mar. 10	18.16	Jan. 5, 1961	15.06	July 11, 1963	14.56
Aug. 8	24.60	Apr. 1	18.09	Feb.	(j)	Sept. 9	15.05
Sept. 5	24.52	Apr. 13	17.77	Mar. 7	15.07	Oct. 17	15.16
Oct. 6	25.80	Apr. 29	17.49	Mar. 28	14.94	Nov. 13	15.28
Nov. 3	19.71	May 27	17.29	Apr. 13	14.78	Dec. 9	15.30
Dec. 1	18.52	June 23	17.39	May 2	14.77	Jan. 2, 1964	16.24
Jan. 6, 1963	18.17	July 27	23.23	May 23	14.68	Feb. 5	15.34
Feb. 2	18.02	Aug. 26	23.62	June 5	14.67	Mar. 12	15.38
Mar. 2	17.87	Sept. 30	24.99	July 19	15.05	Apr. 13	15.05
Mar. 18	17.83	Oct. 26	18.85	Aug. 22	15.29	June 4	14.67
Apr. 4	17.74	Dec. 2	17.55	Sept. 13	15.40	July 14	14.33
May 2	24.88	Dec. 30	17.43	Oct. 12	15.46	Aug. 5	14.50
May 20	25.47	Jan. 24, 1966	17.15	Nov. 1	15.40	Sept. 18	14.96
May 24	25.53	Feb. 21	17.13	Jan. 3, 1962	15.53	Nov. 3	15.16
June 30	18.64	Mar. 31	16.98	Feb. 8	15.40	Dec. 9	15.17
Aug. 1	23.51	Apr. 29	24.75	Mar. 6	15.60	Jan. 8, 1965	15.29
Aug. 30	25.88	May 24	25.70	Apr. 25	15.47	June 2	14.11
Oct. 2	26.04	June 23	17.76	May 8	15.43	July 21	14.20
Nov. 2	20.84	July 25	25.19	June 12	15.15	Aug. 12	14.48
Dec. 3	18.81	Sept. 1	25.76	July 25	15.06	Oct. 5	14.55

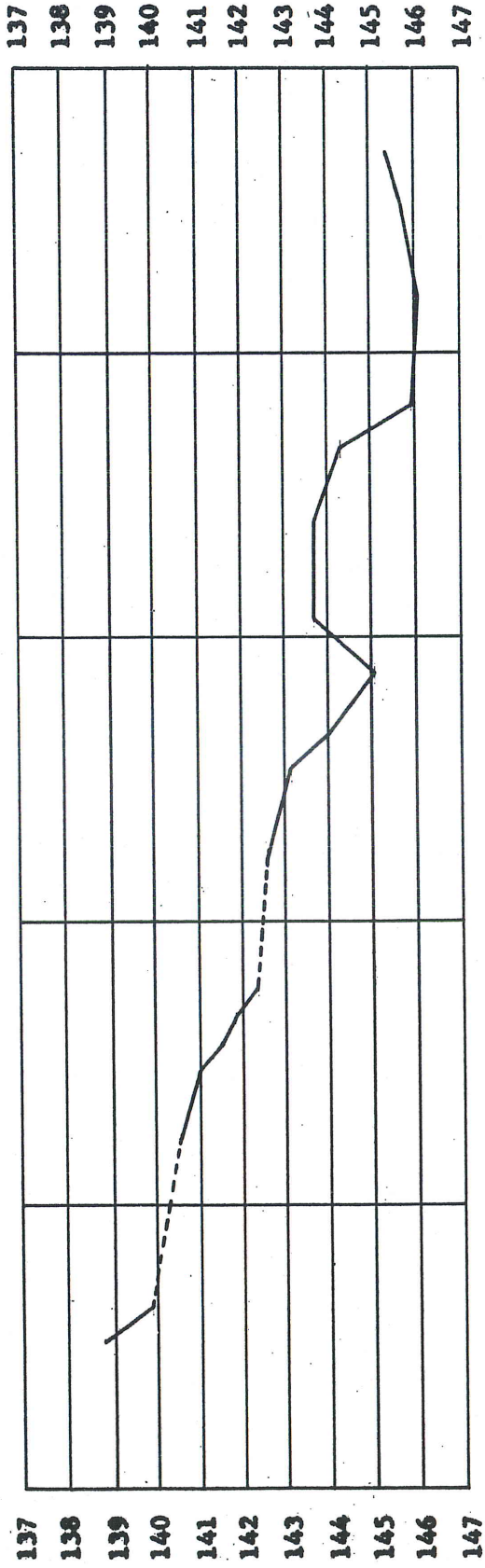
Custer County

A-7-47-13dd. Owner unknown. Drilled unused water-table well in Fort Union Formation, diameter 4 inches, depth 46 feet, cased with pipe. MP top of pipe, 0.30 foot above lsd. Highest water level 31.10 below lsd, Dec. 23, 1965; lowest 43.10 below lsd, June 6, 1947. Records available: 1947-66.

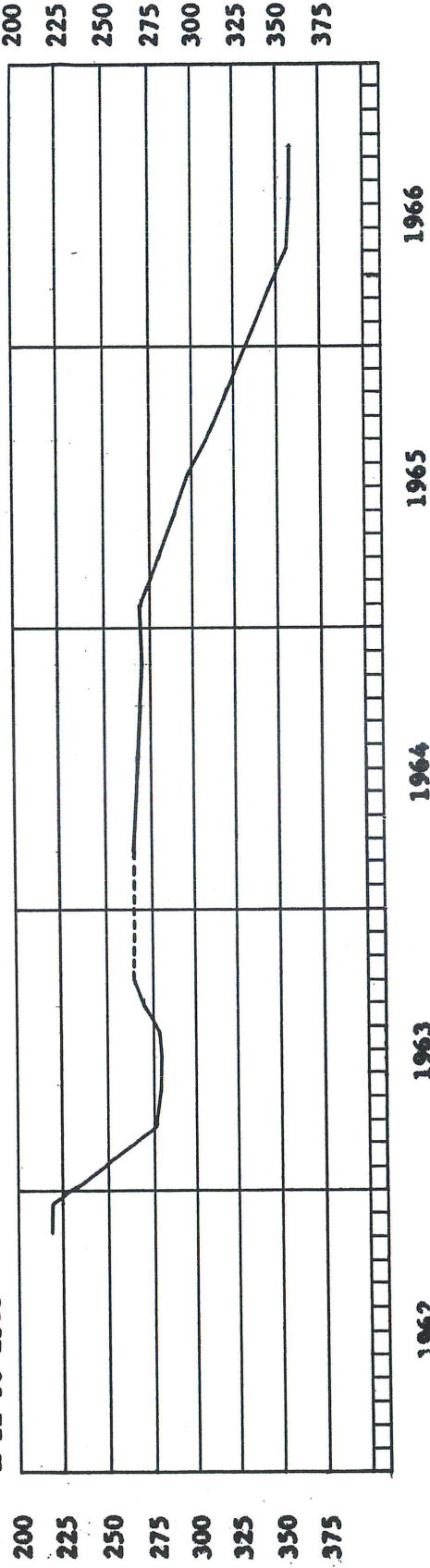
Jan. 5, 1961	38.57	Jan. 20, 1964	37.00
Mar. 10	39.75	Feb. 5	37.09
Apr. 10	40.15	Mar. 4	37.60
May 8	40.41	Apr. 8	38.34
June 9	38.70	May 6	37.85
July 10	37.56	June 25	36.68
Aug. 8	36.78	July 10	36.39
Sept. 7	36.30	Aug. 4	36.22
Oct. 5	36.29	Sept. 1	36.06
Jan. 17, 1962	38.68	Oct. 8	35.53
Feb. 14	38.69	Nov. 4	35.41
Mar. 13	39.43	Dec. 4	35.96
Apr. 4	39.70	Jan. 6, 1965	36.15
May 1	39.97	Feb. 3	34.76
June 7	39.06	Mar. 9	31.98
July 24	37.94	Apr. 2	36.94
Sept. 11	36.32	Apr. 5	37.15
Oct. 1	36.64	May 7	37.90
Nov. 7	36.69	June 16	37.01
Jan. 8, 1963	37.85	July 14	36.08
Feb. 16	38.88	Sept. 7	35.00
Mar. 4	39.27	Nov. 1	35.99
Apr. 3	39.29	Dec. 7	36.00
May 8	39.36	Dec. 23	31.10
June 7	38.00	Jan. 21, 1966	36.63
July 1	37.54	Feb. 17	36.70
Aug. 7	36.37	Mar. 16	36.82
Sept. 17	35.81	Apr. 6	37.28
Nov. 5	35.42	June 3	36.53

