Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 11/3W-27Q1

Type of record: Log from owner (memory). Altitude: About 735 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	12	12	
Quicksand	88	100	
Mississippian system:			
Meramec series:			
Limestone	12	112	

Well 11/3W-27Q2

Type of record: Driller's log (memory). Altitude: About 740 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck, sandy	30	30	
Sand	70	100	
Gravel	4	104	
Sand	7	111	
Mississippian system:			
Meramec series:			
Limestone	50	161	

Well 11/3W-27Q3

Type of record: Driller's log (memory). Altitude: About 735 feet.

Quaternary system:			
Recent and Pleistocene series:			
Surface	32	32	
Quicksand	68	100	
Gravel	6	106	

Well 11/3W-27R1

Type of record: Log from owner (memory). Altitude: About 735 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	30	30	
Quicksand	4	34	
Mississippian system:			
Meramec series:			
Limestone	116	150	

Well 11/3W-27R2

Type of record: Driller's log. Altitude: About 735 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and clay	44	44	

Well 11/3W-27R2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Mississippian system:			
Meramec series:			
Limestone	32	76	
Limestone, shaly	19	95	W.B. at 86 ft

Well 11/3W-30Q1

Type of record: Driller's log. Altitude: About 765 feet.

Quaternary system:			
Recent and Pleistocene series:			
Surface	14	14	
Mississippian system:			
Chester series:			
Sandstone	3	17	
Shale	15	32	
Meramec series:			
Limestone, hard	70	102	
Stone, blue	11	113	Siltstone (?)
Limestone, hard	12	125	
Limestone, soft, white	21	146	
Limestone, hard	30	176	
Limestone, soft, white	4	180	W.B.
Soapstone and sulfur	1	181	
Limestone, soft, white	19	200	
Limestone, soft	1	201	
Osage ? series:			
Shale, blue	3	204	
Layers, varied	16	220	
Limestone, hard, 2 ft alternating with 2 ft shales	20	240	W.B.

Well 11/3W-31C1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil, clayey	19	19	
Mississippian system:			
Meramec series:			
Limestone, extra hard, white	55	74	
Limestone, gray	37	111	
Limestone, brown	19	130	
Limestone, gray	11	141	
Limestone, hard, white	9	150	

Well 11/3W-32A2

Type of record: Driller's log. Altitude: About 770 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	7	7	

Well 11/3W-32A2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Gravel	7	14	
Sand	11	25	
Shale, yellow	4	29	Clay (?)
Shale, blue	8	37	Do
Limestone and gravel	4	41	Limestone fragments (?)
Gravel	2	43	
Sand	8	51	
Mississippian system:			
Meramec series:			
Limestone, oolitic	22	73	
Limestone and thin layers of shale	39	112	
Osage ? series:			
Limestone	36	148	
Shale	49	197	
Siltstone	39	236	

Well 11/3W-34K1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	30	30	
Sand, yellow	20	50	
Mississippian system			
Meramec series:			
Limestone	21	71	W.B.

Well 11/4W-2H1

Type of record: Driller's log (memory). Altitude: About 810 feet.

Quaternary system:			
Recent and Pleistocene series:			
Hardpan	20	20	
Sand	80	100	
Muck, blue	20	120	
Mississippian system:			
Chester series:			
Sandstone	10	130	
Meramec ? series:			
Limestone	--	130	W.B.

Well 11/4W-3C1

Type of record: Driller's log (memory). Altitude: About 830 feet.

Quaternary system:			
Recent and Pleistocene series:			
Hardpan, blue muck, and sand	72	72	

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 11/4W-3C1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Mud seam	--	72	
Hardpan and blue muck	33	105	Red water at 85 ft
Mississippian system:			
Meramec series:			
Limestone	95	200	Stink water at 195 ft

Well 11/4W-12E1

Type of record: Driller's log. Altitude: About 925 feet.

Quaternary system:			
Recent and Pleistocene series:			
Surface	8	8	
Pennsylvanian system:			
Lower series:			
Sandstone	12	22	
Shale, sandy, blue	13	35	
Coal	1	36	
Shale, light	8	44	
Slate, blue	1	45	
Coal, trace	--	45	
Slate, blue	6	51	
Coal	1	52	
Shale, blue	3	55	
Sandstone, brown	5	60	
Shale, sandy, blue	8	68	
Shale, dark-blue	10	78	
Shale, light-blue	7	85	
Shale, blue	30	115	
Coal	1	116	
Shale, blue	9	125	
Sandstone	8	133	W.B.
Mississippian system:			
Chester ? series:			
Shale, light	32	165	
Shale, brown	8	173	
Limestone, white	3	176	
Shale, limy	4	180	
Limestone, sandy	6	186	
Meramec ? series:			
Shale, limy	6	192	
Limestone, white	9	201	
Shale, limy	3	204	
Shale, limy, sandy	13	217	
Shale, cavy, green	5	222	
Limestone	10	232	
Shale, limy	2	234	
Limestone	66	300	

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 11/4W-24J1

Type of record: Driller's log (memory). Altitude: About 845 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	17	17	
Pennsylvanian system:			
Lower ? series:			
Sandstone	63	80	W.B.
Mississippian system:			
Chester ? series:			
Limestone, hard, gray	6	86	
Slate	14	100	
Meramec ? series:			
Limestone, hard	92	192	
Limestone, soft	34	226	W.B.

Well 11/4W-26Q1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay and gravel	15	45	
Gravel, muddy, blue	19	64	
Gravel and sand	3	67	W.B.
Coal	--	67	Float (?)

Well 11/4W-27L1

Type of record: Driller's log. Altitude: About 855 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	23	23	
Pennsylvanian system:			
Lower series:			
Sandstone	4	27	
Fire clay	7	34	
Sandstone	9	43	
Coal	2	45	
Shale, black	31	76	
Sandstone	4	80	W.B.

Well 11/4W-29C1

Type of record: Driller's log. Altitude: About 740 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	20	20	
Sand	20	40	
Gravel	3	43	W.B.

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 11/4W-29C2

Type of record: Driller's log. Altitude: About 740 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	15	15	
Pennsylvanian system:			
Lower series:			
Slate, blue	26	41	
Slate, sandy, blue	2	43	
Shale, sandy, light	8	51	

Well 11/4W-29M1

Type of record: Driller's log. Altitude: About 860 feet.

Quaternary system:			
Recent and Pleistocene series:			
Surface	7	7	
Pennsylvanian system:			
Lower series:			
Sandstone, yellow	16	23	
Shale, light-blue	8	31	
Shale, sandy, blue	3	34	
Sandstone, yellow	19	53	
Sandstone, blue	10	63	
Coal, trace	--	63	
Clay, hard	4	67	
Sandstone, light-blue	11	78	
Coal, trace	--	78	
Slate, blue	3	81	
Shale, sandy, blue	22	103	
Shale, dark-blue	9	112	
Shale, light	11	123	
Shale, sandy, blue	4	127	
Sandstone, pasty	12	139	
Mississippian system:			
Chester ? series:			
Shale, limy	2	141	
Limestone	2	143	

Well 11/5W-2E1

Type of record: Driller's log. Altitude: About 730 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, yellow	26	27	
Pennsylvanian system:			
Lower series:			
Sandstone	3	30	
Shale, blue	27	57	W.B. at 33 ft

Well 11/5W-2E1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Pennsylvanian system:			
Lower series:			
Sandstone	53	110	W.B.
Shale, gray	25	135	
Shale, black	35	170	
Shale, blue	70	240	
Sandstone, white	5	245	W.B.

Well 11/5W-13F1

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

Quaternary system:			
Recent and Pleistocene series:			
Soil	3	3	
Sand, red	18	21	
Pennsylvanian system:			
Lower series:			
Sandstone	60	81	

Well 11/5W-14N1

Type of record: Driller's log (memory). Altitude: About 665 feet.

Quaternary system:			
Recent and Pleistocene series:			
Drift	12	12	
Pennsylvanian system:			
Lower series:			
Shale	98	110	
Sandstone	30	140	
Slate and coal	3	143	
Shale and clay	14	157	
Shale	12	169	
Mississippian system:			
Chester ? series:			
Limestone	36	205	W.B.

Well 11/5W-26A1

Type of record: Driller's log, (memory). Altitude: About 700 feet.

Quaternary system:			
Recent and Pleistocene series:			
Surface	4	4	
Pennsylvanian system:			
Lower series:			
Sandstone	41	45	
Shale, blue	80	125	

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 11/5W-36E1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	10	10	
Pennsylvanian ? system:			
Lower ? series:			
Sandstone, red	7	17	
Shale, blue	63	80	
Sandstone	10	90	
Shale, black	25	115	
Shale, sandy, gray	30	145	
Shale, sandy	15	160	W.B.

Well 11/5W-36L1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	5	5	
Hardpan, clayey, yellow	5	10	
Sand and clay, soft	10	20	
Pennsylvanian ? system:			
Lower ? series:			
Shale with limestone bands	8	28	W.B.
Sandstone, brown	39	67	
Shale, blue	30	97	
Limestone	--	97	

Well 12/2W-28M1

Type of record: Driller's log. Altitude: About 805 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Hardpan, black	6	6	
Clay, sandy, black	22	28	
Hardpan, blue	4	32	
Sand and gravel, blue	5	37	
Hardpan, sandy, blue	10	47	
Hardpan, blue	.5	47.5	
Mississippian system:			
Meramec ? series:			
Limestone, hard, white	8.5	56	W.B.

Well 12/2W-28Q2

Type of record: Driller's log. Altitude: About 805 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil and blue mud	45	45	
Hardpan, gray	4	49	
Gravel, blue	--	49	

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 12/2W-30N1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil and clay	38	38	
Gravel and sand	2	40	W.B.
Clay, blue and quicksand	12	52	

Well 12/2W-33H1

Type of record: Driller's log. Altitude: About 800 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	12	12	
Mississippian system:			
Meramec ? series:			
Limestone	50.5	62.5	
Osage series:			
Shale, blue	5.5	68	W.B.
Shale, blue	92	160	

Well 12/3W-26J1

Type of record: Driller's log. Altitude: About 785 feet.

Old well	56	56	
Mississippian system:			
Meramec series:			
Limestone, hard	29	85	
Limestone, soft, blue	2	87	
Limestone, hard	21	108	

Well 12/3W-27N1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	12	12	
Mississippian system:			
Meramec ? series:			
Limestone	3	15	
Limestone, brown	29	44	
Limestone, gray	91	135	
Osage series:			
Shale, broken	35	170	
Shale, dark	30	200	
Shale, sandy, gray	100	300	T.D. 2,011 ft

Well 12/3W-29G1

Type of record: Driller's log. Altitude: About 800 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and clay	62	62	

Well 12/3W-29G1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Quicksand and mud	130	192	
Gravel, muddy	30	222	
Gravel, blue	--	222	W.B.

Well 12/3W-29J1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	11	11	
Mississippian system:			
Meramec series:			
Limestone, extra-hard, gray	17	28	
Limestone, extra-hard, bluish-white	16	44	
Limestone, medium-hard, white	2	46	
Limestone, soft, blue	1	47	
Limestone, extra-hard, grayish-brown	28	75	
Limestone, extra-hard, brown	10	85	
Limestone, soft, brown	.5	85.5	W.B.
Limestone, extra-hard, blue	4.5	90	

Well 12/3W-36E1

Type of record: Driller's log. Altitude: About 845 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	4	4	
Clay, sandy, red	14	18	
Mississippian system:			
Meramec series:			
Shale, soft, blue	1	19	
Limestone, extra-hard, white	7.5	26.5	
Stone, soft, white and blue	2.5	29	Siltstone (?)
Limestone, extra-hard, white	6	35	
Limestone, soft, white	2	37	W.B.
Limestone, extra-hard, brown	11	48	
Stone, soft, blue	.5	48.5	Siltstone (?)
Limestone, extra-hard, brown	10.5	59	
Limestone, soft, white	.5	59.5	
Limestone, hard, white	1.5	61	
Limestone, hard, brown	3	64	
Stone, soft, blue	2	66	Siltstone (?)
Limestone, brown	19	85	
Limestone, hard, bluish-gray	5	90	
Limestone, hard, brown	12	102	

Well 12/4W-21K1

Type of record: Driller's log. Altitude: About 790 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	20	20	
Softpan, yellow	8	28	
Softpan, gray	22	50	
Wash, gray	15	65	
Wash, yellow	4	69	
Sand, dirty, yellow	6	75	
Wash, gray	98	173	
Mississippian system:			
Meramec series:			
Limestone, white	79	252	
Limestone, brown	12	264	
Limestone, soft, gray	7	271	
Limestone, brown	4	275	W.B.
Limestone, soft, gray	4	279	
Limestone, brown	4	283	
Limestone, gray	60	343	
Limestone, brown	30	373	
Limestone, gray	25	398	
Limestone, white	17	415	
Shale, limy, gray	4	419	
Limestone, white	11	430	
Osage ? series:			
Shale, limy, blue	4	434	
Limestone, soft, blue	10	444	
Limestone, shaly, soft, dark	101	545	

Well 12/4W-21L1

Type of record: Driller's log. Altitude: About 800 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Sand	60	100	
Quicksand	20	120	W.B.
Mississippian system:			
Chester series:			
Shale	40	160	
Soapstone	5	165	
Meramec series:			
Limestone, white	60	225	

Well 12/4W-22F1

Type of record: Driller's log. Altitude: About 730 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	11	11	

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 12/4W-22F1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Mississippian system:			
Meramec series:			
Limestone, white	49	60	
Limestone, gray	45	105	
Limestone, white	145	250	W.B. at 233 ft

Well 12/4W-28B1

Type of record: Driller's log. Altitude: About 765 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	10	10	
Hardpan, gray	19	29	
Mississippian system:			
Meramec series:			
Limestone, hard, white	58	87	

Well 12/4W-28M1

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

Quaternary system:			
Recent and Pleistocene series:			
Surface and sandy pan	30	30	
Pennsylvanian ? system:			
Lower ? series:			
Sandstone	58	88	
Mississippian system:			
Chester ? series:			
Shale, sandy, gray	17	105	
Shale, gray	4	109	
Shale, sandy, gray	21	130	

Well 12/4W-28Q1

Type of record: Driller's log. Altitude: About 710 feet.

