

Table 5.--Selected well logs, Parke County--Continued

Well 16/7W-6N1

Type of record: Driller's log.

Altitude: About 660 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	44	44	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, sandy, gray-----	16	60	
Sandstone, fine, dense, gray----	10	70	
Sandstone, gray, with streaks of slate-----	10	80	
Limestone, broken, gray-----	8	88	W. B.

Well 16/7W-8L1

Type of record: Driller's log.

Altitude: About 660 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	7	7	
Sand, glacial drift-----	12	19	
Clay, blue-----	8	27	
Sand and gravel-----	1	28	W. B.

Well 16/7W-9F1

Type of record: Driller's log.

Altitude: About 710 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil, sandy-----	10	10	
Sand-----	5	15	W. B.
Gravel and sand-----	5	20	W. B.
Sand and gravel-----	10	30	W. B.
Shale, blue-----	5	35	Clay?
Shale, soft, muddy-----	5	40	Do
Shale, sandy-----	5	45	Do
Sand and gravel-----	5	50	W. B.
Gravel-----	5	55	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, black-----	15	70	
Coal-----	5	75	
Shale, black-----	10	85	
Shale-----	60	145	
Shale and soft sandstone-----	5	150	
Shale, hard, dark-----	20	170	
Shale and coal-----	5	175	
Sandstone, shaly, and some soft sandstone-----	5	180	
Sandstone, soft-----	4	184	
Sandstone, coarse, soft-----	6	190	

Table 5.--Selected well logs, Parke County--Continued

Well 16/7W-9F1--Continued			
Material	Thick- ness (feet)	Depth (feet)	Remarks
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, fine-----	5	195	W. B.
Sandstone, fine, harder-----	5	200	W. B.
Sandstone and shale-----	5	205	
Sandstone, coarse-----	15	220	
Sandstone and shale-----	5	225	
Sandstone, fine, harder-----	5	230	
Sandstone, fine-----	15	245	W. B.
Sandstone, coarse, white-----	5	250	
Sandstone, coarse, white, and shale-----	5	255	
Sandstone, coarse, white-----	5	260	

Well 16/7W-9L1			
Type of record: Driller's log.		Altitude: About 700 feet.	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	8	8	
Clay, gray-----	24	32	
Clay, sandy-----	30	62	
Pennsylvanian System:			
Middle? Pennsylvanian Series:			
Shale, gummy-----	18	80	
Sandstone-----	5	85	W. B.
Lower Series:			
Limestone-----	20	105	W. B.
Shale, dark-----	25	130	
Sandstone and shale, white-----	15	145	
Limestone, brown-----	13	158	W. B.
Shale, dark-----	12	170	
Sandstone, clean, light-----	7	177	W. B.
Sandstone, fine, white, with trace of shale-----	33	210	
Limestone, clear-grained-----	15	225	W. B.
Limestone, hard, brown-----	2	227	
Limestone, black-----	1	228	
Limestone, brown, with streaks of shale and sandstone-----	12	240	

Well 16/7W-15E1			
Type of record: Driller's log.		Altitude: About 765 feet.	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	14	14	
Clay, sandy, soft, blue-----	53	67	

Table 5.--Selected well logs, Parke County--Continued

Well 16/7W-15E1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand and gravel-----	.5	67.5	W. B.
Hardpan, blue, with gravel-----	29.5	97	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, yellow, and sticky clay-----	6	103	
Shale, dense, hard, pearl-gray--	12	115	
Sandstone, medium-fine, blue----	30	145	
Slate, dense, hard, blue-----	20	165	
Slate, broken-----	4	169	Cavity
Shale, limy, blue-----	5.5	174.5	
Slate, black-----	15.5	190	
Shale, sticky, blue-----	40	230	
Sandstone, medium-fine, gray----	40	270	W. B.

Well 16/7W-15R1

Type of record: Driller's log. Altitude: About 745 feet.

Dug well-----	18	18	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	52	70	
Hardpan, brown-----	30	100	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Slate, brown-----	5	105	
Coal-----	5	110	
Fire clay-----	8	118	
Sandstone, white-----	77	195	W. B.

Well 16/7W-16L1

Type of record: Driller's log. Altitude: About 750 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Soil-----	2	2	
Clay, yellow-----	14	16	
Clay, blue-----	30	46	
Gravel, cemented, and large boulders-----	89	135	
Clay, hard, blue, and sand-----	11	146	
Gravel, coarse, gray-----	2	148	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 16/7W-17F1

Type of record: Driller log.

Altitude: About 665 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and yellow clay-----	10	10	
Clay, sandy, blue-----	50	60	
Clay, blue-----	11	71	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, blue-----	4	75	
Slate, gray-----	16	91	
Sandstone, gray-----	11	102	W. B.

Well 16/7W-19J1

Type of record: Driller's log.

Altitude: About 725 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Clay, blue-----	62	80	
Clay, muddy, blue, contains trash, rotten wood-----	70	150	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	50	200	
Sandstone, fine, sharp, dense, blue-----	20	220	W. B.

Well 16/7W-19N1

Type of record: Driller's log.

Altitude: About 715 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Clay, blue, and sand-----	62	80	
Quicksand, gray-----	10	90	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, gray-----	25	115	
Coal-----	5	120	W. B.
Fire clay-----	4	124	
Limestone, gray-----	16	140	W. B.

Well 16/7W-20L1

Type of record: Driller's log.

Altitude: About 740 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	22	22	
Clay, blue-----	64	86	

Table 5.--Selected well logs, Parke County--Continued

Well 16/7W-26Q1

Type of record: Driller's log.

Altitude: About 630 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	5	5	
Clay, gummy, yellow-----	13	18	
Hardpan, gravelly, yellow-----	10	28	
Sand and gravel, yellow-----	9	37	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, dense, gray-----	11	48	

Well 16/7W-29E1

Type of record: Driller's log.

Altitude: About 725 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	15	15	
Clay, blue, and sand-----	65	80	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Fire clay-----	4	84	
Slate, gray-----	2	86	
Coal-----	5	91	
Shale, blue-----	2	93	
Slate, blue-----	6	99	
Coal-----	5	104	W. B.

Well 16/7W-29Q1

Type of record: Driller's log.

Altitude: About 685 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil and yellow clay-----	6	6	
Clay with boulders and sand-----	5	11	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, blue-----	9	20	
Limestone, shaly, hard, white---	30	50	
Sandstone, gray, and fire clay--	5	55	W. B.
Shale, limy-----	30	85	
Slate, hard, flinty, fractured, black-----	5	90	W. B.
Limestone, soft, gray to white--	4	94	

Table 5.--Selected well logs, Parke County--Continued

Well 16/7W-30F1

Type of record: Driller's log.

Altitude: About 710 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Fill-----	4	4	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	14	18	
Clay, blue, and sand-----	22	40	
Sand-----	1	41	W. B.
Hardpan, sandy, light-gray-----	59	100	
Muck, soft, blue, contains leaves and sticks-----	51	151	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, weathered, white-----	2	153	
Limestone with streaks of sandstone-----	7	160	
Shale, hard, blue-----	18	178	
Coal, very hard-----	7	185	
Fire clay, plastic, white-----	11	196	
Limestone, black-----	1	197	Gas, W. B.

Well 16/7W-30N1

Type of record: Driller's log.

Altitude: About 700 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	2	2	
Clay, yellow-----	16	18	
Clay, blue-----	62	80	
Hardpan, gravelly-----	19	99	
Gravel and sand-----	1	100	W. B.

Well 16/7W-32H1

Type of record: Driller's log.

Altitude: About 695 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	49	49	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, yellow-----	4	53	
Sandstone, white-----	27	80	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 16/7W-33D1

Type of record: Driller's log.

Altitude: About 700 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay-----	18	18	
Glacier washout-----	20	38	Glacial outwash?
Hardpan-----	6	44	
Sand and gravel-----	3	47	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, sandy-----	13	60	
Sandstone-----	23	83	W. B.

Well 16/7W-33N1

Type of record: Driller's log.

Altitude: About 700 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and yellow clay-----	14	14	
Clay, sandy, gray-----	36	50	
Gravel, coarse-----	4	54	W. B.
Hardpan, blue-----	16	70	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	10	80	
Coal-----	4	84	
Shale, limy, blue-----	18	102	

Well 16/7W-35Q1

Type of record: Driller's log.

Altitude: About 585 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	14	14	
Gravel, dirty-----	15	29	
Gravel, coarse, clean-----	5	34	

Well 16/8W-1E1

Type of record: Driller's log.

Altitude: About 670 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil-----	4	4	
Clay, yellow-----	14	18	
Clay, blue-----	32	50	
Hardpan, blue-----	61	111	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, blue-----	4	115	
Sandstone, white-----	24	139	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-2M1

Type of record: Driller's log. Altitude: About 675 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	1	1	
Clay, yellow-----	21	22	
Clay, blue-----	48	70	
Clay, gravelly, blue-----	10	80	
Gravel, coarse-----	1	81	W. B.

Well 16/8W-7Q1

Type of record: Driller's log. Altitude: About 530 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Surface-----	2	2	
Sand and gravel-----	94	96	Dry
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, gray-----	4	100	
Shale, sandy, gray-----	43	143	
Coal-----	.5	143.5	
Shale, sandy, gray-----	9.5	153	
Coal-----	.5	153.5	
Shale, sandy, gray-----	39.5	193	

Well 16/8W-7Q2

Type of record: Driller's log. Altitude: About 530 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Surface-----	4	4	
Gravel, sandy-----	40	44	Dry
Pan-----	100	144	
Gravel-----	5	149	W. B.

Well 16/8W-8N1

Type of record: Driller's log. Altitude: About 605 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, red-----	20	20	
Sand-----	10	30	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Fire clay-----	34	64	
Shale-----	176	240	
Limestone-----	45	285	

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-10Q1

Type of record: Driller's log.

Altitude: About 660 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	2	2	
Clay, yellow-----	20	22	
Clay, sandy, blue-----	68	90	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, gray-----	20	110	
Slate, gray-----	90	200	
Slate, gray, with streaks of sandstone-----	15	215	

Well 16/8W-11A1

Type of record: Driller's log.

Altitude: About 650 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	14	14	
Clay, blue-----	28	42	
Sand, gray-----	1	43	
Hardpan, blue-----	27	70	Oily
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	26	96	
Sandstone, gray-----	12	108	
Shale, blue-----	52	160	
Sandstone, white-----	10	170	W. B.
Shale, gray-----	26	196	
Sandstone, gray-----	14	210	W. B.
Fire clay, soft, white-----	16	226	
Sandstone, coarse, gray-----	11	237	
Mississippian System:			
Meramec Series:			
Limestone, coarse, soft, gray---	14	251	
Fire clay, hard, white-----	2	253	

Well 16/8W-12D3

Type of record: Driller's log.

Altitude: About 640 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Old well-----	15	15	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, sandy, blue-----	45	60	
Sand grading to gravel-----	10	70	W. B.
Gravel and sand-----	10	80	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-12R1

Type of record: Driller's log. Altitude: About 660 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	24	24	Oily
Clay, blue-----	26	50	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, sandy, blue-----	30	80	
Shale, blue-----	130	210	
Mississippian System:			
Meramec Series:			
Limestone, gray-----	12	222	W. B.

Well 16/8W-13E1

Type of record: Driller's log. Altitude: About 650 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, very soft, yellow-----	40	40	
Clay, soft, blue-----	24	64	
Clay, shaly, soft, blue-----	6	70	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Limestone, dense, gray-----	10	80	W. B.
Coal-----	2	82	
Fire clay, plastic, white-----	8	90	
Siltstone, brown-----	10	100	
Sandstone, fine, brown-----	10	110	

Well 16/8W-13F1

Type of record: Driller's log. Altitude: About 650 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Clay, blue, and sand-----	52	70	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, white-----	30	100	
Fire clay-----	10	110	
Shale, blue-----	30	140	

Well 16/8W-13J1

Type of record: Driller's log. Altitude: About 645 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow, and sand-----	10	10	W. B.
Clay, blue-----	64	74	
Gravel, coarse-----	2	76	

Table 5.--Selected well logs, P arke County--Continued

Well 16/8W-13L2

Type of record: Driller's log.

Altitude: About 650 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and white clay-----	2	2	
Clay, yellow-----	16	18	
Clay, sandy, blue-----	30	48	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	12	60	
Slate, blue-----	20	80	
Fire clay, sandy, white-----	10	90	
Sandstone, gray, with streaks of limestone-----	14	104	W. B.

Well 16/8W-13P1

Type of record: Driller's log.

Altitude: About 615 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow, and sand-----	21	21	
Clay, very hard, blue-----	29	50	
Gravel and sand-----	2	52	W. B.

Well 16/8W-13P3

Type of record: Driller's log.

Altitude: About 615 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil-----	1	1	
Clay, yellow-----	9	10	
Clay, soft, blue-----	40	50	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, white-----	21	71	W. B.

Well 16/8W-14D1

Type of record: Driller's log.

Altitude: About 610 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	21	21	
Sand, yellow-----	15	36	
Sand, coarser with depth, light-gray-----	14	50	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale-----	--	50	

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-14J1

Type of record: Driller's log. Altitude: About 630 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	15	15	
Clay, blue-----	40	55	
Mud, leaves, sticks-----	5	60	Odor
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	12	72	
Shale, limy-----	25	97	W. B.

Well 16/8W-16R1

Type of record: Driller's log. Altitude: About 650 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and yellow clay-----	18	18	
Sand, yellow-----	1	19	
Clay, blue-----	27	46	
Pennsylvanian System:			
Middle Pennsylvanian Series:			
Slate and shale-----	44	90	W. B.
Shale, hard, blue-----	10	100	

Well 16/8W-19E1

Type of record: Driller's log. Altitude: About 520 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and yellow clay-----	12	12	
Clay, light-brown-----	18	30	
Gravel, dirty, brown-----	1	31	
Pennsylvanian System:			
Middle? Pennsylvanian Series:			
Shale, hard, blue-----	17	48	
Siltstone, hard, white-----	22	70	W. B.
Sandstone, gray-----	26	96	W. B.
Lower? Pennsylvanian Series:			
Coal, hard-----	4	100	
Fire clay-----	2	102	
Sandstone-----	--	102	W. B.

Well 16/8W-19M1

Type of record: Driller's log. Altitude: About 510 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Surface-----	15	15	
Softpan, sandy-----	8	23	

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-19M1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Pennsylvanian System:			
Middle? Pennsylvanian Series:			
Shale, soft, light-----	4	27	W. B. 56 to 63 ft.
Shale, sandy, light-----	44	71	
Lower? Pennsylvanian Series:			
Slate, dark-----	.5	71.5	Salt water
Shale, black-----	28.5	100	
Sandstone, hard-----	8	108	
Shale, sandy, gray-----	30	138	
Shale, dark-gray-----	20	158	
Shale, sandy, light-----	4	162	
Shale, sandy, dark-----	11	173	
Sandstone, gray-----	3	176	
Shale, sandy, gray-----	11	187	
Shale, sandy, light-----	13	200	
Coal-----	1	201	
Shale, sandy, gray-----	5	206	
Sandstone, light-----	21	227	
Limestone-----	3	230	

Well 16/8W-20N1

Type of record: Driller's log.

Altitude: About 550 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow, and sand-----	21	21	
Hardpan, sandy, blue-----	39	60	
Hardpan, sandy-----	10	70	
Pennsylvanian System:			
Middle? Pennsylvanian Series:			
Limestone, gray-----	20	90	W. B.
Shale, gray-----	30	120	
Sandstone, white-----	15	135	
Shale, limy-----	15	150	

Well 16/8W-22Q1

Type of record: Driller's log.

Altitude: About 665 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow, and gravel-----	18	18	W. B.
Clay, blue-----	6	24	
Gravel-----	1	25	
Clay, blue, and gravel-----	9	34	

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-23K1

Type of record: Driller's log.

Altitude: About 615 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand and gravel-----	40	40	Dry
Sand, gray-----	14	54	W. B.
Hardpan-----	2	56	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Limestone, blue-----	4	60	
Shale, sandy-----	16	76	
Sandstone, white-----	10	86	W. B.
Shale, blue-----	4	90	

Well 16/8W-23P1

Type of record: Driller's log.

Altitude: About 620 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	6	24	
Limestone, blue-----	4	28	
Shale, cavy, light-gray-----	32	60	
Shale, sandy, light-----	10	70	
Limestone, white-----	25	95	
Slate, sandy, gray-----	15	110	
Shale, sandy-----	38	148	
Coal-----	5	153	
Fire clay, gray-----	22	175	
Shale, gray-----	15	190	
Coal-----	8	198	
Fire clay, gray-----	2	200	

Well 16/8W-24A2

Type of record: Driller's log.