j ice in well

A-10-58-18dc



A-12-56-23dc



Depth to water below land surface, in feet

Figure 6. --Graphs of water levels in wells A-10-58-18dc and A-12-56-23dc.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
<p>A-10-58-18dc. Owner unknown. Drilled unused artesian well in Fox Hills Sandstone and Hell Creek Formation, diameter 4 inches, depth 166 feet. MP top of casing at lsd and 2,782 feet above msl. Highest water level 138.8 below lsd, Oct. 5, 1962; lowest 146.58 below lsd, July 6, 1966. Records available: 1962-66.</p>				<p>A-14-16-15bb--Continued</p>			
Oct. 5, 1962	138.8	Nov. 6, 1964	146.06	Jan. 30, 1961	36.44	Oct. 29, 1963	34.60
Nov. 21	139.91	Jan. 25, 1965	143.68	Feb. 28	35.94	Dec. 29	34.79
Mar. 25, 1963	140.59	Apr. 1	143.69	Apr. 1	35.30	Jan. 29, 1964	34.79
June 21	141.00	May 27	144.30	Apr. 29	35.11	Feb. 27	34.84
July 25	141.56	Aug. 31	145.92	June 1	36.76	Mar. 27	34.96
Aug. 27	141.84	Oct. 27	146.05	Aug. 1	35.44	Apr. 29	34.76
Oct. 2	142.39	Mar. 15, 1966	145.68	Aug. 30	35.34	May 26	34.01
Mar. 18, 1964	142.58	July 6	146.58	Sept. 28	35.76	June 28	30.70
July 14	143.17	Sept. 13	145.35	Nov. 1	35.27	Aug. 25	31.41
Aug. 24	144.00			Jan. 31, 1962	35.50	Oct. 27	32.75
				Feb. 26	35.77	Nov. 24	33.13
				Mar. 28	34.18	Dec. 29	33.36
				Apr. 25	34.84	Jan. 26, 1965	33.55
				May 29	34.62	Mar. 30	33.40
				June 7	34.36	Apr. 15	31.98
				June 27	32.10	Apr. 28	32.17
				July 28	33.43	May 27	32.52
				Aug. 30	34.11	June 30	33.08
				Sept. 26	34.21	Aug. 25	32.48
				Oct. 30	32.28	Sept. 28	32.98
				Nov. 28	34.36	Nov. 30	32.35
				Jan. 30, 1963	34.56	Jan. 27, 1966	34.02
				Feb. 26	34.11	Feb. 24	34.45
				Mar. 26	34.53	Mar. 22	32.25
				Apr. 29	34.74	Apr. 26	34.38
				May 29	34.77	May 24	34.60
				June 26	34.64	June 22	34.62
				July 29	34.35	July 19	34.70
				Aug. 27	34.24	Aug. 24	35.77
				Sept. 27	34.13		
				<u>Flathead County</u>			
<p>A-10-58-32dbl. Shell Oil Co. Drilled industrial artesian well in Fox Hills Sandstone and Hell Creek Formation, diameter 5 inches, depth 464 feet. MP top of casing 0.3 foot above lsd and 2,912.3 feet above msl. Highest water level 213.68 below lsd, Mar. 25, 1963; lowest 217.17 below lsd, Nov. 21, 1962. Records available: 1962-66.</p>				<p>B-27-20-17cc. U. S. Geol. Survey. Bored observation water-table well in alluvium, diameter 1 1/2 inches, depth 9.6 feet, cased with pipe. MP top of casing 1.5 feet above lsd and 2,896.64 feet above msl. Highest water level 1.82 below lsd, Mar. 1, 1965; lowest 5.75 below lsd, Aug. 8, 1949. Records available: 1928-44, 1946-49, 1963-66.</p>			
Sept. 25, 1962	215.7	Aug. 24, 1964	216.01	Oct. 1, 1963	4.80	Mar. 1, 1965	1.82
Nov. 21	217.17	Nov. 6	217.14	Nov. 5	4.67	Apr. 5	2.50
Dec. 14	214.53	Jan. 28, 1965	216.94	Dec. 3	4.73	May 3	2.82
Mar. 25, 1963	213.68	Apr. 1	215.09	Jan. 6, 1964	4.63	June 1	3.90
June 21	214.68	May 27	214.66	Feb. 3	4.63	June 28	4.04
July 25	214.33	Aug. 31	215.86	Mar. 3	4.37	Aug. 2	4.84
Aug. 27	215.30	Oct. 27	215.84	Apr. 1	3.87	Aug. 30	4.00
Oct. 2	215.48	Mar. 15, 1966	214.95	May 29	3.83	Sept. 28	3.42
Mar. 18, 1964	215.70	July 6	215.98	July 1	3.97	Nov. 1	3.62
July 14	215.48	Sept. 13	214.03	Aug. 3	4.28	Dec. 8	3.42
				Oct. 1	4.30	Jan. 5, 1966	3.85
				Nov. 2	4.18	Feb. 2	3.87
				Nov. 30	4.20	Mar. 2	3.86
				Jan. 4, 1965	3.82	Aug. 25	4.67
				Feb. 3	3.53		
				<u>Fergus County</u>			
<p>A-11-57-32bb. A. McNaney. Drilled domestic artesian well in Fox Hills Sandstone and Hell Creek Formation, diameter 4 inches to 160 feet, 2 inches from 160 feet on, depth 980 feet. MP top of culvert at lsd. Highest water level 37.5 below lsd, Feb. 2, 1963; lowest 86.82 below lsd, Sept. 13, 1966. Records available: 1963-66.</p>				<p>B-28-21-3ab. U. S. Geol. Survey. Driven observation artesian well in alluvium, diameter 3/4 inch, depth 9.4 feet, cased with pipe. MP top of casing 1.2 feet above lsd. Highest water level 0.70 above lsd, June 11, 1964; lowest 6.01 below lsd, Dec. 3, 1963. Records available: 1963-66.</p>			
Feb. 2, 1963	37.5*	Apr. 2, 1965	56.55	Aug. 29, 1963	5.87	Feb. 3, 1964	5.02
Oct. 31	52.0*	May 28	57.42	Oct. 1	5.94	Mar. 3	5.80
Dec. 2	52.25*	June 11	59.33**	Nov. 5	6.00	Apr. 1	5.52
Dec. 8	51.08**	July 26	60.83**	Dec. 3	6.01	May 29	3.56
Jan. 10, 1964	52.0**	Aug. 24	59.66**	Jan. 6, 1964	4.96	June 11	+0.70
Mar. 5	54.0*	Sept. 21	60.0**				
May 5	55.5	Oct. 22	61.17**				
May 26	56.58**	Jan. 17, 1966	63.75**				
July 14	56.12	Feb. 21	64.83**				
Oct. 23	56.83**	Mar. 15	65.42**				
Feb. 5, 1965	56.58**	July 6	68.86				
Mar. 8	56.33**	Sept. 13	86.82				
<p>* Measurements by owner ** Measurements by Shell Oil Co.</p>							

Date	Water level	Date	Water level	Date	Water level	Date	Water level
D-1-33-19da--Continued				D-2-33-9dd. Owner unknown. Drilled unused water-table well in alluvium, diameter 3 inches, depth 20 feet, steel casing. MP top of pump, 3.5 feet above lsd and 2,935.5 feet above msl. Highest water level 2.24 below lsd, June 5, 1958; lowest 8.93 below lsd, Apr. 25, 1963. Records available: 1956-66.			
Sept. 6, 1957	20.83	June 1, 1960	22.04	Sept. 7, 1956	3.78	Apr. 15, 1960	5.81
Oct. 11	20.48	June 28	20.99	Dec. 18	6.45	June 1	3.29
Dec. 17	20.60	July 28	20.59	Mar. 28, 1957	6.88	June 28	4.35
Mar. 18, 1958	20.63	Aug. 30	20.22	June 4	3.63	July 28	3.04
June 6	20.73	Oct. 4	22.18	July 9	4.70	Aug. 30	3.80
July 7	20.39	Jan. 11, 1961	20.19	Aug. 7	4.02	Oct. 3	4.69
Aug. 6	20.89	Feb. 28	20.28	Mar. 18, 1958	7.10	Jan. 10, 1961	6.49
Sept. 5	20.97	Apr. 5	20.38	June 5	2.24	Feb. 27	5.35
Sept. 24	20.59	June 5, 1962	19.00	July 2	3.71	Apr. 4	5.21
Oct. 1	20.51	Apr. 25, 1963	20.01	Aug. 5	4.38	Sept. 10, 1962	4.58
Feb. 4, 1959	20.64	July 25	21.14	Sept. 3	4.05	Apr. 25, 1963	8.93
Apr. 30	18.57	Nov. 1	20.02	Oct. 2	4.88	July 25	4.29
June 2	18.99	Apr. 1, 1964	20.18	Feb. 4, 1959	6.79	Nov. 1	6.13
July 2	19.22	Aug. 12	18.56	Apr. 29	5.53	Apr. 1, 1964	7.91
Aug. 4	20.17	Nov. 10	18.55	June 1	4.45	Aug. 12	4.42
Sept. 3	19.96	Mar. 3, 1965	17.59	July 1	4.15	Nov. 10	8.31
Oct. 1	19.46	July 8	18.42	Aug. 4	3.47	Mar. 3, 1965	6.23
Nov. 2	19.82	Oct. 28	18.50	Sept. 3	3.13	July 8	6.51
Dec. 10	19.57	Jan. 4, 1966	18.63	Oct. 2	3.94	Oct. 28	5.02
Feb. 3, 1960	20.41	May 10	19.19	Nov. 2	4.99	Feb. 4, 1966	7.16
Apr. 13	19.84	Sept. 1	19.52	Dec. 10	5.16	May 10	4.48
				Feb. 3, 1960	6.69	Sept. 1	2.94
D-1-33-24bc. Mrs. Henry Kray. Drilled irrigation water-table well in alluvium, diameter 4 inches, depth 28 feet, cased with pipe. MP top of pipe at lsd and 2,898 feet above msl. Highest water level 6.47 below lsd, Sept. 10, 1962; lowest 8.94 below lsd, Feb. 4, 1966. Records available: 1962-66.				Blaine County			
June 5, 1962	7.19	Nov. 10, 1964	8.30	A-31-24-6bcl. C. Bear estate. Drilled observation water-table well in alluvium, diameter 6 5/8 inches, depth 69.7 feet, steel casing. MP top of casing, 2.3 feet above lsd and 2,330.47 feet above msl. Highest water level 5.10 below lsd, Aug. 29, 1960; lowest 9.98 below lsd, Apr. 14, 1961. Records available: 1960-62, 1966.			
Sept. 10	6.47	Mar. 3, 1965	8.29	June 29, 1960	9.82	Apr. 22, 1961	8.80
Apr. 25, 1963	7.96	July 8	8.25	July 8	8.23	May 12	8.53
July 25	8.00	Oct. 28	8.46	July 16	7.38	June 30	7.10
Nov. 1	8.37	Feb. 4, 1966	8.94	Aug. 29	5.10	July 21	6.70
Apr. 1, 1964	8.65	May 10	7.80	Sept. 18	7.88	Oct. 25	8.65
Aug. 12	7.91	Sept. 1	7.91	Apr. 12, 1961	9.86	Apr. 18, 1962	9.81
D-1-33-33ab. U. S. Geol. Survey. Drilled observation water-table well in alluvial fan deposits, diameter 4 inches, depth 37.5 feet, cased with pipe. MP top of pipe, 1.2 feet above lsd and 2,339.2 feet above msl. Highest water level 5.18 below lsd, June 12, 1958; lowest 12.04 below lsd, Sept. 1, 1966. Records available: 1958-66.				June 29, 1960	9.82	Sept. 19, 1966	8.15
June 12, 1958	5.18	Oct. 3, 1960	7.07	Apr. 13	9.86	May 25, 1966	6.49
July 7	5.50	Jan. 10, 1961	7.39	Apr. 14	9.98	Sept. 13	6.94
Aug. 6	6.24	Feb. 28	7.52	Apr. 20	9.92		
Sept. 5	6.61	Mar. 27	7.25	A-35-24-9ca. J. Billmeyer. Drilled irrigation water-table well in Flaxville Formation, diameter 16 inches, depth 52 feet, cased with corrugated culvert. MP at lsd. Records available: 1966.			
Sept. 30	6.80	Apr. 4	7.04	May 25, 1966	29.81	Sept. 14, 1966	29.82
Feb. 4, 1959	5.96	June 5, 1962	5.53	Chouteau County			
Apr. 30	5.69	Sept. 10	8.59	A-29-13-21aa2. U. S. Geol. Survey. Drilled unused artesian well in deposits of Pleistocene age, diameter 2 inches, depth 210 feet, cased to 167 feet. MP top of pipe, 0.40 foot above lsd. Highest water level 15.78 below lsd, May 17, 1949; lowest 26.04 below lsd, Oct. 2, 1963. Records available: 1947-66.			
June 2	6.15	Apr. 25, 1963	8.57				
July 1	6.59	July 25	8.80				
Aug. 4	7.12	Nov. 1	8.83				
Sept. 3	7.18	Apr. 1, 1964	8.11				
Oct. 1	7.23	Aug. 12	9.04				
Nov. 2	6.83	Nov. 10	8.41				
Dec. 10	7.11	Mar. 3, 1965	7.03				
Feb. 3, 1960	7.15	July 8	8.11				
Apr. 15	6.74	Oct. 28	10.34				
June 1	6.80	Feb. 4, 1966	11.10				
June 28	6.88	May 10	10.19				
July 28	9.01	Sept. 1	12.04				
Aug. 30	7.20						

Date	Water level	Date	Water level	Date	Water level	Date	Water level
B-29-22-8dd--Continued				A-16-40-17ca. Owner unknown. Dug unused water-table well in alluvium, diameter 42 inches, depth 15.2 feet, cribbed with rock. MP top of plank cover, 0.30 foot above lsd. Records available: 1965-66.			
Jan. 6, 1964	57.58	June 1, 1965	52.51	May 14, 1965	4.13	Sept. 13, 1966	7.58
Feb. 3	57.76	July 8	51.52	May 24, 1966	6.04		
Apr. 1	57.96	Aug. 1	51.81				
May 29	56.93	Sept. 1	52.44				
July 1	56.10	Oct. 1	53.10				
Aug. 1	56.49	Nov. 2	53.85				
Sept. 22	56.80	Dec. 1	54.53				
Oct. 1	56.90	Jan. 1, 1966	55.08				
Nov. 1	57.30	Feb. 1	55.42				
Dec. 1	57.69	Mar. 1	55.83				
Mar. 3, 1965	57.97	Mar. 28	56.20				
Apr. 6	56.54	Apr. 7	56.04				
May 1	55.32	Aug. 25	54.11				

Gallatin County

D-2-4-13cc. Owner unknown. Dug observation water-table well in alluvium, diameter 12 inches, depth 11 feet, cased with tile. MP top of casing at lsd. Highest water level 2.54 below lsd, June 27, 1952; lowest 10.37, Feb. 28, 1963. Records available: 1947-66.