Quaternary system:			
Recent and Pleistocene series:			
Surface	17	17	
Wash, clayey, yellow	18	35	
Softpan	4	39	
Sand and gravel, trace	--	39	W.B.
Softpan	26	65	
Wash	16	81	
Mississippian system:			
Meramec ? series:			
Limestone	1	82	

Well 12/4W-29C1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	23	23	
Pennsylvanian system:			
Lower series:			
Shale, gray	21	44	
Sandstone	2	46	
Shale, gray	36	82	
Mississippian system:			
Meramec series:			
Limestone, yellow	9	91	
Limestone, white	2	93	
Shale, limy, sandy	20	113	
Shale, limy	7	120	
Limestone	2	122	W.B.
Shale, limy	7	129	

Well 12/4W-29F3

Type of record: Driller's log. Altitude: About 780 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	18	18	
Pennsylvanian system:			
Lower series:			
Shale	17	35	
Sandstone	10	45	
Soapstone	25	70	
Clay	5	75	W.B.
Shale, blue	14	89	
Fire clay	--	89	

Well 12/4W-29F5

Type of record: Driller's log. Altitude: About 780 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	18	18	
Pennsylvanian system:			
Lower ? series:			
Shale, blue	20	38	
Shale, gray	10	48	
Rock, hard	1	49	
Shale, gray	11	60	
Shale, blue	25	85	
Mississippian system:			
Meramec ? series:			
Limestone	15	100	
Limestone, soft, yellow	7	107	

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 12/4W-29F-5--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Mississippian system:			
Meramec ? series:			
Shale, limy, blue	3	110	
Limestone, sandy, blue	9	119	
Shale, limy, blue	11	130	
Limestone, soft, blue	7	137	

Well 12/4W-33B1

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

Quaternary system:			
Recent and Pleistocene series:			
Surface clay	25	25	
Sand, dirty, yellow	3	28	
Clay, sandy, yellow	4	32	
Sand, dirty, yellow	44	76	
Softpan, gray	16	92	
Gravel, coarse	1	93	W.B.
Softpan	6	99	

Well 12/4W-33H1

Type of record: Driller's log (memory). Altitude: About 740 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	10	10	
Sand	93	103	
Mississippian system:			
Meramec series:			
Limestone, hard	22	125	W.B.

Well 12/4W-35R1

Type of record: Driller's log. Altitude: About 765 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	40	40	
Quicksand	45	85	
Muck, black, and gravel	15	100	W.B.
Mississippian system:			
Meramec series:			
Limestone, boulders	10	110	
Limestone, dark	15	125	W.B.

Well 12/5W-23G1

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

Quaternary system:			
Recent and Pleistocene series:			
Hardpan	64	64	

Well 12/5W-23G1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Pennsylvanian system:			
Lower series:			
Slate	26	90	
Sandstone, white	15	105	W.B.

Well 12/5W-23Q1

Type of record: Driller's log. Altitude: About 765 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	14	14	
Pennsylvanian system:			
Lower series:			
Sandstone, yellow	19	33	
Slate, soft, blue	3	36	
Slate, blue	4	40	
Slate, black	10	50	
Sandstone	3	53	
Shale, blue	20	73	
Shale, sandy, gray	12	85	
Sandstone, gray	8	93	W.B.

Well 12/5W-24C1

Type of record: Driller's log. Altitude: About 770 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	18	18	
Sand, coarse, yellow	65	83	
Hardpan	3	86	
Gravel, trace	--	86	
Hardpan	9	95	
Softpan, gray	32	127	
Mississippian ? system:			
Chester ? series:			
Shale, soft, light-green	7	134	
Shale, soft, blue	2	136	
Shale, soft, gray	12	148	
Limestone, shelly	2	150	W.B.

Well 12/5W-24F1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Surface	14	14	
Sand, dirty, yellow	89	103	
Softpan, gray	2	105	
Gravel, dirty, trace	--	105	
Wash, clayey, soft	50	155	

Table 4.--Selected well logs, Owen County, Indiana--Continued

Well 12/5W-24H2

Type of record: Driller's log (memory). Altitude: About 765 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	30	30	
Sand	10	40	
Clay, blue	90	130	
Gravel	1	131	W.B.
Clay, blue	69	200	
Silt	--	200	

Well 12/5W-25J1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	5	5	
Sand	85	90	
Gravel	--	90	

Well 12/5W-25K1

Type of record: Driller's log, (memory). Altitude: About 710 feet.

Quaternary system:			
Recent and Pleistocene series:			
Hardpan	25	25	
Sand	80	105	
Pennsylvanian ? system:			
Lower ? series:			
Sandstone	21	126	

Table 5.--Field chemical analyses of water from wells, Owen County, Indiana

(Results in parts per million)

Well number: See text for description of well-numbering system.
Geologic age: Pl, Pleistocene; P, Pennsylvanian; M, Mississippian.
Material: Cl, clay; G, gravel; Ls, limestone; S, sand; Sd-sh, sandy shale; Sh, shale; Sh-ls, shaly limestone; 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
9/3W- 1R1	S,G	Pl	7-23-59	65	2.0	366	15	4	280	
2E1	S,G	Pl	8- 3-59	65	1.5	395	5	1	308	
5C1	Ls	M	10-16-59	58	1.0	49	12	166	232	
8R1	Ss	P	8-18-59	54	1.0	156	17	4	72	
9K1	Sh	M	10-16-59	55	1.5	376	11	6	272	
12C1	Sh	M	11-17-60	--	.1	293	295	26	560	
12N1	G	Pl	7-24-59	55	.2	49	10	4	16	
16R1	Ls	M	3-28-60	52	.1	322	38	16	236	
17N1	Ss	P(?)	8- 3-59	54	2.0	73	18	6	40	
26Q1	Ls	M	8- 3-59	60	.5	322	330	10	612	
9/4W- 4B1	Sh	M	7-22-59	70	.5	200	10	3	152	
5M1	Ls	M	7-22-59	64	.5	332	25	4	240	
6H1	Ls	M	7-22-59	64	1.0	307	75	22	208	
6R1	S,G	Pl	8- 3-59	62	2.0	332	10	4	244	
7Q1	S,G	Pl	7-23-59	64	5.0	454	10	5	336	
10N1	Ss	M	7-23-59	57	2.0	400	35	8	328	
16C1	Ls	M	7-23-59	58	.2	210	15	12	128	
19L1	G	Pl	8- 3-59	54	7.5	98	10	4	96	
20A2	Ss	M	10-16-59	65	.3	317	100	14	280	
20H1	Sh	M	7-23-59	70	.5	366	160	8	392	
20H2	Ss	M	7-23-59	58	5.0	366	100	6	300	
21D1	Sh	M	7-23-59	68	1.0	239	120	22	256	
21D2	Ss	M	7-23-59	65	.5	259	95	18	290	
22F1	Ss	M	7-23-59	65	.3	322	20	2	228	

Table 5.--Field chemical analyses of water from wells, Owen 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
9/4W-23A1	G,S	Pl	10-16-59	55	4.0	561	81	10	480	
29H1	Ss	M	11-21-58	59	1.0	410	--	6	196	
9/5W- 7J1	----	P	8- 5-59	62	.1	737	20	22	32	
7L1	Sh	P	8-20-59	65	.3	1,040	13	224	10	
8D1	Sd-sh	P(?)	6-28-60	57	.5	493	40	8	120	
13A1	S,G	Pl	8- 5-59	54	1.0	88	45	12	88	
18J1	Ss	P	6-28-60	55	3.0	137	80	52	136	
19L1	Ss	P	8- 5-59	65	.5	210	95	14	200	
21K1	Ss	P	6-28-60	57	3.0	224	140	8	256	
31P1	Ls	P(?)	10- 6-60	56	1.5	195	38	8	204	
9/6W-11F1	Ss	P	8-20-59	70	.3	693	31	10	3	
11L1	Ss	P	8-17-59	62	.5	595	16	8	2	
11L2	-----	P	10- 6-60	63	>7.5	5	1,760	42	1,720	
12E1	Ss	P	8-20-59	62	1.0	561	320	14	592	
13Q1	Ss	P	8-19-59	65	.5	600	17	50	20	
26C1	Sd-sh	P	8-20-59	70	1.0	200	225	26	324	Well depth 69 ft.
26C1	-----	P	11-17-60	--	3.0	366	74	8	220	Well depth 120 ft.
10/3W- 1P1	Ls	M	9-15-59	55	1.0	410	26	4	328	
3Q1	Ls	M	8- 6-59	55	1.5	410	95	30	412	
4G1	Ls	M	8-59	--	---	381	10	30	316	
4H1	Ls	M	8- 5-59	55	7.5	322	26	4	220	
4J1	S,G	Pl	9 -3-59	55	3.0	454	13	43	332	
9A1	Ls	M	8- 6-59	60	.5	395	20	14	316	
9G1	G	Pl	9-16-59	63	1.0	342	85	8	300	
9K1	S,G	Pl	8- 5-59	65	.5	371	25	4	308	
10B1	Ls	M	9-15-59	55	.5	400	132	30	428	
10B2	Ls	M	9-15-59	55	>7.5	327	34	4	256	
13E1	Sh	M	8- 6-59	60	1.0	361	15	11	328	
14C1	Ls	M	8- 6-59	59	2.5	493	60	6	448	

10/3W-14C2	Ls	M	8- 6-59	60	0.5	405	65	4	364
16H1	Ls	M	8- 5-59	65	.5	356	25	6	288
16J1	Ls	M	8- 7-59	65	.3	351	28	8	284
19E1	Ls	M	8- 7-59	60	.3	410	115	24	452
20M1	S,G	P1	11-16-60	54	5.0	361	17	12	324
20N2	Ls	M	8- 7-59	70	.3	400	60	12	380
21C1	S,G	P1	9-15-59	56	4.0	415	10	6	272
21F1	Ls	M	9-15-59	64	.1	425	32	4	328
21M1	Ls	M	9-15-59	59	.1	493	40	14	400
21M2	S	P1	9-15-59	60	.1	332	35	10	260
24P1	Ls	M	9-15-59	65	1.0	366	260	5	436
24R1	Ls	M	8- 6-59	56	.3	283	45	70	348
25N1	Ls	M	8- 6-59	62	1.0	342	15	6	244
28M1	C1	M	8-17-59	60	.5	395	19	2	288
28P1	Ls	M	10- 5-60	58	1.5	293	14	8	248
31D1	S	P1	8-19-59	65	.5	283	20	4	208
32L1	G	P1	8-18-59	54	.5	327	14	3	248
32M1	Ls	M	3-29-60	50	1.0	366	18	6	292
33B1	Ls	M	8- 6-59	58	.1	361	15	5	292
33B2	Ls	M	8- 6-59	65	.3	264	20	88	320
33H1	Ls	M	8- 7-59	60	4.0	478	10	4	352
33H2	Ls	M	8- 6-59	60	3.0	468	28	4	332
34L1	Ls	M	11-16-60	--	3.0	508	9	8	352
34P2	S,G	P1	7-24-59	65	7.5	542	95	8	516
10/4W- 1H1	Ls	M	7-21-59	67	2.5	405	5	6	284
3D1	Ss	M	7-21-59	70	.5	288	40	4	250
5P1	Sh	P	7-21-59	55	>7.5	102	230	26	256
13E1	-----	M(?)	7-21-59	55	7.5	264	8	2	188
14H1	-----	P1(?)	7-22-59	55	7.5	303	15	4	232
14L1	Ls	M	7-22-59	62	1.0	317	30	4	256
23C1	Ss	M	7-21-59	72	.5	151	52	8	136
24A1	S	P1	7-21-59	59	3.0	351	5	2	248
24A3	Ls	M	7-23-59	58	2.0	322	10	2	236
25C1	Ss	M	10-16-59	56	.1	283	11	4	212
26F1	Ls	M	7-22-59	59	.5	268	100	6	296
26Q1	Ls	M	7-22-59	55	3.0	205	50	14	192

Table 5.--Field chemical analyses of water from wells, Owen 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
10/4W-30F1	G	Pl	8-21-59	55	1.0	220	39	5	160	
32H1	Ls	M	7-22-59	56	.5	273	25	13	272	
32J1	Ls	M	7-22-59	62	.5	190	20	3	148	
33N1	Ss	M	7-22-59	62	.5	142	140	10	204	
35D1	Ls	M	12-19-57	47	.1	339	-----	10	414	
35P1	Ls	M	7-22-59	60	.5	288	270	20	468	
36C1	G	Pl	7-22-59	55	.5	220	10	3	160	
10/5W- 3B1	-----	P	9-18-59	57	.3	59	10	10	14	
9R1	Ss,Sh	P	--------	57	>7.5	88	165	28	142	
9R2	Sh	P	9-18-59	58	1.0	88	48	32	70	
14E1	-----	P	8-21-59	65	.3	508	32	38	396	
15B1	Sh	P	9-18-59	55	>7.5	478	775	12	1,070	
15B2	Ss(?)	P	9-18-59	57	>7.5	176	510	8	556	
16A1	Sh	P	9-18-59	57	1.3	117	155	12	144	
20G1	S(?)	Pl	8-21-59	65	.8	381	32	8	276	
24C1	Ls	M	8-21-59	65	.3	83	50	12	100	
29Q1	Ss	P	8-21-59	65	1.0	522	555	14	396	
10/6W- 2K1	Ss	P	12-30-59	--	3.0	464	105	12	128	
13F1	Sh,Ss	P	12-30-59	--	.1	888	64	8	4	
13L1	Ss	P	8-20-59	60	.5	664	110	4	6	
23R1	Ss	P	10- 6-60	--	.5	507	10	12	84	
24Q1	-----	M(?)	8-20-59	65	.3	776	174	54	114	
25B1	-----	M(?)	8-20-59	65	>7.5	356	900	26	1,100	
25L1	Ls	M	8-20-59	62	.3	556	30	10	40	
26A1	-----	P(?)	8-20-59	65	.5	649	24	16	40	
35C1	G	Pl P(?)	10-15-59	58	1.5	122	30	266	268	
36D1	Sh	P	8-20-59	65	1.0	439	22	15	260	
11/2W- 7J1	Sh	M	9-15-59	60	1.5	346	17	6	252	