Altitude: About 695 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	19	19	
Clay, blue-----	31	50	
Hardpan, hard, blue-----	20	70	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, yellow-----	10	80	
Shale, gray-----	4	84	
Sandstone, coarser with depth, gray to white-----	26	110	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-24F1

Type of record: Driller's log.

Altitude: About 640 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and clay-----	10	10	
Sand, yellow-----	16	26	
Clay, yellow-----	2	28	
Sand and gravel, gray-----	10	38	W. B.
Gravel, medium-coarse-----	6	44	W. B.

Well 16/8W-26J1

Type of record: Driller's log.

Altitude: About 715 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Hardpan, blue-----	78	96	
Gravel-----	3	99	W. B.

Well 16/8W-27D1

Type of record: Driller's log.

Altitude: About 670 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Surface clay-----	6	6	
Clay and sand-----	5.5	11.5	
Boulder clay-----	30.5	42	
Pennsylvanian System:			
Middle Pennsylvanian Series:			
Shale, bluish-gray-----	44	86	
Lower Pennsylvanian Series:			
Shale, blue-----	1.3	87.3	
Coal-----	.5	87.8	
Clay, blue-----	29.7	117.5	
Limestone-----	1.3	118.8	
Shale, blue-----	1	119.8	
Coal-----	.2	120	
Fire clay-----	2	122	

Well 16/8W-30E3

Type of record: Driller's log.

Altitude: About 520 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Sand and gravel-----	6	24	Dry
Clay, blue-----	11	35	
Clay, gritty, blue-----	5	40	
Shale, soft, broken-----	4	44	Boulder?
Clay, blue-----	14	58	

Table 5.--Selected well logs, Parke County--Continued

Well 16/8W-30E3--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Pennsylvanian System:			
Middle Pennsylvanian Series:			
Shale-----	--	58	

Well 16/8W-33F1

Type of record: Driller's log. Altitude: About 660 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow, and sand-----	37	37	
Clay, blue, and sand-----	10	47	
Sand and marl-----	2	49	
Clay, blue-----	3	52	
Pennsylvanian System:			
Middle Pennsylvanian Series:			
Sandstone, soft, white-----	8	60	
Sandstone, hard, brown-----	6	66	W. B.
Cavity-----	1	67	
Shale, white-----	1	68	

Well 16/8W-34H1

Type of record: Driller's log. Altitude: About 720 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	12	12	
Hardpan, blue-----	48	60	
Sand-----	3	63	W. B.
Clay, blue-----	13	76	
Clay, gravelly, blue-----	7	83	W. B.
Sand-----	3	86	W. B.
Pennsylvanian System:			
Middle? Pennsylvanian Series:			
Shale, brown-----	34	120	
Lower Pennsylvanian Series:			
Fire clay-----	26	146	
Slate, black, and coal-----	10	156	W. B.
Slate and shale-----	69	225	
Coal-----	7	232	W. B.
Fire clay-----	3	235	
Limestone-----	2	237	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 16/9W-25N1

Type of record: Driller's log. Altitude: About 514 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Gravel, dirty-----	15	15	
Gravel, coarse-----	23	38	Dry
Clay, sticky, blue-----	29	67	
Gravel, coarse-----	57	124	W. B.

Well 16/9W-36D1

Type of record: Driller's log. Altitude: About 515 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Gravel, dirty-----	12	12	
Gravel-----	41	53	Dry
Clay, blue-----	14	67	
Gravel, yellow-----	34	101	W. B.
Gravel, blue-----	33	134	W. B.
Pennsylvanian System:			
Middle Pennsylvanian Series:			
Shale, blue-----	--	134	

Well 17/6W-18A1

Type of record: Driller's log. Altitude: About 545 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Boulders and sand-----	20	20	
Mississippian System:			
Meramec Series:			
Limestone, gray-----	28	48	
Osage? Series:			
Sandstone, white-----	4	52	W. B.

Well 17/6W-21E1

Type of record: Driller's log from memory. Altitude: About 760 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	30	30	
Clay, putty-like, red-----	21	51	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone-----	29	80	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 17/6W-31F1

Type of record: Driller's log. Altitude: About 750 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	23	23	
Clay, gray-----	31	54	
Sand, dirty-----	1	55	W. B.
Hardpan, gray-----	41	96	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	8	104	
Sandstone, white, and blue shale	16	120	
Sandstone, clean, gray-----	15	135	W. B.

Well 17/6W-33C1

Type of record: Driller's log. Altitude: About 795 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil-----	2	2	
Clay, yellow-----	28	30	
Clay, soft, blue-----	50	80	
Clay, gravelly, blue-----	--	80	Gas
Hardpan, blue-----	50	130	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, white-----	35	165	W. B.

Well 17/7W-7D1

Type of record: Driller's log. Altitude: About 700 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	83	83	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, white-----	29	112	
Slate and shale-----	14	126	
Sandstone-----	10	136	
Slate, with streak of hard sandstone-----	24	160	W. B.
Slate, black-----	--	160	

Well 17/7W-11D1

Type of record: Driller's log from memory. Altitude: About 700 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	10	10	
Clay, blue-----	30	40	

Table 5.--Selected well logs, Parke County--Continued

Well 17/7W-11D1--Continued			
Material	Thick- ness (feet)	Depth (feet)	Remarks
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, white-----	70	110	W. B.

Well 17/7W-11K1			
Type of record: Driller's log from memory.		Altitude: About 700 feet.	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	35	35	
Sand, bark, wood, coal fragments	45	80	
Gravel, coarser with depth-----	26	106	W. B.

Well 17/7W-11M1			
Type of record: Driller's log from memory.		Altitude: About 695 feet.	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	12	12	
Clay, blue-----	33	45	
Quicksand-----	37	82	
Sand and pebbly gravel-----	2	84	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale-----	36	120	W. B.

Well 17/7W-12R2			
Type of record: Driller's log from memory.		Altitude: About 710 feet.	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	15	15	
Sand and gravel, coarser with depth-----	51	66	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale-----	--	66	

Well 17/7W-14D1			
Type of record: Driller's log.		Altitude: About 700 feet.	
Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	1	1	
Clay, yellow-----	13	14	
Clay, soft, blue-----	26	40	
Hardpan, very hard, blue-----	40	80	
Clay, sandy, soft, blue-----	62	142	

Table 5.--Selected well logs, Parke County--Continued

Well 17/7W-20M1

Type of record: Driller's log. Altitude: About 540 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Dug well-----	22	22	
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, yellow-----	27.5	49.5	
Mississippian System:			
Meramec Series:			
Limestone, yellow-----	50.5	100	
Limestone, gray-----	40	140	
Limestone, brown-----	30	170	W. B.

Well 17/7W-23A1

Type of record: Driller's log. Altitude: About 705 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Clay, soft, blue-----	107	125	
Gravel, yellow, and clay-----	20	145	
Hardpan, blue-----	5	150	
Sand and clay-----	4	154	W. B.
Sand, dirty, and clay-----	16	170	
Gravel, yellow, and clay-----	9.5	179.5	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone-----	20.5	200	W. B.
Shale, blue-----	1	201	

Well 17/7W-23P1

Type of record: Driller's log. Altitude: About 670 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Clay or hardpan, blue-----	72	90	
Shale, soft-----	10	100	Clay?
Gravel and mud, gray-----	3	103	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale-----	22	125	
Sandstone, moderately hard-----	25	150	
Sandstone, dirty-----	10	160	
Shale, softer with depth, gray--	30	190	
Sandstone and limestone-----	24	214	
Shale, gray-----	10	224	

Table 5.--Selected well logs, Parke County--Continued

Well 17/7W-23P1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Mississippian System:			
Meramec Series:			
Limestone, bluish-gray-----	10	234	
Limestone, hard, white and gray-	6	240	
Fire clay-----	1	241	
Limestone, white and gray-----	23	264	
Osage? Series:			
Sandstone-----	4	268	
Limestone, gray, with streak of soft shale-----	27	295	
Shale, sandy, light bluish-gray-	47	342	

Well 17/7W-26C1

Type of record: Driller's log.

Altitude: About 600 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Loam-----	6	6	
Gravel-----	1	7	
Clay, yellow-----	13	20	
Hardpan, gray-----	48	68	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale-----	127	195	
Sandstone, hard-----	1	196	
Shale, hard-----	4	200	
Limestone, hard-----	2	202	
Shale, soft-----	4	206	
Limestone, hard-----	3	209	
Sandstone, soft-----	5	214	
Sandstone, hard-----	2	216	
Sandstone-----	11	227	
Fire clay-----	2	229	
Sandstone, white-----	14	243	W. B.

Well 17/7W-27P1

Type of record: Driller's log.

Altitude: About 620 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	35	35	
Gravel-----	13	48	
Hardpan-----	8	56	Dry
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, black-----	14	70	
Sandstone and shale-----	45	115	

Table 5.--Selected well logs, Parke County--Continued

Well 17/7W-29G1

Type of record: Driller's log. Altitude: About 575 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, dirty-----	15	15	
Clay, blue-----	35	50	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, blue-----	38	88	
Mississippian System:			
Meramec Series:			
Limestone, gray-----	24	112	W. B.

Well 17/7W-29J1

Type of record: Driller's log from memory. Altitude: About 550 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, gravel, and boulders-----	68	68	
Mississippian System:			
Meramec Series:			
Limestone-----	32	100	
Sandstone, brown-----	6	106	W. B.
Shale, sandy, blue-----	55	161	

Well 17/7W-29Q2

Type of record: Driller's log. Altitude: About 640 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	5	5	
Hardpan, yellow to brown-----	15	20	
Hardpan, sandy, yellow-----	5	25	
Hardpan, gravelly-----	4	29	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, sandy, gray-----	5	34	
Fire clay, gray-----	60	94	
Shale, sandy, with streaks of limestone-----	35	129	
Limestone, sandy-----	10	139	
Coal-----	5	144	
Fire clay, gray-----	5	149	
Mississippian System:			
Meramec Series:			
Limestone, shaly, gray-----	5	154	
Limestone, sandy-----	5	159	
Limestone, sandy, shaly-----	5	164	
Limestone, sandy, dense-----	5	169	
Limestone, shaly-----	5	174	
Limestone, sandy-----	6	180	

Table 5.--Selected well logs, Parke County--Continued

Well 17/7W-30J1

Type of record: Driller's log. Altitude: About 560 feet.

Material	Thick-ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay and gravel-----	8	8	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, blue-----	12	20	
Limestone, blue-----	10	30	
Shale, sandy-----	20	50	
Sandstone, gray-----	20	70	
Shale, blue-----	2	72	
Mississippian System:			
Meramec Series:			
Limestone, gray-----	18	90	
Limestone, white-----	40	130	

Well 17/7W-31E1

Type of record: Driller's log. Altitude: About 660 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	15	15	
Hardpan, brown-----	35	50	
Gravel, red, and clay-----	7	57	
Hardpan, blue-----	13	70	

Well 17/7W-31K1

Type of record: Driller's log. Altitude: About 660 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	22	22	
Clay, gravelly, blue-----	61	83	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, soft, blue-----	17	100	
Sandstone, coarse, soft, clean, white-----	7	107	W. B.

Well 17/7W-32K1

Type of record: Driller's log. Altitude: About 660 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil and yellow clay-----	5	5	
Clay, sandy, soft, yellow-----	2	7	W. B.
Clay, sandy, yellow-----	11	18	
Clay, gravelly, blue-----	12	30	

Table 5.--Selected well logs, Parke County--Continued

Well 17/7W-32K1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, soft, yellow-----	40	70	
Sandstone, medium-coarse, bluish-gray-----	15	85	
Shale, plastic, gray-----	36	121	
Sandstone, fine-grained, gray---	4	125	W. B.

Well 17/7W-33B2

Type of record: Driller's log.

Altitude: About 650 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	12	12	
Sand and gravel-----	1	13	
Hardpan, blue-----	42	55	
Gravel-----	1	56	
Hardpan, gravelly, gray-----	36	92	
Sand-----	5	97	W. B.
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Sandstone, white-----	3	100	
Sandstone, coarse, dark-----	6	106	W. B.

Well 17/7W-33L1

Type of record: Driller's log.

Altitude: About 655 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	2	2	
Clay, yellow-----	16	18	
Hardpan, pebbly, blue-----	52	70	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, blue-----	9	79	
Sandstone, gray-----	16	95	W. B.
Shale, gray, with streaks of limestone-----	8	103	

Well 17/7W-35B1

Type of record: Driller's log.

Altitude: About 700 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Clay, blue, with streaks of sand	72	90	

Table 5.--Selected well logs, Parke County--Continued

Well 17/8W-9Q1

Type of record: Driller's log.

Altitude: About 650 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Dug well-----	40	40	
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	83	123	
Gravel and sand-----	3	126	W. B.

Well 17/8W-14F1

Type of record: Driller's log from memory.

Altitude: About 675 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	15	15	
Clay, blue-----	105	120	
Gravel-----	--	120	W. B.

Well 17/8W-21G1

Type of record: Driller's log from memory.

Altitude: About 630 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	40	40	
Sand-----	10	50	W. B.
Clay, blue-----	38	88	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, with thin pebble band----	32	120	W. B.

Well 17/8W-27P1

Type of record: Driller's log.

Altitude: About 660 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	2	2	
Clay, yellow-----	20	22	
Clay, hard, blue-----	13	35	
Sand, muddy, and gravel-----	2	37	
Clay, gravelly, blue-----	23	60	
Clay, sandy, blue-----	10	70	
Sand, muddy, with coal and sticks-----	15	85	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, dark-blue-----	5	90	
Shale, hard, dark-blue-----	5	95	
Limestone, coarse, black-----	20	115	
Fire clay, plastic, white-----	5	120	
Sandstone, shaly, blue-----	10	130	W. B.

Table 5.--Selected well logs, Parke County--Continued

Well 17/8W-35B1

Type of record: Driller's log. Altitude: About 510 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Drift-----	12	12	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, soft, blue-----	18	30	
Slate, gray, with cherty con- cretions-----	61	91	
Sandstone, white, with streaks of quartz-----	20	111	
Mississippian System:			
Meramec Series:			
Conglomerate, pebbly, with shale matrix-----	2	113	
Limestone, coarse-grained, fossiliferous-----	23	136	W. B.

Well 17/9W-2F3

Type of record: Driller's log. Altitude: About 500 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	10	10	
Clay, sandy, brown-----	18	28	
Clay, sandy, gray-----	18	46	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, gray-----	33	79	
Limestone-----	11	90	W. B.
Shale, dark-----	17	107	

Well 17/9W-12J2

Type of record: Driller's log. Altitude: About 555 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	60	60	
Clay, sandy, yellow-----	10	70	
Gravel, yellow-----	4	74	Dry, gas
Gravel and clay-----	15	89	
Pennsylvanian System:			
Lower Pennsylvanian Series:			
Shale, sandy, white-----	6	95	
Sandstone, white-----	15	110	W. B.
Fire clay, white-----	6	116	

Table 5.--Selected well logs, Parke County--Continued

Well 17/9W-12P1

Type of record: Driller's log.

Altitude: About 560 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	80	80	
Gravel-----	20	100	
Sand-----	15	115	W. B.
Gravel, coarse-----	6	121	W. B.

Table 6.--Field chemical analyses in parts per million of water from wells,
Parke County, Indiana

Well number: See text for description of well-numbering system.
Material: C, coal; G, gravel; Ls, limestone; S, sand; Sd-sh, sandy shale; Sh, shale; Sh-ss, shaly sandstone; Geologic age: P1, Pleistocene; P, Pennsylvanian; M, Mississippian; D, Devonian.
Sls, siltstone; Ss, sandstone.