Feb. 3, 1961	9.69	Mar. 27, 1964	9.14
Apr. 3	9.89	Apr. 28	8.84
June 8	5.82	June 4	7.96
July 22	5.73	July 21	5.47
Sept. 1	5.50	Aug. 26	4.36
Oct. 12	6.24	Oct. 7	7.25
Nov. 15	8.05	Nov. 18	8.71
Dec. 19	8.80	Dec. 31	9.22
Jan. 30, 1962	9.69	Jan. 27, 1965	9.27
Feb. 27	9.65	Feb. 24	9.43
Mar. 31	7.90	Mar. 27	9.80
Apr. 29	9.00	Apr. 28	9.16
May 31	8.13	May 27	8.48
June 26	7.04	June 15	6.96
July 25	5.20	July 13	4.27
Sept. 5	5.00	Aug. 17	3.35
Oct. 2	6.85	Sept. 27	3.89
Oct. 30	8.35	Oct. 26	7.03
Dec. 5	8.80	Dec. 2	8.21
Jan. 2, 1963	9.58	Dec. 3	8.3
Jan. 31	9.85	Jan. 3, 1966	8.36
Feb. 28	10.37	Jan. 5	8.60
Mar. 26	10.08	Feb. 1	8.80
Apr. 25	9.42	Feb. 4	8.71
May 24	8.87	Feb. 23	8.93
June 23	6.58	Mar. 4	8.9
July 23	4.23	Mar. 28	9.07
Aug. 27	4.46	Apr. 2	9.1
Oct. 9	6.81	May 4	10.0
Nov. 22	7.47	May 24	8.50
Jan. 5, 1964	8.34	June 20	6.11
Jan. 29	8.64	July 26	5.77
Feb. 26	8.93	Sept. 3	6.3

Garfield County

A-14-30-11bd. Bud Shaw. Dug unused water-table well in terrace deposits, diameter 5 feet, depth 10.5 feet, cribbed with rock. MP top of rock curb 0.50 foot below lsd. Records available: 1965-66.

May 13, 1965	0.73	May 26, 1966	7.50
June 11	4.95	Sept. 14	8.21

Glacier County

B-32-11-3dd. Bureau of Indian Affairs. Dug unused water-table well in deposits of Pleistocene age, diameter 24 inches, depth 9 feet, corrugated culvert casing. MP top of concrete curb 0.30 foot above lsd. Highest water level 0.00, Mar. 19, 1951, Mar. 4, 1952, Apr. 5, 1954, Feb. 26, 1957, Apr. 30, 1960; lowest 3.69 below lsd, Sept. 12, 1960. Records available 1947-66.

Jan. 27, 1961	2.00	June 27, 1963	2.45
Jan. 31	2.85	July 29	2.70
Mar. 29	1.04	Sept. 30	3.46
Apr. 17	1.51	Oct. 19	3.31
Apr. 29	0.83	Oct. 31	3.21
June 13	2.69	Nov. 19	2.97
June 28	2.95	Dec. 2	2.84
July 11	2.75	Dec. 21	3.06
Aug. 14	3.06	Dec. 27	2.79
Sept. 18	2.85	Jan. 28, 1964	2.72
Sept. 28	2.60	Feb. 16	2.32
Oct. 17	2.22	Feb. 28	2.14
Jan. 3, 1962	1.68	Mar. 31	1.53
Jan. 30	1.55	Apr. 4	1.41
Feb. 13	1.35	Apr. 9	0.67
Mar. 21	1.23	Apr. 20	1.00
Mar. 28	1.10	Apr. 28	1.08
Apr. 17	0.71	May 15	1.41
Apr. 30	1.30	May 31	0.94
May 15	0.62	June 16	0.25
May 29	1.81	July 22	1.83
July 3	2.57	Aug. 1	2.97
July 11	2.77	Sept. 14	2.80
Aug. 3	2.84	Sept. 30	2.70
Aug. 15	3.28	Oct. 29	2.42
Aug. 31	3.45	Nov. 16	2.69
Sept. 10	3.17	Dec. 1	2.76
Oct. 4	3.09	Dec. 31	3.32
Nov. 1	2.88	Jan. 11, 1965	3.42
Nov. 13	3.10	Feb. 25	1.24
Nov. 30	2.95	Mar. 29	1.77
Dec. 28	3.18	Apr. 10	0.41
Jan. 18, 1963	2.05	Apr. 28	0.64
Jan. 30	2.29	May 25	1.37
Feb. 5	1.19	June 1	1.67
Feb. 26	0.97	June 16	0.30
Feb. 28	1.01	June 27	0.77
Mar. 28	0.93	July 31	2.65
Apr. 15	1.45	Aug. 28	2.83
Apr. 29	1.54	Sept. 29	2.05
May 25	2.32	Oct. 18	2.52
June 10	1.91	Oct. 28	2.89

Date	Water level	Date	Water level	Date	Water level	Date	Water level
<u>Dawson County</u>				B-4-10-10dc2--Continued			
<p>A-15-58-26bb. Owner unknown. Drilled unused water-table well in alluvium, diameter 8 inches, depth 18.8 feet, cased with pipe. MP top of casing, 1.0 foot above lsd. Records available: 1966.</p>				<p>B-4-10-36abl. Lewis Wertz. Drilled water-table well, diameter 6 inches, depth 73.0 feet, steel casing. MP top of casing 2.00 feet above lsd. Highest water level 44.42 below lsd, Sept. 5, 1962; lowest 54.60 below lsd, Aug. 1, 1961. Records available: 1960-66.</p>			
May 24, 1966	6.05			Aug. 29, 1961	4.39	Sept. 10, 1963	4.10
<p>A-18-56-25cb. Mrs. Bud Stevenson. Dug unused water-table well in terrace deposits, diameter 30 inches, depth 28 feet, cribbed with concrete. MP top of curb, 0.75 foot above lsd. Highest water level 22.25 below lsd, Jan. 4, 1966; lowest 26.37 below lsd, Sept. 27, 1960. Records available: 1947-66.</p>				<p>B-6-10-27cc. Land & Livestock Co. Drilled unused water-table well in deposits of Tertiary age, diameter 6 inches, depth 88.8 feet, steel casing. MP top of casing, 0.5 foot above lsd. Highest water level 36.70 below lsd, Sept. 7, 1965, lowest 62.52 below lsd, May 4, 1961. Records available: 1960-66.</p>			
Jan. 5, 1961	25.93	July 9, 1963	24.63	Aug. 3, 1960	48.97	Oct. 3, 1961	53.29
Feb. 7	24.95	Aug. 5	24.63	Sept. 7	46.95	Nov. 2	51.24
Mar. 8	25.01	Sept. 4	24.66	Oct. 4	45.90	Mar. 6, 1962	51.74
Mar. 20	25.71	Oct. 8	24.75	Nov. 2	45.10	Sept. 5	44.42
Apr. 11	25.01	Nov. 13	25.12	Dec. 6	44.93	Mar. 6, 1963	46.20
Apr. 25	25.04	Dec. 9	24.86	Jan. 31, 1961	46.47	Sept. 10	45.30
May 9	25.00	Jan. 14, 1964	25.55	Mar. 7	48.20	Mar. 10, 1964	48.72
May 31	25.03	Feb. 5	24.92	Apr. 4	49.48	Sept. 15	46.35
June 27	25.07	Apr. 14	24.83	May 4	50.73	Mar. 10, 1965	48.90
July 26	25.06	May 5	24.85	June 8	52.24	Sept. 7	45.76
Aug. 15	25.10	June 2	24.92	June 28	53.36	Mar. 10, 1966	46.52
Sept. 12	24.98	Aug. 4	24.96	Aug. 1	54.60	Sept. 8	46.90
Sept. 19	25.29	Sept. 1	24.97	Aug. 29	54.40		
Oct. 2	25.46	Oct. 5	25.03				
Nov. 7	25.09	Nov. 10	24.92				
Jan. 23, 1962	25.06	Dec. 8	25.86				
Feb. 19	25.20	Mar. 2, 1965	25.00				
Mar. 21	25.38	Mar. 30	25.64				
Apr. 17	25.05	June 2	23.77				
May 15	24.92	July 7	22.55				
June 12	24.86	Aug. 4	22.54				
July 10	24.72	Aug. 31	22.65				
Aug. 14	24.76	Oct. 5	22.83				
Sept. 12	25.10	Nov. 2	22.98				
Oct. 9	24.91	Nov. 30	23.14				
Nov. 6	24.70	Jan. 4, 1966	22.25				
Dec. 4	24.71	Feb. 1	23.31	June 21, 1960	60.38	Oct. 3, 1961	46.45
Jan. 3, 1963	24.84	Mar. 8	23.46	Aug. 1	45.20	Nov. 2	50.07
Feb. 5	25.09	Apr. 12	23.55	Sept. 6	40.79	Dec. 5	53.99
Feb. 7	25.20	May 3	23.60	Oct. 3	41.94	Mar. 6, 1962	62.10
Mar. 4	24.85	June 6	24.05	Nov. 2	44.28	Sept. 5	45.40
May 7	25.30	July 12	23.73	Dec. 6	48.40	Mar. 6, 1963	61.70
June 4	24.83	Aug. 23	23.94	Jan. 31, 1961	54.50	Sept. 10	40.40
				Mar. 7	58.18	Mar. 10, 1964	60.37
				Apr. 4	60.73	Sept. 14	39.05
				May 4	62.52	Mar. 10, 1965	58.02
				June 8	61.80	Sept. 7	36.70
				June 28	55.32	Mar. 10, 1966	57.85
				Aug. 1	46.43	Sept. 8	43.96
				Aug. 29	43.43		
<u>Deer Lodge County</u>				<u>Fallon County</u>			
<p>B-4-10-10dc2. Willage of Opportunity. Driven water-table well in alluvium, diameter 4 inches, depth 20.0 feet, steel casing. MP bottom of 6-inch outlet pipe 1.30 feet above lsd and 4,980.1 feet above msl. Highest water level 3.57 below lsd, June 8, 1961; lowest 4.70 below lsd, March 10, 1964. Records available: 1960-66.</p>				<p>A-3-60-2aa. Roy Crawford. Drilled unused water-table well in alluvium, diameter 5 inches, cased with pipe. MP top of casing 0.60 foot above lsd. Records available: 1965-66.</p>			
July 26, 1960	4.05	Mar. 7, 1961	4.46	May 6, 1965	16.92	Sept. 12, 1966	24.40
Sept. 7	4.35	Apr. 4	4.38	May 23, 1966	17.00		
Oct. 3	4.65	May 4	4.07				
Nov. 2	4.43	June 8	3.57				
Dec. 6	4.42	June 28	3.86				
Jan. 31, 1961	4.59	Aug. 1	4.38				