11/2W-16Q1	S,G	P1	9-14-59	64	1.0	337	75	44	316	
20Q1	Ss	M	9-14-59	64	1.0	454	31	6	296	
21C1	S	P1	9-15-59	55	>7.5	615	150	10	612	
29G1	G	P1	9-14-59	55	.5	425	17	8	312	
30A1	Ls	M	9-15-59	55	1.0	425	19	16	256	
11/3W- 2Q1	Ls	M	9- 2-59	55	.8	434	26	3	316	
8A1	Ls	M	9- 3-59	65	.5	337	109	14	284	
13R1	Ls	M	9- 2-59	55	.5	444	22	6	336	
15B1	Ls	M	9- 2-59	55	.5	337	33	50	316	
17R1	Ls	M	9- 3-59	65	.5	429	54	8	364	
19P1	Ls	M	9- 4-59	62	.8	395	15	4	276	
19P2	Ls	M	9- 4-59	55	.5	459	28	23	376	
20L1	Ls	M	9- 3-59	55	4.0	483	43	12	396	
22B1	Ls	M	9- 3-59	55	1.0	371	24	64	332	
25L1	Sh	M	3-29-60	58	.8	483	16	94	124	
26N1	Ls	M	9- 3-59	65	.5	425	10	4	272	
27E1	Ls	M	9- 3-59	65	2.0	366	7	18	264	
27P1	Ls	M	9- 4-59	65	3.0	342	22	4	236	
27Q3	S,G	P1	10-15-59	--	1.5	0	13	110	240	Contaminated (?)
27R2	Sh-ls	M	11-16-60	--	1.0	239	12	8	184	
34K1	Ls	M	9- 3-59	62	.5	312	27	6	236	
34K2	S,G	P1	9- 4-59	62	.8	322	14	2	224	
11/4W- 2H1	Ls	M	8- 7-59	56	3.0	351	27	7	208	
22D1	Sh	P	8- 3-59	60	1.5	171	39	4	96	
24J1	Ss	P	8- 4-59	70	.3	117	26	5	76	
	Ls	M								
26Q1	G,S	P1	10- 6-60	56	1.0	137	515	8	644	
29C1	S,G	P1	8- 4-59	55	.3	220	60	3	184	
11/5W- 2E1	Ss	P	9-11-58	--	1.0	273	-----	14	192	
2M1	Ss	P	9-11-58	63	>7.5	342	-----	12	252	
13F1	Ss	P	9-17-59	60	.1	298	27	24	260	
14N1	Ls	M	4- 5-60	--	.3	98	12	24	68	
26A1	-----	P	9-17-59	62	.3	161	44	32	136	
36E1	Sd-sh	P	9-17-59	59	7.5	268	39	6	184	

Table 5.--Field chemical analyses of water from wells, Owen 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
12/2W-28Q1	Ls	M	9-18-59	55	3.5	464	16	14	332	
28Q2	G	Pl	9-16-59	60	.2	351	14	12	216	
30J1	Ls	M	9- 2-59	65	.5	317	24	17	220	
30R1	Ls	M	9- 2-59	55	.5	322	39	10	272	
31H1	Ls	M	9- 2-59	65	.5	415	37	8	344	
33H1	Sh	M	9-16-59	60	.2	468	17	4	244	
12/3W-25B1	G	Pl	9- 1-59	55	2.0	371	9	20	228	
26B1	Ls	M	9- 1-59	65	.3	327	20	9	268	
26B3	G	Pl	9- 1-59	60	1.5	346	18	10	264	
26C1	S	Pl	9- 3-59	54	7.5	449	8	52	296	
26J1	Ls	M	9- 1-59	65	.3	429	34	10	352	
27B1	Sh	M	9- 1-59	65	2.5	429	18	18	288	
27P1	G	Pl	9- 3-59	65	.3	268	11	8	212	
29B1	G	Pl	9- 2-59	62	.8	371	11	8	276	
29G1	G	Pl	9- 2-59	60	7.5	517	8	8	384	
29G2	G	Pl	9- 2-59	65	.5	317	12	6	216	
29J1	Ls	M	11-16-60	56	1.0	332	11	22	280	
33M1	Ls	M	1-11-60	55	.2	468	6	10	332	
33N1	Ls	M	9- 4-59	55	.5	327	53	8	296	
34B1	Ls	M	9- 2-59	65	.5	317	15	6	220	
34J1	Ls	M	9- 2-59	54	.5	298	37	13	252	
12/4W-21K1	Ls	M	8-18-59	70	.8	405	26	3,400	332	
24J1	G	Pl	8-18-59	70	3.0	366	24	6	244	
24Q1	S	Pl	8-18-59	65	.8	381	12	18	264	
26A1	Ls(?)	M(?)	8-19-59	54	5.0	288	29	118	328	
28Q1	S,G	Pl	9-16-59	56	.5	332	28	4	260	
29C1	Ls	M	11-14-60	--	.5	293	53	20	272	
33B1	G	Pl	9-16-59	62	1.0	293	11	2	196	

12/4W-33H1	Ls	M	8-18-59	65	0.8	395	32	6	88	
33H2	S	P1	8-18-59	58	.5	346	56	10	280	
33J1	Ss	P	11-16-60	--	.5	303	18	28	260	
34D1	Ls	M	10-15-59	55	1.5	303	12	14	208	
35R1	Ls	M	11-16-60	--	.1	288	10	18	252	
12/5W-23Q1	Ss	P	8-18-59	54	1.5	156	95	8	110	
24C1	Ls	M	8-17-59	65	.1	386	24	4	280	
25J1	S,G	P1	8-18-59	62	.5	117	12	3	44	
25K1	Ss	P	8-18-59	62	1.0	327	17	3	224	

Table 6.--Records of springs, Owen County, Indiana

Spring number: See text for well-numbering system.
Altitude: Altitude of land-surface datum from topographic map.
Water bearing-material: Cg, conglomerate; Ls, limestone; Sh, shale; Ss, sandstone; T, till.
Geologic age: Pl, Pleistocene; P, Pennsylvanian; M, Mississippian.
Flow: e, estimated; m, measured.
Use: D, domestic; N, not used; S, stock.
Field chemical analyses: In parts per million; water samples collected on date of measurement.

Spring	Owner	Popular Name	Altitude (feet)	Water-bearing material	Geologic age	Flow (gpm)	Date of measurement	Use	Field Chemical Analyses						Remarks
									Temperature (°F)	Iron (Fe)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Hardness as $CaCO_3$ (calcium & magnesium)	
9/3W-17B1	R. Bixler	--------	720	Ss	M	e0.5	4-11-60	D	48	0.1	220	65	46	244	Spring from vertical crevice
20B1	----------	--------	580	Ls	M	e10	4-11-60	S	49	.3	195	31	6	108	Spring from bedding plane & joint
20C1	----------	--------	580	Ls	M	e40	4-11-60	N	49	----	---	---	--	---	Spring from limestone-sandstone contact
22J1	D. Newton	--------	615	Ls	M	e50	4-11-60	S	54	.1	283	54	6	236	
9/4W- 2F1	----------	--------	670	Ls	M	e15	4-13-60	N	54	.2	244	42	10	200	
12R1	----------	--------	550	Ls	M	e10	4-11-60	N	49	.1	185	27	8	128	Spring from solution openings
13A1	----------	--------	550	Ls	M	e25	4-11-60	S	--	---	---	--	--	---	Do
16E1	----------	--------	540	Ss	M	m4	4-13-60	N	52	.1	303	18	4	216	Spring from fracture
17R1	----------	--------	600	Ls	M	e10	4-13-60	N	53	.2	151	28	10	116	Spring from solution openings
27C1	----------	--------	570	Ls	M	e3	4-11-60	N	48	.2	132	22	8	120	Do

9/4W-32P1	----------	--------	550	Ls	M	e.5	11-19-59	S	41	.2	210	90	16	244	Seep from quarry face
11/3W-17J1	H. A. West	--------	740	T	P1	e.5	9-16-60	D	58	.2	322	12	8	296	Spring from till-limestone contact
32A1	----------	--------	610	Cg	P1	e2	9-16-60	N	61	1.5	312	12	6	256	Spring seep area in sand and gravel conglomerate
32C1	----------	--------	635	T	P1	m24	4-14-60	N	53	.2	249	13	6	176	Spring seep area from sand and gravel lenses in till
32G1	M. Chaney	--------	620	Ls	M	m15	4-14-60	N	50	.1	200	17	6	140	Spring from solution opening
11/4W-14N1	M. W. Gwinn	--------	670	Ls	M	e40	4-27-60	N	51	.1	181	34	6	100	Do
35B1	J. R. Soey	--------	610	Ls	M	e30	4-14-60	S	49	.1	190	34		144	Do
11/5W-35P1	----------	--------	700	Ss	P	e.5	9-14-60	N	60	.3	49	8	10	40	
12/4W-28N1	State of Indiana	--------	800	Sh	P	e1	4-28-60	N	--	>7.5	0	785	100	828	Seep area in road cut; water has corrosive action on concrete drain

Table 7.--Field chemical analyses of water from streams, Owen 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. 9 N., R. 3 W.					
Raccoon Creek	NE¼SE¼ sec. 13	9-16-60	71	0.2	249	18	12	208	Sample taken at bridge on county road
Little Raccoon Cr.	SE¼SW¼ sec. 25	9-16-60	78	.2	137	10	14	112	Do
Raccoon Creek	NW¼NW¼ sec. 27	9-16-60	70	.4	215	15	8	180	Do
				T. 9 N., R. 4 W.					
White River	SW¼NW¼ sec. 21	11-20-59	44	.2	303	100	24	252	Do
Raccoon Creek	NE¼SW¼ sec. 26	9-16-60	69	.2	215	23	8	188	Do
Fish Creek	SE¼NW¼ sec. 31	9-14-60	71	.3	146	12	8	112	Sample taken at bridge on state road
Jack Creek	SE¼SW¼ sec. 32	11-19-59	37	.1	185	46	6	148	Sample taken at bridge on county road
				T. 9 N., R. 5 W.					
Houser Creek	SW¼SW¼ sec. 5	9-14-60	72	.3	201	27	14	180	Do
Lick Creek	SE¼SW¼ sec. 7	9-14-60	70	.2	249	175	10	328	Do
Need Ditch	SE¼SW¼ sec. 20	9-14-60	80	.5	166	26	12	128	Do
Eel River	SE¼SW¼ sec. 31	11-19-59	38	.2	215	70	14	212	Sample taken at bridge on state road
Brush Creek	NE¼NW¼ sec. 33	9-14-60	65	.2	215	48	12	216	Sample taken at bridge on county road

					T. 10 N., R. 2 W.				
White River	NW¼SE¼ sec. 6	11-20-59	46	0.3	293	108	28	276	Sample taken at bridge on county road
					T. 10 N., R. 3 W.				
Little Mill Creek	SW¼SW¼ sec. 3	9-16-60	68	.2	220	12	8	172	Do
McCormick's Creek	SE¼SW¼ sec. 23	9-16-60	68	.2	307	15	8	248	Sample taken at bridge on state road
White River	NE¼NE¼ sec. 29	11-20-59	44	.3	283	98	28	276	Do
McBride Branch	NW¼SW¼ sec. 32	9-16-60	66	.2	264	13	8	212	Sample taken at bridge on county road
					T. 10 N., R. 4 W.				
East Fork Fish Cr.	NW¼NW¼ sec. 15	9-14-60	65	1.0	132	10	6	96	Sample taken at bridge on state road
Rattlesnake Creek	NW¼NE¼ sec. 25	9-16-60	64	.2	229	15	8	200	Sample taken at bridge on county road
West Fork Fish Cr.	NE¼NW¼ sec. 28	9-14-60	62	.2	195	10	8	144	Do
					T. 10 N., R. 6 W.				
Lick Creek	SE¼SE¼ sec. 25	9-14-60	66	.2	181	19	12	140	Do
					T. 11 N., R. 2 W.				
Indian Creek	SW¼NE¼ sec. 29	9-16-60	71	.2	249	13	8	216	Sample taken at bridge on state road
					T. 11 N., R. 3 W.				
Limestone Creek	SE¼SE¼ sec. 23	9-16-60	73	.2	239	11	10	196	Sample taken at bridge on county road
Little Mill Creek	NE¼NE¼ sec. 29	9-16-60	65	.2	410	13	8	336	Do
					T. 11 N., R. 4 W.				
Jordan Creek	SE¼SW¼ sec. 7	9-14-60	68	.3	166	12	8	132	Sample taken at the side of county road
Rattlesnake Creek	SE¼SW¼ sec. 26	9-16-60	66	.2	254	28	6	208	Sample taken at bridge on county road
					T. 12 N., R. 3 W.				
Mill Creek	NE¼NE¼ sec. 21	9-16-60	64	.2	317	21	12	276	Do
Brush Creek	NW¼NE¼ sec. 26	9-16-60	62	.3	273	10	12	220	Do