Well	Material	Geologic age	Date of Collection	Temperature (°F)	Iron (Fe)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Hardness as CaCO ₃ (Calcium, magnesium)	Remarks
14/6W-1R1	Sh, Ss	P	11-17-58	58	1.0	429	--	6	292	
2N1	Ss	P	11-17-58	61	.1	307	--	8	224	
3Q1	Ss	P	12-8-60	50	2.0	390	30	10	364	
5F1	Ss	P	9-22-59	--	1.0	429	13	4	308	
7G1	S, G	P1	11-17-58	55	5.0	317	--	12	220	
7J1	S, G	P1	11-17-58	56	.1	439	--	22	424	
8D1	Ss	P	11-17-58	55	.1	410	--	16	308	
12H1	Ss	P	9-22-59	66	5.0	468	17	5	344	
14B1	Ss	P	11-17-58	56	.5	459	--	22	364	
16B1	S, G	P1	11-17-58	59	.3	366	--	6	276	
17D1	Ss	P	11-17-58	--	.3	429	--	14	276	
19R1	Ss	P	11-18-58	--	1.5	464	--	10	352	
20B1	Ss	P	5-16-61	54	1.0	278	22	12	240	
22P1	Sd-sh	P	11-18-58	--	.5	278	--	162	324	Inflammable gas
27D1	Ss	P	5-13-58	58	.2	390	--	2	192	
27G1	S	P1	9-22-59	58	1.5	478	11	6	312	
32N1	Ss?	P	9-22-59	--	.1	464	11	6	14	
33A1	-----	P	5-16-61	54	1.0	434	10	8	212	
34E1	G	P1	9-22-59	55	.5	337	10	5	200	
34N1	Ss	P	12-8-60	--	.1	337	9	10	264	
35R2	Ss	P	11-21-58	--	1.5	420	--	4	136	
36C1	Ss	P	5-16-61	56	7.5	244	34	14	176	
36K1	Ss	P	11-21-58	55	.3	429	--	10	268	

36L1	Ss	P	11-21-58	55	1.0	405	--	10	280
36Q1	-----	P	11-21-58	59	1.0	459	--	16	160
14/7W- 5C1	Ss	P	12- 7-60	52	1.5	386	15	12	304
5R1	Ss	P	12- 7-60	--	.1	420	85	616	296
6D1	S,G	P1	9-22-59	--	.1	386	46	8	336
6D2	G	P1	1-10-61	56	7.5	33	55	8	276
11Q1	S,G	P1	12- 7-60	54	.1	259	85	12	312
13P1	Ss	P	12- 7-60	--	.5	317	13	8	236
18P1	S,G	P1	12- 7-60	--	.1	283	32	16	276
20D1	-----	P	12- 7-60	--	.1	425	10	10	72
22D1	Ss	P	7-23-59	--	.3	425	20	22	300
22D3	Ss	P	9-23-59	--	.1	376	12	2	256
22E1	Ss	P	9-23-59	--	1.5	312	14	6	224
22E2	Ss	P	9-23-59	--	.1	361	12	2	268
22E5	Ss	P	12- 7-60	--	.3	395	16	14	332
22K1	S,G	P1	9-23-59	--	1.5	410	64	4	352
24P1	Ss	P	9-23-59	--	.5	415	13	4	288
28L1	Ss	P	9-23-59	--	<.1	547	23	158	50
31B1	S,G	P1	12- 7-60	52	.1	259	14	10	236
32E1	S	P1	4- 8-59	--	1.5	425	20	8	242
35Q1	Ss	P	9-30-58	--	<.1	503	--	20	168
36L1	Ss	P	9-23-59	--	1.0	454	11	8	224
36L2	Ss	P	9-23-59	--	.3	488	17	7	128
14/8W- 5G1	-----	P	9-24-59	--	.1	708	18	20	8
9F1	C	P	5-16-61	--	3.0	371	60	10	236
14J1	S,G	P1	9-23-59	56	.3	288	66	14	272
16R1	-----	P1	9-23-59	65	5.0	429	140	8	384
18P1	S,G	P1	5-16-61	--	1.0	522	12	10	280
18R1	S,G	P1	5-13-58	56	1.5	522	--	6	308
21A1	-----	P	7-23-59	--	.1	381	290	36	532
23R1	G	P1	12- 7-60	--	.2	337	195	24	636
26A1	G	P1	9-22-59	--	1.0	303	48	5	236
30P1	Ss	P	12- 7-60	--	.5	664	8	152	84
30R1	G	P1	12- 7-60	--	4.0	454	11	12	316
31P1	S,G	P1	8-26-59	--	<.1	415	13	2	284
33L1	Ss	P	9-23-59	--	.3	512	94	10	432

Table 6.--Field chemical analyses of water from wells, Parke County, Indiana--Continued

Well	Material	Geologic age	Date of Collection	Temperature (°F)	Iron (Fe)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Hardness as CaCO ₃ (Calcium, magnesium)	Remarks
14/9W-13Q1	Ls	P	9-24-59	--	0.1	556	140	30	344	
14K1	G	P1	12-7-60	--	.3	425	405	34	652	
23H2	G	P1	9-24-59	--	.1	468	85	6	428	
23H3	S,G	P1	12-7-60	--	.1	464	25	10	432	
23R1	S,G	P1	12-7-60	--	.1	390	50	14	384	
24L1	G	P1	9-24-59	--	1.5	639	12	6	456	
24M1	G,S	P1	12-7-60	--	.1	478	21	14	440	
25M1	S,G	P1	9-24-59	--	2.0	532	88	7	452	
26J1	G	P1	9-24-59	--	.5	517	87	8	440	
35H1	G	P1	9-24-59	--	.1	381	115	8	372	
35L1	S,G	P1	5-16-61	--	.2	249	60	12	260	
35R1	S,G	P1	8-20-59	--	.1	342	33	14	320	
15/6W-7E1	Ss	P	1-11-61	57	3.0	410	9	6	340	
7H1	Sh	P	11-19-58	--	.3	522	--	10	188	
7J2	S	P1	12-8-60	--	5.0	434	12	10	308	
7K1	Ss	P	11-19-58	56	1.0	498	--	6	280	
8E1	Ls	M	11-19-58	56	.1	493	--	4	244	
9G1	-----	--	11-19-58	59	>7.5	395	--	10	284	
9H1	Ss	M?	11-20-58	--	1.5	444	--	16	336	
10E1	Ss	P?	11-19-58	55	5.0	434	--	20	372	
10L1	Ls	M	12-8-60	--	.5	420	--	16	424	
12M1	S1s,Ls	M?	11-19-58	--	.1	503	--	18	384	
13Q1	Ss	--	2-16-60	52	10.0	395	115	4	380	
28Q1	Ls	M	12-8-60	--	.1	327	20	16	292	
31M1	Ss	P	11-18-58	57	.5	468	--	12	336	
35E1	S	P1	11-18-58	55	.3	293	--	30	268	
15/7W-3H1	G	P1	1-11-61	--	.1	220	180	40	392	
4K1	Ss	P	1-12-60	--	7.5	361	10	62	336	
13B2	Ss	P	1-11-61	--	.1	356	22	30	192	

15/7W-13E1	Ss	P	12- 8-60	--	5.0	390	10	8	300
14A1	Ss	P	1-11-61	56	1.0	488	8	10	368
18L1	Ls	M	1-11-61	--	.1	620	37	524	40
31P1	Sh	P	9-22-59	--	<.1	351	32	5	280
15/8W- 4P1	-----	P	9-24-59	60	.0	766	108	652	18
5J1	S,G	P1	9-24-59	--	.1	366	33	4	304
6H1	S,G	P1	9-24-59	--	1.0	322	46	4	268
12F1	Sh	P	9-24-59	--	7.5	727	17	4	464
19A1	Ss	P	9-25-59	--	.5	517	13	10	80
19R1	-----	P1	9-24-59	--	<.1	464	130	18	496
23Q1	C	P	9-25-59	--	.5	581	64	30	244
24N1	Sh	P	9-25-59	--	1.5	561	13	4	344
26F1	G	P1	9-25-59	--	1.0	527	14	4	268
27H1	G	P1	9-25-59	--	.3	517	14	6	188
32L1	Ss	P	9-24-59	--	.3	571	32	20	64
33L1	-----	P	9-25-59	58	.5	1,103	12	160	20
15/9W-13E1	S,G	P1	9-24-58	--	.1	342	48	11	324
13P1	S,G	P1	9-24-59	--	<.1	283	32	6	244
14H1	S,G	P1	5-16-61	--	<.1	264	60	10	248
36R1	S,G	P1	9-24-59	--	2.5	590	13	7	268
16/6W- 2L1	Ls	M	11-20-58	54	>7.5	727	--	2	432
8C1	Ss	P	11-20-58	--	2.5	390	--	6	268
11F1	Sls	M	11-19-58	--	>7.5	952	--	12	584
12G1	Ls	M	11-20-58	54	1.0	434	--	6	256
12J1	S,G	P1	1-60	54	5.0	259	15	6	160
18C1	Sls?	M	1-11-61	43	3.0	439	28	44	408
20M1	Ss	P	11-20-58	--	5.0	312	--	120	360
25P1	Ls	M	12- 1-60	--	.3	337	17	8	232
26E1	S	P1	11-19-58	--	7.5	439	--	8	328
28P1	Sh	M	11-20-58	53	.1	537	--	8	36
31Q1	Ls	M	1-12-61	51	.5	434	14	8	352
34N1	-----	P	11-19-58	55	.1	488	--	14	280
35M1	-----	P	1-11-61	--	.5	449	10	32	368
35Q1	Ss	P	11-19-58	54	1.0	317	--	122	396

Table 6.--Field chemical analyses of water from wells, Parke County, Indiana--Continued

Well	Ma- teri- al	Geo- logic age	Date of Collec- tion	Temper- ature (°F)	Iron (Fe)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Hardness as CaCO ₃ (Calcium, magnesium)	Remarks
16/7W-3K1	Ss	P	1-12-61	--	1.0	381	21	14	288	
4H3	Ss	P	1-12-61	--	.1	566	21	10	8	
4K2	G	P1	1-12-61	--	.5	434	11	8	56*	
5N1	S,G	P1	1-12-61	42	2.0	395	18	26	332	
6D1	-----	P,M	1-12-60	--	.1	561	10	60	120	
6N1	Ls	P	1-12-61	--	.5	415	14	20	352	
7C1	S,G	P1	1-12-61	--	>7.5	454	12	4	324	
12L1	Sh	P	1-12-61	--	.3	420	11	8	308	
15E1	Ss	P	1-12-61	46	.3	405	9	6	228	
15R1	Ss	P	12- 2-60	--	3.0	288	18	10	204	
16K1	Ss	P	12- 2-60	--	1.5	459	9	10	324	
16L1	G	P1	12- 2-60	--	1.0	361	5	10	280	
17F1	Ss	P	1-12-61	--	.5	449	11	26	328	
17M1	Ss	P	1-12-61	--	.5	415	8	50	356	
19J1	Ss	P	12- 1-60	--	.5	664	13	12	48	
19N1	C,Ls	P	12- 1-60	--	.1	366	8	10	120	
20L1	Ss	P	12- 1-60	52	.5	351	10	10	280	
21L1	Ss	P	12- 2-60	--	5.0	293	12	10	240	
22L1	G	P1	12- 1-60	--	.1	381	10	10	296	
23M1	Ls?	M	12- 2-60	--	1.0	420	8	10	352	
24L1	Ls	M	12- 2-60	52	1.0	288	26	12	280	
24M1	S	P1	12- 2-60	50	.1	439	170	86	668	
25F1	Ss	P	12- 2-60	57	3.0	229	8	10	172	
26Q1	S,G	P1	1-11-60	48	.1	264	20	40	272	
29E1	C	P	12- 1-60	56	1.0	303	9	10	184	
29Q1	Ss,Sh	P	1-11-60	--	.1	532	11	24	184	
30F1	Ls	P	12- 1-60	52	.1	688	9	14	18	
30G1	S,G	P1	12- 1-60	--	.1	283	29	12	264	
30N1	S,G	P1	12- 1-60	--	.5	400	7	12	128	

16/7W-32H1	Ss	P	12- 1-60	--	3.0	356	12	8	276
33D1	Ss	P	12- 1-60	--	.1	351	10	12	272
33N1	G	P1	12- 1-60	--	4.0	405	35	34	398
35Q1	G	P1	12- 1-60	54	.1	332	24	12	328
16/8W- 2M1	G	P1	1-19-61	--	.1	556	9	6	436
7K2	G	P1	1-19-61	49	5.0	410	17	20	324
7Q1	-----	P	11-19-58	--	.1	956	--	1,160	22
7Q2	G	P1	11-19-58	55	7.5	434	--	42	376
8N1	-----	P	11-19-58	--	.1	630	--	38	80
11A1	Ss	P	1-19-61	46	.1	566	11	18	324
12R1	Ls	M	1-19-61	--	.1	703	9	100	24
13E3	Ss	P	11-20-58	--	.3	434	--	22	472
13F1	-----	P	11-19-58	59	1.0	473	--	44	420
14J1	Ls,h	P	11-19-58	--	2.0	517	--	4	340
16R1	Sh	P	11-19-58	--	.0	693	--	4	168
18B1	-----	P	11-19-58	56	.0	644	--	36	16
19E1	S1s,Ss	P	11-17-58	60	.1	1,290	--	84	10
19M1	Sd-sh	P	5-18-61	57	.1	434	48	12	156
20N1	Ss	P	-----	56	3.0	434	--	14	24
22Q1	G	P1	11-17-58	60	.3	473	--	44	528
23K1	Ss	P	11-17-58	58	1.0	405	--	10	272
24F1	S,G	P1	11-19-58	52	.3	468	--	6	312
26J1	G	P1	11-17-58	56	2.0	425	--	10	284
34H1	Sh,C,°	P	11-17-58	59	.0	600	--	8	76
36G1	Ls	P1	11-17-58	54	2.0	571	--	12	352
16/9W-25H1	S,G	P1	3-12-57	54	<.1	---	--	24	384
35R2	-----	D	11-17-58	69	.1	425	--	3,880	780
36P1	G	P1	11-17-58	54	.3	381	--	6	396
17/6W- 5D1	Ss	P	10-29-58	--	.1	532	--	4	340
6C1	Sh	M?	10-29-58	--	.3	532	--	14	384
6Q1	Sh	M?	10-29-58	--	.1	508	--	8	328
7B1	Sh	M	10-29-58	--	.1	630	--	5	456
18A1	Ss	M	10-29-58	57	2.5	468	--	8	388
19L1	G	P1	12- 1-60	--	1.5	434	10	10	324

Table 6.--Field chemical analyses of water from wells, Parke County, Indiana--Continued

Well	Ma- teri- al	Geo- logic age	Date of Collec- tion	Temper- ature (°F)	Iron (Fe)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Hardness as CaCO ₃ (Calcium, magnesium)	Remarks
17/6W-21C1	Ss	P?	10-29-58	57	2.0	434	--	6	336	
21E1	Ss	P	10-29-58	54	1.0	298	--	7	220	
21L1	G	P1	12- 1-60	--	.3	298	13	10	232	
30M1	Sh	P	10-29-58	--	.1	420	--	24	220	
31F1	Ss	P	5-18-61	57	1.0	---	17	6	204	
32H1	G	P1	10-29-58	--	.5	366	--	12	300	
33C1	Ss	P	6-20-56	58	>7.5	434	13	10	328	
17/7W- 1B1	Ss	P?	10-29-58	53	.5	508	--	6	364	
6K1	Ss	P	10-29-58	--	2.5	605	--	6	408	
7L1	Ss	P	10-29-58	55	.5	429	--	4	240	
9N1	G	P1	10-29-58	--	.1	439	--	10	344	
11E1	-----	P	11-10-58	--	>.1	547	--	6	408	
11F1	Sh,Ss	P	11-10-58	--	<.3	581	--	34	628	
11M1	G	P1	11-10-58	51	.3	600	--	6	456	
12R2	Sh	P	11-10-58	--	.5	449	--	32	348	
15H1	S,G	P1	12- 1-60	--	.1	107	14	22	112	
17E1	G	P1	5-14-58	55	2.0	439	--	2,140	508	
17E2	Ls	M	5-28-58	58	.2	278	--	8	252	
17E3	G	P1	4-22-59	54	3.0	478	10	36	344	
20M1	Ls	M	5-25-61	55	.3	415	25	70	312	
23A1	Ss	P	10-30-58	55	.5	439	--	5	296	
26C1	Ss	P	10-30-58	58	.1	566	--	232	144	
26D1	-----	P	10-30-58	--	.3	512	--	16	284	
29J1	Ss	M	10-30-58	--	.1	390	--	12	344	
29K1	-----	--	10-30-58	54	.1	459	--	18	388	
29Q1	-----	--	10-30-58	54	1.5	425	--	250	252	
29Q2	Ls	M	1-19-61	--	.3	512	43	2,210	128	
30J1	Ls	M	10-30-58	--	.3	346	--	.4	236	
30J2	Ls	M	12- 1-60	54	.1	312	17	12	216	

