

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/2W-24B1

Type of record: Driller's log. Altitude: 695 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Silt, sandy, clayey, dark-brown--	1	1	Sand 30 percent.
Silt, sandy, reddish-brown-----	2	3	Sand 30-35 percent.
Clay, sandy, laminated orange and gray-----	1	4	Sand 15-20 percent.
Sand, fine, tan, with trace of clay-----	1	5	
Sand, fine to coarse, light-brown	3	8	Sand mostly fine.
Sand, fine to medium, silty-----	2	10	
Sand with little clay-----	2	12	
Sand, fine to medium-----	2	14	
Sand, fine-----	11	25	

Well 33/2W-24C1

Type of record: Driller's log. Altitude: 695 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Silt, sandy, clayey, dark- brown, with few small roots----	1	1	Sand 35 percent.
Clay, sandy, silty, dark-brown---	1	2	Do.
Sand, very fine, yellowish-brown-	2	4	
Sand, fine, very light-brown, with trace of silt-----	1	5	
Sand, fine to medium, reddish- brown-----	5	10	Sand mostly fine.
Sand, fine-----	8	18	
Sand, fine to medium-----	2	20	
Sand, fine to coarse-----	4	24	Sand mostly fine.
Silt, sandy-----	1	25	

Well 33/2W-26G1

Type of record: Driller's log. Altitude: 712 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine-----	58	58	
Mud, blue-----	22	80	
Gravel-----	44	124	
Mud-----	6	130	
Mississippian and Devonian Systems:			
Lower Mississippian and Upper Devonian Series:			
Slate and stone-----	31	161	
Stone, hard, brown-----	21	182	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/2W-26G1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Devonian and Silurian Systems; undifferentiated:			
Limestone, gray-----	518	700	
Dolomite-----	2	702	
Limestone, white-----	88	790	
Limestone, gray-----	90	880	
Ordovician System:			
Upper Ordovician Series:			
Shale, blue-----	100	980	
Shale, brown-----	128	1,108	
Middle Ordovician Series:			
Limestone-----	52	1,160	

Well 33/2W-34B1

Type of record: Driller's log.

Altitude: 720 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, brown-----	12	12	
Sand, yellow-----	42	54	
Sand, gray-----	14	68	
Clay, sticky, gray-----	67	135	
Clay, gray, and fine sand-----	7	142	
Mississippian and Devonian Systems:			
Lower Mississippian and Upper Devonian Series:			
Shale, brown-----	42	184	
Middle Devonian Series:			
Lime, white-----	19	203	

Well 33/3W-10Q4

Type of record: Driller's log.

Altitude: 678 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, black-----	5	5	
Sand, yellow-----	15	20	
Clay, blue-----	2	22	
Sand-----	68	90	
Hardpan, brown-----	3	93	
Sand and gravel-----	14	107	

Well 33/3W-13P1

Type of record: Driller's log.

Altitude: 672 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, clayey, silty, brown	1	1	Clay 20 percent.
Sand, fine, light-brown, with little clay-----	1	2	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/3W-13P1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, slightly sandy, organic, dark-grayish-brown-----	1	3	Clay 15 percent; sand mostly fine.
Sand, fine to medium, clayey, dark-grayish-brown-----	2	5	
Sand, very fine, grayish-brown--	9	14	
Clay, sandy-----	2	16	
Sand, fine-----	9	25	

Well 33/3W-13R1

Type of record: Driller's log.

Altitude: 677 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, slightly clayey, dark-brown-----	1	1	Clay about 40 per- cent. Clay 40-45 percent. Clay 20-25 percent.
Sand, fine, brown, with little clay-----	1	2	
Sand, fine, clayey, dark-brown--	1	3	
Sand, fine, clayey, dark-gray- ish-brown-----	2	5	
Sand, fine, clayey, grayish- brown-----	5	10	
Sand, fine-----	8	18	
Sand, fine, with trace of lignite-----	2	20	
Sand, fine-----	2	22	
Sand, fine, with trace of lignite-----	3	25	

Well 33/3W-14N1

Type of record: Driller's log.