Table 7.--Field chemical analyses of water from streams, Owen County, Indiana--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. 12 N., R. 4 W.					
Doe Creek	NE¼NW¼ sec. 22	9-16-60	64	0.2	273	15	18	228	Sample taken at bridge on state road
Mill Creek	NW¼SW¼ sec. 36	9-16-60	67	.2	298	18	12	252	Sample taken at bridge on county road
				T. 12 N., R. 5 W.					
Coon Creek	SE¼SE¼ sec. 36	9-14-60	68	.3	215	11	8	180	Do

Table 8.--Water levels in observation wells in Owen County, Indiana

(In feet below land-surface datum. Water level: e, estimated; h, tape measurement)

Owen 2. (12/4W-35B1). Agnes Stuckey. Cataract. NW¼NE¼ sec. 35, T. 12 N., R. 4 W. Drilled unused artesian well in limestone, diameter 6 inches, depth 96 feet. Land-surface datum is about 680 feet above msl. Recording gage installed April 22, 1949; removed May 10, 1952. Highest water level is 4.20 below lsd, March 11, 1952; lowest, 28.30 below lsd, November 1, 1954. Records available 1946 to 1957.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1946		July 2	18.13	Mar. 9	18.31	Dec. 1	19.05
		9	18.34	16	17.39	8	19.11
Sept. 10	23.43	15	18.24	23	10.40	15	13.45
17	23.58	23	18.51	30	11.90	22	18.50
24	23.75	30	18.91	Apr. 6	17.91	29	16.01
Oct. 1	24.00	Aug. 5	19.11	13	15.01		
8	24.77	13	19.49	20	17.70		
15	25.65	20	16.54	27	18.20		
22	25.34	27	18.82	May 4	18.30		
29	24.44	Sept. 2	19.13	12	15.67		
Nov. 5	22.34	9	19.15	18	18.06		
12	20.70	17	17.30	25	18.38		
19	20.44	24	17.08	June 1	18.57		
26	14.02	Oct. 1	18.75	9	18.69		
Dec. 3	19.97	8	19.19	15	18.59		
10	17.58	15	19.64	22	19.16		
17	18.06	29	18.09	29	17.86		
31	15.63	Nov. 5	19.32	July 6	19.26		
		12	19.54	14	18.90		
1947		19	19.68	20	20.27		
		26	19.11	28	19.87		
Jan. 14	17.44	Dec. 3	19.29	Aug. 3	18.35		
27	17.99	10	19.41	10	19.60		
Feb. 14	18.43	16	19.59	18	20.40		
21	18.57	23	19.27	25	21.18		
28	18.76			31	21.48		
Mar. 7	19.00	1948		Sept. 8	20.48		
29	17.95			15	21.36		
Apr. 6	16.00	Jan. 1	18.34	22	19.76		
12	10.00	8	18.20	29	21.01		
20	17.58	15	18.70	Oct. 6	21.10		
26	11.93	21	18.83	12	21.01		
May 6	17.69	27	19.04	20	18.99		
16	16.67	Feb. 4	19.20	27	21.80		
28	18.00	11	19.40	Nov. 3	19.21		
June 6	14.94	17	16.02	10	15.76		
18	15.00	25	16.50	17	18.63		
26	17.90	Mar. 2	17.18	24	18.83		

(Daily 2 A.M. water level from recorder graph, 1949)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-----	-----	-----	-----	20.52	20.67	18.68	23.01	22.28	22.94	21.94	22.63
2	-----	h17.43	h18.26	-----	20.50	20.75	19.41	23.05	22.46	22.97	21.99	22.65
3	-----	-----	-----	-----	20.53	20.82	19.87	23.10	22.55	23.01	22.05	22.72
4	-----	-----	-----	-----	20.56	20.93	20.29	23.15	22.60	23.04	22.18	22.72
5	-----	-----	-----	h17.70	20.58	21.02	20.58	23.19	-----	-----	22.19	22.73
6	h11.80	-----	-----	-----	20.60e	21.14	20.88	23.23	-----	-----	22.29	22.73
7	-----	-----	-----	-----	20.60	21.25	21.18	23.26	22.92	-----	22.31	22.66
8	-----	-----	-----	-----	20.62	21.39	21.43	23.29	22.99	-----	22.31	22.70
9	-----	h18.05	-----	-----	20.62	21.52	21.63	23.34	23.06	-----	22.33	22.76
10	-----	-----	h18.25	-----	20.62	21.60	21.76	23.40	23.11	-----	22.36	-----
11	-----	-----	-----	-----	20.66	20.62	21.88	23.47	23.15	-----	22.36	-----
12	h17.46	-----	-----	-----	20.68	20.75	21.99	23.49	23.18	-----	22.38	-----
13	-----	-----	-----	h18.36	20.71	20.79	22.05	23.45	23.18	-----	22.41	-----
14	-----	-----	-----	-----	20.72	20.63	22.13	23.42	23.17	-----	22.41	-----
15	-----	-----	-----	-----	20.74	20.66	22.19	23.41	23.18	-----	22.47	17.57
16	-----	h14.18	h18.37	-----	20.76	15.65	22.27e	20.48	23.15	-----	22.42	18.15
17	-----	-----	-----	-----	20.79	-----	22.35	20.65	23.11	-----	22.43	18.50
18	-----	-----	-----	-----	20.82	18.04	22.44	21.17	22.21	-----	22.47	18.69
19	h13.01	-----	-----	-----	20.84	18.85	22.53	-----	22.11	-----	22.50	18.84
20	-----	-----	-----	h18.44	20.86	19.47	22.61	-----	22.19	-----	22.44	18.93
21	-----	-----	-----	-----	20.87	19.87	22.66	-----	22.31	-----	22.47	18.95
22	-----	-----	-----	-----	20.79	20.19	22.70	-----	22.43	-----	22.55	17.83
23	-----	-----	-----	20.47	20.73	20.39	22.74	22.73	22.50	-----	22.54	15.76
24	-----	-----	h18.26	20.47	18.43	20.50	22.77	22.82	22.61	-----	22.51	16.60
25	-----	-----	-----	20.47	18.85	20.59	22.79	22.90	22.69	-----	22.45	17.33
26	-----	-----	-----	20.51	19.43	20.71	22.82	22.95	22.75	-----	22.52	17.72
27	h10.01	-----	-----	20.52	19.80	20.90	22.85	22.98	22.78	-----	22.49	17.03
28	-----	-----	-----	20.52	20.12	21.10	22.88	21.51	22.79	21.65	22.54	17.18
29	-----	-----	-----	20.51	20.35	16.90	22.90	21.66	22.81	21.72	22.52	17.60
30	-----	-----	-----	20.52	20.49	17.85	22.92	21.86	22.87	21.76	22.58	17.94
31	-----	-----	h15.88	-----	20.59	-----	22.96	22.11	-----	21.82	-----	18.20

(Daily 2 A.M. water level from recorder graph, 1950)

1	18.36	16.47	17.86	15.90	18.56	18.84	18.71	20.00	-----	18.68	20.20	18.54
2	18.14	16.97	17.96	16.52	18.56	18.91	18.79	20.05	h12.64	18.94	20.20	18.59
3	18.06	-----	e18.07	17.01	18.54	18.95	18.84	20.10	14.05	19.14	20.24	-----
4	-----	-----	e18.13	17.35	18.54	18.41	18.68	20.16	15.40	19.30	20.26	10.47
5	-----	17.98	h18.21	13.25	18.53	18.49	18.73	20.20	16.33	19.42	20.22	12.68
6	-----	18.02	18.22	14.50	18.52	18.58	18.78	20.26	17.18	19.51	20.22	13.95
7	-----	18.09	18.22	15.44	18.55	18.68	18.84	20.32	17.74	19.60	20.24	14.14
8	e15.10	18.19	18.04	16.08	18.60	18.78	18.90	20.36	18.16	19.65	-----	14.95
9	15.50	17.95	18.03	16.69	18.63	18.86	18.96	20.40	18.42	19.20	10.88	15.79
10	14.52	18.00	18.21	17.17	16.95	12.26	19.02	20.43	18.65	19.10	13.90	16.38
11	-----	18.09	18.29	-----	17.00	14.12	19.09	20.46	18.79	19.18	15.32	16.99
12	-----	h18.99	18.26	-----	17.42	15.38	19.17	20.47	18.92	19.32	16.28	17.44
13	-----	-----	e17.65	-----	17.70	16.59	19.23	20.49	19.05	19.32	17.10	17.75
14	-----	-----	17.77	-----	17.94	16.93	19.31	20.50	19.18	19.43	17.69	18.02
15	h6.74	-----	17.97	h18.19	18.11	17.51	19.40	20.52	19.28	-----	18.12	18.21

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 2--Cont.

(Daily 2 A.M. water level from recorder graph, 1950)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	-----	-----	18.08	18.22	18.26	17.85	19.47	20.52	19.37	-----	18.41	18.39
17	-----h	15.07	18.15	18.27	18.37	18.04	19.54	20.53	19.48	-----	18.61	18.53
18	-----	-----	18.19	18.30	18.45	18.31	19.60	20.52	19.60	19.80	18.73	18.63
19	-----	-----	18.29	18.32	18.52	17.80	19.61	19.83	19.68	19.83	18.82	18.70
20	-----	16.66	18.32	18.36	18.57	14.06	19.57	19.75	19.74	19.84	-----	18.73
21	-----	17.12	17.76	18.40	18.60	15.16	19.52	19.76	19.78	19.87	10.38	18.79
22	h16.94	16.85	17.90	18.42	18.63	15.98	19.56	19.84	-----	19.89	13.67	18.81
23	17.21	16.58	18.02	18.43	18.67	16.70	19.61	19.95	12.38	19.91	14.98	18.82
24	16.45	16.85	18.12	18.43	18.70	17.31	19.66	20.07	14.40	19.99	15.91	18.81
25	16.67	17.18	18.20	18.42	18.72	17.70	19.72	20.16	15.62	20.03	16.72	18.83
26	-----	17.47	18.27	18.44	18.75	18.03	19.78	20.24	16.48	20.08	17.29	18.83
27	-----	17.69	17.25	18.47	18.78	18.28	19.81	20.32	17.27	20.10	17.64	18.90
28	-----	17.84	e11.00	18.52	18.80	18.45	19.85	20.38	17.76	20.09	18.01	18.94
29	-----	-----	12.30	18.55	18.82	18.55	19.88	20.42	18.22	20.13	18.29	18.94
30	15.13	-----	14.08	18.56	18.82	18.63	19.91	20.47	18.49	20.18	18.43	18.95
31	15.84	-----	15.17	-----	18.82	-----	19.96	20.38	-----	20.19	-----	19.03

(Daily 2 A.M. water level from recorder graph, 1951)

1	19.08	18.92	17.90	18.80	18.98	19.23	15.62	-----	20.37	20.88	19.64	18.75
2	19.10	18.96	18.20	18.84	19.01	19.27	16.50	-----	20.40	20.88	19.87	18.83
3	19.07	19.02	18.38	18.88	19.02	19.32	17.31	-----	20.44	20.87	20.02	18.89
4	18.94	19.01	18.41	18.90	19.00	19.22	17.84	-----	20.50	20.88	20.08	16.25
5	18.94	19.01	18.54	18.94	18.99	19.23	18.30	18.43	20.54	20.91	20.22	14.84
6	18.91	19.03	18.62	18.97	19.02	19.25	18.61	18.64	20.55	20.97	20.33	14.94
7	18.91	19.01	18.66	18.97	16.89	19.26	18.88	18.81	20.57	20.99	18.34	15.70
8	18.90	19.06	18.70	18.80	17.46	19.27	19.10	18.96	20.63	20.92	18.60	16.41
9	18.91	19.10	18.77	18.78	17.90	19.29	19.27	19.09	20.63	20.95	18.91	16.43
10	18.90	19.13	18.85	18.81	18.26	19.35	15.19	19.23	20.63	20.96	19.03	16.92
11	18.89	19.11	18.89	18.86	13.25	19.42	16.13	19.36	20.63	20.97	18.46	17.40
12	18.92	19.08	18.90	18.86	14.60	19.49	16.97	19.47	20.67	20.97	18.64	17.70
13	18.94	19.01	18.87	18.64	-----	19.27	17.56	19.57	20.68	21.00	18.70	18.01
14	18.93	18.94	18.84	h17.45	-----	19.29	18.03	19.64	20.70	21.02	14.33	18.29
15	14.90	18.95	18.84	17.57	-----	19.33	18.36	19.71	20.73	21.02	15.38	18.41
16	15.64	18.93	18.65	17.83	-----	19.37	18.56	19.77	20.76	21.03	15.97	18.60
17	16.31	18.58	18.66	18.11	-----	19.42	18.73	19.84	20.79	21.04	16.64	18.71
18	15.95	18.52	18.10	18.35	-----	19.49	18.91	19.91	20.81	21.06	17.40	18.76
19	15.23	18.00	17.69	18.49	h18.56	19.55	19.06	19.98	20.84	21.07	17.90	18.79
20	15.43	16.43	17.96	18.61	-----	19.60	19.20	20.05	20.87	21.09	18.33	18.85
21	16.12	-----	18.23	18.70	-----	19.66	19.34	20.09	20.89	21.06	18.57	18.83
22	16.89	11.46	18.42	-----	-----	19.72	19.44	20.15	20.91	21.05	18.68	18.74
23	17.47	13.66	18.37	-----	18.85	19.76	19.54	20.23	20.92	19.60	17.95	18.82
24	17.80	14.92	18.24	-----	18.92	19.81	19.65	20.30	20.96	14.82	16.66	18.88
25	18.13	15.81	18.44	-----	18.97	19.87	19.31	20.35	20.96	15.35	17.26	18.93