17/7W-3IK1	Ss	P	1-12-61	48	7.5	425	13	6	352
32P1	Ss	P	10-30-58	--	.1	410	--	8	320
33B1	Ss	P	10-30-58	--	1.0	493	--	6	368
33B2	Ss	P	10-30-58	--	2.0	464	--	4	296
34B1	G	P1	10-30-58	--	2.5	434	--	6	296
35B1	-----	--	5-18-61	56	.3	464	12	10	144
35D1	Sh	P	10-30-58	--	.3	586	--	2	184
35D2	C	P	10-30-58	--	.3	581	--	4	188
35E1	Sh	P	10-30-58	53	1.5	459	--	6	292
36F1	G	P1	10-29-58	--	1.0	405	--	2	108
17/8W- 1N1	G	P1	11-30-60	--	3.0	434	8	10	340
7L1	Sh	P	11-11-58	54	.1	420	--	10	308
7P1	G	P1	11-11-58	54	.5	444	--	12	288
8N1	-----	P	11-11-58	55	.1	649	--	108	128
9Q1	G	P1	11-12-58	53	.3	556	--	6	300
10P1	Ss	P	11-21-58	53	.1	527	--	6	220
10Q1	G	P1	11-12-58	54	.5	600	--	6	376
10R1	G	P1	11-30-60	--	3.0	356	10	12	232
11G1	G	P1	11-10-58	54	>3.0	571	--	8	316
12B1	Sh	P	11-10-58	54	2.5	595	--	6	400
12J1	Sh	P	11-10-58	--	1.5	537	--	4	320
12P1	G	P1	11-10-58	--	3.0	581	--	7	356
14D1	Sh	P	11-12-58	--	.5	483	--	6	236
14F1	G	P1	11-12-58	54	.5	581	--	14	372
14F2	S,G	P1	11-30-60	--	.1	429	12	10	312
17H1	Sd-sh	P	11-12-58	--	.5	605	--	10	280
18L1	G	P1	11-11-58	52	.1	332	--	6	264
18N2	S	P1	11-11-58	54	.5	342	--	8	304
19R3	S,G	P1	11-11-58	--	.1	434	--	10	368
21G1	Sh	P	11-11-58	54	.1	483	--	2	264
27P1	Sh-ss	P	1-12-61	--	4.0	473	9	22	384
32J1	Sh	P	11-19-58	54	1.0	459	--	12	176
32M1	S,G	P1	10-31-58	55	7.5	425	--	8	408
34H1	Ss,Sh	P	10-31-58	--	.3	503	--	4	352
17/9W- 1P1	G	P1	11-13-58	53	.1	337	--	8	184
12J2	Ss	P	11-30-60	--	.1	298	30	62	184
13H1	G	P1	11-30-60	--	.1	229	16	12	232
13J1	G	P1	11-30-60	--	.1	210	17	10	200

Table 7.--Records of springs in Parke County, Indiana

Spring number: See text for well-numbering system.
 Altitude: Altitude of land-surface datum from topographic map.
 Water-bearing material: Cgl, conglomerate; G, gravel; S, sand; Ss, sandstone; T, till.

Geologic age: P1, Pleistocene; P, Pennsylvanian.
 Flow: e, estimated; m, measured.
 Use: D, domestic; N, none; P, public supply; S, stock.
 Field chemical analyses: In parts per million; water samples collected at date of measurement.

Spring	Owner	Altitude (feet)	Water-bearing material	Geologic age	Flow (gpm)	Date of measurement	Use	Temperature (°F)	Field chemical analyses					Remarks
									Iron (Fe)	Bicarbonate (HCO ₃)	Sulfate (SO ₄ ²⁻)	Chloride (Cl)	Hardness as CaCO ₃ (Calcium and magnesium)	
14/7W-13L1	M. Greenlee	570	S, G	P1	4e	5-7-57	N	---	<0.1	224	---	6	288	Overlain by till.
16/6W-21E1	W. D. Gordan	730	T	P1	2e	5-17-61	D	53	<.1	254	85	16	396	
16/8W-19E2	R. Simpson	580	Ss	P	3e	5-18-61	S	56	<.1	288	75	12	312	
17/7W-29G2	R. M. Fisher	550	S, G	P1	1e	12-1-60	D	---	.1	332	18	16	328	Seep area.
29G3	-----do-----	550	S, G	P1	1e	6-28-61	N	58	---	---	---	---	---	Do
29L1	G. Lindley	600	T?	P1	10e	10-31-58	N	56	.1	322	---	10	416	At contact with Pennsylvanian sandstone.
17/8W-25H1	K. Rainwater	500	Ss	P	.5e	5-3-61	N	47	.1	215	35	8	216	
25K1	F. Heath	500	Ss	P	2e	5-3-61	N	55	.1	234	20	10	200	
36E1	-----do-----	540	Ss	P	4e	5-3-61	N	49	.1	39	17	8	32	Fractures in sandstone.

Table 8.--Field chemical analyses of water from streams, Parke County, Indiana
(Results in parts per million)

Name	Location	Date of collection	Temperature (°F)	Iron (Fe)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Hardness as CaCO ₃ (calcium and magnesium)	Remarks
T. 14 N., R. 6 W.									
Rocky Fork Creek	NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1	10-4-60	57	0.4	210	12	10	156	Sample taken at bridge on county road.
T. 14 N., R. 7 W.									
Strangers Creek	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1	10-4-60	57	.1	244	535	10	672	Do
Raccoon Creek	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22	10-4-60	60	.1	307	23	10	272	Do
North Branch Otter Creek	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36	1-4-60	55	.2	332	525	14	792	Sample taken at ford on county road.
T. 14 N., R. 8 W.									
Weisner Creek	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11	10-4-60	55	.2	361	25	12	320	Sample taken at bridge on county road.
Little Raccoon Creek	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13	10-4-60	56	.2	332	34	14	324	Do
Raccoon Creek	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15	10-4-60	55	.1	239	95	54	304	Do
T. 15 N., R. 6 W.									
Rocky Fork Creek	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25	10-4-60	60	.2	366	17	8	328	Do
Raccoon Creek	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28	10-5-60	61	.2	303	25	10	280	Do
T. 15 N., R. 7 W.									
Sand Creek	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4	10-4-60	56	.2	195	490	10	584	Do
Williams Creek	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17	10-4-60	55	.2	376	110	102	396	Do
Little Raccoon Creek	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21	10-4-60	56	.2	337	39	12	328	Do

Table 8.--Field chemical analyses of water from streams, Parke County--Continued

Name	Location	Date of collection	Temperature (°F)	Iron (Fe)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Hardness as CaCO ₃ (calcium and magnesium)	Remarks
T. 15 N., R. 9 W.									
Rocky Run Creek	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4	10- 4-60	56	0.2	366	36	14	344	Sample taken at bridge on county road.
Leatherwood Creek	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5	10- 4-60	55	.1	366	36	18	352	Do
T. 15 N., R. 9 W.									
Raccoon Creek	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12	10- 4-60	61	.1	322	28	14	300	Do
T. 16 N., R. 6 W.									
South Fork Raccoon Creek	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17	10- 4-60	65	.2	322	38	14	320	Do
	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36	10- 4-60	64	.2	342	30	12	304	Do
T. 16 N., R. 7 W.									
Little Raccoon Creek	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24	10- 4-60	65	.2	346	33	12	328	Do
T. 16 N., R. 8 W.									
Sugar Creek	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6	10- 4-60	64	.2	307	42	20	292	Do
Leatherwood Creek	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13	10- 4-60	58	.2	342	70	14	316	Do
T. 16 N., R. 9 W.									
Wabash River	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35	10- 3-60	65	.2	254	49	24	280	Sample taken at bridge on federal highway.

T. 17 N., R. 6 W.

Sugar Creek	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8	10-4-60	64	0.1	298	43	26	304	Sample taken at bridge on county road.
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T. 17 N., R. 7 W.

Green Creek	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20	10-4-60	66	.1	366	32	16	352	Sample taken at bridge on county road	
Mill Creek	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21	10-4-60	62	.2	332	26	12	312		Do
Roaring Creek	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29	10-4-60	61	.1	317	41	20	316		Do
Sugar Creek	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29	10-4-60	59	.2	283	45	24	272		Do

T. 17 N., R. 8 W.

Mill Creek	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18	10-4-60	61	.1	342	33	22	344	Do
Rush Creek	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28	10-4-60	59	.1	356	28	18	344	Do

T. 17 N., R. 9 W.

Coal Creek	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2	10-3-60	61	.1	322	34	12	328	Do
Wabash River	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3	10-3-60	65	.2	239	54	20	256	Sample taken at bridge on state highway.

Table 9.--Water levels in observation wells in Parke County, Indiana
(In feet below land-surface datum, except as noted.
Water level: e, estimated; h, tape measurement)

Parke 1. (15/8W-3Q1). Donald C. Stutler. Rockville. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 15 N., R. 8 W. Dug artesian well in glacial drift, diameter 42 inches, depth 19 feet. Land-surface datum is about 665 above msl. Highest water level is 2.38 below lsd, June 21, 1945; lowest, 8.47 below lsd, Sept. 20, 1945. Records available: 1945 to 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1945		Mar. 7	3.10	1947		Nov. 6	5.14
		14	3.07			20	5.15
June 14	2.71	21	3.02	Jan. 1	5.22	27	4.95
21	2.38	28	3.02	9	5.08	Dec. 4	4.80
28	3.56	Apr. 4	3.10	16	4.90	11	4.82
July 5	3.94	11	3.10	23	4.86	18	4.90
12	4.49	18	3.29	30	4.72	25	4.90
19	4.87	25	3.00	Feb. 6	4.65		
22	5.24	May 2	3.42	13	4.03	1948	
Aug. 2	5.00	9	3.20	20	4.06	Jan. 1	4.85
9	5.29	16	3.12	27	4.10	8	4.95
17	5.28	23	3.06	Mar. 6	4.16	15	5.00
23	6.14	30	2.86	13	4.32	22	5.10
30	7.00	June 6	3.06	20	3.98	29	5.14
Sept. 6	7.77	13	3.10	27	3.95	Feb. 5	5.22
13	7.91	20	3.12	Apr. 3	3.87	12	5.30
20	8.47	27	3.70	10	3.86	19	5.02
27	8.02	July 4	3.78	24	3.80	26	4.90
Oct. 4	5.23	11	5.61	May 1	3.78	Mar. 4	4.95
11	5.93	18	5.00	8	3.63	11	4.87
18	6.51	25	5.60	15	3.55	18	4.77
25	4.15	Aug. 1	5.69	22	3.50	25	4.55
Nov. 1	4.99	8	5.83	29	3.45	Apr. 7	4.65
8	4.38	15	5.94	June 5	3.53	14	4.80
15	3.75	22	6.13	12	3.50	21	5.05
22	3.15	29	6.45	20	3.75	28	5.20
29	2.55	Sept. 5	6.58	27	4.00	May 6	5.12
Dec. 6	3.15	12	6.64	July 3	4.50	13	5.10
13	3.45	19	6.92	10	4.65	20	5.35
20	3.75	26	6.94	17	4.74	27	5.35
27	3.35	Oct. 3	7.40	24	4.85	June 3	5.42
1946		10	7.48	Aug. 8	5.10	10	5.35
		17	7.10	15	5.50	17	5.28
		24	7.07	22	5.80	24	5.14
Jan. 3	3.15	31	6.92	Sept. 4	5.81	July 1	4.98
10	2.96	Nov. 7	6.55	11	5.50	8	5.05
17	3.00	14	6.16	18	5.10	15	5.02
24	3.10	21	5.78	25	5.43	22	5.05
31	3.25	28	5.65	Oct. 2	5.35	29	5.10
Feb. 7	3.29	Dec. 5	5.43	9	5.08	Aug. 7	4.95
14	3.30	12	5.30	16	5.20	12	5.11
21	3.15	26	5.13	23	5.28	19	5.24
28	3.12			30	5.22		

Table 9.--Water levels in observation wells in Parke County--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1948		1949		May 6	5.06	Oct. 6	5.50
Aug. 26	5.45	Jan. 6	4.78	13	5.18	13	5.10
Sept. 2	5.25	13	4.78	20	5.23	20	4.60
9	5.37	20	4.72	26	5.20	27	4.30
16	5.46	27	4.60	June 2	5.26	Nov. 3	4.88
30	5.18	Feb. 3	4.82	9	5.32	10	5.00
Oct. 7	5.32	10	4.86	16	5.08	17	5.02
14	5.38	17	4.78	23	5.14	Dec. 1	5.16
21	5.16	24	4.72	30	5.30	8	5.18
28	5.01	Mar. 3	4.80	July 7	5.34	15	5.12
Nov. 4	4.92	10	4.88	14	5.32	22	5.04
18	4.83	17	4.92	21	5.44	29	4.88
25	4.78	24	4.97	Aug. 4	5.30		
Dec. 2	4.85	31	4.98	11	5.08	1950	
9	4.94	Apr. 7	5.06	18	5.22	Jan. 5	4.78
16	5.10	14	5.21	25	5.28	12	4.60
23	4.98	21	5.22	Sept. 1	5.52	19	4.50
30	4.85	28	5.10	8	5.64	July 14	3.84
				22	5.88		
				29	6.02		

Parke 2. (14/8W-1J1). Ohio Oil Co. Catlin. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 14 N., R. 8 W. Drilled unused artesian (?) well in sand and gravel, diameter 8 to 6 inches, depth 36.5 feet. Land-surface datum is 532.0 feet above msl. Recording gage installed Feb. 5, 1957. Highest water level is 1.4 above lsd, Feb. 5, 6, 1960; lowest, 8.3 below lsd, Dec. 22, 30, 1960. Records available: 1957 to 1960.

(Daily highest water level from recorder graph, 1957)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	----	----	3.6	1.3	2.7	----	----	5.2	6.3	7.0	6.9	6.2
2	----	----	3.7	1.3	2.9	----	----	5.3	6.3	7.1	6.9	6.3
3	----	----	4.4	0.1	3.4	----	----	5.3	6.4	7.1	6.9	6.2
4	----	----	4.7	0.1	3.9	----	hl.9	5.3	6.4	7.1	7.0	6.3
5	----	----	4.9	0.3	4.3	----	----	5.4	6.5	7.1	7.0	6.3
6	----	6.61	5.2	0.7	4.6	----	----	5.5	6.5	7.1	7.0	4.0
7	----	6.56	5.4	0.8	4.7	----	----	5.5	6.5	7.1	6.9	----
8	----	6.04	6.0	0.4	4.8	----	2.7	5.5	6.6	7.1	7.0	----
9	----	3.76	----	0.7	4.9	----	3.8	5.6	6.6	7.2	7.0	----
10	----	2.87	----	1.0	5.0	----	4.0	5.6	6.6	7.2	7.0	e3.2
11	----	2.80	----	1.3	5.0	----	4.2	5.7	6.6	7.2	7.0	4.2
12	----	2.89	----	1.5	2.4	----	4.2	5.7	6.6	7.2	----	4.6
13	----	3.39	----	1.7	2.2	----	2.5	5.8	6.7	7.2	----	4.3
14	----	4.08	----	1.9	2.2	----	2.3	5.8	6.7	7.2	----	5.5
15	----	4.35	5.0	2.0	2.4	----	2.3	5.8	6.7	7.2	----	5.7
16	----	4.78	5.1	1.7	2.7	----	2.4	5.9	6.8	7.2	----	6.3
17	----	5.29	5.3	1.3	2.8	----	2.3	5.9	6.8	7.2	----	3.3

Table 9.--Water levels in observation wells in Parke County--Continued

(Daily highest water level from recorder graph, 1957)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
18	----	----	4.3	1.6	2.1	h1.8	2.3	6.0	6.8	7.3	----	0.1
19	----	----	4.3	1.7	0.2	----	2.5	6.0	6.8	7.3	----	0.0
20	----	----	4.5	0.4	0.2	----	2.7	6.0	6.8	7.3	----	0.1
21	----	----	4.7	0.5	0.3	----	3.7	6.1	6.8	7.3	----	0.8
22	----	----	4.7	1.3	0.4	----	3.4	6.2	6.9	7.0	----	1.2
23	----	----	4.8	1.3	0.2	----	3.2	6.1	6.9	6.4	----	1.4
24	----	----	4.9	1.7	e0.2	h3.0	3.7	6.1	6.9	6.5	----	1.6
25	----	----	1.8	2.0	----	----	4.7	6.2	6.9	6.6	----	0.0
26	----	----	1.9	1.9	----	----	4.8	6.3	7.0	6.7	5.4	----
27	----	----	2.4	1.9	----	----	4.9	6.2	7.0	6.7	5.5	0.7
28	----	----	2.6	2.1	----	----	5.0	6.2	7.0	6.7	5.8	1.0
29	----	----	2.5	2.2	----	----	5.0	6.2	7.0	6.7	6.0	1.2
30	----	----	2.7	2.5	----	----	5.1	6.3	7.0	6.7	6.2	1.4
31	----	----	2.9	----	----	----	5.2	6.3	----	6.9	----	1.1