Date	Water level	Date	Water level	Date	Water level	Date	Water level
B-13-19-22bc1--Continued				B-13-20-14ac--Continued			
Sept. 24, 1962	44.69	Jan. 20, 1964	51.17	May 9, 1960	18.33	Aug. 1, 1961	10.53
Oct. 8	45.75	Feb. 20	52.02	May 16	17.38	Aug. 9	9.78
Oct. 15	46.18	Mar. 20	52.28	May 23	17.96	Aug. 14	9.50
Oct. 20	46.56	Apr. 20	51.36	May 30	17.54	Aug. 21	9.62
Oct. 22	46.72	May 20	45.35	June 1	17.35	Aug. 28	9.85
Oct. 29	47.36	June 20	36.05	June 6	15.21	Sept. 1	9.55
Nov. 5	47.91	July 20	39.20	June 13	14.16	Sept. 4	9.65
Nov. 12	48.44	Aug. 20	41.85	June 20	13.65	Sept. 11	9.68
Nov. 19	48.90	Dec. 28	49.45	June 27	13.02	Sept. 18	10.17
Nov. 20	48.97	Jan. 25, 1965	49.73	July 1	12.55	Oct. 5	12.35
Nov. 26	48.89	Feb. 23	50.00	July 4	12.02	Oct. 9	12.92
Dec. 3	48.94	Mar. 22	50.10	July 11	11.67	Oct. 16	13.70
Dec. 10	49.02	Apr. 24	46.85	July 18	11.54	Oct. 23	14.34
Dec. 17	49.16	May 28	40.70	July 25	11.31	Oct. 27	14.69
Dec. 20	49.25	June 25	37.20	Aug. 1	10.66	Nov. 6	15.27
Dec. 24	49.34	July 24	40.50	Aug. 8	10.04	Nov. 13	15.85
Jan. 20, 1963	50.06	Aug. 21	42.27	Aug. 15	10.44	Dec. 7	17.24
Feb. 20	49.30	Sept. 25	44.56	Aug. 22	10.33	Dec. 18	17.49
Mar. 20	49.01	Oct. 22	46.20	Aug. 29	10.06	Dec. 25	17.92
Apr. 20	47.31	Nov. 22	48.28	Sept. 1	10.64	Jan. 1, 1962	18.31
May 20	43.45	Dec. 20	49.56	Sept. 8	11.47	Jan. 8	18.65
June 20	38.68	Jan. 19, 1966	49.75	Sept. 12	11.53	Jan. 15	18.94
July 20	41.03	Feb. 21	50.90	Sept. 19	11.46	Jan. 31	19.50
Aug. 20	42.85	Mar. 24	50.55	Sept. 26	11.53	Feb. 1	19.52
Sept. 20	44.33	Apr. 21	47.95	Oct. 1	11.16	Feb. 5	19.62
Oct. 20	46.23	May 20	44.00	Oct. 3	11.26	Feb. 12	19.75
Nov. 20	48.81	Sept. 6	44.97	Oct. 10	12.35	Feb. 19	19.24
Dec. 20	50.17			Oct. 17	13.25	Feb. 26	19.48
				Oct. 21	13.87	Mar. 1	19.58
				Nov. 9	15.62	Mar. 5	19.72
				Nov. 14	15.96	Mar. 12	19.86
				Nov. 21	16.30	Mar. 19	19.87
				Nov. 28	16.60	Mar. 26	19.29
				Dec. 1	16.65	Apr. 2	19.36
				Dec. 5	16.98	Apr. 9	19.52
				Dec. 11	17.40	Apr. 16	19.66
				Dec. 19	17.89	Apr. 23	18.44
				Dec. 26	18.22	Apr. 30	17.69
				Jan. 1, 1961	18.50	May 1	17.76
				Jan. 2	18.55	May 7	18.45
				Jan. 7	18.76	May 14	18.48
				Feb. 2	19.68	May 21	18.26
				Feb. 6	19.79	May 28	16.86
				Feb. 13	19.50	June 1	16.18
				Feb. 20	19.75	June 4	16.10
				Feb. 27	19.96	June 11	15.51
				Mar. 1	20.01	June 18	13.96
				Mar. 6	20.14	June 25	13.29
				Mar. 13	20.30	July 1	13.63
				Mar. 20	20.45	July 2	13.52
				Mar. 27	20.59	July 16	12.04
				Apr. 1	20.68	July 23	11.88
				Apr. 3	20.71	July 30	11.00
				Apr. 10	20.83	Aug. 1	10.79
				Apr. 17	20.92	Aug. 6	10.35
				Apr. 24	21.02	Aug. 13	9.76
				May 1	21.14	Aug. 20	9.98
				May 8	21.19	Aug. 27	10.83
				May 15	21.22	Sept. 1	10.53
				May 22	21.22	Sept. 3	10.49
				May 29	19.36	Sept. 10	10.74
				June 1	18.71	Sept. 17	11.05
				June 5	16.80	Sept. 24	11.27
				June 12	13.59	Oct. 3	12.13
				June 19	13.41	Nov. 5	15.59
				June 26	12.39	Nov. 12	15.79
				July 1	11.82	Nov. 19	16.01
				July 3	11.65	Nov. 26	16.28
				July 10	11.42	Dec. 1	16.63
				July 17	11.18	Dec. 3	16.76
				July 24	11.05	Dec. 10	16.98
				July 31	10.58		

B-13-20-14ac. Bonneville Power Adm. Drilled water-table well in terrace deposits, diameter 6 inches, depth 35.5 feet, cased with pipe. MP top of casing, 1.30 feet above lsd and 3,146.3 feet above msl. Highest water level 8.68 below lsd, July 1, 1959; lowest 21.22 below lsd, May 15 and May 22, 1961. Records available: 1959-66.

Apr. 21, 1959	19.60	Nov. 1, 1959	14.75
Apr. 27	19.72	Nov. 2	14.79
May 1	19.76	Nov. 9	15.12
May 4	19.42	Nov. 16	15.52
May 11	18.88	Nov. 23	15.99
May 20	17.72	Nov. 30	16.07
May 25	18.09	Dec. 1	16.13
June 1	16.82	Dec. 7	16.43
June 8	14.42	Dec. 14	16.76
June 15	11.60	Dec. 21	17.02
June 22	9.00	Dec. 29	17.33
June 29	8.74	Jan. 1, 1960	17.44
July 1	8.68	Jan. 4	17.54
July 6	8.81	Jan. 11	17.77
July 13	9.27	Jan. 18	18.01
July 20	9.08	Jan. 25	18.22
July 27	9.40	Feb. 1	18.43
Aug. 1	9.33	Feb. 8	18.62
Aug. 3	8.77	Feb. 15	18.82
Aug. 10	8.92	Feb. 22	19.01
Aug. 17	9.36	Feb. 29	19.20
Aug. 24	8.86	Mar. 1	19.23
Aug. 31	9.51	Mar. 7	19.40
Sept. 1	9.78	Mar. 14	19.57
Sept. 7	10.52	Mar. 21	19.13
Sept. 14	11.03	Mar. 28	19.13
Sept. 21	11.09	Apr. 1	19.26
Sept. 28	11.18	Apr. 4	19.33
Oct. 1	11.19	Apr. 11	18.10
Oct. 5	11.58	Apr. 18	17.74
Oct. 12	12.80	Apr. 25	18.28
Oct. 19	13.66	May 1	18.50
Oct. 26	14.46	May 2	18.54

Date	Water level	Date	Water level	Date	Water level	Date	Water level
B-28-21-3ab--Continued				B-29-21-17ccl--Continued			
July 1, 1964	4.85	Aug. 2, 1965	5.15	May 18, 1964	3.00	May 1, 1965	2.08
Aug. 3	4.20	Aug. 30	5.30	June 1	3.25	June 1	2.60
Oct. 1	5.40	Sept. 28	5.28	July 1	3.18	July 1	2.73
Nov. 2	5.36	Nov. 1	5.16	Aug. 1	3.56	Aug. 1	3.32
Nov. 30	5.29	Dec. 8	5.06	Sept. 1	3.82	Sept. 1	3.08
Jan. 4, 1965	5.00	Jan. 5, 1966	4.96	Oct. 1	3.94	Oct. 1	3.07
Feb. 3	4.70	Feb. 2	5.46	Nov. 1	3.96	Nov. 2	3.23
Mar. 1	4.44	Mar. 2	5.89	Nov. 20	4.02	Dec. 1	3.21
Apr. 5	4.68	Apr. 6	5.44	Dec. 1	3.73	Jan. 6, 1966	3.26
May 3	3.48	May 2	5.12	Jan. 5, 1965	3.68	Feb. 1	3.32
June 1	3.54	Aug. 25	5.80	Feb. 4	3.61	Mar. 3	3.34
June 28	3.70			Mar. 2	3.24	Apr. 1	2.00
				Apr. 1	2.23	Aug. 25	3.50
				Apr. 20	1.81		

B-29-20-18aal. William Anderson. Dug unused water-table well in aeolian deposits, diameter 56 inches, depth 18.0 feet, concrete casing. MP top of 3/4-inch pipe, 0.70 foot below lsd. Highest water level 15.22 below lsd, June 1, 1965; lowest 17.38 below lsd, Apr. 1, 1964. Records available: 1963-66.

Oct. 1, 1963	16.72	Mar. 1, 1965	15.93
Nov. 5	16.82	Apr. 5	15.27
Dec. 3	16.94	May 3	15.26
Jan. 6, 1964	17.04	June 1	15.22
Feb. 3	17.18	June 28	15.23
Mar. 3	17.28	Aug. 2	15.28
Apr. 1	17.38	Aug. 30	15.39
May 29	16.56	Sept. 28	15.48
July 1	16.43	Nov. 1	15.60
Aug. 3	16.27	Dec. 8	15.78
Oct. 1	16.30	Jan. 5, 1966	15.88
Nov. 2	16.42	Feb. 2	15.98
Nov. 30	16.56	Mar. 2	16.08
Jan. 4, 1965	16.48	Apr. 6	15.40
Feb. 3	16.48	Aug. 25	15.45

B-29-20-29bd. John Byrne. Drilled unused artesian well in glacial deposits, diameter 5 inches, depth 151.5 feet, cased with pipe. MP top of recorder floor, 2.5 feet above lsd. Highest water level 20.86 below lsd, June 25, 1965; lowest 27.02 below lsd, Apr. 7, 1964. Records available: 1963-66.

Sept. 17, 1963	24.56	Feb. 1, 1965	23.93
Oct. 19	25.00	Mar. 1	23.97
Nov. 5	25.15	Apr. 6	23.50
Dec. 1	25.74	May 1	23.18
Jan. 1, 1964	25.56	June 1	21.76
Feb. 1	25.78	June 25	20.86
Mar. 1	26.11	July 1	20.97
Apr. 1	26.68	Aug. 3	21.21
Apr. 7	27.02	Sept. 1	21.47
May 1	26.76	Oct. 1	21.79
June 1	25.50	Nov. 1	22.14
July 1	23.23	Dec. 1	22.62
Aug. 1	23.19	Jan. 1, 1966	22.67
Sept. 1	23.56	Feb. 1	22.87
Oct. 1	23.77	Mar. 1	23.35
Nov. 1	23.90	Apr. 1	23.70
Dec. 1	24.07	Aug. 25	23.63
Jan. 4, 1965	24.08		

B-29-21-17ccl. James Murphey. Dug stock water-table well in aeolian deposits, diameter 56 inches, depth 6.8 feet, concrete casing. MP top of concrete 2.0 feet above lsd. Highest water level 1.81 below lsd, Apr. 20, 1965; lowest 4.02 below lsd, Nov. 20, 1964. Records available: 1964-66.