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 2--Cont.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	18.40	16.49	18.59	-----	19.00	19.93	19.30	20.39	20.97	16.45	17.67	17.11
27	18.55	17.11	18.68	-----	19.05	19.93	19.33	20.41	20.60	17.41	18.07	17.47
28	18.60	17.60	18.71h	18.98	19.04	19.80	-----	20.43	20.71	18.04	18.36	17.81
29	18.71	-----	18.73	18.97	19.07	12.76	-----	20.46	20.83	18.55	18.52	18.05
30	18.83	-----	18.73	18.97	19.13	14.75	-----	20.42	20.88	18.95	18.64	17.65
31	18.91	-----	18.76	-----	19.19	-----	-----	20.38	-----	19.32	-----	17.41

(Daily 2 A.M. water level from recorder graph, 1952)

1	17.06	-----	18.91	18.48	18.75	-----	-----	-----	-----	-----	-----	-----
2	17.52	-----	18.98	18.51	18.77	-----	-----h	20.52	-----	-----	-----	-----
3	17.86	16.93	18.99	18.57	18.81	-----	-----	-----	-----	-----	-----	-----
4	18.17	15.37	18.95	18.62	18.85	-----	-----	-----	-----h	21.36	-----	-----
5	18.27	15.65	19.02	8.65	18.88	-----h	19.05	-----	-----	-----	-----h	18.98
6	18.40	16.21	19.09	11.90	18.90	-----	-----	-----h	20.28	-----	-----	-----
7	18.51	16.66	19.14	13.84	18.94h	19.26	-----	-----	-----	-----	-----	-----
8	18.58	17.12	19.16	15.00	-----	-----	-----	-----	-----	-----h	21.49	-----
9	18.58	17.48	19.13	15.83	-----	-----	-----h	20.78	-----	-----	-----	-----
10	18.63	17.80	19.06	16.50h	14.38	-----	-----	-----	-----	-----	-----	-----
11	18.72	-----	4.20	17.03	-----	-----	-----	-----	-----h	21.50	-----	-----
12	18.77	-----	10.55	17.49	-----	-----h	19.74	-----	-----	-----	-----h	18.78
13	18.81	-----	12.95	17.00	-----	-----	-----	-----h	20.96	-----	-----	-----
14	18.81	-----	14.44	15.35	-----h	16.51	-----	-----	-----	-----h	21.42	-----
15	18.81	-----	15.49	15.80	-----	-----	-----	-----	-----	-----	-----	-----
16	18.86	-----	16.23	16.37	-----	-----	-----h	20.10	-----	-----	-----	-----
17	18.87	18.65	16.94	16.92h	18.60	-----	-----	-----	-----	-----	-----	-----
18	18.85	18.71	17.47	17.37	-----	-----	-----	-----	-----	-----h	21.57	-----
19	18.88	18.77	17.21	17.66	-----	-----h	19.50	-----	-----	-----	-----h	20.60
20	18.84	18.79	17.35	17.91	-----	-----	-----	-----h	20.33	-----	-----	-----
21	18.89	18.80	17.61	18.13	-----h	18.84	-----	-----	-----	-----h	21.37	-----
22	18.89	18.85	15.00	18.31	-----	-----	-----	-----	-----	-----	-----	-----
23	18.87	18.89	15.02	18.44	-----	-----	-----h	20.94	-----	-----	-----	-----
24	18.95	18.89	15.72	18.40h	15.86	-----	-----	-----	-----	-----	-----	-----
25	19.02	18.90	16.30	18.45	-----	-----	-----	-----	-----h	21.57	-----	-----
26	18.98	18.94	16.88	18.50	-----	-----h	20.15	-----	-----	-----	-----h	20.73
27	9.08	18.94	17.38	18.58	-----	-----	-----	-----h	21.14	-----	-----	-----
28	12.10	18.93	17.73	18.62	-----h	17.50	-----	-----	-----	-----h	21.06	-----
29	13.88	18.90	18.02	18.66	-----	-----	-----	-----	-----	-----	-----	-----
30	-----	-----	18.28	18.71	-----	-----	-----h	21.14	-----	-----	-----	-----
31	-----	-----	18.42	-----h	18.54	-----	-----	-----	-----h	21.55	-----	-----

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1953		Jan. 16	20.10	Feb. 13	19.13	Mar. 13	18.80
		23	19.93	20	19.92	20	18.16
Jan. 2	20.78	30	20.05	27	19.75	27	19.05
9	18.55	Feb. 6	20.38	Mar. 6	14.96	Apr. 10	17.83

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 2--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 17	18.85	1954		Sept. 4	26.89	June 21	24.41
24	19.02			11	27.90	28	24.49
May 1	19.12	Jan. 2	22.73	18	27.92	July 5	24.50
8	19.26	9	22.30	23	27.48	12	24.53
15	19.30	16	23.08	27	27.54	18	24.26
25	19.10	23	22.40	Oct. 4	28.10	25	24.48
June 1	19.60	30	20.90	11	28.10	Aug. 2	24.55
8	19.60	Feb. 6	20.66	18	28.20	9	24.57
15	19.60	13	21.03	25	28.10	15	24.62
22	20.60	20	20.27	Nov. 1	28.30	22	24.73
29	20.00	27	20.20	8	28.10	30	24.78
July 6	19.90	Mar. 6	20.37	18	28.02	Sept. 7	26.65
13	18.58	13	20.44	27	28.07	15	26.66
20	19.31	20	20.04	Dec. 4	28.03	20	26.70
27	19.05	27	20.26	11	28.03	28	26.74
Aug. 3	19.10	Apr. 3	20.00	18	28.02	Oct. 5	26.31
10	19.20	10	20.06	27	28.02	12	26.22
17	20.42	17	19.93			19	26.22
24	20.60	24	19.93	1955		26	26.32
31	20.79	May 1	20.04			Nov. 1	26.12
Sept. 7	20.96	8	19.46	Jan. 1	28.02	8	26.25
14	21.60	15	20.55	8	26.37	15	26.26
21	22.30	22	20.27	17	26.41	22	24.05
24	22.64	29	20.19	24	26.40	29	24.18
28	22.85	June 5	18.76	31	26.43	Dec. 6	24.32
Oct. 10	23.40	12	20.12	Feb. 7	26.47	13	26.17
17	23.90	19	20.53	14	26.43	20	26.15
24	24.89	26	20.79	21	26.41	27	26.23
31	24.30	July 3	20.42	28	26.15		
Nov. 7	24.20	11	21.35	Mar. 7	26.21	1956	
14	24.77	18	23.00	14	26.20		
21	24.83	24	21.22	21	26.15	Jan. 3	26.23
28	24.83	28	23.90	28	26.20	10	26.25
Dec. 5	24.60	Aug. 2	25.89	Apr. 4	26.20	16	26.27
12	24.77	14	25.93	11	26.22	23	26.25
19	23.08	21	25.89	18	26.15	Feb. 6	26.04
26	23.73	28	26.16	25	26.15	13	26.02
				May 2	26.21	20	26.02
				11	26.26	29	24.03
				17	26.23	Mar. 7	24.17
				23	24.07	14	24.21
				31	24.15	19	24.20
				June 7	24.27		
				14	24.32		

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 2--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 26	24.19	Oct. 24	24.68	May 7	24.32	Dec. 3	24.38
Apr. 2	24.19	31	24.75	14	24.30	10	24.40
9	24.15	Nov. 7	24.74	21	24.16	17	24.40
16	24.18	14	24.74	28	24.04	23	24.16
23	24.33	21	24.69	June 4	24.04	30	21.08
30	24.48	28	24.65	11	24.10		
May 7	24.73	Dec. 5	24.62	18	24.12	1958	
14	24.76	12	24.55	24	24.16		
21	24.76	19	24.43	July 1	24.13		
28	24.08	26	24.43	8	24.11	Jan. 8	16.09
June 4	24.02			15	24.08	15	16.95
11	24.24	1957		23	24.06	22	16.30
19	24.28			29	24.24	29	17.95
25	24.33	Jan. 3	24.46	Aug. 5	24.31	Feb. 5	18.42
July 2	24.37	10	24.45	12	24.38	12	18.76
9	24.30	22	24.47	19	24.42	19	19.05
16	24.37	30	24.45	27	24.44	27	18.95
23	24.26	Feb. 6	24.40	Sept. 3	24.48	Mar. 6	19.18
30	24.38	13	24.36	10	24.50	26	17.97
Aug. 6	24.44	20	24.37	17	24.52		
16	24.60	28	24.40	25	24.53		
23	24.61	Mar. 7	24.40	Oct. 2	24.52		
30	24.60	14	24.39	9	24.54		
Sept. 7	24.56	21	24.38	16	24.54		
14	24.60	28	24.35	23	24.53		
21	24.60	Apr. 4	24.18	29	24.48		
27	24.65	11	24.04	Nov. 5	24.44		
Oct. 3	24.68	17	24.14	12	24.44		
10	24.70	24	24.18	17	24.38		
17	24.70	30	24.23	29	24.36		

Owen 3. (12/4W-33R1). Ben Lambert. Cataract. SE¼SE¼ sec. 33, T. 12 N., R. 4 W. Drilled unused artesian well in limestone, diameter 6 inches, reported depth about 175 feet. Land-surface datum is about 800 feet above msl. Recording gage installed September 17, 1952; removed November 5, 1952. Highest water level is 84.23 below lsd, March 13, 1952; lowest, 139.55 below lsd May 13, 1952. Records available 1946 to 1953.

1946		Aug. 1	109.15	Dec. 12	109.21	Jan. 30	109.04
		9	108.96	19	109.33	Feb. 6	109.13
June 5	109.07	22	108.97	26	109.27	13	109.32
6	109.08	29	109.38			20	109.24
20	108.98	Sept. 6	109.00	1947		27	109.22
27	109.00	Oct. 22	109.58			Mar. 6	109.25
July 4	109.15	Nov. 14	109.41	Jan. 2	109.27	13	109.27
13	109.00	21	109.40	9	109.27	20	109.17
17	109.94	28	109.41	16	109.20	27	109.11
26	109.89	Dec. 5	109.40	23	109.20	Apr. 3	109.1[illegible]

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 3--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 10	109.18	Mar. 4	108.60	Jan. 27	108.80	Jan. 5	108.60
17	109.16	11	108.60	Feb. 4	108.72	12	108.60
24	109.19	18	108.47	10	108.61	19	108.64
May 1	109.10	25	108.50	17	108.66	26	108.50
8	109.17	Apr. 1	108.30	24	108.70	Feb. 2	108.60
15	109.16	8	108.60	Mar. 3	108.76	9	108.59
22	109.14	15	108.61	10	108.46	16	108.49
29	109.10	22	108.80	17	108.60	23	108.33
June 5	109.15	29	108.77	24	108.61	Mar. 2	108.52
12	109.07	May 6	108.61	31	108.50	9	108.20
19	109.11	13	108.77	Apr. 7	108.50	16	108.37
26	109.10	20	108.80	15	108.29	23	108.38
July 3	109.15	27	108.80	28	108.61	30	108.14
10	109.15	June 3	108.89	May 5	108.61	Apr. 6	108.45
17	109.15	10	108.77	12	108.50	13	108.45
24	109.24	17	108.88	19	108.65	20	108.46
31	109.20	24	108.94	26	108.57	27	108.20
Aug. 7	109.20	July 1	109.02	June 2	108.61	May 4	108.37
15	109.22	8	109.04	9	108.80	11	108.48
21	109.22	15	109.04	16	108.71	18	108.40
28	109.17	22	109.01	23	108.70	25	108.46
Sept. 4	109.16	29	109.01	30	108.79	June 1	108.50
11	109.17	Aug. 5	109.03	July 6	108.80	8	108.51
18	109.20	12	108.99	14	108.79	15	108.50
25	109.06	19	109.04	22	108.85	22	108.40
Oct. 2	109.14	26	109.10	29	108.88	29	108.51
9	109.12	Sept. 2	109.16	Aug. 5	108.90	July 6	108.49
16	109.10	9	109.11	11	108.84	13	108.50
23	109.16	16	109.23	18	108.84	20	108.50
30	109.08	23	109.11	25	108.92	27	108.60
Nov. 6	109.03	30	109.17	Sept. 1	108.85	Aug. 3	108.61
13	109.09	Oct. 7	109.11	8	108.84	10	108.61
20	109.03	14	109.18	15	108.94	17	108.69
27	108.85	21	109.20	22	108.86	24	108.64
Dec. 4	109.01	29	109.15	29	108.90	31	108.55
11	108.97	Nov. 4	109.00	Oct. 6	108.87	Sept. 7	108.59
18	108.95	11	109.04	13	108.90	14	108.53
25	108.97	18	108.94	20	108.96	21	108.49
		25	108.86	27	108.91	28	108.54
1948		Dec. 2	108.97	Nov. 3	108.93	Oct. 5	108.42
		9	108.89	10	108.80	12	108.36
Jan. 1	108.85	16	108.86	17	108.79	19	108.34
8	108.84	23	108.92	24	108.77	26	108.44
15	109.93	30	108.88	Dec. 1	108.79	Nov. 2	108.40
22	109.70			8	108.85	10	108.37
29	108.90	1949		22	108.70	16	108.40
Feb. 5	108.89			29	108.81	23	108.34
12	108.94	Jan. 6	108.76			30	108.25
19	108.34	13	108.85	1950		Dec. 7	108.25
26	108.70	20	108.86			14	108.25
						21	108.40
						28	108.34

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 3--Cont.