(Daily highest water level from recorder graph, 1958)

1	1.5	2.2	----	3.2	2.5	6.6	5.0	0.4	5.1	3.3	6.1	1.2
2	1.8	2.5	----	3.4	2.6	6.7	5.4	1.0	5.1	3.5	6.1	1.1
3	2.2	2.7	----	3.8	0.3	6.7	5.5	1.2	5.0	3.9	6.2	0.7
4	2.4	3.4	----	3.8	0.3	6.7	5.5	1.6	5.1	4.4	6.2	0.7
5	2.6	----	----	2.3	1.6	6.7	5.6	2.0	5.2	4.8	6.2	1.0
6	2.6	----	h6.2	2.1	1.7	6.8	5.7	2.3	2.5	5.3	6.4	1.4
7	2.7	----	----	2.1	2.1	6.7	5.8	2.5	2.3	5.4	6.3	1.7
8	3.1	----	----	2.5	2.3	6.7	5.8	2.4	2.3	5.4	6.3	1.9
9	3.5	----	----	2.5	2.4	6.6	5.9	2.6	2.4	5.2	6.3	2.0
10	3.7	----	3.8	2.6	2.6	0.0	5.9	3.2	2.5	1.9	6.4	2.3
11	4.0	----	4.1	2.6	2.8	0.5	5.6	4.1	2.8	2.0	6.5	2.4
12	3.9	----	3.8	2.7	3.9	1.7	5.5	----	4.2	2.3	6.5	2.5
13	3.9	----	3.8	3.6	2.8	1.7	5.0	0.2	5.2	2.5	6.5	2.7
14	4.1	----	4.7	4.0	5.2	1.6	4.5	1.2	5.4	2.6	6.5	2.8
15	3.8	----	4.9	4.4	5.8	1.9	2.4	+0.4	5.4	2.7	6.3	3.5
16	3.5	----	4.9	5.0	6.1	2.2	2.3	0.5	+0.1	3.8	1.6	4.2
17	3.3	----	5.5	5.3	6.1	2.6	2.6	0.1	+0.2	4.5	0.2	4.7
18	3.3	----	5.8	5.6	6.1	2.7	3.3	0.3	0.4	5.5	0.8	5.6
19	3.2	----	6.2	6.1	6.2	2.2	4.3	1.0	0.9	5.6	1.2	5.6
20	0.8	----	6.3	4.5	6.3	2.2	3.1	1.4	1.1	5.6	1.4	5.7
21	0.2	----	6.3	2.7	6.3	2.3	3.2	1.7	1.2	5.7	1.5	5.8
22	1.5	----	6.4	2.6	6.3	2.5	3.9	1.9	1.5	5.7	1.6	5.8
23	1.8	----	6.4	2.3	6.4	2.2	4.3	2.2	1.8	5.8	1.8	5.8
24	1.7	----	2.0	2.3	6.4	2.4	5.1	2.3	1.9	5.8	1.8	5.8
25	1.8	6.0	2.0	2.7	6.4	1.6	5.7	2.6	2.1	5.9	0.1	5.9
26	1.9	6.0	2.3	3.3	6.5	1.7	5.8	3.0	2.3	5.9	0.3	6.0
27	2.0	5.9	2.5	2.7	6.5	2.2	5.9	3.9	2.4	6.0	0.9	6.0
28	2.1	6.1	2.6	2.4	6.5	2.6	5.6	4.5	2.5	6.0	1.0	6.0

Table 9.--Water levels in observation wells in Parke County--Continued

(Daily highest water level from recorder graph, 1958)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
29	2.2	----	2.7	2.2	6.6	3.5	5.6	4.8	2.7	6.1	1.2	6.0
30	2.2	----	2.7	2.4	6.6	4.3	5.2	4.9	2.8	6.1	1.3	6.1
31	2.2	----	2.7	----	6.6	----	+0.2	5.0	----	6.1	----	6.0

(Daily highest water level from recorder graph, 1959)

1	4.1	2.8	0.4	0.2	1.4	----	4.6	5.1	5.7	6.0	5.9	5.7
2	3.3	2.7	0.5	0.2	1.6	----	4.7	5.1	5.6	6.0	5.9	5.7
3	3.2	2.7	0.7	0.4	1.8	----	4.6	5.1	5.7	6.0	5.9	5.7
4	3.4	2.7	0.8	0.8	1.9	----	4.6	5.2	5.7	6.0	5.6	5.7
5	4.2	2.8	0.2	0.9	2.2	----	4.6	5.2	5.7	6.0	5.6	5.7
6	4.2	2.9	0.2	1.1	2.3	----	4.7	5.2	5.7	6.0	5.7	5.7
7	4.5	2.8	0.2	1.1	2.5	----	4.8	5.2	5.7	6.0	5.8	5.7
8	5.6	2.7	0.3	1.0	2.7	----	4.8	5.2	5.7	6.0	5.8	5.7
9	6.3	0.2	0.3	1.1	2.8	4.1	4.8	5.3	5.7	6.1	5.8	5.8
10	6.3	0.2	0.3	1.0	2.7	4.1	4.8	5.3	5.7	6.0	5.7	5.7
11	6.3	0.2	0.4	1.1	2.3	4.1	4.8	5.3	5.8	5.8	5.8	5.3
12	6.3	0.2	0.2	1.3	2.2	4.0	4.9	5.4	5.8	5.9	5.8	0.8
13	6.3	0.3	0.1	1.5	2.2	4.1	4.9	5.4	5.8	5.9	5.5	0.8
14	5.6	0.1	0.1	1.6	2.4	4.2	4.9	5.4	5.7	5.9	5.3	1.1
15	4.2	0.1	0.1	1.7	2.6	4.2	4.9	5.4	5.7	5.9	5.2	1.2
16	4.0	e0.1	0.4	1.9	2.7	4.2	4.9	5.3	5.8	5.9	5.2	1.8
17	4.3	0.1	0.6	2.0	----	4.2	4.9	5.3	5.9	5.9	5.3	2.2
18	5.6	----	0.7	1.7	----	4.3	4.9	5.4	5.9	6.0	5.3	2.3
19	5.7	----	0.8	0.2	----	4.3	4.9	5.4	5.9	6.0	5.3	3.0
20	3.2	----	0.9	0.3	----	4.3	5.0	5.4	5.9	6.0	5.4	3.3
21	2.7	----	0.9	0.8	----	4.3	5.0	5.4	5.9	6.0	5.4	3.3
22	2.9	----	1.0	1.1	----	4.3	5.0	5.5	5.9	6.0	5.4	3.8
23	2.9	----	1.0	1.4	----	4.4	5.1	5.5	5.9	5.9	5.5	4.1
24	2.9	----	1.1	1.6	----	4.4	5.0	5.5	5.9	5.8	5.4	4.7
25	2.8	----	1.1	1.7	----	4.4	5.1	5.5	5.9	5.8	5.5	5.0
26	2.8	----	0.4	1.9	----	4.4	5.1	5.5	5.9	5.9	5.6	5.0
27	2.8	0.2	0.5	1.2	----	4.5	5.0	5.5	5.9	5.9	5.6	2.5
28	2.8	0.4	1.0	0.3	----	4.5	5.0	5.6	e5.9	6.0	5.7	1.4
29	2.7	----	0.8	0.6	----	4.5	5.1	5.6	----	5.9	5.7	1.2
30	2.8	----	0.6	1.1	----	4.6	5.1	5.6	e6.0	6.0	5.6	1.2
31	2.8	----	0.6	----	----	----	5.1	----	----	5.9	----	1.7

(Daily highest water level from recorder graph, 1960)

1	1.8	0.7	2.6	----	3.9	1.1	1.9	5.9	6.9	7.6	7.9	8.2
2	1.8	0.8	2.5	----	3.5	1.3	2.1	5.9	7.0	7.6	8.0	8.2
3	1.4	0.9	2.5	----	3.5	1.6	2.3	6.0	7.0	7.6	8.1	8.2
4	1.8	0.7	2.8	----	4.0	2.0	2.6	6.0	7.0	7.7	8.1	8.2
5	2.2	+1.4	2.8	----	4.4	2.3	3.0	6.1	7.0	7.6	8.1	8.2
6	2.5	+1.4	----	----	3.0	2.6	3.5	6.2	7.1	7.6	8.0	8.2
7	2.9	+0.8	----	----	2.5	3.1	3.9	6.2	7.1	7.7	8.1	8.2
8	3.5	+1.3	----	----	2.4	3.3	4.2	6.2	7.1	7.7	8.1	8.2

Table 9.--Water levels in observation wells in Parke County--Continued

(Daily highest water level from recorder graph, 1960)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	4.0	----	----	----	2.0	4.2	4.7	6.3	7.1	7.7	8.1	8.2
10	4.2	----	----	----	1.7	5.1	4.9	6.3	7.2	7.8	8.1	8.2
11	4.6	----	----	----	1.7	5.5	4.9	6.3	7.2	7.8	8.1	8.2
12	1.0	----	----	----	1.8	5.6	4.9	6.4	7.2	7.8	8.1	8.2
13	0.5	----	----	2.4	1.9	----	5.0	6.4	7.2	7.8	8.1	8.2
14	+0.6	----	----	2.5	2.2	----	5.0	6.4	7.3	7.8	8.1	8.2
15	+0.8	----	----	2.6	2.5	----	5.0	6.5	7.3	7.8	8.0	8.2
16	+0.8	1.5	2.7	2.7	2.6	5.7	5.1	6.5	7.3	7.8	8.0	8.2
17	+0.7	1.5	2.7	2.7	2.6	5.7	5.1	6.5	7.4	7.8	8.1	8.2
18	+1.0	1.6	2.1	2.7	2.7	5.9	5.2	6.5	7.4	7.9	8.1	8.2
19	+0.8	1.8	1.2	2.7	2.8	5.9	5.2	6.6	7.4	7.8	8.1	8.2
20	----	2.3	1.1	2.7	2.8	5.9	5.3	6.6	7.4	7.9	8.1	8.2
21	-0.7	2.4	1.1	2.9	2.5	2.6	5.4	6.6	7.4	7.9	8.1	8.2
22	1.2	2.6	1.1	3.4	2.0	0.8	5.4	6.7	7.4	7.8	8.1	8.3
23	1.7	2.7	1.1	3.7	2.0	0.0	5.5	6.7	7.4	7.8	8.2	----
24	2.1	2.5	1.1	4.2	2.3	0.1	5.5	6.8	7.4	7.9	8.2	----
25	2.3	2.4	1.1	4.5	1.2	0.6	5.6	6.8	7.5	7.9	8.2	----
26	3.2	2.5	1.1	5.0	1.2	1.1	5.7	6.8	7.5	7.9	8.2	----
27	0.5	2.5	1.0	5.7	1.3	1.5	5.7	6.8	7.5	7.9	8.2	----
28	0.5	2.5	0.8	5.9	1.5	1.5	5.7	6.9	7.5	7.9	8.1	----
29	0.6	2.5	----	5.9	0.1	1.6	5.7	6.9	7.5	7.9	8.1	----
30	0.6	----	----	4.8	0.2	1.9	5.7	6.9	7.5	7.9	8.2	8.3
31	0.7	----	----	----	0.9	----	5.9	6.9	----	7.9	----	8.2

Parke 3. (16/9W-25N1). F. T. Moore. Montezuma. SW $\frac{1}{2}$ SW $\frac{1}{2}$ sec. 25, T. 16 N., R. 9 W. Drilled unused artesian well in sand and gravel, diameter 12 to 10 inches, depth 124 feet. Land-surface datum is 514.3 feet above msl. Recording gage installed July 15, 1957. Highest water level is 36.55 below lsd, Aug. 10-12, 1958; lowest, 49.18 below lsd, Dec. 31, 1960. Records available: 1957 to 1960. Affected by fluctuations in barometric pressure and river stage.

(Daily highest water level from recorder graph, 1957)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	----	----	----	----	----	----	----	38.83	40.91	43.02	44.71	45.42
2	----	----	----	----	----	----	----	38.89	40.97	43.11	44.73	45.46
3	----	----	----	----	----	----	----	38.94	41.03	43.17	44.77	45.45
4	----	----	----	----	----	----	----	38.99	41.11	43.24	44.83	45.52
5	----	----	----	----	----	----	----	39.07	41.22	43.31	44.86	45.52
6	----	----	----	----	----	----	----	39.12	41.30	41.38	44.92	45.52
7	----	----	----	----	----	----	----	----	41.36	43.43	44.91	45.53
8	----	----	----	----	----	----	----	39.21	41.44	43.50	44.91	45.62
9	----	----	----	----	----	----	----	39.26	41.51	43.58	45.04	----
10	----	----	----	----	----	----	----	39.30	41.59	43.64	45.12	45.54
11	----	----	----	----	----	----	----	39.37	41.69	43.71	45.16	45.57
12	----	----	----	----	----	----	----	39.46	41.74	43.77	45.17	45.50
13	----	----	----	----	----	----	----	39.53	41.82	43.83	45.18	45.48

Table 9.--Water levels in observation wells in Parke County--Continued

(Daily highest water level from recorder graph, 1957)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	----	----	----	----	----	----	----	39.59	41.92	43.89	45.15	45.48
15	----	----	----	----	----	----	----	39.66	41.96	43.93	45.25	45.47
16	----	----	----	----	----	----	38.64	39.72	42.04	44.02	45.27	45.49
17	----	----	----	----	----	----	38.62	39.80	42.14	44.08	45.25	45.46
18	----	----	----	----	----	----	38.61	39.87	42.21	44.17	45.18	45.41
19	----	----	----	----	----	----	38.59	39.93	42.27	44.23	45.26	45.35
20	----	----	----	----	----	----	38.58	40.00	42.35	44.30	45.28	45.31
21	----	----	----	----	----	----	38.58	40.09	42.43	44.35	----	45.09
22	----	----	----	----	----	----	38.57	40.18	42.51	44.40	----	44.73
23	----	----	----	----	----	----	38.60	40.24	42.58	44.43	----	44.39
24	----	----	----	----	----	----	38.66	40.27	42.65	44.45	45.26	44.01
25	----	----	----	----	----	----	38.64	40.36	42.69	44.54	45.30	43.71
26	----	----	----	----	----	----	38.64	40.46	42.74	44.57	45.33	43.35
27	----	----	----	----	----	----	38.65	----	42.81	44.61	45.33	43.03
28	----	----	----	----	----	----	----	----	42.88	44.62	45.36	42.88
29	----	----	----	----	----	----	38.70	40.68	42.93	44.59	45.39	42.68
30	----	----	----	----	----	----	38.73	40.76	42.98	44.62	45.41	42.50
31	----	----	----	----	----	----	38.78	40.84	----	44.66	----	42.36

(Daily highest water level from recorder graph, 1958)

1	42.22	41.80	42.98	44.08	45.01	----	39.39	37.47	37.33	39.46	41.96	----
2	e42.12	41.85	43.00	44.08	45.04	----	39.31	----	37.41	39.56	42.02	----
3	----	41.89	43.01	44.12	----	----	39.26	----	37.48	39.61e	42.11	42.79
4	----	41.92	43.04	44.14	----	----	39.22	----	37.58	39.68e	42.19	42.79
5	----	41.92	43.04	44.14	45.10	----	39.21	36.88	37.64	39.75e	42.27	42.85
6	----	41.97	43.07	44.18	45.11	----	39.20	36.75	37.65	----	42.37	42.94
7	41.73	42.02	43.12	44.26	45.09	----	39.18	36.66	37.70	39.93	42.45	42.91
8	41.71	42.07	43.13	44.32	45.09	----	39.19	36.63	37.75	40.00	42.50	42.89
9	41.68e	42.12	43.14	44.35	45.10	----	39.18	36.59	37.79	40.07	42.55	42.97
10	41.68	----	43.23	44.36	45.09	45.80	39.15	36.55	37.84	40.19	42.66	42.96
11	41.70	----	43.27	44.39	45.10	45.63	39.13	36.55	37.96	40.29	42.75	42.93
12	41.67	42.21	43.30	44.42	45.12	----	39.09	36.55	38.02	40.39	42.82	----
13	41.64	42.25	43.31	44.46	45.15	----	38.99	36.60	38.08	40.46	42.89	43.00
14	41.64	42.28	43.38	44.48	45.15	----	38.89	36.65	38.17	40.54	42.96	42.99
15	41.67	42.31	43.43	44.50	45.16	----	38.82	36.68	38.26	40.63	42.99	42.97
16	41.68	42.38	43.47	44.54	45.18	----	38.73	36.70	38.34	40.69	43.11	42.96
17	41.68	42.45	43.52	44.57	45.19	----	38.61	36.68	38.41	40.75	43.09	42.97
18	41.69	42.48	43.56	44.59	45.21	----	38.43	36.72	38.51	40.85	43.10	43.01
19	41.69	42.53	43.61	44.62	45.25	----	38.26	36.70	38.59	40.93	43.05	43.00
20	41.66	42.59	43.65	44.65	45.26	----	38.10	36.66	38.62	40.99	43.02	43.10
21	41.61	42.60	43.69	44.68	45.28	----	37.96	36.65	38.68	41.08	42.97	----
22	41.68	42.63	43.74	44.70	45.28	39.87	37.86	----	38.77	41.16	42.98	----
23	41.70	42.70	43.79	44.73	45.33	39.88	37.77	36.72	38.84	41.25	42.96	----
24	41.63	42.71	43.83	44.74	45.35	39.91	37.69	36.72	38.89	e41.33	42.96	43.21
25	41.64	42.77	43.88	44.86	45.37	39.89	37.68	36.82	38.97	e41.42	42.95	43.26
26	41.64	42.80	43.91	44.87	45.40	39.84	37.68	36.89	----	41.50	43.03	43.28