B-29-21-20cc. Lutheran Cemetery. Drilled irrigation artesian well in glacial deposits, diameter 6 inches, depth 278 feet, cased with pipe. MP top of casing 5.0 feet below lsd. Highest water level 100.00 below lsd, July 1, 1964 and June 28, 1965; lowest 102.07 below lsd, Apr. 1, 1964. Records available: 1963-66.

Oct. 1, 1963	101.53	Mar. 1, 1965	101.73
Nov. 5	101.58	Apr. 5	101.50
Dec. 3	101.90	May 3	100.80
Jan. 6, 1964	101.60	June 1	100.30
Feb. 3	101.75	June 28	100.00
Mar. 3	101.93	Aug. 2	100.80
Apr. 1	102.07	Aug. 30	100.90
May 29	100.95	Sept. 28	100.94
July 1	100.00	Nov. 1	101.07
Aug. 3	101.08	Dec. 8	101.10
Oct. 1	101.57	Jan. 5, 1966	101.10
Nov. 2	101.55	Feb. 2	101.44
Nov. 30	101.44	Mar. 2	101.70
Jan. 4, 1965	101.54	Aug. 25	101.40
Feb. 3	101.58		

B-29-21-33cc. U. S. Geol. Survey. Driven observation well in alluvium, diameter 3/4 inch, depth 9.4 feet, cased with pipe. MP top of casing 1.2 feet above lsd. Highest water level 0.62 above lsd, June 10, 1964; lowest 8.56 below lsd, Sept. 28, 1965. Records available: 1963-66.

Aug. 29, 1963	6.90	Feb. 3, 1965	6.57
Oct. 1	7.00	Mar. 1	6.13
Nov. 5	7.04	Apr. 5	6.22
Dec. 3	7.14	May 3	4.92
Jan. 6, 1964	7.02	June 1	4.32
Feb. 3	6.98	June 28	3.73
Mar. 3	7.08	Aug. 2	6.02
Apr. 1	6.85	Aug. 30	6.40
May 29	4.72	Sept. 28	8.56
June 10	+0.62	Nov. 1	6.74
July 1	3.12	Dec. 8	6.83
Aug. 3	5.76	Jan. 5, 1966	6.88
Oct. 1	6.76	Feb. 2	6.93
Nov. 2	6.75	Apr. 6	6.50
Nov. 30	6.70	May 2	6.13
Jan. 4, 1965	6.45	Aug. 25	6.87

B-29-22-8dd. Sparks School. Drilled unused water-table well in glacial deposits, diameter 7 inches, depth 70 feet, cased with pipe. MP top of casing 1.0 foot above lsd. Highest water level 51.52 below lsd, July 8, 1965; lowest 57.97 below lsd, Mar. 3, 1965. Records available: 1964-66.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
A-31-34-8ca--Continued				D-5-50-26da2. Joe McDowell. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 42 feet, cased with corrugated metal pipe, gravel packed from 20 to 42 feet. MP inspection port in base of pump, 3.0 feet above lsd. Records available: 1965-66.			
Jan. 13, 1961	6.13	Nov. 6, 1963	4.38	May 5, 1965	9.25	Sept. 12, 1966	11.29
Feb. 9	6.40	Dec. 2	4.73	May 23, 1966	9.90		
Mar. 9	6.56	Jan. 8, 1964	4.92	D-5-51-16bc1. Carl Shaffer. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 55 feet, cased with concrete. MP inspection port in pump base, 2.0 feet above lsd. Records available: 1965-66.			
Apr. 3	6.66	Feb. 3	5.52	May 5, 1965	12.88	Sept. 12, 1966	14.57
Apr. 17	6.73	Mar. 5	5.90	May 23, 1966	13.09		
May 8	6.64	Apr. 8	6.25	D-5-51-16bc2. Carl Shaffer. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 47 feet, cased with concrete. MP inspection port in pump base, 1.50 feet above lsd. Records available: 1965-66.			
June 6	6.05	May 13	5.96	May 5, 1965	12.55	Sept. 12, 1966	14.23
July 10	5.43	June 2	5.36	May 23, 1966	12.78		
Aug. 14	4.94	July 15	4.56	D-9-48-5ac. Leonard Somers. Drilled stock artesian well in Fort Union Formation, diameter 4 inches to 108 feet, 2 inches 108 to 309 feet, total depth 420 feet, MP top of casing, 0.40 foot above lsd. Records available: 1965-66.			
Sept. 13	4.96	Aug. 4	4.40	May 4, 1965	6.85	Sept. 12, 1966	7.21
Oct. 18	5.44	Sept. 11	4.21	May 23, 1966	7.20		
Nov. 16	5.72	Oct. 22	4.24	D-9-48-8ca. Florence Lawrence. Drilled stock water-table well in alluvium, diameter 4 inches, depth 34 feet, cased with pipe. MP top of casing, 1.0 foot above lsd.			
Jan. 17, 1962	6.40	Nov. 12	4.48	May 4, 1965	15.09	Sept. 12, 1966	18.20
Feb. 21	6.69	Dec. 22	4.95	May 23, 1966	17.36		
Mar. 15	6.86	Jan. 22, 1965	5.31	Powell County			
Apr. 20	6.75	Feb. 17	5.72	B-6-10-15aa. Quinlan School. Dug unused water-table well in alluvium, diameter 33 inches, depth 12.6 feet, concrete casing. MP top of wood platform at lsd. Highest water level 5.16 below lsd, July 1, 1959; lowest 12.02 below lsd, Mar. 5, 1962. Records available: 1957-64.			
May 24	6.23	Mar. 19	6.17	Sept. 3, 1957	9.23	Sept. 1, 1959	8.30
June 19	5.12	Apr. 21	5.17	Oct. 2	8.14	Oct. 1	8.50
July 24	4.74	May 27	3.66	Nov. 4	9.52	Nov. 5	9.62
Aug. 14	4.17	June 24	3.58	Dec. 2	9.89	Dec. 1	9.68
Sept. 12	4.36	July 22	3.67	Jan. 2, 1958	10.15	Jan. 4, 1960	10.73
Oct. 10	4.74	Aug. 16	3.82	Feb. 3	10.4	Feb. 1	9.63
Nov. 9	5.89	Oct. 26	4.20	Mar. 3	10.46	Mar. 7	10.02
Dec. 7	5.03	Dec. 17	4.69	Mar. 31	10.69	Apr. 1	9.80
Jan. 18, 1963	6.47	Jan. 21, 1966	5.14	May 1	10.72	May 3	8.67
Feb. 21	6.69	Feb. 11	5.38	June 5	5.72	May 31	6.95
Mar. 14	5.51	Mar. 15	6.22	July 1	7.29	July 6	6.80
May 17	5.52	Apr. 19	5.79	July 30	7.65	Aug. 3	8.44
June 5	5.27	May 11	5.62	Aug. 29	6.6	Sept. 1	8.10
July 18	0.40	June 9	5.21	Jan. 5, 1959	9.5	Oct. 5	7.80
Aug. 7	2.77	July 11	4.62	Apr. 1	10.0	Nov. 1	8.38
Sept. 9	3.73	Aug. 5	4.48	July 1	5.16	Dec. 5	9.30
Oct. 7	4.08			Aug. 2	8.32	Jan. 30, 1961	10.08
Powder River County				D-3-46-17ad. U. S. Forest Service. Drilled stock artesian well in Fort Union Formation, diameter 4 inches, depth 144.8 feet, cased with pipe. MP top of casing, 1.90 feet above lsd. Records available: 1965-66.			
May 5, 1965	48.07	Sept. 12, 1966	46.31	D-4-50-20ba. E. Barnhart. Drilled unused artesian well in Fort Union Formation, diameter 4 inches, depth 131.9 feet, cased with pipe. MP top of casing, 1.40 feet above lsd. Records available: 1965-66.			
May 23, 1966	47.13			May 3, 1965	63.58	Sept. 12, 1966	52.54
D-4-51-34ac. Powder River County. Drilled irrigation water-table well in alluvium, diameter 4 inches, depth unknown. MP top of casing, 0.30 foot above lsd. Records available: 1965-66.				May 23, 1966	62.70		
May 6, 1965	12.10	Sept. 12, 1966	12.58	D-5-50-26dal. Joe McDowell. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 42 feet, cased with corrugated metal pipe, gravel packed from 20 to 42 feet. MP top of casing, 2.90 feet above lsd. Records available: 1965-66.			
May 23, 1966	12.56			May 5, 1965	8.78	Sept. 12, 1966	11.53
D-5-50-26dal. Joe McDowell. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 42 feet, cased with corrugated metal pipe, gravel packed from 20 to 42 feet. MP top of casing, 2.90 feet above lsd. Records available: 1965-66.				May 23, 1966	10.42		