(Daily 2 A.M. water level from recorder graph, 1952)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-----	-----	-----	-----	85.85	119.90	111.22	109.73	109.26	109.03	108.84	-----
2	-----	-----	-----	-----	-----	119.18	111.14	109.68	109.22	-----	108.83	-----
3	91.96	-----	-----	85.09	-----	118.50	111.05	109.66	109.24	-----	108.85	-----
4	-----	-----	-----	-----	-----	117.99	110.99	109.60	109.26	109.15	108.89	-----
5	-----	-----	-----	-----	-----	117.40	110.91	109.62	109.26	------	108.87	-----
6	-----	-----	-----	-----	-----	116.91	110.83	109.63	109.26	-----	-----	h108.96
7	-----	85.40	-----	-----	-----	116.45	110.79	109.61	109.26	-----	-----	-----
8	-----	-----	-----	-----	85.60	116.00	110.65	109.57	109.26	108.95	-----	-----
9	-----	-----	-----	-----	-----	115.60	110.58	109.53	109.25	108.91	-----	-----
10	90.79	-----	-----	85.15	-----	115.22	110.54	109.52	109.24	108.90	-----	-----
11	-----	-----	-----	-----	-----	114.92	110.49	109.51	109.21	108.91	-----	-----
12	-----	-----	-----	-----	-----	114.54	110.45	109.51	109.20	108.89	-----	-----
13	-----	-----	84.23	-----	139.55	114.25	110.40	109.53	109.20	108.85	-----	[illegible]
14	-----	85.15	84.44	-----	138.93	114.02	110.35	109.51	109.19	108.84	-----	-----
15	-----	-----	-----	-----	136.01	113.71	110.26	109.46	109.16	108.85	h108.91	-----
16	-----	-----	-----	-----	-----	113.41	110.23	109.42	109.12	108.86	-----	-----
17	89.21	-----	-----	85.33	-----	113.19	110.20	109.44	-----	108.87	-----	-----
18	-----	-----	-----	-----	-----	112.99	110.15	109.44	108.99	108.90	-----	-----
19	-----	-----	-----	-----	-----	112.84	110.10	109.44	108.98	108.89	-----	-----
20	-----	-----	84.60	-----	-----	112.65	110.05	109.39	109.03	108.89	-----	-----
21	-----	85.10	-----	-----	-----	112.45	109.99	109.38	109.07	108.97	-----	-----
22	-----	-----	-----	-----	-----	112.31	109.97	109.40	109.09	108.97	h108.94	-----
23	-----	-----	-----	-----	131.31	112.17	109.92	109.41	109.08	108.93	-----	-----
24	87.71	-----	-----	85.29	130.55	111.99	109.93	109.39	109.10	108.90	-----	-----
25	-----	-----	-----	-----	128.25	111.85	109.90	109.40	109.11	108.86	-----	-----
26	-----	-----	-----	-----	126.52	111.74	109.96	109.38	109.08	108.87	-----	-----
27	-----	-----	85.07	-----	125.00	111.64	109.85	109.36	109.06	108.84	-----	-----
28	-----	84.83	-----	-----	123.99	111.53	109.78	109.33	109.05	108.82	-----	-----
29	-----	-----	-----	-----	122.77	111.41	109.76	109.31	109.05	108.86	h108.95	-----
30	-----	-----	-----	-----	121.54	111.28	109.73	109.30	109.04	108.88	-----	-----
31	86.87	-----	-----	-----	120.69	-----	109.74	109.28	-----	108.85	-----	-----

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 3--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1953		Mar. 16	109.49	Mar. 31	109.29	Apr. 13	109.37
		23	109.42	Apr. 6	109.38	20	109.42
Mar. 2	109.47						
9	109.62						

Owen 4. (12/4W-29R1). Jackson Township School. Cunot. SE¼SE¼ sec. 29, T. 12 N., R. 4 W. Drilled unused well in limestone, diameter 6 inches, reported depth about 114 feet. Land-surface datum is about 805 feet above msl. Highest water level is 62.69 below lsd, August 17, 1952; lowest, 102.83 below lsd October 26, 1953. Records available 1946 to 1953.

1946		Jan. 25	71.90	Oct. 11	78.61	June 7	77.81
		Feb. 1	71.75	18	78.99	17	77.77
Jan. 20	72.60	8	71.83	25	79.78	21	78.03
21	72.58	15	71.62	Nov. 1	79.69	28	79.79
28	75.70	21	71.57	8	78.80	July 5	79.58
July 5	76.05	Mar. 1	71.51	15	78.76	12	80.14
12	76.59	8	73.69	22	79.19	19	80.02
19	76.70	15	73.56	29	79.22	26	80.76
26	78.20	22	72.11	Dec. 6	77.93	Aug. 2	80.29
Aug. 2	78.39	29	70.35	13	76.59	9	80.56
9	78.22	Apr. 5	70.82	20	77.96	16	80.81
16	78.05	12	74.19	27	77.84	23	80.89
23	78.60	19	68.81			29	80.86
31	78.49	26	69.54	1948		Sept. 7	80.74
Sept. 7	78.80	May 3	73.57			13	81.79
14	78.78	10	73.89	Jan. 3	76.45	20	84.58
21	78.88	17	72.72	10	76.68	27	84.52
28	79.12	26	72.29	17	76.42	Oct. 4	84.47
Oct. 5	79.20	31	74.41	24	76.51	11	83.23
12	79.75	June 7	72.67	31	77.87	18	83.62
19	80.26	14	75.87	Feb. 9	78.73	25	82.29
26	80.59	21	74.50	16	76.46	Nov. 1	81.53
Nov. 2	80.80	28	74.66	22	75.69	8	81.74
8	80.44	July 7	77.73	Mar. 1	76.42	15	80.70
16	80.42	12	76.61	8	76.48	22	79.03
23	80.60	19	76.77	15	74.52	30	79.27
30	78.31	28	78.19	22	76.54	Dec. 5	78.19
Dec. 7	78.68	Aug. 2	78.51	29	77.29	13	78.02
14	76.10	11	78.32	Apr. 5	77.40	21	78.08
21	75.80	18	78.72	12	77.68	27	77.89
28	74.70	23	78.94	19	77.49		
		30	78.79	26	77.03	1949	
1947		Sept. 6	78.81	May 3	77.22		
		13	78.75	10	77.31	Jan. 3	78.48
Jan. 4	73.10	20	78.48	17	77.44	10	76.70
11	71.15	27	78.52	24	77.33	17	76.88
18	71.60	Oct. 4	78.52	31	77.70	24	81.87

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 4--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	80.19	1950		Nov. 27	77.34	Oct. 8	76.48
Feb. 7	81.79	Jan. 3	79.25	Dec. 4	75.79	15	77.89
14	82.35	9	78.64	11	75.26	22	78.08
21	81.67	16	78.42	18	76.46	29	78.16
28	81.49	23	80.38	26	77.80	Nov. 55	78.42
Mar. 7	82.62	30	80.29			12	78.75
14	82.38	Feb. 6	80.23	1951		19	77.04
22	82.12	13	79.07			26	77.39
27	80.10	20	79.48	Jan. 2	77.17	Dec. 3	77.28
Apr. 4	81.20	27	78.12	8	77.33	10	78.81
11	81.49	Mar. 6	78.64	15	77.72	17	78.85
18	81.38	13	78.69	22	77.43	24	77.18
25	80.90	20	78.37	29	77.25	31	77.69
May 2	80.73	27	78.80	Feb. 5	78.77		
9	79.82	Apr. 3	78.89	12	78.82	1952	
16	81.09	10	78.51	19	76.49		
23	80.88	17	78.19	26	75.80	Jan. 7	77.42
31	80.49	24	78.08	Mar. 5	74.08	14	77.36
June 6	80.12	May 1	78.26	12	75.67	21	77.19
13	81.90	4	78.37	19	74.00	28	77.77
20	81.10	15	78.54	26	75.68	Feb. 4	76.24
26	81.22	22	78.67	Apr. 2	76.39	11	76.59
July 5	81.06	29	78.55	9	77.74	18	77.78
11	81.14	June 5	79.38	16	76.11	25	77.65
18	81.17	12	79.20	23	76.47	Mar. 3	77.54
25	81.39	19	78.37	30	76.74	10	77.39
Aug. 1	81.68	25	78.47	May 7	78.57	17	77.15
8	81.73	July 3	78.59	14	76.04	24	77.64
15	81.80	10	78.80	21	76.19	31	77.81
22	81.39	17	78.89	28	77.78	Apr. 7	77.53
29	81.32	24	77.32	June 4	78.10	14	76.81
Sept. 6	81.58	31	77.46	11	78.32	21	76.47
12	81.69	Aug. 7	77.69	18	78.68	28	75.06
19	82.85	14	78.12	25	77.13	May 5	74.81
25	81.52	21	78.08	July 2	76.30	12	74.76
Oct. 3	81.80	28	78.27	9	76.07	19	74.64
10	81.73	Sept. 5	78.69	16	76.36	26	74.23
17	80.76	11	77.80	23	77.79	June 2	74.49
24	80.52	18	76.38	30	77.37	9	74.61
31	78.79	25	77.59	Aug. 6	77.12	16	75.04
Nov. 7	78.63	Oct. 2	75.42	13	78.77	23	74.40
14	80.70	9	75.07	20	78.59	30	74.57
21	80.38	16	76.76	27	78.64	July 7	90.84
28	80.29	23	76.19	Sept. 4	77.58	12	83.87
Dec. 5	80.44	30	77.67	10	77.74	19	68.84
12	80.68	Nov. 6	76.45	17	77.88	27	94.24
19	80.62	13	76.13	24	76.19	Aug. 9	90.68
27	79.33	20	76.68	Oct. 1	76.40	17	62.69

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 4--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 18	99.04	1953		Apr. 19	87.84	Aug. 3	99.75
27	95.03			26	78.84	9	86.96
Oct. 5	91.37	Jan. 11	85.78	May 3	81.82	16	91.85
12	94.88	24	88.81	10	70.63	24	86.71
19	101.65	31	88.84	17	79.83	30	95.81
26	102.83	Feb. 8	82.91	24	76.84	Sept. 6	89.67
Nov. 9	80.29	15	83.74	31	77.84	14	91.71
15	86.47	22	86.81	June 15	76.43	15	82.87
22	94.09	Mar. 8	91.81	21	88.13	20	81.75
29	98.66	15	91.81	30	91.72	24	82.63
Dec. 7	92.37	22	83.81	July 8	92.68	Oct. 1	77.84
13	95.04	29	91.35	14	88.89	8	64.24
21	92.83	Apr. 5	83.75	19	91.82		
28	87.84	13	83.79	26	85.79		

Owen 5. (12/4W-30B1). David R. Bronson. Poland. NW¼NE¼ sec. 30, T. 12 N., R. 4 W. Dug unused artesian well in sandy-clay, diameter 26 inches, depth 17.4 feet. Land-surface datum is about 780 feet above msl. Recording gage installed October 20, 1958. Highest water level is 0.70 below lsd, Feburary 1959; lowest, 13.72 below lsd, February 23, 1954. Records available 1946 to 1959.

1946		Nov. 30	12.55	May 31	2.65	Dec. 20	11.07
		Dec. 7	12.66	June 14	3.97	27	12.16
June 5	2.52	14	11.68	21	2.67		
8	2.58	21	10.99	28	3.54	1948	
15	5.75	28	10.57	July 5	4.68		
22	8.08			12	6.27	Jan. 3	6.25
29	6.98	1947		19	6.78	10	5.87
July 6	9.08			26	7.36	17	6.94
14	8.38	Jan. 4	6.65	Aug. 2	8.75	24	6.32
20	8.78	12	5.65	9	8.63	31	7.24
27	12.58	18	4.07	16	7.95	Feb. 7	8.10
Aug. 3	13.39	26	2.66	23	9.25	14	8.92
10	12.67	Feb. 1	2.47	30	8.75	21	8.49
17	11.86	8	3.78	Sept. 6	9.06	28	3.78
24	11.80	16	3.76	13	8.62	Mar. 7	3.54
31	11.28	22	3.94	20	8.76	13	3.27
Sept. 7	11.78	Mar. 8	6.47	27	9.85	20	1.91
14	13.10	15	6.45	Oct. 6	10.35	27	1.54
21	12.68	22	4.67	11	9.45	Apr. 3	3.23
28	11.78	29	2.98	18	10.66	12	1.76
Oct. 5	11.67	Apr. 5	1.76	25	10.53	17	2.55
12	11.67	12	1.77	Nov. 1	10.64	24	4.59
19	11.78	19	1.84	8	10.56	May 1	4.80
26	12.08	26	1.66	14	10.58	8	3.89
Nov. 3	12.58	May 3	1.55	22	10.86	22	3.23
10	12.08	12	3.67	29	11.21	30	5.79
16	12.09	18	1.56	Dec. 6	11.34	June 5	7.07
23	12.46	25	1.95	13	11.78	12	7.79