Table 9.--Water levels in observation wells in Parke County--Continued

(Daily highest water level from recorder graph, 1958)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	41.69	42.78	43.94	44.89	45.42	39.75	37.67	36.96	----	41.58	42.98	43.30
28	41.73	42.86	43.97	44.91	45.44	39.66	37.69	37.00	39.22	41.67	42.95	43.34
29	41.72	----	44.00	44.94	----	39.57	37.67	37.08	39.28	41.75	42.94	43.38
30	41.73	----	44.01	44.98	----	39.46	37.66	37.16	39.33	41.84	----	43.45
31	41.72	----	44.04	----	----	----	37.64	37.23	----	41.92	----	43.46

(Daily highest water level from recorder graph, 1959)

1	43.45	42.46	38.26	38.32	38.75	39.17	41.26	43.47	45.34	46.81	47.67	47.93
2	43.51	42.24	----	38.33	38.54	39.24	41.35	43.54	45.39	46.84	47.69	47.95
3	43.55	42.10	----	38.33	38.37	39.31	41.42	43.59	45.47	----	47.72	47.95
4	43.61	42.00	----	38.45	38.19	39.37	41.46	43.64	45.52	46.92	47.73	47.96
5	----	41.97	38.17	38.43	38.11	----	41.53	43.72	45.56	46.95	47.77	47.97
6	----	41.87	38.21	38.44	38.08	39.59	41.61	43.78	45.61	46.99	47.82	47.98
7	----	41.76	38.37	38.40	38.09	39.66	41.70	43.84	45.66	47.02	47.85	----
8	e43.80	41.67	38.31	38.40	38.07	39.73	41.76	43.90	45.72	47.06	----	----
9	43.82	41.55	38.30	38.45	38.06	39.80	41.82	43.97	45.77	47.11	----	48.04
10	43.86	41.29	38.30	38.46	38.06	39.87	41.90	44.04	----	47.15	47.86	48.04
11	43.88	40.93	38.29	38.50	38.11	39.93	42.97	44.10	----	47.19	47.88	48.03
12	43.91	40.48	38.27	38.49	----	39.99	42.05	----	45.92	----	47.89	48.05
13	43.94	40.01	38.22	38.53	----	40.00	e42.14	44.24	45.96	47.24	47.91	48.09
14	43.96	39.50	38.15	38.56	----	----	----	44.30	46.00	47.25	47.93	48.09
15	43.99	39.00	38.13	38.58	38.35	40.17	----	44.36	46.03	47.27	47.93	48.07
16	----	38.46	38.21	----	38.43	40.20	42.38	44.42	46.09	47.28	47.93	48.05
17	e44.10	38.21	38.24	38.68	38.48	40.26	42.45	44.48	46.16	47.29	----	----
18	44.08	38.17	38.17	38.71	38.51	40.34	42.51	44.54	46.21	47.31	----	----
19	44.08	----	38.16	38.77	38.56	40.40	42.58	44.60	46.26	47.33	e47.89	e48.00
20	44.12	----	38.08	38.80	38.65	40.48	42.66	44.65	46.30	47.34	47.86	47.98
21	44.05	----	----	38.89	38.70	40.54	42.72	44.70	----	47.58	47.86	47.98
22	44.03	38.11	----	38.90	38.78	40.60	42.79	44.76	----	47.40	47.86	47.98
23	43.90	38.11	38.10	38.90	----	40.70	42.84	44.82	----	47.41	47.85	47.98
24	43.76	38.25	38.13	----	----	----	----	44.88	46.53	47.42	47.84	47.98
25	e43.62	38.23	38.16	----	----	----	----	44.94	46.55	47.46	47.87	47.98
26	----	38.23	38.12	38.95	----	----	43.08	44.99	46.59	47.50	47.89	47.98
27	43.25	38.23	38.20	38.97	38.98	41.01	43.12	45.05	46.64	47.53	47.92	47.96
28	43.05	38.26	38.33	38.93	39.00	41.09	43.17	45.11	46.69	47.58	e47.93	----
29	42.88	----	38.33	39.00	39.01	41.16	43.24	45.16	46.74	----	47.93	----
30	42.76	----	38.31	38.96	39.08	41.22	43.30	----	46.78	----	47.92	----
31	42.59	----	38.33	----	39.12	----	43.40	----	----	47.65	----	----

(Daily highest water level from recorder graph, 1960)

1	47.92	47.31	45.56	----	43.96	44.24	41.99	42.72	44.26	45.90	47.34	48.45
2	47.88	47.29	45.50	----	43.94	44.23	41.93	42.77	44.31	45.93	47.39	48.48
3	47.89	47.26	45.50	----	43.95	44.25	41.91	42.82	44.36	46.00	47.44	48.50
4	47.86	47.24	----	----	43.95	44.26	41.92	42.86	44.42	46.03	47.50	48.52
5	47.85	47.21	----	----	43.96	44.26	41.93	42.91	44.46	46.04	47.52	48.55

Table 9.--Water levels in observation wells in Parke County--Continued

(Daily highest water level from recorder graph, 1960)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	47.82	47.21	----	45.73	43.91	44.31	41.93	42.95	44.52	46.06	47.55	48.58
7	47.80	47.18	----	45.63	43.96	44.32	41.93	42.97	44.57	46.07	47.61	48.61
8	47.81	47.10	----	45.56	43.98	44.34	41.93	43.00	44.63	----	47.64	48.63
9	----	47.02	----	45.52	----	e44.35	41.93	43.04	----	----	47.68	48.67
10	----	46.99	----	45.46	----	----	e41.93	43.07	----	----	47.73	48.68
11	----	46.96	----	45.42	----	44.39	41.96	43.13	----	----	47.77	48.70
12	----	46.26	----	45.42	----	44.41	41.98	43.17	----	----	47.80	48.74
13	----	46.13	----	e45.41	44.01	44.41	42.01	43.22	----	----	47.83	48.78
14	----	46.04	----	----	44.01	44.42	42.05	43.27	----	----	47.87	48.79
15	47.73	45.95	----	----	44.05	44.45	42.08	43.31	----	----	47.90	48.80
16	47.68	45.84	----	----	44.03	44.43	42.08	43.35	----	----	47.92	48.83
17	47.64	----	45.55	----	44.04	----	42.07	43.41	----	----	47.98	48.85
18	47.63	----	45.54	----	44.10	----	42.08	43.45	----	----	48.01	48.89
19	47.58	----	45.54	----	44.10	----	----	43.50	----	----	48.05	48.91
20	----	----	45.59	----	44.10	----	----	43.55	----	----	48.08	48.93
21	----	----	45.55	----	44.12	----	42.27	43.62	----	----	48.11	48.95
22	----	45.87	45.55	----	----	----	42.29	43.69	----	----	48.14	48.98
23	47.48	45.83	45.61	----	----	43.87	42.31	43.74	----	----	48.18	49.00
24	47.47	45.77	45.62	----	----	43.47	42.35	43.80	----	----	48.23	49.02
25	47.44	45.73	----	----	----	43.05	42.41	43.85	----	47.09	48.25	49.04
26	47.42	45.75	----	----	----	42.72	42.44	43.90	----	47.10	48.28	e49.05
27	47.40	----	----	----	----	42.45	42.48	43.95	----	47.14	48.31	----
28	47.38	----	----	----	----	42.24	42.52	44.00	45.76	47.19	48.34	----
29	47.35	----	----	----	----	42.17	42.56	44.05	45.78	47.23	48.37	49.12
30	----	----	----	----	----	42.07	42.59	44.12	45.83	47.27	48.41	49.15
31	47.32	----	----	----	----	----	42.66	44.18	----	47.30	----	49.16

Parke 4. (15/6W-27K1). U. S. Corps of Engineers. Mansfield. NW $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 27, T. 15 N., R. 6 W. Drilled unused artesian well in limestone, diameter 6 inches, depth 111.7 feet. Land-surface datum is 748.7 feet above msl. Recording gage installed July 16, 1957. Highest water level is 47.29 below lsd, June 11-14, 1959; lowest, 48.56 below lsd, Nov. 6-8, 1960. Records available: 1957 to 1960. Affected by fluctuations in barometric pressure.

(Daily highest water level from recorder graph, 1957)

1	----	----	----	----	----	----	----	47.73	----	48.00	47.92	47.89
2	----	----	----	----	----	----	----	47.72	----	48.01	47.93	47.90
3	----	----	----	----	----	----	----	47.69	47.91	48.03	47.93	47.88
4	----	----	----	----	----	----	----	47.69	47.92	48.03	47.94	47.89
5	----	----	----	----	----	----	----	47.69	47.94	48.05	47.94	47.90
6	----	----	----	----	----	----	----	47.71	47.95	48.05	47.95	47.81
7	----	----	----	----	----	----	----	47.73	47.97	48.06	47.92	47.81
8	----	----	----	----	----	----	----	47.74	47.98	48.07	47.87	47.83
9	----	----	----	----	----	----	----	47.76	47.99	48.08	47.90	47.84
10	----	----	----	----	----	----	----	47.76	47.99	48.08	47.93	47.83

Table 9.--Water levels in observation wells in Parke County--Continued

(Daily highest water level from recorder graph, 1957)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	----	----	----	----	----	----	----	----	48.01	48.09	47.94	47.85
12	----	----	----	----	----	----	----	----	e47.95	48.10	47.93	47.87
13	----	----	----	----	----	----	----	47.75	----	48.11	47.88	47.88
14	----	----	----	----	----	----	----	47.76	----	48.11	47.80	47.90
15	----	----	----	----	----	----	----	47.77	47.94	48.09	47.83	47.91
16	----	----	----	----	----	----	47.69	47.78	47.94	48.00	47.83	47.91
17	----	----	----	----	----	----	47.65	47.80	47.95	48.00	47.84	47.82
18	----	----	----	----	----	----	47.65	47.81	47.96	48.01	47.78	47.77
19	----	----	----	----	----	----	47.65	47.82	47.92	48.02	47.79	47.70
20	----	----	----	----	----	----	47.66	47.84	47.91	48.03	47.82	47.70
21	----	----	----	----	----	----	47.67	47.85	47.91	48.03	47.84	47.75
22	----	----	----	----	----	----	47.67	47.87	47.91	48.03	47.86	47.78
23	----	----	----	----	----	----	47.67	47.87	47.91	47.84	47.84	47.78
24	----	----	----	----	----	----	47.68	47.86	47.92	47.84	47.85	47.80
25	----	----	----	----	----	----	47.70	47.87	47.93	47.87	47.87	47.69
26	----	----	----	----	----	----	47.71	47.88	47.94	47.88	47.87	47.70
27	----	----	----	----	----	----	47.73	----	47.97	47.90	47.87	47.70
28	----	----	----	----	----	----	47.73	----	47.98	47.91	47.87	47.70
29	----	----	----	----	----	----	47.74	----	47.98	47.90	47.88	47.73
30	----	----	----	----	----	----	47.74	----	47.99	47.90	47.88	47.74
31	----	----	----	----	----	----	47.75	----	----	47.92	----	47.72

(Daily highest water level from recorder graph, 1958)

1	47.73	----	47.91	47.87	47.87	47.87	47.80	47.61	47.79	47.61	47.72	47.56
2	47.75	----	47.91	47.88	47.87	47.87	47.81	47.61	47.80	47.61	47.71	47.55
3	47.77	----	47.91	47.88	47.82	47.88	47.82	47.61	47.75	47.61	47.70	47.54
4	47.80	----	47.91	47.88	47.80	47.90	47.83	47.62	47.75	47.61	47.69	47.56
5	47.80	----	47.91	47.85	47.79	47.90	47.84	47.63	47.75	47.61	47.69	47.56
6	47.78	----	47.91	47.84	47.79	47.92	47.85	47.64	47.67	47.64	47.69	47.59
7	47.79	----	47.90	47.84	47.79	47.92	47.85	47.63	47.67	47.68	47.70	47.62
8	47.80	----	47.89	47.85	47.79	47.92	47.85	47.63	----	47.68	47.67	47.62
9	47.83	----	47.88	47.85	47.80	47.88	47.86	47.64	----	47.64	47.67	47.62
10	47.82	----	47.89	47.86	47.80	47.72	47.87	47.64	47.66	47.63	47.67	47.65
11	47.83	----	47.90	47.86	47.81	47.72	47.77	47.64	47.66	47.63	47.69	47.65
12	47.84	----	47.90	47.86	47.83	47.73	47.77	47.66	47.66	47.65	47.69	47.65
13	47.82	----	47.89	47.88	47.84	47.72	47.77	47.67	47.66	47.65	47.69	47.67
14	47.82	----	47.90	47.89	47.87	47.72	47.77	47.67	47.67	47.65	47.69	47.68
15	47.82	----	47.91	47.89	47.83	47.73	47.75	47.64	47.67	47.65	47.65	47.69
16	47.82	----	47.91	47.89	47.83	47.73	47.75	47.64	47.64	47.65	47.63	47.69
17	47.82	----	47.91	47.90	47.83	47.74	47.76	47.64	47.58	47.66	47.58	47.69
18	47.83	----	47.92	47.90	47.83	47.76	47.77	47.64	47.58	47.66	47.58	47.70
19	47.84	----	47.92	47.90	47.84	47.75	47.77	47.65	47.58	47.68	47.58	47.70
20	47.76	----	47.90	47.87	47.85	47.73	47.73	47.66	47.58	47.68	47.59	47.71

Table 9.--Water levels in observation wells, Parke County--Continued

(Daily highest water level from recorder graph, 1958)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	47.73	----	47.91	47.87	47.86	47.73	47.73	47.67	47.58	47.68	47.60	47.72
22	47.74	----	47.91	47.87	47.82	47.73	47.73	47.67	47.59	47.68	47.60	47.72
23	----	----	47.92	47.87	47.82	47.73	47.73	47.68	47.60	47.69	47.61	47.72
24	47.77	----	47.84	47.87	47.83	47.73	47.74	47.68	47.60	47.69	47.61	47.72
25	47.55	47.92	47.84	47.89	47.83	47.73	47.74	47.68	47.60	47.70	47.54	47.73
26	----	47.91	47.85	47.90	47.83	47.73	47.74	47.69	47.60	47.70	47.54	47.73
27	----	47.88	47.85	47.88	47.83	47.73	----	47.69	47.60	47.70	47.55	47.73
28	----	47.88	47.85	47.87	47.83	47.74	47.79	47.69	47.61	47.70	47.54	47.73
29	----	----	47.86	47.87	47.84	47.74	47.79	47.70	47.61	47.71	47.54	47.73
30	----	----	47.86	47.87	47.84	47.78	47.79	47.70	47.61	47.72	47.56	47.75
31	----	----	47.87	----	47.87	----	47.60	47.77	----	47.72	----	47.70

(Daily highest water level from recorder graph, 1959)