Altitude: 668 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, slightly silty, dark-brown-----	2	2	Sand 15 percent. Clay 35 percent.
Clay, very sandy, silty, dark- grayish-brown-----	1	3	
Clay, sandy, dark-brownish- gray, with trace of silt-----	1	4	
Sand, fine, very clayey, dark- brown-----	1	5	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/3W-14N1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, sandy, black-----	1	6	Sand 35 percent.
Sand, fine, clayey, dark-gray- ish-brown-----	6	12	Clay 35 percent.
Sand, fine, clayey-----	2	14	Clay 15 percent.
Sand, fine, with trace of lignite-----	11	25	

Well 33/3W-14P1

Type of Driller's log.

Altitude: 672 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, dark-brown, with little clay-----	1	1	
Sand, fine, clayey, dark-brown--	1	2	Clay 30 percent.
Clay, sandy, dark-gray-----	2	4	Sand 30-35 percent.
Sand, fine, clayey, dark- grayish-brown-----	1	5	Clay 40 percent.
Sand, fine, clayey, dark-brown--	2	7	Clay 15-20 percent.
Sand, fine, grayish-brown, with trace of clay-----	3	10	
Sand, fine, with trace of lignite-----	15	25	

Well 33/3W-15P1

Type of record: Driller's log.

Altitude: 670 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, dark- brown, with trace of fine gravel-----	1	1	Sand mostly fine.
Clay, sandy, dark-gray-----	1	2	Sand 35 percent.
Sand, fine, brown, with trace of clay-----	2	4	
Sand, fine, yellowish-brown----	4	8	
Clay, sandy, brown-----	2	10	Fine sand 35 per- cent.
Sand, fine, clayey-----	1	11	
Clay, sandy, with trace of silt-	1	12	
Sand, fine, clayey-----	4	16	
Sand, slightly clayey-----	2	18	
Sand with trace of lignite-----	4	22	
Sand with fine gravel-----	3	25	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/3W-15Q1

Type of record: Driller's log.

Altitude: 680 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown-----	1	1	Sand mostly fine.
Clay, sandy, dark-brown-----	1	2	Fine sand 35-40 per- cent.
Sand, fine to coarse, dark- brown, with trace of clay-----	5	7	Sand mostly fine.
Sand, fine, dark-brown, with trace of clay and very fine gravel-----	1	8	
Clay, sandy-----	2	10	
Sand, clayey-----	7	17	
Sand, fine-----	8	25	

Well 33/3W-21H1

Type of record: Driller's log.

Altitude: 671 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown, with few fine gravel-----	1	1	Sand mostly fine to medium.
Clay, sandy, brown, with fine gravel-----	1	2	Sand 20-25 percent.
Sand, fine to coarse, gravelly, brown-----	1	3	Gravel up to 1 1/4 inch; sand mostly fine.
Sand, fine to coarse, slightly clayey, brown, with few very fine gravel-----	1	4	Sand mostly fine.
Clay, sandy, light-brown-----	8	12	Sand 15-20 percent.
Sand, slightly clayey-----	3	15	
Sand, fine-----	3	18	
Sand, gravelly-----	12	30	Gravel up to 1 inch.

Well 33/3W-21L1

Type of record: Driller's log.

Altitude: 675 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown, with few medium gravel-----	1	1	Sand mostly fine.
Sand, fine, light-brown-----	1	2	
Sand, fine to coarse, brown-----	1	3	Sand mostly fine.
Sand, fine, brown-----	1	4	
Sand, fine, brown, with trace of clay-----	2	6	

Table 4.--Selected logs of wells and test holes in starke County--Continued

Well 33/3W-21L1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown, with trace of clay-----	12	18	Sand mostly fine.
Sand, fine, with trace of lignite-----	4	22	
Sand, fine to medium-----	13	35	

Well 33/3W-21N1

Type of record: Driller's log.

Altitude: 675 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown, with few fine gravel-----	1	1	Sand mostly fine.
Sand, fine to medium, brown, with few fine gravel-----	1	2	Do.
Sand, fine to medium, brown, with few very fine gravel-----	3	5	Sand mostly fine.
Sand, fine to coarse, dark-brown, with little clay and few very fine gravel-----	5	10	Do.
Sand, fine to medium, clayey----	4	14	
Clay, sandy-----	3	17	
Sand, fine, with trace of lignite-----	13	30	

Well 33/3W-22D1

Type of record: Driller's log.