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 5--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 19	6.73	May 21	8.05	Apr. 10	2.96	Mar. 3	1.90
26	7.82	28	8.96	15	2.82	17	1.58
July 3	8.81	June 4	9.94	24	3.08	24	1.79
10	9.07	11	8.24	1	3.04	Apr. 1	1.77
17	8.88	18	8.22	6	2.72	7	1.76
24	10.45	25	8.97	13	4.06	14	1.68
31	7.88	July 2	9.53	20	3.64	21	1.69
Aug. 7	8.47	9	8.68	27	5.76	May 5	2.88
14	8.37	16	9.96	June 7	6.98	12	1.62
22	9.97	23	9.96	10	7.74	19	3.89
28	9.53	30	9.45	17	6.66	28	4.85
Sept. 4	9.77	Aug. 6	10.07	26	3.74	June 4	6.67
11	9.78	13	10.07	July 1	4.67	10	6.85
18	10.07	20	9.98	7	6.07	17	6.53
24	10.07	27	9.85	15	5.27	23	6.67
Oct. 2	8.99	Sept. 6	10.67	21	7.74	July 1	6.48
9	10.77	10	9.99	30	7.42	10	5.47
16	10.81	17	10.08	Aug. 6	8.07	15	4.97
23	10.74	24	8.08	12	8.42	21	4.85
30	9.27	Oct. 1	9.99	20	8.67	29	6.09
Nov. 6	8.66	8	10.99	26	8.57	Aug. 6	7.28
13	4.69	15	10.09	Sept. 3	5.88	11	7.45
20	1.97	22	8.97	9	5.33	20	9.06
27	3.37	29	8.29	17	6.39	25	8.85
Dec. 4	3.37	Nov. 5	9.47	24	4.06	Sept. 1	8.44
11	4.63	12	6.77	30	5.97	9	8.47
25	3.46	20	9.55	Oct. 10	5.16	15	8.88
		26	8.97	14	4.99	24	8.87
1949		Dec. 3	9.77	22	6.61	Oct. 2	9.08
		13	9.35	28	7.07	6	9.39
Jan. 1	3.06	17	7.57	Nov. 4	7.15	12	9.89
8	2.10	24	4.37	12	5.29	20	9.77
15	2.07			19	6.75	27	8.83
23	2.67	1950		Dec. 2	1.96	Nov. 4	8.99
Feb. 5	2.96			9	2.08	10	8.07
11	3.42	Jan. 7	1.89	16	2.97	17	3.07
19	2.78	14	1.06	24	3.75	25	1.97
26	1.93	21	1.93	29	3.85	Dec. 1	3.78
Mar. 5	2.69	28	1.78			9	1.64
12	3.08	Feb. 4	2.02	1951		15	2.08
19	2.98	11	2.65			22	2.25
26	1.99	17	1.93	Jan. 6	4.96	29	3.89
Apr. 2	1.91	18	2.05	13	4.26		
9	3.91	25	1.83	20	2.99	1952	
16	4.23	Mar. 3	3.89	30	3.25		
23	5.23	11	2.86	Feb. 3	3.96	Jan. 6	1.74
30	3.46	18	2.61	10	4.46	12	2.07
May 7	6.93	25	2.07	17	3.74	19	1.86
14	7.59	Apr. 2	1.99	24	1.79	26	2.03

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 5--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	1.56	Jan. 24	8.39	Apr. 6	7.61	Aug. 9	8.63
9	1.79	31	6.88	13	2.08	Sept. 21	10.21
16	2.83	Feb. 8	10.97	20	1.90	Nov. 16	5.46
24	3.06	15	11.06	May 4	1.89	Dec. 2	2.96
27	2.53	22	10.93	5	2.06	21	2.96
Mar. 1	3.06	Mar. 8	3.99	11	2.70		
8	2.79	15	5.07	18	3.60	1956	
15	2.06	22	2.94	25	4.71		
22	1.07	29	2.05	June 2	5.16	Jan. 6	6.36
29	2.77	Apr. 5	3.01	8	5.01	18	7.96
Apr. 6	1.45	13	4.07	15	5.46	Feb. 1	7.96
19	2.17	19	3.96	23	6.46	8	2.46
28	2.41	26	2.09	29	7.16	21	2.46
May 3	4.37	May 3	3.89	July 6	7.81	29	1.71
11	4.77	10	4.02	14	8.41	Mar. 19	1.96
19	6.48	17	3.97	20	8.81	Apr. 11	1.86
24	4.57	24	5.09	28	9.21	25	3.46
June 2	4.47	31	5.81	Aug. 4	9.41	May 11	3.96
7	4.93	June 15	6.83	11	9.71	June 1	1.67
14	5.91	21	7.91	Sept. 29	11.16	29	6.65
21	6.99	30	6.99	Oct. 5	11.34	July 27	8.46
28	3.36	July 8	8.49	13	11.36	Aug. 28	9.46
July 7	6.06	15	9.01	20	11.56	Sept. 5	9.66
12	6.88	19	8.98	Nov. 3	11.96	12	9.46
19	7.98	26	10.05	10	12.56	26	9.71
27	6.63	Aug. 3	7.77	17	12.40	Nov. 29	11.76
Aug. 3	9.85	9	8.83	Dec. 1	12.86		
9	4.93	24	10.64	7	12.54	1957	
17	9.09	30	11.07	14	13.12		
24	9.09	Sept. 6	11.59			Feb. 13	2.12
31	9.48	14	9.78	1955		20	2.63
Sept. 8	9.75	15	10.14			27	2.10
21	8.27	20	9.85	Jan. 3	11.66	Mar. 7	2.51
27	10.07	Nov. 3	11.29	12	3.46	13	2.58
Oct. 5	10.75			18	3.71	20	1.81
12	9.83	1954		Feb. 16	5.46	27	1.36
19	10.78			Mar. 2	1.63	Apr. 3	1.35
26	10.47	Jan. 6	12.78	8	1.73	10	1.21
Nov. 9	9.95	12	13.00	15	2.16	17	1.74
15	11.08	19	13.17	22	1.62	24	1.88
22	11.09	26	12.28	29	1.72	May 1	2.59
29	10.57	Feb. 2	13.37	Apr. 14	1.31	8	3.81
Dec. 7	9.05	9	13.51	26	1.41	15	4.53
13	9.33	17	13.65	May 3	2.91	22	1.45
21	10.61	23	13.72	11	3.96	29	2.04
28	10.55	Mar. 2	13.58	June 1	5.96	June 4	1.86
		9	13.03	14	2.56	11	2.75
1953		16	12.18	July 12	6.56	18	2.81
		23	11.32	27	7.86	26	3.58
Jan. 11	9.45	30	9.24	Aug. 3	8.31	July 3	2.96

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 5--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 10	4.32	Feb. 5	2.70	Oct. 28	7.40	Dec. 4	1.09
17	5.56	13	3.75	29	7.54	5	1.13
24	6.26	19	4.99	30	7.66	6	1.31
31	6.64	27	6.34	31	7.77	7	1.59
Aug. 7	7.61	Mar. 6	7.11	Nov. 1	7.82	8	1.71
14	7.96	26	4.03	2	7.83	9	1.85
21	8.31	Apr. 16	2.66	3	7.86	10	2.09
28	8.56	May 15	2.75	4	7.94	11	2.29
Sept. 4	8.86	22	2.70	5	7.96	12	2.39
11	9.62	June 24	1.61	6	8.01	13	2.59
18	9.38	July 1	1.97	7	8.08	14	2.92
25	9.60	15	2.02	8	8.14	15	3.15
Oct. 1	9.73	22	3.72	9	8.14	16	3.40
9	9.96	29	4.89	10	8.17	17	3.65
16	10.06	Aug. 5	1.97	11	8.25	18	3.90
30	10.36	19	2.10	12	8.30	19	4.12
Nov. 6	10.56	26	3.15	13	8.36	20	4.31
13	10.66	Sept. 3	4.71	14	8.40	21	4.67
21	7.66	10	5.82	15	8.43	22	4.96
27	4.36	16	6.67	16	8.39	23	5.18
Dec. 4	4.61	23	6.97	17	4.65	24	5.29
11	2.66	30	6.96	18	2.50	25	5.61
18	1.66	Oct. 7	6.77	19	2.15	26	5.93
26	1.06	14	7.15	20	2.12	27	6.13
		20	h6.11	21	2.15	28	6.25
1958		21	6.21	22	2.18	29	6.41
		22	6.49	23	2.32	30	6.61
Jan. 2	1.76	23	6.68	24	2.39	31	6.83
8	2.86	24	6.82	25	2.11		
15	3.86	25	6.99	26	1.60		
22	2.85	26	7.13	27	1.57		
29	2.20	27	7.27	Dec. 3	1.15		

(Daily highest water level from recorder graph, 1959)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct	Nov.	Dec.
1	6 42	2.46	1.30	0.83	1.36	----	6.76	8.59	9.29	9.99	10.55	9.89
2	5.68	2.48	1.30	.83	1.51	----	6.80	8.63	9.31	10.02	10.56	9.90
3	5.27	2.12	1.36	.83	1.77	----	7.07	8.66	9.34	10.04	10.59	9.92
4	5.23	1.85	1.57	.89	1.98	----	7.20	8.68	9.37	10.06	10.60	9.94
5	5.25	1.86	1.05	1.02	2.13	----	e7.26	8.69	9.40	10.09	10.60	9.95
6	5.31	2.03	.96	1.21	2.31	----	----	8.71	9.43	10.11	10.63	9.97
7	5.26	2.22	1.16	1.45	2.53	----	7.46	8.73	9.45	10.12	10.67	9.98
8	5.26	2.14	1.31	1.48	2.81	----	7.57	8.75	9.47	10.14	10.69	9.99
9	5.40	----	.92	1.14	2.99	----	7.64	8.76	9.50	10.15	10.71	10.01
10	5.57	.70	.84	1.12	3.17	----	7.71	8.78	9.53	10.18	10.72	10.04

Table 8.--Water levels is observation wells in Owen County, Indiana--Continued

Owen 5--Cont.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	5.70	1.04	.85	1.15	2.99	----	7.76	8.81	9.56	10.18	10.73	9.68
12	5.87	1.41	----	1.29	1.35	----	7.80	8.84	9.59	10.20	10.74	4.97
13	5.97	1.33	.79	1.42	1.13	----	7.87	8.87	9.63	10.23	10.68	3.69
14	6.07	.91	.81	1.59	1.13	2.97	7.95	8.90	9.65	10.24	10.45	3.51
15	5.30	.99	.75	1.77	1.29	3.12	8.00	8.92	9.66	10.25	10.32	3.51
16	4.79	1.20	1.01	1.92	1.54	3.27	8.05	8.96	9.66	10.28	10.17	3.55
17	4.69	1.10	1.13	2.06	1.74	3.46	8.09	8.98	9.69	10.29	10.13	3.65
18	4.66	1.09	1.41	2.15	1.89	3.71	8.12	9.00	9.72	10.31	10.05	3.70
19	4.64	1.22	1.54	1.46	1.79	3.97	8.12	9.03	9.75	10.33	9.99	3.70
20	4.18	1.49	1.59	1.26	1.91	4.21	8.16	9.07	9.77	10.34	9.93	3.73
21	2.60	1.83	1.64	1.27	1.96	4.43	8.20	9.09	9.78	10.36	9.89	3.77
22	2.60	2.04	1.79	1.38	1.71	4.66	8.25	9.11	9.80	10.38	9.86	3.90
23	2.60	1.33	1.94	1.58	1.65	4.92	8.29	9.12	9.81	10.39	9.79	4.02
24	2.59	1.34	2.00	1.78	1.78	5.21	8.31	9.13	9.83	10.38	9.77	4.11
25	2.55	1.35	2.09	1.96	1.97	5.45	8.35	9.16	9.86	10.38	9.77	4.22
26	2.54	1.34	1.77	2.10	1.67	5.69	8.40	9.18	9.87	10.40	9.77	4.32
27	2.56	1.38	1.69	1.90	1.63	5.96	8.44	9.20	e9.88	10.42	9.79	4.32
28	2.57	1.36	1.83	.93	1.63	6.15	8.47	9.22	e9.92	10.46	9.81	3.93
29	2.54	----	1.82	.97	1.86	6.38	8.50	9.24	9.94	10.49	9.84	3.21
30	2.46	----	1.66	1.12	2.10	6.62	8.53	9.26	9.97	10.51	9.87	2.95
31	2.46	----	1.39	----	e2.28	----	8.56	9.27	----	10.53	----	2.95

Owen 6. (12/5W-24K1). John E. Harrison. Poland. NW¼SE¼ sec. 24, T. 12 N., R. 5 W. Dug unused artesian well in sandy-clay, diameter 36 inches, depth 19.5 feet. Land-surface datum is about 710 feet above msl. Highest water level is 1.72 below lsd, March 26, 1949; lowest, 11.58 below lsd, Feb. 22, 1953. Records available 1946 to 1953.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1946		Sept. 14	8.46	1947		Apr. 26	3.05
		21	8.28			May 3	4.31
June 5	5.98	28	8.39	Jan. 4	5.46	12	5.46
8	6.28	Oct. 5	9.06	12	5.57	18	3.46
15	6.86	12	9.15	18	5.38	25	4.24
22	7.35	19	9.16	26	5.17	31	5.24
29	7.68	26	9.29	Feb. 1	4.58	June 14	5.53
July 6	7.58	Nov. 3	9.39	8	6.17	21	5.38
14	7.99	10	9.05	16	6.45	28	5.78
20	8.27	16	8.87	22	6.46	July 5	6.86
27	8.17	23	8.27	Mar. 8	7.73	12	7.18
Aug. 3	8.18	30	7.59	15	6.47	19	6.38
10	8.38	Dec. 7	8.49	22	6.06	26	6.38
17	8.28	14	5.07	29	5.36	Aug. 2	7.17
24	8.19	21	7.27	Apr. 5	3.36	9	7.57
31	8.29	28	6.60	12	3.32	16	7.46
Sept. 7	8.39			19	5.23	23	7.17