Date	Water level	Date	Water level	Date	Water level	Date	Water level
<u>B-32-11-3dd--Continued</u>				<u>McCone County</u>			
Nov. 4, 1965	2.88	Mar. 29, 1966	1.00	A-19-48-11bc. City of Circle. Drilled unused water-table well in alluvium, diameter 12 inches, depth 53 feet, cased with steel. MP top of casing, 2.20 feet above lsd. Highest water level 27.25 below lsd, Oct. 11, 1954; lowest 32.42 below lsd, Jan. 22, 1962. Records available: 1954-66.			
Nov. 30	2.62	Apr. 27	1.33				
Dec. 18	2.77	May 16	1.54				
Dec. 29	3.10	June 21	2.37				
Jan. 27, 1966	3.09	July 7	2.35				
Feb. 23	1.94	Aug. 30	2.98	Jan. 5, 1961	31.31	Nov. 13, 1963	31.18
<u>Hill County</u>				Feb. 2	31.30	Dec. 10	31.24
A-32-15-17dd. U. S. Geol. Survey. Drilled unused artesian well in deposits of Pleistocene age, diameter 2 inches, depth 180 feet, cased to 152 feet. MP top of casing, 0.20 foot above lsd. Highest water level 39.92 below lsd, Feb. 4, 1965; lowest 52.56 below lsd, June 18, 1947. Records available: 1947-66.				Mar. 2	31.25	Jan. 14, 1964	31.26
Feb. 2, 1961	41.13	Jan. 29, 1964	41.08	Mar. 30	31.21	Feb. 5	31.26
Mar. 2	41.02	Feb. 27	41.81	Apr. 12	31.19	Mar. 3	31.10
Mar. 30	41.03	Mar. 30	41.88	Apr. 25	31.98	Apr. 15	31.16
Apr. 12	41.03	Apr. 30	41.67	May 17	31.22	May 4	31.08
Apr. 26	41.02	May 27	41.53	June 13	31.29	June 2	31.19
June 14	41.12	June 21	40.91	July 18	31.55	July 6	30.25
Aug. 2	41.50	July 26	41.31	Aug. 15	31.70	Aug. 4	30.56
Oct. 10	41.80	Oct. 8	41.27	Oct. 31	31.49	Sept. 1	30.92
Feb. 3, 1962	41.63	Oct. 24	41.16	Nov. 14	31.48	Oct. 6	31.09
Mar. 7	41.54	Dec. 3	41.19	Jan. 22, 1962	32.42	Nov. 10	31.18
Mar. 5	41.37	Jan. 10, 1965	40.97	Feb. 19	31.36	Dec. 8	31.24
June 17	41.37	Feb. 4	39.92	Mar. 7	31.32	Jan. 5, 1965	31.17
Aug. 8	41.5	Mar. 11	40.89	Apr. 3	31.02	Feb. 2	31.30
Sept. 5	41.60	Mar. 31	40.68	Apr. 4	31.16	Mar. 2	31.31
Oct. 6	41.68	Apr. 13	40.60	May 15	31.22	Mar. 30	31.08
Nov. 3	41.70	Apr. 29	40.58	June 12	30.55	May 5	30.29
Dec. 1	41.64	May 27	40.46	July 10	30.89	June 8	29.38
Jan. 6, 1963	41.62	June 24	40.46	Aug. 14	30.76	July 15	30.34
Feb. 2	41.54	July 29	40.42	Sept. 12	31.06	Aug. 5	30.71
Mar. 2	41.34	Aug. 26	40.54	Oct. 9	31.16	Aug. 31	30.91
Mar. 16	41.33	Sept. 30	40.56	Nov. 6	31.21	Oct. 11	31.10
Apr. 4	41.29	Oct. 27	40.75	Dec. 4	31.23	Nov. 2	31.10
May 2	41.24	Dec. 2	40.52	Jan. 3, 1963	31.24	Nov. 30	31.14
May 20	41.24	Dec. 30	40.45	Feb. 7	31.58	Jan. 3, 1966	30.19
May 24	41.27	Jan. 25, 1966	40.40	Mar. 4	30.44	Feb. 1	31.25
June 30	41.36	Feb. 21	40.30	Mar. 19	30.60	Mar. 4	31.30
Aug. 1	41.50	Mar. 31	40.23	Apr. 1	30.71	Apr. 5	30.79
Aug. 30	41.75	Apr. 29	40.20	May 8	30.68	Apr. 12	30.84
Oct. 2	41.99	May 24	40.28	June 4	30.88	May 5	30.50
Nov. 2	42.24	June 23	40.21	July 9	30.27	June 8	30.61
Dec. 3	41.49	July 26	40.32	Aug. 1	30.78	July 6	30.84
Dec. 30	42.28	Aug. 31	40.63	Sept. 1	31.03	Aug. 23	31.18
<u>Judith Basin County</u>				<u>Missoula County</u>			
A-16-12-7da2. M. A. Groskopf. Dug unused water-table well in alluvium, diameter 24 inches, depth 9.5 feet, cribbed with wood. MP top of cover 0.1 foot above lsd and 4,304.92 feet above msl. Highest water level 4.23 below lsd, June 21, 1965; lowest 9.46 below lsd, Sept. 14, 1966. Records available: 1964-66.				B-13-19-22bcl. Woolworth's. Drilled water-table well in alluvium, diameter 6 inches, depth 84 feet, cased with pipe. MP top of casing, 10.0 feet below lsd and 3,179 feet above msl. Highest water level 36.05 below lsd, June 20, 1964; lowest 52.89 below lsd, Mar. 19, 1962. Records available: 1962-66.			
Nov. 12, 1964	6.52	June 21, 1965	4.23	Jan. 3, 1962	52.19	May 21, 1962	41.33
Jan. 12, 1965	6.70	July 17	5.16	Feb. 1	52.12	May 28	38.77
Mar. 2	6.02	Sept. 7	7.58	Mar. 5	52.69	June 3	38.07
Apr. 19	4.94	Jan. 11, 1966	6.50	Mar. 12	52.84	June 11	38.71
May 17	4.77	Sept. 14	9.46	Mar. 19	52.89	July 16	39.41
				Mar. 20	52.86	July 20	39.75
				Mar. 26	52.53	July 23	40.04
				Apr. 4	51.15	July 30	40.26
				Apr. 9	49.63	Aug. 6	40.51
				Apr. 16	49.35	Aug. 13	41.21
				Apr. 20	48.35	Aug. 20	41.61
				Apr. 23	46.90	Aug. 27	42.13
				Apr. 30	45.09	Sept. 3	42.82
				May 7	44.81	Sept. 10	43.43
				May 14	43.15	Sept. 17	44.00
				May 20	41.74	Sept. 20	44.30

Date	Water level	Date	Water level	Date	Water level	Date	Water level
A-12-56-34da--Continued				B-6-20-19cc--Continued			
Dec. 13, 1962	224.89	July 14, 1964	280.38	Aug. 29, 1958	4.83	Apr. 12, 1963	14.34
Mar. 26, 1963	238.54	Aug. 24	288.82	Sept. 26	5.22	May 6	12.45
May 16	249.63	Nov. 11	298.39	Oct. 31	9.25	June 5	5.20
June 24	246.45	Apr. 2, 1965	305.29	Nov. 28	10.41	June 14	5.82a
July 1	251.86	May 28	314.47	Dec. 26	11.78	June 25	4.24
July 25	252.30	Aug. 31	319.42	Jan. 30, 1959	12.96	July 16	6.17
Aug. 27	252.86	Oct. 27	324.04	Feb. 27	13.75	July 30	4.78
Sept. 12	252.0*	May 2, 1966	349.46	Mar. 27	14.17	Aug. 13	5.05
Oct. 1	253.29	July 6	354.08	Apr. 24	14.33	Aug. 26	4.30
Mar. 17, 1964	259.37	Sept. 13	359.69	May 29	7.52	Sept. 9	4.90
* Measurement by Shell Oil Co.				June 26	4.49	Sept. 24	6.10
Ravalli County				July 23	3.91	Oct. 7	7.76
B-5-19-26bc. Bonneville Power Administration.				Aug. 28	4.49	Oct. 22	8.63
Drilled observation water-table well in talus deposits,				Sept. 25	7.49	Nov. 5	9.90
diameter 6 inches, depth 52 feet, cased with pipe.				Oct. 29	10.99	Nov. 18	10.90
MP floor of recorder shelter 3.2 feet above lsd.				Nov. 27	12.03	Dec. 2	11.65
Highest water level 32.19 below lsd, June 30, 1964;				Dec. 31	12.57	Dec. 31	12.84
lowest 38.20 below lsd, Feb. 27, 1964. Records				Jan. 29, 1960	13.73	Feb. 27, 1964	14.27
available 1962-66.				Feb. 26	14.53	Mar. 13	14.85
July 20, 1962	35.81	Aug. 25, 1964	35.39	Mar. 25	14.97	Apr. 1	15.38
Aug. 20	37.00	Sept. 29	36.73	Apr. 29	15.10	Apr. 28	16.01
Sept. 20	37.85	Oct. 21	37.11	May 27	9.81	May 21	12.58
Oct. 20	37.60	Dec. 3	37.42	June 24	3.14	July 1	4.78
Nov. 20	38.07	Jan. 5, 1965	35.31	July 15	4.27	July 22	4.30
Dec. 20	37.75	Feb. 4	36.83	Aug. 26	4.37	Aug. 25	4.04
Jan. 20, 1963	35.39	Feb. 24	36.89	Sept. 30	6.90	Sept. 29	7.17
Feb. 20	37.05	Mar. 30	36.13	Oct. 28	8.90	Oct. 21	8.53
Mar. 20,	37.77	Apr. 27	33.37	Nov. 25	10.38	Nov. 3	11.05
Apr. 20	35.98	May 26	33.09	Dec. 16	11.83	Jan. 6, 1965	11.47
May 20	35.07	June 24	32.77	Feb. 6, 1961	13.43	Feb. 4	12.24
June 20	34.34	Aug. 5	35.62	Mar. 31	14.26	Feb. 24	12.64
July 20	35.59	Sept. 1	36.14	May 2	14.42	Mar. 30	13.51
Aug. 20	36.78	Oct. 1	36.20	June 2	5.07	Apr. 27	14.21
Sept. 20	37.52	Oct. 27	36.75	Aug. 10	4.46	May 27	6.41
Oct. 20	37.76	Nov. 29	37.17	Sept. 1	5.43	June 30	3.84
Nov. 20	37.98	Jan. 3, 1966	35.21	Oct. 30	10.65	Aug. 4	4.18
Dec. 20	35.81	Feb. 2	36.70	Dec. 1	11.83	Sept. 1	4.77
Jan. 26, 1964	37.56	Feb. 24	37.53	Jan. 31, 1962	13.44	Sept. 29	7.48
Feb. 27	38.20	Mar. 30	37.45	Mar. 2	14.33	Oct. 27	10.07
Apr. 1	37.89	Apr. 28	36.18	Apr. 2	14.91	Nov. 29	11.17
Apr. 28	36.44	May 26	35.74	May 2	13.64	Jan. 3, 1966	12.27
May 20	33.46	June 29	35.91	June 4	5.67	Feb. 2	13.38
June 30	32.19	July 28	37.19	July 2	3.82	Feb. 24	13.96
July 22	34.29	Aug. 26	38.01	July 30	3.40	Mar. 8	13.12
B-6-20-19cc. Ravalli County Fairgrounds. Dug and				Aug. 27	4.38	Mar. 30	14.30
driven irrigation water-table well in alluvium, diame-				Sept. 24	5.84	Apr. 28	13.20
ter 48 inches to 3/4 inch, depth 20 feet. MP top of				Oct. 1	6.43	May 26	5.58
3/4-inch pipe, 0.6 foot above lsd and 3,559.6 feet				Nov. 5	9.85	June 29	4.66a
above msl. Highest water level 3.14 below lsd, June 24,				Dec. 31	11.76	July 28	5.11
1960; lowest 16.01 below lsd, Apr. 28, 1964. Records				Jan. 28, 1963	12.80	Aug. 26	5.11
available: 1956-66.				Mar. 4	13.30	Sept. 7	4.86
May 7, 1956	11.66	July 3, 1957	4.60	Apr. 3	14.20	a - pumping	
June 5	6.19	Aug. 13	5.71	B-9-20-21ad1. Dan Shea. Drilled water-table well			
July 5	5.73	Sept. 12	6.33	in alluvium underlying river terrace, diameter 4 inches,			
Aug. 10	4.64	Oct. 2	7.67	depth 32.2 feet, cased with pipe. MP top of casing 0.8			
Aug. 28	4.90	Nov. 6	11.13	foot above lsd and 3,308.8 feet above msl. Highest			
Oct. 3	7.45	Dec. 3	12.32	water level 2.95 below lsd, June 29, 1964; lowest 27.99			
Nov. 6	10.88	Jan. 6, 1958	13.46	below lsd, Apr. 1, 1961. Records available 1956-66.			
Dec. 5	12.33	Feb. 11	14.55	Jan. 5, 1956	18.84	Oct. 1, 1956	12.21
Jan. 3, 1957	13.60	Mar. 3	14.95	Feb. 1	20.50	Nov. 1	13.22
Feb. 14.11		Apr. 3	15.47	Mar. 1	22.81	Dec. 1	17.63
Apr. 8	14.93	May 30	8.61	Apr. 1	19.69	Jan. 1, 1957	22.50
May 2	15.51	June 28	5.77	May 8	18.89	Feb. 2	25.35
June 3	8.33	July 25	5.90	June 7	3.19	Mar. 1	25.44
				July 1	4.53	Apr. 1	25.25
				Aug. 1	8.53	May 1	22.45
				Sept. 1	10.00	June 1	4.84