1	47.69	47.77	----	47.46	47.40	47.36	47.52	47.62	47.72	47.97	47.94	47.98
2	47.69	47.76	----	47.45	47.40	47.36	47.54	47.64	47.72	47.98	47.94	47.99
3	47.69	47.72	----	47.45	47.40	47.36	47.55	47.65	47.74	47.98	47.95	48.00
4	47.69	47.72	----	47.45	47.40	47.38	47.56	47.62	47.76	48.00	47.90	48.00
5	47.71	47.73	----	47.46	47.40	47.39	47.58	47.63	47.77	48.00	47.90	48.00
6	47.72	47.77	----	47.47	47.38	47.40	47.58	47.64	47.79	47.99	47.91	48.00
7	47.72	----	----	47.47	47.38	47.41	47.61	47.64	47.81	47.99	----	48.00
8	47.73	----	----	47.46	47.40	47.43	47.61	47.64	47.82	47.99	----	48.00
9	47.74	----	----	47.45	47.40	47.47	47.61	47.65	47.84	48.00	----	48.02
10	47.75	----	----	47.45	47.39	47.36	47.65	47.66	47.83	47.89	----	48.03
11	47.76	----	47.56	47.46	47.39	47.29	47.66	47.68	47.83	47.89	----	47.99
12	47.77	----	47.55	47.46	47.39	47.29	47.67	47.69	47.84	47.89	----	47.96
13	47.77	----	47.54	47.46	47.39	47.29	47.69	47.71	47.85	47.90	----	47.96
14	47.73	----	47.50	47.46	47.38	47.29	47.69	47.72	47.86	47.90	----	47.97
15	47.73	----	47.48	47.46	47.38	47.31	47.69	47.73	47.87	47.91	----	47.97
16	47.74	----	47.53	47.46	47.38	47.32	47.71	47.56	47.88	47.93	----	47.97
17	47.74	47.66	47.53	47.46	47.38	47.33	47.71	47.55	47.90	47.94	----	47.97
18	47.76	47.65	47.54	47.46	47.38	47.35	47.71	47.55	47.91	47.95	----	47.98
19	47.76	----	47.54	47.44	47.38	47.38	47.71	47.57	47.92	47.95	----	48.00
20	47.66	----	47.54	47.44	47.38	47.41	47.72	47.59	47.93	47.96	----	48.02
21	47.63	----	47.54	47.44	47.39	47.42	47.72	47.61	47.93	47.98	----	48.02
22	47.65	----	47.55	47.43	47.39	47.42	47.72	47.62	47.94	47.99	----	48.02
23	47.68	----	47.56	47.44	47.38	47.43	47.76	47.63	47.95	47.94	----	48.02
24	47.69	----	47.55	47.44	47.38	47.43	47.76	47.65	47.97	47.91	----	48.03
25	47.70	----	47.55	47.44	47.38	47.43	47.76	47.67	47.99	47.91	----	48.03
26	47.70	----	47.52	47.44	47.38	47.43	47.77	47.67	47.96	47.91	----	48.03
27	47.71	----	47.52	47.42	47.36	47.43	47.74	47.69	47.95	47.91	47.96	48.02
28	47.72	----	47.53	47.40	47.36	47.47	47.74	47.70	47.95	47.93	47.96	48.02
29	47.73	----	47.53	47.40	47.36	47.47	47.74	47.70	47.96	47.94	47.96	48.02
30	47.73	----	47.52	47.40	47.36	47.49	47.62	47.72	47.97	47.94	47.97	48.02
31	47.76	----	47.52	----	47.36	----	47.62	47.73	----	47.94	----	48.02

Table 9.--Water levels in observation wells, Parke County--Continued

(Daily highest water level from recorder graph, 1960)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.03	48.03	48.04	47.96	47.94	47.73	47.76	----	48.28	48.45	48.51	48.45
2	48.02	48.03	48.05	47.96	47.94	47.75	47.77	----	48.29	48.45	48.51	48.45
3	48.02	48.03	48.05	47.97	47.94	47.76	47.78	----	48.31	48.46	48.53	48.45
4	48.02	48.03	48.05	47.97	47.94	47.78	47.80	----	48.32	48.47	48.54	48.45
5	48.04	47.99	----	47.97	47.94	47.80	47.82	----	48.33	48.47	48.55	48.45
6	48.05	47.99	----	47.97	47.90	47.82	47.84	----	48.35	48.47	48.55	48.45
7	48.06	47.99	----	47.98	47.88	47.83	47.84	----	48.36	48.49	48.56	48.45
8	48.06	47.99	----	47.98	47.89	47.84	47.85	48.16	48.37	48.49	48.55	48.45
9	48.06	47.98	----	47.99	47.89	47.84	47.86	48.16	48.38	48.49	48.55	48.45
10	48.05	47.97	----	48.01	47.89	47.84	47.86	48.16	48.38	48.51	48.55	48.45
11	48.05	47.97	----	48.00	47.89	47.89	47.86	48.16	48.38	48.52	48.54	48.44
12	48.03	47.97	----	47.98	----	47.88	47.86	48.16	48.39	48.52	48.54	48.44
13	48.03	47.98	----	47.98	47.82	47.87	47.85	48.16	48.39	48.52	48.54	48.44
14	48.01	----	----	47.98	47.82	47.87	47.85	48.16	48.41	48.53	48.54	48.44
15	48.01	----	----	47.98	47.82	----	47.86	48.16	48.42	48.54	48.52	48.44
16	48.01	48.01	48.02	47.98	47.82	----	47.88	48.20	48.43	48.55	48.52	48.44
17	48.01	48.00	48.02	47.97	47.82	47.87	47.89	48.20	48.44	48.55	48.52	48.44
18	48.01	48.00	48.02	47.97	47.82	47.89	47.90	48.21	48.45	48.55	48.52	48.44
19	48.01	48.01	48.02	47.99	47.82	47.90	47.92	48.22	48.38	48.53	48.52	48.44
20	48.02	48.03	48.02	47.98	47.82	47.90	47.94	48.22	48.38	48.53	48.51	48.44
21	48.03	48.04	48.02	47.98	47.82	47.84	47.96	48.22	48.39	48.54	48.51	48.44
22	48.05	48.04	48.02	47.98	47.82	47.84	47.98	48.22	48.39	48.53	48.51	48.45
23	48.07	48.04	48.03	47.98	47.82	47.66	47.99	48.22	48.39	48.53	48.48	----
24	48.08	48.05	48.03	47.98	47.82	47.66	48.00	48.22	48.39	48.53	48.48	----
25	48.08	48.04	48.05	47.98	47.82	47.68	----	48.23	48.40	48.54	48.48	----
26	48.09	48.04	48.05	47.98	47.77	47.71	----	48.23	48.42	48.51	48.48	----
27	48.07	48.04	48.06	47.98	47.77	47.73	----	48.23	48.43	48.51	48.48	----
28	48.06	48.04	48.01	47.98	47.76	47.74	----	48.23	48.43	48.52	48.45	----
29	48.05	48.04	47.95	47.97	47.75	47.74	----	48.23	48.43	48.52	48.45	48.45
30	48.04	----	47.95	47.94	47.72	47.76	----	48.23	48.44	48.52	48.45	48.45
31	48.03	----	47.95	----	47.72	----	----	48.24	----	48.51	----	48.45

Parke 5. (17/7W-17E1). Glen Crowder. Marshall. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 17 N., R. 7 W. Drilled unused artesian well in limestone, diameter 6 inches, depth 165.6 feet. Land-surface datum is 582.5 feet above msl. Recording gage installed April 22, 1959. Highest water level is 34.34 below lsd, June 23, 1960; lowest, 37.18 below lsd, Oct. 25, 1960. Records available: 1959 to 1960. Affected by barometric pressure.

(Daily highest water level from recorder graph, 1959)

1	----	----	----	----	35.90	36.34	36.61	36.81	36.92	37.00	36.76	36.64
2	----	----	----	----	35.95	36.36	36.68	36.84	36.92	36.99	36.77	36.66
3	----	----	----	----	36.01	36.39	36.67	36.81	36.99	37.00	36.76	36.64
4	----	----	----	----	36.05	36.39	36.65	36.60	37.00	37.03	36.53	36.63
5	----	----	----	----	36.08	36.40	36.66	36.65	37.00	37.02	36.54	36.62
6	----	----	----	----	36.10	36.42	36.69	36.73	37.01	37.00	36.62	36.58

Table 9.--Water levels in observation wells, Parke County--Continued

(Daily highest water level from recorder graph, 1959)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	----	----	----	----	36.18	36.46	36.73	36.76	37.03	37.02	36.62	36.59
8	----	----	----	----	36.19	36.48	36.70	36.79	37.04	37.00	----	36.60
9	----	----	----	----	36.14	36.49	36.72	----	37.01	37.06	----	36.66
10	----	----	----	----	36.13	36.38	36.73	----	36.99	36.70	----	36.61
11	----	----	----	----	36.16	36.27	36.73	----	37.02	36.63	----	36.42
12	----	----	----	----	36.21	36.27	36.76	----	37.03	36.67	----	36.24
13	----	----	----	----	36.18	36.33	36.79	----	37.03	36.71	----	36.27
14	----	----	----	----	36.22	36.40	36.80	----	37.01	36.76	----	36.33
15	----	----	----	----	36.22	36.41	36.80	----	36.90	36.82	----	36.32
16	----	----	----	----	36.24	36.41	36.80	----	37.06	36.86	----	36.35
17	----	----	----	----	36.24	36.45	36.78	----	37.10	36.89	----	36.38
18	----	----	----	----	36.23	36.49	36.73	----	37.10	36.90	----	36.41
19	----	----	----	----	36.24	36.50	36.75	----	37.08	36.91	----	36.45
20	----	----	----	----	36.25	36.50	36.80	----	37.07	36.92	----	36.45
21	----	----	----	----	36.30	36.47	36.83	----	37.07	36.95	----	36.45
22	----	----	----	35.95	36.22	36.50	36.81	----	37.09	36.93	----	36.48
23	----	----	----	35.99	36.23	36.55	36.71	----	37.11	36.80	----	36.48
24	----	----	----	36.01	36.27	36.56	36.72	----	37.11	36.70	----	36.48
25	----	----	----	36.02	36.26	36.50	36.78	----	37.03	36.69	----	36.47
26	----	----	----	36.00	36.27	36.50	36.81	36.93	36.99	36.66	36.62	36.46
27	----	----	----	35.70	36.30	36.55	36.64	36.94	36.89	36.71	36.65	36.08
28	----	----	----	35.49	36.28	36.58	36.63	36.94	36.93	36.79	36.65	36.05
29	----	----	----	35.65	36.30	36.61	36.70	36.94e	36.97	36.78	36.68	36.11
30	----	----	----	35.78	36.32	36.61	36.76	36.96	36.97	36.80	36.65	36.17
31	----	----	----	----	36.31	----	36.79	36.97	----	36.77	----	36.25

(Daily highest water level from recorder graph, 1960)

1	36.27	----	36.49	35.84	36.36	----	36.14	36.63	36.90	37.01	37.02	----
2	36.24	----	36.37	35.91	36.38	----	36.30	36.63	36.92	37.00	37.05	----
3	36.26	----	36.37	36.07	36.38	----	36.19	35.75	36.93	37.07	37.13	----
4	36.35	----	36.49	36.12	36.41	----	36.29	35.87	36.92	37.06	37.10	----
5	36.35	----	36.52	36.17	36.42	----	36.33	36.09	36.93	37.02	37.08	----
6	36.36	----	36.50	36.18	36.10	----	36.37	36.23	36.96	37.05	37.04	----
7	36.35	----	36.50	36.25	35.95	----	36.39	36.30	36.98	37.09	37.11	----
8	36.40	----	36.47	36.31	36.00	----	36.41	36.36	36.99	37.08	37.07	----
9	36.41	----	36.43	36.35	36.07	----	36.43	36.42	36.94	37.09	37.02	----
10	36.42	----	36.48	36.39	36.09	----	36.37	36.47	36.95	37.13	36.98	----
11	36.44	----	36.49	36.34	36.16	----	36.39	36.54	36.95	37.11	36.96	----
12	36.36	----	36.53	36.40	36.21	----	36.44	36.57	36.95	37.12	36.98	----
13	36.35	----	36.53	36.40	36.22	----	36.08	36.58	36.97	37.12	36.99	----
14	36.23	----	36.51	36.41	36.24	----	36.08	36.61	37.01	37.12	37.00	----
15	36.15	----	36.42	36.41	36.30	----	36.18	36.65	37.02	37.12	36.89	----
16	36.26	----	36.38	36.15	36.29	36.43	36.24	36.68	37.04	37.12	36.88	----
17	36.23	36.20	36.44	36.15	36.28	36.42	36.28	36.69	----	37.11	36.88	----
18	36.21	36.25	36.45	36.25	36.36	36.48	36.31	36.68	----	37.13	36.68	----
19	36.30	36.31	36.44	36.28	----	36.49	36.35	36.70	36.87	37.10	36.95	----

Table 9.--Water levels in observation wells, Parke County--Continued

(Daily highest water level from recorder graph, 1960)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
20	36.34	36.33	36.46	36.25	----	36.50	36.40	36.70	36.88	37.14	36.95	----
21	----	36.27	36.36	36.26	----	36.21	36.44	36.73	36.93	37.13	36.96	----
22	----	36.36	36.36	36.34	----	35.76	36.45	36.75	36.93	37.07	36.96	----
23	----	36.40	36.35	36.35	----	34.34	36.47	36.77	36.95	37.07	36.99	----
24	----	36.37	36.35	36.35	----	34.83	36.50	36.81	36.97	37.14	36.93	----
25	----	36.30	36.34	36.36	----	35.39	36.53	36.81	36.99	37.13	36.94	----
26	----	36.42	36.32	36.38	----	35.66	36.45	36.83	----	37.02	36.95	----
27	----	36.45	35.80	36.44	----	35.84	36.45	36.85	----	37.02	36.96	----
28	----	36.43	35.80	36.44	----	35.94	36.49	36.85	36.99	37.04	36.90	----
29	----	36.47	35.83	36.39	----	35.99	36.53	36.86	36.99	37.06	36.91	----
30	----	----	35.62	36.32	----	36.12	36.53	36.89	37.02	37.01	36.92	36.71
31	----	----	35.62	----	----	----	36.60	36.89	----	36.99	----	36.70

PUBLICATIONS OF COOPERATIVE GROUND-WATER PROGRAM

Report

Ground-water resources of the Indianapolis area, Marion County, Ind. C. L. McGuinness. Indiana Department Conservation, Division Geology. 1943

Bulletins

- No. 1 Memorandum concerning a pumping test at Gas City, Indiana. J. G. Ferris, Indiana Department of Conservation, Division of Water Resources. 1945.
- 2 A preliminary report of the ground-water levels of the State based on records of twenty-six observation wells for which long time records are available. Indiana Department of Conservation, Division of Water Resources. 1946 (Out of print).
- 3 Ground-water resources of St. Joseph County, Indiana. Part 1, South Bend area. F. H. Klaer, Jr., and R. W. Stallman. Indiana Department of Conservation, Division of Water Resources. 1948.
- 4 Ground-water resources of Boone County, Indiana. E. A. Brown. Indiana Department of Conservation, Division of Water Resources. 1949.
- 5 Ground-water resources of Noble County, Indiana. R. W. Stallman and F. H. Klaer, Jr. Indiana Department of Conservation, Division of Water Resources. 1950.
- 7 Water-level records of Indiana. Indiana Department of Conservation, Division of Water Resources. 1956.
- 8 Ground-water resources of Tippecanoe County, Indiana. Appendix, Basic Data. J. S. Rosenshein and O. J. Cosner. Indiana Department of Conservation, Division of Water Resources. 1956.
- 8 Ground-water resources of Tippecanoe County, Indiana. J. S. Rosenshein. Indiana Department of Conservation, Division of Water Resources. 1958 (1959).
- 9 Ground-water resources of Adams County, Indiana. F. A. Watkins, Jr., and P. E. Ward. Indiana Department of Conservation, Division of Water Resources. 1962.
- 10 Ground-water resources of northwestern Indiana. Preliminary Report: Lake County. J. S. Rosenshein. Indiana Department of Conservation, Division of Water Resources. 1961.
- 11 Ground-water resources of west-central Indiana. Preliminary Report: Greene County. F. A. Watkins, Jr., and D. G. Jordan. Indiana Department of Conservation, Division of Water Resources. 1961.