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 6--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 30	7.75	Aug. 7	7.32	July 16	8.08	June 10	7.36
Sept. 6	7.06	14	7.75	23	7.83	17	6.85
13	8.35	22	7.83	30	8.14	26	5.51
20	8.25	28	8.85	Aug. 6	8.23	July 1	6.47
27	7.24	Sept. 4	8.12	13	8.29	7	6.99
Oct. 6	7.37	11	7.58	20	7.28	15	7.59
11	8.03	18	8.33	27	7.23	21	6.49
18	8.22	24	8.46	Sept. 6	6.81	30	7.46
25	7.93	Oct. 2	9.57	10	7.45	Aug. 6	8.49
Nov. 1	8.03	9	7.55	17	6.89	12	7.55
8	8.18	16	8.56	24	6.59	20	6.58
14	8.05	23	8.38	Oct. 1	7.35	26	7.29
22	8.08	30	7.73	8	5.49	Sept. 3	4.24
29	7.34	Nov. 6	3.53	15	5.57	9	6.06
Dec. 6	7.57	13	5.01	22	4.17	17	6.24
13	7.70	20	3.49	29	6.29	25	5.08
20	7.04	27	5.47	Nov. 5	4.34	30	6.38
27	7.92	Dec. 6	6.23	12	6.94	Oct. 10	6.83
		11	5.38	20	7.48	14	5.38
1948		25	5.46	26	7.36	22	7.49
				Dec. 3	7.49	28	7.58
Jan. 3	3.36	1949		13	5.39	Nov. 4	7.53
10	4.07			17	4.95	12	7.57
24	6.14	Jan. 1	3.49	24	4.37	19	6.12
31	6.85	8	2.45			Dec. 2	3.05
Feb. 7	7.55	15	3.41	1950		9	3.58
14	7.54	23	3.99			16	3.49
21	8.57	Feb. 5	3.98	Jan. 7	3.38	24	6.13
28	5.05	11	5.07	14	3.49	29	5.25
Mar. 7	2.83	19	4.46	21	4.88		
13	4.87	26	4.32	28	4.36	1951	
20	3.43	Mar. 5	5.58	Feb. 4	5.26		
27	3.28	12	5.71	11	4.38	Jan. 6	5.53
Apr. 3	4.72	19	4.49	17	4.36	13	6.05
10	4.48	26	1.72	18	4.56	20	4.36
17	4.94	Apr. 2	5.07	25	4.59	30	5.46
24	6.07	9	5.73	Mar. 3	5.09	Feb. 3	5.38
May 1	5.76	16	5.56	11	5.43	10	5.47
8	4.75	23	7.76	18	5.45	17	4.28
22	6.41	30	5.91	25	5.08	24	5.46
30	7.43	May 7	6.41	Apr. 2	5.43	Mar. 3	4.84
June 5	7.37	14	6.43	10	4.58	17	5.05
12	7.98	21	7.02	15	5.53	24	5.18
19	7.39	28	8.14	24	5.55	Apr. 1	5.22
26	8.38	June 4	7.82	May 1	5.59	7	4.98
July 3	7.87	11	7.57	6	5.88	14	4.19
10	7.77	18	9.34	13	5.49	21	5.28
17	7.95	25	7.46	20	5.38	May 5	6.14
24	7.29	July 2	7.46	27	6.78	12	5.45
31	6.09	9	8.06	June 7	6.77	19	6.09

Table 8.--Water levels in observation wells in Owen County, Indiana--Continued

Owen 6--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 28	6.32	Dec. 29	5.38	July 19	7.94	Mar. 8	5.58
June 4	7.03			27	8.02	15	6.39
11	7.19	1952		Aug. 3	8.36	22	3.53
17	6.18			9	5.31	29	3.51
23	6.24	Jan. 6	4.84	17	8.27	Apr. 5	4.47
July 1	6.10	12	3.23	24	9.45	13	5.51
10	5.57	19	5.08	31	8.57	19	5.33
15	5.55	26	4.03	Sept. 8	8.57	26	3.32
21	5.47	Feb. 2	3.89	21	8.57	May 3	5.27
29	6.95	9	4.75	27	8.57	10	5.44
Aug. 6	7.42	16	4.98	Oct. 5	9.56	17	5.41
11	7.91	24	5.71	12	8.45	24	6.53
20	7.47	Mar. 1	5.13	19	8.33	31	7.53
25	7.91	8	5.90	26	9.18	June 15	7.42
Sept. 1	8.08	15	4.99	Nov. 6	8.59	21	7.99
9	8.35	22	3.50	15	9.35	30	7.55
15	8.49	29	4.97	22	9.34	July 8	10.11
24	8.37	Apr. 6	4.00	29	9.55	15	9.49
Oct. 2	8.23	19	3.73	Dec. 7	7.75	19	9.23
6	8.50	28	5.39	13	7.98	26	7.21
12	8.97	May 3	6.06	21	9.05	Aug. 3	9.55
20	8.58	11	6.39	28	8.85	9	9.48
27	6.35	17	8.14			24	8.51
Nov. 4	6.82	24	4.49	1953		30	10.45
10	5.78	31	6.06			Sept. 6	9.43
17	4.58	June 7	5.31	Jan. 11	8.01	15	8.93
25	3.55	14	6.43	24	6.75		
Dec. 1	5.82	21	7.94	31	6.95		
9	4.38	28	4.79	Feb. 8	11.55		
15	6.43	July 7	7.44	15	10.77		
22	5.39	12	7.57	22	11.58		

PUBLICATIONS OF COOPERATIVE GROUND-WATER PROGRAM

Report

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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.

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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.

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8 Ground-water resources of Tippecanoe County, Indiana. J. S. Rosenshein. Indiana Department of Conservation, Division of Water Resources. 1958 (1959).

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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.

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.

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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.

INDEX

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

PREPARED BY THE
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 18 PLATE 1

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

SECTION LETTER SYMBOLS IN WELL-NUMBERING SYSTEM.

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

DIAGRAM OF TOWNSHIP

PUTNAM CO
CLAY CO
GREENE CO
MORGAN CO

R. 6 W. R. 5 W. R. 4 W. R. 3 W. R. 2 W.

T. 12 N. T. 11 N. T. 10 N. T. 9 N.

CATARACT LAKE
CATARACT
QUINCY
GOSPORT
PATRICKSBURG
SPENCER
COAL CITY
ARNEY
FREEDOM
WHITEHALL

CREEK
FORK
BRANCH
RIVER
BRUSH CREEK
MILL CREEK
LITTLE LIMESTONE CREEK
INDIAN CREEK
NAANS CREEK
SIXMILE CREEK
FISH CREEK
WEST FORK FISH CREEK
EAST FORK FISH CREEK
RATTLESNAKE CREEK
McCORMICKS CREEK
LICK CREEK
HOUSER CREEK
BEECH CREEK
NEED DITCH
McBRIDES BR
RACCOON CREEK
LITTLE RACCOON CREEK
WHITE RIVER
EEL RIVER

EXPLANATION

- Bl — Water well
- R5 — Observation well
- Q1 — Spring
- O R2 — Oil well, test hole, or hole drilled for purposes other than water supply
- P1 — Well for which log is listed in table 4
- C3 — Well or spring for which field chemical analysis is listed in table 5 or 6
- ▲ — Stream water sampling site—field chemical analysis of water in table 7

Base modified from Indiana Department of Conservation, Geological Survey, Base Map of Owen County, No. 60, April 3, 1958

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

0 1 2 3 4 5 6 MILES
0 5000 10000 15000 20000 FEET

BY F.A. WATKINS, JR. AND D.G. JORDAN
1961

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

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BULLETIN 18, PLATE 2

EXPLANATION

Production from sand and gravel

Water from sand and gravel of Pleistocene age overlain by Pleistocene lake sediments or Recent alluvium. Well depths range from 30 to 100 feet. Yields more than adequate for domestic and stock use. Area of municipal pumpage and relatively large yields.

Water from sand and gravel lenses and stringers interbedded with till and(or) lake sediments in pre-Pleistocene stream channels. Well depths range from 20 to 220 feet. Yields from sand and gravel adequate for domestic, stock, and locally for small industrial use. Many wells in area are cased through the sand and gravel and tap underlying bedrock.

Production from bedrock

Water predominately from sandstone of Pennsylvanian age. Well depths range from 20 to 300 feet. Yields generally adequate for domestic and stock use.

Water predominately from limestone of Mississippian age. Well depths range from 20 to 550 feet. Yields generally adequate for domestic and stock use, and locally for small industrial supplies.

PUTNAM CO

CLAY CO

MORGAN CO

MONROE CO

GREENE CO

R. 6 W. R. 5 W. R. 4 W. R. 3 W. R. 2 W.

T. 12 N. T. 11 N. T. 10 N. T. 9 N.

CATARACT LAKE
CATARACT
QUINCY
PATRICKSBURG
COAL CITY
ARNEY
FREEDOM
SPENCER
GOSPORT
WHITEHALL

BRUSH CREEK
MILL CREEK
NORTH FORK COON CREEK
SIXMILE CREEK
LITTLE NAANS CREEK
NAANS BRANCH
LIMESTONE CREEK
INDIAN CREEK
WHITE RIVER
WEST FORK FISH CREEK
EAST FORK FISH CREEK
RATTLESNAKE CREEK
McCORMICKS CREEK
LICK CREEK
HOUSER CREEK
BEECH CREEK
NEED DITCH
EEL RIVER
McBRIDES BR
RACCOON CREEK
LITTLE RACCOON CREEK

Base modified from Indiana Department of Conservation, Geological Survey, Base Map of Owen County, No. 60, April 3, 1958

MAP OF OWEN COUNTY, INDIANA SHOWING AVAILABILITY OF GROUND WATER

0 1 2 3 4 5 6 MILES

0 5000 10000 15000 20000 FEET

BY F. A. WATKINS, JR. AND D. G. JORDAN

1961

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

DIAGRAM OF TOWNSHIP

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

PREPARED BY THE
UNITED STATES DEPARTMENT OF THE INTERIOR
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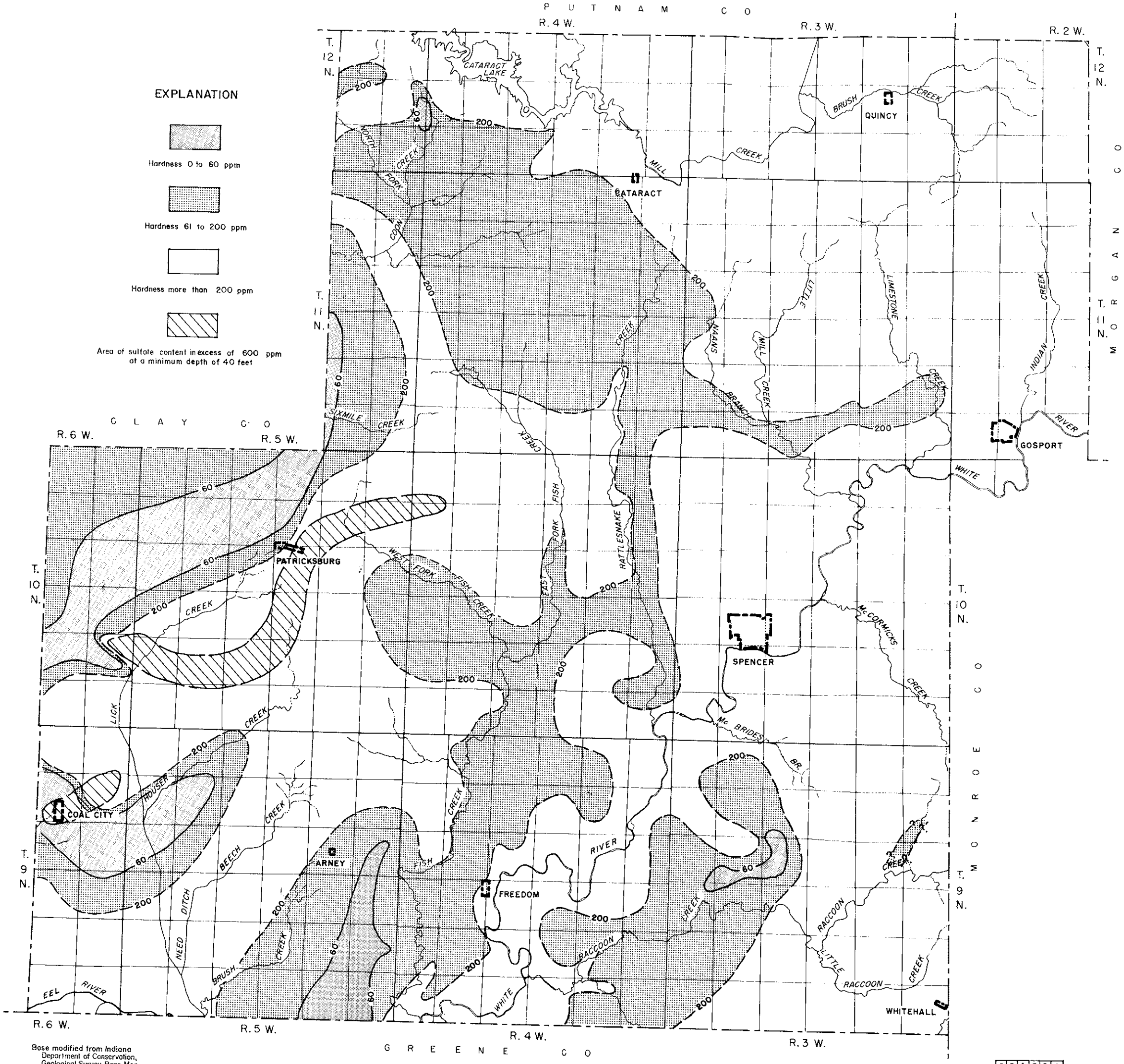
BULLETIN 18, PLATE 3



Base modified from Indiana Department of Conservation, Geological Survey, Base Map of Owen County, No. 60, April 3, 1958

MAP OF OWEN COUNTY, INDIANA SHOWING HARDNESS OF GROUND WATER

0 1 2 3 4 5 6 MILES

0 5000 10000 15000 20000 FEET

BY F.A. WATKINS, JR. AND D.G. JORDAN

1961

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

DIAGRAM OF TOWNSHIP