Date	Water level	Date	Water level	Date	Water level	Date	Water level
B-13-20-14ac--Continued				B-14-21-24db--Continued			
Dec. 17, 1962	17.28	Sept. 25, 1964	12.50	Nov. 20, 1959	15.99	Nov. 17, 1960	19.44
Dec. 24	17.67	Oct. 26	14.58	Nov. 27	16.20	Dec. 1	20.34
Dec. 31	17.99	Nov. 23	16.53	Dec. 3	17.32	Dec. 8	20.67
Jan. 1, 1963	18.04	Dec. 28	17.90	Dec. 10	17.63	Dec. 15	21.07
Feb. 4	19.23	Jan. 25, 1965	18.93	Dec. 17	18.00	Mar. 17, 1961	26.79
Mar. 1	19.38	Feb. 23	19.55	Dec. 24	18.36	Mar. 30	27.49
Apr. 1	19.83	Mar. 22	19.46	Dec. 31	18.83	Apr. 20	27.68
May 1	20.05	Apr. 24	18.70	Jan. 7, 1960	19.45	May 1	28.29
June 1	15.05	May 28	14.80	Jan. 14	19.72	June 1	26.16
July 1	13.92	June 25	12.00	Jan. 21	20.25	July 3	19.30
July 30	12.25	July 24	12.44	Jan. 28	20.45	Aug. 3	18.35
Sept. 6	10.68	Aug. 21	11.70	Feb. 4	20.76	Aug. 31	18.78
Oct. 7	13.87	Sept. 25	13.42	Feb. 11	21.22	Oct. 5	21.30
Oct. 31	15.44	Oct. 22	14.70	Feb. 18	21.34	Nov. 6	24.48
Nov. 26	16.82	Nov. 22	15.60	Feb. 25	21.60	Dec. 7	28.10
Dec. 30	18.56	Dec. 20	17.26	Mar. 3	21.84	Jan. 3, 1962	28.48
Jan. 29, 1964	19.56	Jan. 19, 1966	18.25	Mar. 10	22.53	Feb. 1	30.05
Feb. 24	17.21	Feb. 21	19.12	Mar. 17	22.28	Mar. 1	30.24
Mar. 27	20.69	Mar. 24	18.80	Mar. 24	21.11	Apr. 3	28.88
Apr. 27	21.05	Apr. 21	17.94	Mar. 31	20.81	May 2	29.34
May 29	18.70	May 20	15.34	Apr. 7	20.87	June 4	23.37
June 29	11.10	June 30	12.22	Apr. 14	21.02	July 16	17.84
July 31	11.82	July 23	12.91	Apr. 21	20.92	July 31	17.89
Aug. 21	11.90	Sept. 6	11.54	Apr. 28	21.11	Aug. 7	17.24
B-14-21-24db. John Hartwig. Dug and driven observation water-table well in alluvium, diameter 36 inches to 3/4-inch pipe, depth 33.4 feet. MP top of casing 0.9 foot above lsd. Highest water level 7.48 below lsd, July 30, 1959; lowest 30.24 below lsd, Mar. 1, 1962. Records available: 1958-66.				B-14-21-24db--Continued			
May 26, 1958	19.69	Feb. 19, 1959	21.96	May 5	21.30	Aug. 17	17.30
May 29	17.43	Feb. 26	22.20	May 12	21.40	Aug. 28	18.61
June 5	15.94	Mar. 5	21.94	May 21	21.03	Oct. 1	21.50
June 12	14.66	Mar. 12	22.02	May 26	20.31	Nov. 5	24.69
June 19	13.37	Mar. 19	21.23	June 2	17.09	Dec. 4	26.37
June 27	15.68	Mar. 26	20.24	June 9	14.54	Jan. 2, 1963	28.04
July 3	16.08	Apr. 2	19.50	June 16	11.99	Feb. 4	29.02
July 10	16.24	Apr. 9	20.31	June 23	10.22	Feb. 27	30.02
July 17	16.60	Apr. 16	20.42	June 30	10.83	Apr. 1	30.08
July 24	15.22	Apr. 23	20.49	July 7	9.44	May 1	30.18
July 31	13.60	Apr. 30	20.63	July 14	8.50	May 14	29.70
Aug. 7	12.27	May 7	20.28	July 21	9.52	June 3	22.26
Aug. 14	12.62	May 13	20.41	July 28	10.55	July 1	20.48
Aug. 21	13.88	May 20	19.15	Aug. 4	10.62	July 30	19.33
Aug. 28	14.33	May 28	19.64	Aug. 11	10.62	Sept. 4	15.57
Sept. 4	14.24	June 4	19.35	Aug. 18	11.61	Oct. 7	20.97
Sept. 11	12.25	June 11	17.86	Aug. 25	12.61	Nov. 1	23.60
Sept. 18	13.62	June 18	12.47	Sept. 1	13.25	Nov. 29	26.03
Sept. 24	13.79	June 25	10.59	Sept. 8	13.90	Jan. 2, 1964	27.67
Oct. 1	14.84	July 2	10.33	Sept. 15	14.47	Jan. 30	29.55
Oct. 9	15.08	July 9	10.98	Sept. 22	15.08	Mar. 2	29.60
Oct. 16	16.18	July 16	9.12	Sept. 29	15.69	Mar. 30	29.67
Oct. 23	17.12	July 23	9.44	Oct. 6	16.26	Sept. 18	19.15
Oct. 29	17.91	July 30	7.48	Oct. 13	16.90	Mar. 4, 1965	28.02
Nov. 6	18.42	Aug. 6	9.84	Oct. 20	17.43	Sept. 2	17.38
Nov. 13	18.86	Aug. 13	10.66	Oct. 27	17.94	Mar. 7, 1966	28.95
Nov. 20	19.41	Aug. 20	10.33	Nov. 9	18.84	Sept. 6	16.10
Nov. 28	19.99	Aug. 27	10.54	<u>Petroleum County</u>			
Dec. 4	20.18	Sept. 3	10.90	A-14-27-6cb. Kenneth Cole. Drilled irrigation water-table well in alluvium, diameter 5 inches, depth 40 feet, steel casing to 30 feet. MP top of casing, 1.60 feet below lsd. Records available: 1965-66.			
Dec. 11	20.39	Sept. 10	11.19	May 13, 1965	8.01	Sept. 14	9.42
Dec. 18	20.65	Sept. 17	11.77	May 26, 1966	8.34		
Dec. 24	20.88	Sept. 24	12.62	<u>Phillips County</u>			
Dec. 31	21.11	Oct. 1	12.95	A-31-34-8ca. W. D. Miller. Drilled unused water-table well in alluvium, diameter 5 inches, depth 15 feet, cased with steel pipe. MP top of casing, 1.70 feet above lsd. Highest water level 0.40 below lsd, July 18, 1963; lowest 6.90 below lsd, March 11, 1953. Records available: 1947-66.			
Jan. 8, 1959	21.36	Oct. 9	11.82				
Jan. 15	21.70	Oct. 15	13.57				
Jan. 22	21.76	Oct. 22	14.33				
Jan. 29	21.63	Oct. 29	13.82				
Feb. 5	21.52	Nov. 5	15.06				
Feb. 12	21.73	Nov. 12	15.52				

Date	Water level	Date	Water level	Date	Water level	Date	Water level
A-28-57-28dd--Continued'				D-2-23-29bd--Continued			
Aug. 28, 1961	23.81	Apr. 20, 1964	23.66	July 27, 1964	7.22	Aug. 23, 1965	5.79
Sept. 11	23.99	May 11	24.13	Aug. 24	5.76	Sept. 20	6.25
Oct. 9	23.65	June 10	23.95	Sept. 24	4.67	Oct. 18	6.90
Nov. 6	23.99	July 14	22.94	Oct. 27	5.57	Oct. 21	6.98
Jan. 30, 1962	24.19	Aug. 11	23.43	Nov. 22	6.92	Nov. 16	7.65
Feb. 28	24.33	Sept. 21	23.28	Dec. 28	8.19	Jan. 20, 1966	10.03
Apr. 5	24.08	Oct. 22	23.01	Jan. 20, 1965	9.02	Feb. 23	11.23
Apr. 30	24.08	Nov. 24	22.74	Feb. 18	9.99	Mar. 25	11.85
May 14	24.14	Dec. 28	23.09	Mar. 30	11.25	Apr. 21	12.51
June 20	24.08	Jan. 25, 1965	23.16	Apr. 29	11.81	May 25	12.45
July 9	24.13	Feb. 24	23.20	May 26	12.00	June 30	9.17
Aug. 29	24.44	Mar. 22	23.44	June 28	10.73	July 25	6.14
Oct. 1	24.55	Apr. 27	22.82	July 29	7.38	Aug. 24	4.21
Nov. 6	24.50	May 28	22.07				
Dec. 3	24.35	June 22	21.62				
Jan. 2, 1963	24.32	July 20	21.26	<u>Sweet Grass County</u>			
Jan. 30	24.19	Aug. 24	21.32	A-4-14-14ba. Spike Van Cleave. Dug domestic water-table well in alluvium, diameter 30 inches, depth 16 feet, cribbed with stone. MP top of plank curb 2.0 feet above lsd prior to Apr. 1965; top of concrete curb 1.2 feet above lsd from Apr. 1965 to Apr. 1966; top of new cover 2.0 feet above lsd after Apr. 1966. Highest water level 3.58 below lsd, June 13 and July 28, 1964; lowest 15.19 below lsd, Mar. 28, 1962. Records available: 1947-66			
Feb. 19	24.55	Sept. 28	21.32	Feb. 2, 1961	14.76	Feb. 27, 1964	14.36
Mar. 18	24.46	Oct. 25	22.46	Mar. 2	14.63	Mar. 26	14.53
Apr. 2	24.47	Nov. 23	21.12	Mar. 28	12.74	Apr. 28	14.13
May 20	24.41	Dec. 21	21.09	Apr. 28	12.51	May 26	5.87
July 1	24.48	Jan. 25, 1966	20.93	May 25	11.45	June 13	3.58
Aug. 2	24.25	Feb. 25	21.01	June 27	7.26	June 28	4.87
Sept. 24	23.95	Mar. 20	21.18	July 26	9.41	July 28	3.58
Oct. 21	23.56	Apr. 18	21.11	Aug. 29	10.52	Aug. 25	6.00
Nov. 5	23.70	May 17	21.15	Sept. 27	10.44	Sept. 27	11.15
Nov. 12	24.17	June 20	20.95	Nov. 1	10.53	Oct. 23	10.48
Dec. 31	23.41	July 6	21.13	Jan. 5, 1962	13.56	Nov. 22	13.12
Jan. 28, 1964	23.10	July 19	21.03	Feb. 2	13.63	Dec. 23	13.69
Feb. 18	24.12	Aug. 22	21.21	Mar. 1	14.11	Jan. 20, 1965	13.84
Mar. 17	24.21			Mar. 28	15.19	Feb. 17	14.23
<u>Rosebud County</u>				Apr. 25	14.06	Mar. 31	14.46
A-12-44-18dd. Rosebud County School Board. Drilled unused artesian well in Fort Union Formation, depth 141 feet, cased with pipe. MP bottom of square hole in pump 1.80 feet above lsd. Records available: 1965-66.				May 30	4.77	Apr. 13	11.56
May 14, 1965	124.92	Sept. 13, 1966	122.05	June 26	10.02	May 13	10.19
May 24, 1966	121.68			Aug. 1	6.03	June 28	6.50
<u>Stillwater County</u>				Aug. 30	9.56	July 29	8.65
D-2-23-29bd. Alvin Southworth. Drilled domestic water-table well in alluvium, diameter 6 inches, depth 24 feet, cased with steel pipe. MP top of casing 0.25 foot above lsd. Highest water level 2.73 below lsd, Sept. 23, 1949; lowest 12.93 below lsd, June 20, 1957. Records available: 1947-66.				Sept. 25	12.28	Aug. 24	6.02
Jan. 14, 1961	8.56	Sept. 24, 1962	6.09	Nov. 1	13.62	Sept. 20	8.77
Feb. 11	9.52	Nov. 2	6.66	Nov. 28	12.94	Oct. 18	9.69
Mar. 11	10.31	Dec. 26	8.64	Dec. 27	13.58	Nov. 17	12.85
Mar. 27	10.75	Mar. 1, 1963	10.75	Mar. 1, 1963	14.22	Dec. 23	13.58
Apr. 9	10.93	Mar. 26	11.93	Mar. 27	14.47	Jan. 19, 1966	14.05
May 10	10.64	May 27	11.55	May 28	13.94	Feb. 25	14.56
June 5	9.52	June 24	9.59	June 25	4.26	Mar. 25	14.54
July 13	5.63	Aug. 1	6.08	July 31	5.41	Apr. 21	13.37
Aug. 28	4.05	Sept. 24	4.60	Sept. 25	10.44	May 25	9.70
Sept. 26	3.80	Oct. 31	5.35	Oct. 31	12.78	June 28	7.29
Nov. 2	5.83	Dec. 27	8.00	Nov. 27	10.61	July 25	6.59
Nov. 27	7.22	Jan. 27, 1964	9.22	Dec. 30	13.51	Aug. 24	11.23
Mar. 27, 1962	10.91	Feb. 24	10.12	Jan. 30, 1964	14.06		
Apr. 27	11.67	Mar. 26	11.01	<u>Toole County</u>			
May 31	10.74	Apr. 27	11.73	B-36-2-8cc. Cloyd Hannon. Dug domestic and stock water-table well in alluvium, diameter 4 feet, depth 17 feet, cribbed with wood. MP top of platform, 1.00 foot above lsd. Highest water level 1.43 below lsd, June 6, 1953; lowest 10.89 below lsd, Dec. 18, 1961. Records available: 1947-66.			
June 25	10.30	May 25	12.19				
Aug. 2	6.51	June 14	12.23				
Aug. 31	5.85	June 30	10.11				