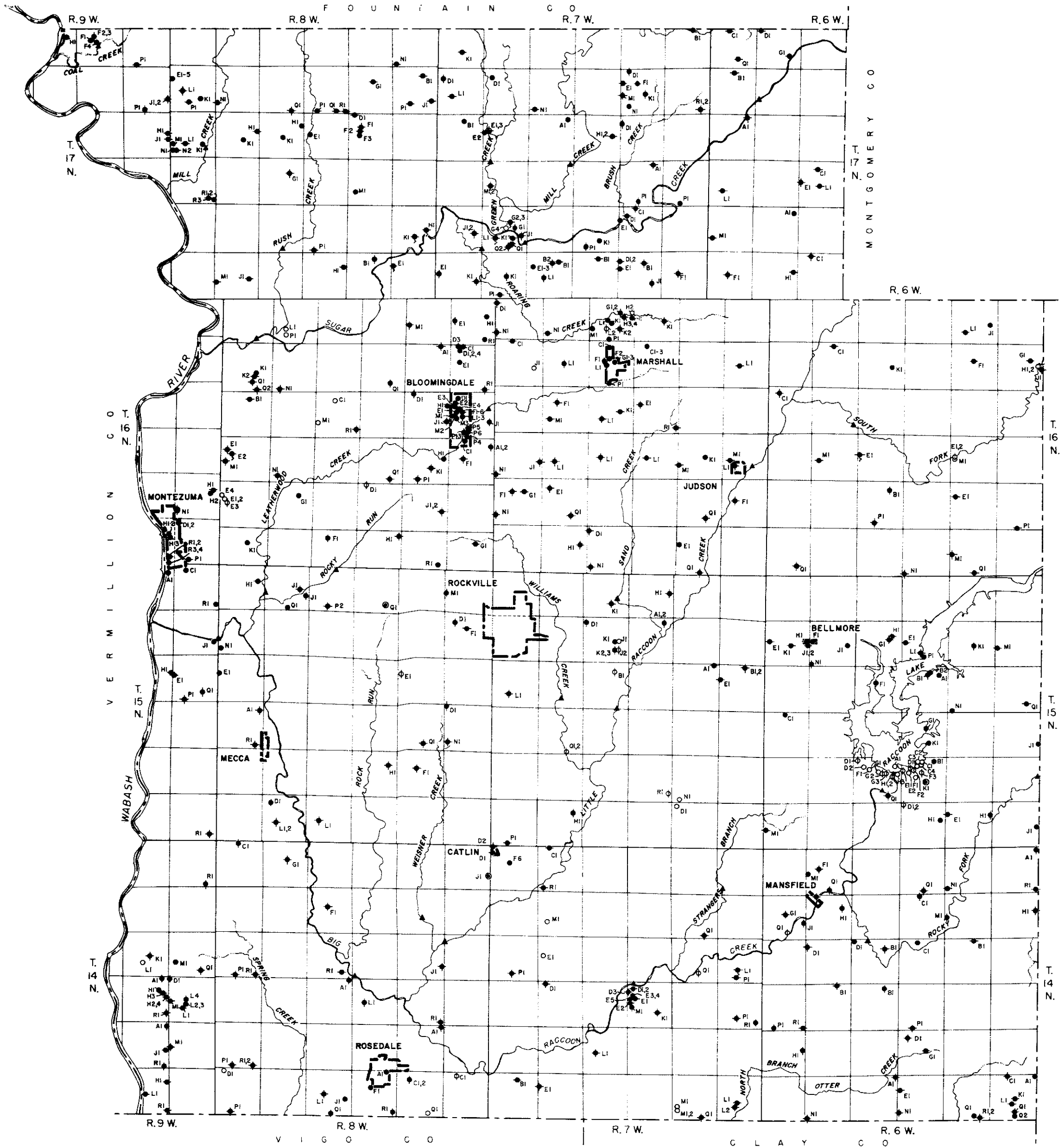
Publications of cooperative ground-water programs--Continued

Bulletins--Continued

- 12 Ground-water resources of northwestern Indiana. Preliminary Report: Porter County. J. S. Rosenshein. Indiana Department of Conservation, Division of Water Resources. 1962.
- 13 Ground-water resources of northwestern Indiana. Preliminary Report: La Porte County. J. S. Rosenshein and J. D. Hunn. Indiana Department of Conservation, Division of Water Resources. 1962.
- 14 Ground-water resources of west-central Indiana. Preliminary Report: Sullivan County. F. A. Watkins, Jr., and D. G. Jordan. Indiana Department of Conservation, Division of Water Resources. 1962.
- 15 Ground-water resources of northwestern Indiana. Preliminary Report: St. Joseph County. J. S. Rosenshein and J. D. Hunn. Indiana Department of Conservation, Division of Water Resources. 1962.
- 16 Ground-water resources of west-central Indiana. Preliminary Report: Clay County. F. A. Watkins, Jr., and D. G. Jordan. Indiana Department of Conservation, Division of Water Resources. 1962.
- 17 Ground-water resources of west-central Indiana. Preliminary Report: Vigo County. F. A. Watkins, Jr., and D. G. Jordan. Indiana Department of Conservation, Division of Water Resources. 1963.
- 18 Ground-water resources of west-central Indiana. Preliminary Report: Owen County. F. A. Watkins, Jr., and D. G. Jordan. Indiana Department of Conservation, Division of Water Resources. 1963.
- 19 Ground-water resources of northwestern Indiana. Preliminary Report: Marshall County. J. S. Rosenshein and J. D. Hunn. Indiana Department of Conservation, Division of Water Resources. 1964.
- 20 Ground-water resources of northwestern Indiana. Preliminary Report: Fulton County. J. S. Rosenshein and J. D. Hunn. Indiana Department of Conservation, Division of Water Resources. 1964.
- 21 Ground-water resources of west-central Indiana. Preliminary Report: Putnam County. F. A. Watkins, Jr., and D. G. Jordan. Indiana Department of Conservation, Division of Water Resources. 1964.
- 22 Ground-water resources of northwestern Indiana. Preliminary Report: Starke County. J. S. Rosenshein and J. D. Hunn. Indiana Department of Conservation, Division of Water Resources. 1964.
- 23 Ground-water resources of west-central Indiana. Preliminary Report: Parke County. F. A. Watkins, Jr., and D. G. Jordan. Indiana Department of Conservation, Division of Water Resources. 1964.

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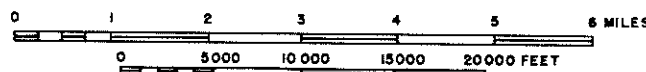


EXPLANATION

- B1 Water well
- ⊙ R5 Observation well
- O1 Spring
- RI Oil well, test hole, or hole drilled for purposes other than water supply
- ◆ P1 Well for which log is listed in table 5
- ◆ C2 Well or spring for which field chemical analysis is listed in table 6 or 7
- ▲ Stream-water sampling site - field chemical analysis of water in table 8

Base modified from Indiana Department of Conservation, Geological Survey, Base Map No. 61 of Parke County, November 1, 1957

MAP OF PARKE COUNTY, INDIANA, SHOWING LOCATION OF WELLS AND SPRINGS



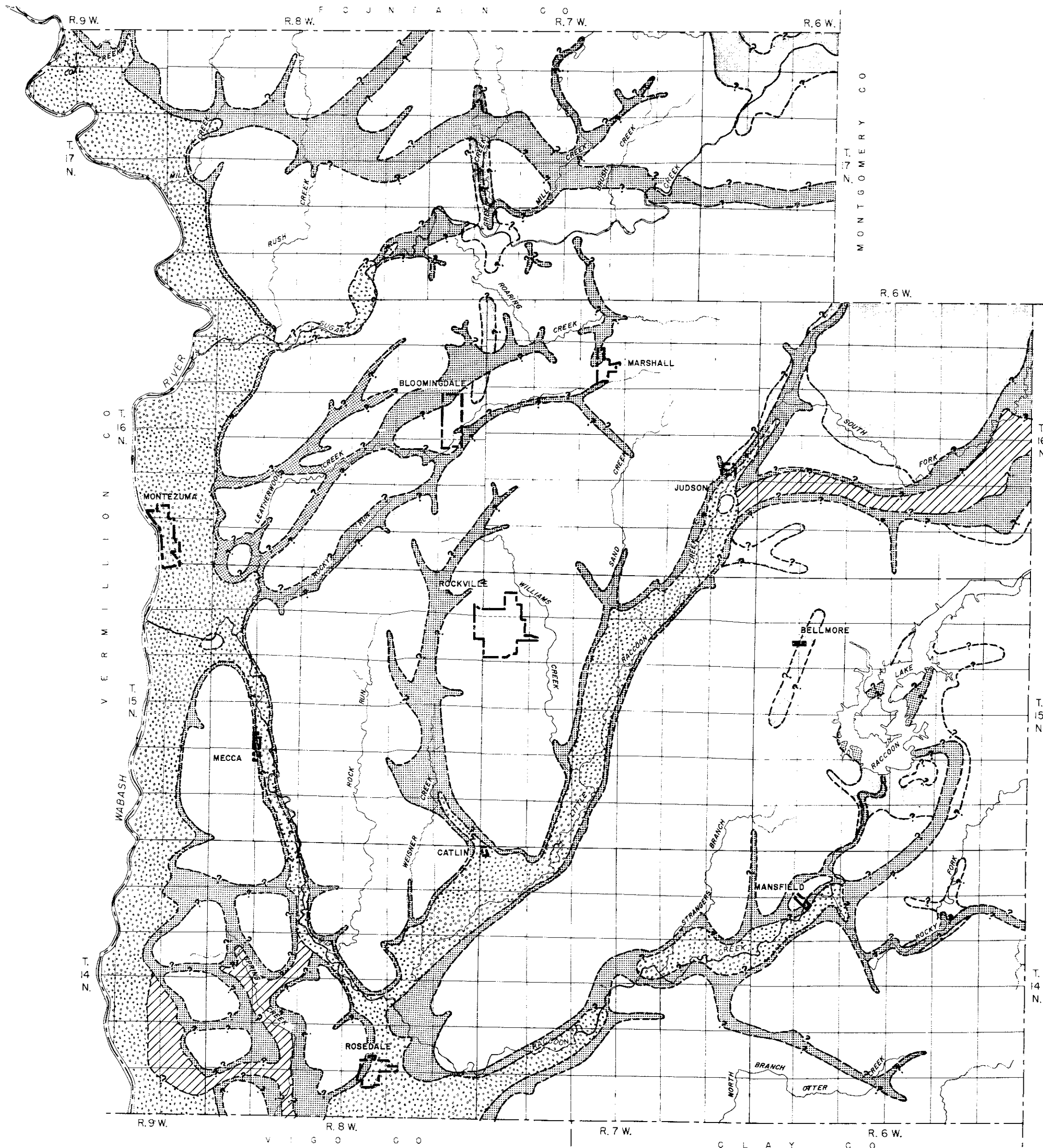
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1961

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

DIAGRAM OF TOWNSHIP

D	C	B	A
E	F	G	H
I	J	K	L
M	N	O	P
Q	R	S	T

SECTION LETTER SYMBOLS IN WELL-NUMBERING SYSTEM

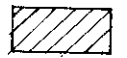


EXPLANATION

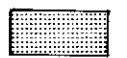
Production from sand and gravel



Water from sand and gravel of Pleistocene age overlain by Recent alluvium. Well depths range from 20 to 150 feet. Yields more than adequate for domestic and stock use. Area of municipal and irrigation pumpage and relatively large yields

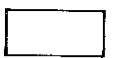


Water from sand and gravel of Pleistocene age overlain by fill. Well depths range from 50 to 130 feet. Yields more than adequate for domestic and stock use. Area in which large yields may be possible

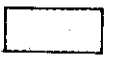


Water from sand and gravel lenses and stringers interbedded with fill or overlain by recent alluvium. Well depths range from 30 to 130 feet. Yields more than adequate for domestic and stock use. Some wells cased through the sand and gravel and tap the underlying bedrock

Production from bedrock



Water predominately from sandstone of Pennsylvanian age. Well depths range from 40 to 350 feet. Yields generally adequate for domestic and stock use



Water from limestone, sandstone, and siltstone of Mississippian age. Well depths range from 50 to 400 feet. Yields generally adequate for domestic and stock use

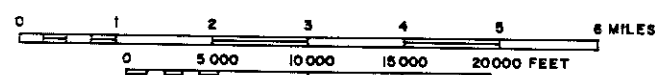
Boundary approximate



Boundary uncertain

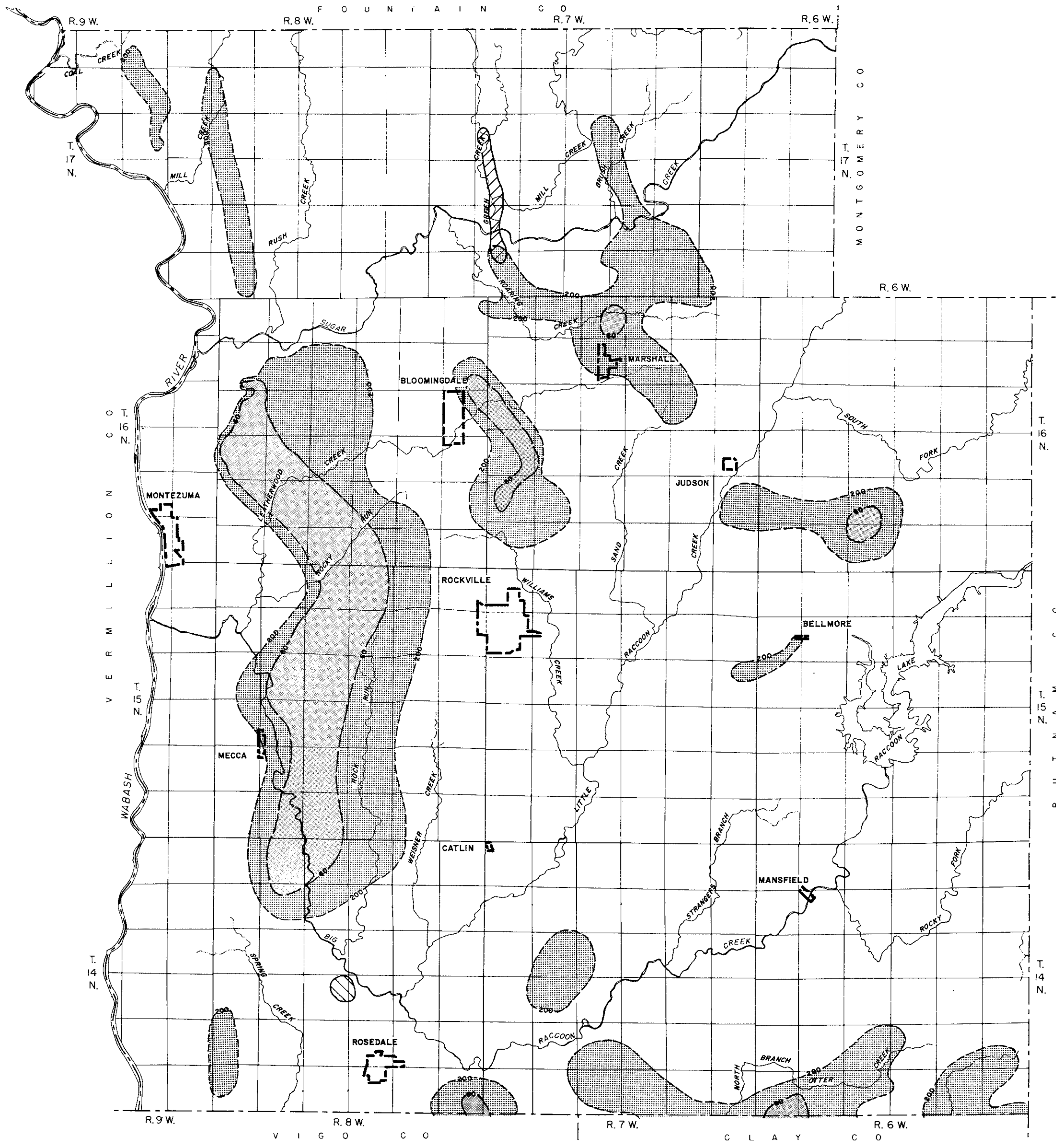


MAP OF PARKE COUNTY, INDIANA, SHOWING AVAILABILITY OF GROUND WATER










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1961

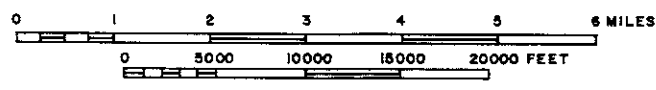
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EXPLANATION

-  Hardness near 0 to 60 ppm.
-  Hardness 61 to 200 ppm.
-  Hardness more than 200 ppm.
-  Area of chloride content in excess of 250 ppm. at a minimum depth of 132 feet
-  Area of sulfate content in excess of 250 ppm. at a minimum depth of 82 feet
-  Boundary approximate
-  Boundary uncertain

MAP OF PARKE COUNTY, INDIANA, SHOWING HARDNESS OF GROUND WATER



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6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

DIAGRAM OF TOWNSHIP

Base modified from Indiana Department of Conservation, Geological Survey, Base Map No. 61 of Parke County, November 1, 1957