Date	Water level	Date	Water level	Date	Water level	Date	Water level
D-1-26-9bb--Continued				D-1-26-9dd--Continued			
Nov. 21, 1963	12.62	Aug. 24, 1964	11.68	May 17, 1965	13.19	Oct. 16, 1965	12.33
Dec. 5	12.78	Sept. 25	11.98	May 24	12.81	Oct. 27	12.46
Dec. 24	12.94	Oct. 26	12.30	June 2	12.82	Nov. 1	12.49
Jan. 6, 1964	12.98	Nov. 23	12.57	June 7	12.75	Nov. 12	12.55
Jan. 20	13.06	Dec. 28	12.80	June 14	12.54	Nov. 15	12.64
Feb. 10	13.17	Jan. 21, 1965	12.83	June 21	12.54	Nov. 23	12.70
Feb. 24	13.22	Feb. 23	13.10	July 12	12.34	Nov. 29	12.67
Mar. 9	13.27	Mar. 1	12.58	July 19	12.18	Dec. 8	11.30
Mar. 23	13.32	Mar. 8	13.14	July 26	12.02	Dec. 17	12.83
Apr. 6	13.16	Mar. 15	13.20	Aug. 2	11.92	Dec. 30	12.92
Apr. 20	11.93	Mar. 22	13.23	Aug. 10	11.82	Jan. 11, 1966	12.99
May 11	11.77	Mar. 29	13.25	Aug. 16	11.93	Jan. 27	13.08
May 23	12.27	Apr. 5	13.25	Aug. 26	11.30	Feb. 7	13.13
June 8	12.07	Apr. 26	13.25	Aug. 27	11.37	Feb. 21	13.22
June 22	11.30	May 3	13.26	Aug. 31	11.59	Mar. 28	13.24
July 7	11.54	May 5	13.29	Sept. 7	11.52	May 31	12.39
July 23	11.71	May 7	12.34	Sept. 20	11.62	July 15	11.57
Aug. 9	11.69	May 10	13.08	Sept. 27	11.37	Sept. 23	11.76

Date	Water level	Date	Water level	Date	Water level	Date	Water level
B-36-2-8cc--Continued				A-27-45-34dd--Continued			
Jan. 17, 1961	9.21	Dec. 16, 1963	8.67	Aug. 13, 1962	12.89	Jan. 20, 1964	13.47
Feb. 27	9.26	Feb. 10, 1964	9.01	Aug. 17	10.87	Oct. 10	12.77
Apr. 20	9.28	Apr. 24	5.11	Aug. 25	10.37	June 10, 1965	12.69
June 19	8.56	May 6	2.17	Aug. 29	10.36	Aug. 17	12.53
Aug. 19	9.73	May 11	2.33	Sept. 21	10.66	Nov. 13	12.10
Sept. 22	10.21	June 8	3.46	Nov. 1	11.24	Mar. 30, 1966	12.26
Oct. 21	10.51	July 19	4.80	Mar. 29, 1963	12.69	May 25	12.42
Dec. 18	10.89	Sept. 19	7.45	July 4	13.37	Aug. 4	11.75
Feb. 16, 1962	7.59	Nov. 19	8.29	Nov. 19	13.25		
May 19	5.56	Jan. 12, 1965	8.80				
July 14	6.07	Feb. 20	6.22				
Sept. 15	8.06	Apr. 1	3.80				
Oct. 4	8.46	June 12	3.52				
Nov. 16	9.08	July 17	2.21				
Jan. 15, 1963	9.56	Sept. 3	4.84				
Feb. 6	8.35	Oct. 22	5.43				
Apr. 19	5.54	Nov. 1	5.52				
June 16	7.23	Dec. 14	5.87				
Aug. 12	6.09	Feb. 15, 1966	7.09				
Aug. 28	6.53	Apr. 1	6.66				
Oct. 18	7.74	May 20	3.82				
Nov. 22	8.35	July 27	3.19				

Valley County

A-26-45-8dd. U. S. Geol. Survey. Drilled observation water-table well in alluvium, diameter 3/4 inch, depth 42.0 feet, cased with pipe. MP top of casing 0.7 foot above lsd and 2,012.8 feet above msl. Highest water level 6.91 below lsd, May 24, 1966; lowest 15.10 below lsd, July 20, 1962. Records available: 1962-66.

July 20, 1962	15.10	Jan. 20, 1964	10.41
July 25	9.79	Oct. 10	9.82
Aug. 25	9.79	June 10, 1965	8.79
Aug. 29	9.74	Aug. 17	9.47
Sept. 21	9.78	Nov. 12	9.37
Oct. 31	10.45	Mar. 30, 1966	8.94
Mar. 29, 1963	10.19	May 24	6.91
July 4	11.07	Aug. 4	8.50
Nov. 19	11.10		

A-27-45-31dd. U. S. Geol. Survey. Drilled observation water-table well in alluvium, diameter 3/4 inch, depth 30.1 feet, cased with pipe. MP top of casing 2.90 feet above lsd and 2,030.3 feet above msl. Highest water level 12.03 below lsd, Aug. 21, 1962; lowest 18.16 below lsd, Mar. 29, 1963. Records available: 1962-66.

Aug. 21, 1962	12.03	Oct. 10, 1964	17.85
Aug. 24	14.49	June 10, 1965	17.61
Aug. 29	15.20	Aug. 17	17.55
Sept. 21	15.55	Nov. 12	17.59
Oct. 31	14.37	Mar. 30, 1966	18.00
Mar. 29, 1963	18.16	May 24	18.11
July 4	17.25	Aug. 4	17.20
Nov. 19	16.54		
Jan. 20, 1964	17.54		

A-27-45-34dd. U. S. Geol. Survey. Drilled observation water-table well in alluvium, diameter 3/4 inch, depth 23.4 feet, cased with plastic pipe. MP 0.6 foot above lsd and 2,015.7 feet above msl. Highest water level 10.36 below lsd, Aug. 29, 1962; lowest 13.47 below lsd, Jan. 20, 1964. Records available: 1962-66.

A-34-40-1aa. Owner unknown. Dug domestic and stock water-table well in glacial moraine, diameter 24 inches, depth unknown, cased with wood. MP top of board cover at lsd. Records available: 1965-66.

June 2, 1965	26.58	Sept. 13, 1966	26.12
May 25, 1966	26.18		

Wibaux County

A-11-57-17abl. Union Texas Petroleum. Drilled unused artesian well in Fox Hills Sandstone and Hell Creek Formation, diameter 8 inches, depth 1,100 feet, cased with pipe. MP top of casing 0.80 foot above lsd and 2,633.8 feet above msl. Highest water level 81.73 below lsd, Nov. 6, 1964 and May 27, 1965; lowest 82.80 below lsd, June 24, 1963. Records available: 1962-66.

Oct. 12, 1962	82.71	Aug. 24, 1964	82.47
Nov. 21	82.70	Nov. 6	81.73
Dec. 13	82.49	May 27, 1965	81.73
Mar. 26, 1963	82.17	July 12	82.08
June 24	82.80	Aug. 31	82.13
July 25	82.59	Oct. 27	82.20
Aug. 27	82.65	May 5, 1966	82.35
Oct. 1	82.77	July 7	82.34
Mar. 17, 1964	82.48	Sept. 13	81.85
July 14	81.75		

Yellowstone County

D-1-26-9bb. U. S. Geol. Survey. Augered observation water-table well in terrace deposits, diameter 3/4 inch, depth 15 feet, cased with steel pipe. MP top of casing, 0.90 foot above lsd and 3,147.9 feet above msl. Highest water level 10.48 below lsd, May 23, 1962; lowest 13.43 below lsd, Mar. 13, 1963. Records available: 1962-66.

May 11, 1962	11.33	Feb. 27, 1963	13.40
May 23	10.48	Mar. 13	13.43
June 8	10.92	Mar. 22	13.33
June 25	11.28	Apr. 8	13.34
July 9	10.73	Apr. 23	13.34
July 25	10.97	May 8	13.23
Aug. 8	11.22	May 23	12.79
Aug. 24	11.49	June 7	12.54
Sept. 7	12.20	June 24	12.55
Sept. 26	12.62	July 8	12.57
Oct. 8	12.74	July 25	11.91
Oct. 26	12.90	Aug. 16	11.69
Nov. 7	13.02	Aug. 23	11.58
Nov. 26	13.19	Sept. 11	11.90
Dec. 13	13.29	Sept. 23	12.10
Dec. 20	13.31	Oct. 7	12.40
Jan. 21, 1963	13.38	Oct. 22	12.48
Feb. 8	13.18	Nov. 7	12.42

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