Altitude: 671 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown, with trace of fine gravel-----	1	1	
Sand, fine to coarse, brown, with trace of fine gravel and clay-----	1	2	
Clay, very sandy, dark-brown----	1	3	
Sand, fine to coarse, very clayey, dark-brown-----	1	4	
Sand, fine, clayey, brown-----	3	7	
Sand, fine, light-brown, with few red, black, and white grains-----	1	8	
Sand, fine, clayey-----	2	10	
Clay, sandy-----	2	12	
Sand, clayey-----	3	15	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/3W-22D1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine-----	3	18	
Sand, fine, with trace of lignite-----	7	25	

Well 33/3W-29A1

Type of record: Driller's log.

Altitude: 675 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, slightly clayey, brown, with few very fine gravel-----	1	1	
Sand, fine to coarse, light- brown, with few very fine gravel-----	1	2	
Sand, fine to medium, light- brown, with trace of dark- gray, with little clay-----	1	3	Sand mostly fine.
Sand, fine to medium, clayey, brown-----	1	4	Clay 15-20 percent.
Sand, fine to coarse, light- brown with few very fine gravel-----	1	5	Sand mostly fine.
Sand, fine, light-brown, with few very fine gravel and trace of clay-----	3	8	
Sand, fine, clayey, with trace of gravel-----	2	10	
Sand, fine, with little clay---	6	16	
Sand, fine to medium, with some gravel-----	14	30	

Well 33/3W-29G1

Type of record: Driller's log.

Altitude: 675 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, brown, with trace of clay and few very fine gravel-----	1	1	
Clay, very sandy, dark-brown----	2	3	Fine sand 35 percent.
Clay, sandy, grayish-brown-----	1	4	Sand 15-20 percent.
Clay, very sandy, dark-grayish- brown-----	1	5	Sand 35 percent.
Clay, sandy, grayish-brown-----	1	6	Sand 20 percent.
Clay, sandy, mottled gray and light-brown-----	1	7	Sand 15-20 percent.

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/3W-29G1--Continued

Material	Thick-ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, very sandy, light-grayish-brown, with trace of gravel---	5	12	
Sand, silty-----	4	16	
Sand, fine, clayey-----	3	19	
Sand, with little clay-----	11	30	
Sand, fine to medium, clayey, with trace of lignite-----	2	32	
Clay, sandy-----	3	35	

Well 33/3W-29L1

Type of record: Driller's log.

Altitude: 675 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, soft, dark-brown, with trace of clay-----	1	1	
Sand, fine, clayey, dark-brown--	1	2	
Sand, fine, clayey, dark-brown--	4	6	Clay 25 percent.
Sand, fine to medium, clayey, dark-brown-----	3	9	Clay 40 percent.
Clay, sandy-----	1	10	
Sand, fine to medium, clayey----	4	14	
Clay, sandy-----	2	16	
Sand, fine to medium, clayey----	6	22	
Sand, fine, with trace of lignite-----	8	30	

Well 33/3W-29N1

Type of record: Driller's log.

Altitude: 675 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown, with trace of very fine gravel-----	1	1	
Sand, fine, clayey, brown-----	1	2	Clay 20 percent.
Do-----	1	3	Clay 45 percent.
Clay, sandy, brown-----	2	5	Sand 35 percent.
Do-----	2	7	Sand 20-25 percent.
Silt, sandy-----	3	10	
Clay, sandy-----	2	12	
Sand, fine, clayey-----	7	19	
Sand, fine silty-----	2	22	
Sand, fine, clayey-----	8	30	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/3W-30R1

Type of record: Driller's log.

Altitude: 675 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to coarse, brown, with few gravel-----	1	1	Clay 35 percent.
Sand, fine, clayey, brown-----	1	2	
Sand, fine, clayey, brown, with few fine gravel-----	2	4	
Sand, fine, clayey, dark-brown---	3	7	
Sand, clayey-----	1	8	
Clay, sandy-----	6	14	
Sand, silty-----	5	19	
Sand, fine, with trace of lignite-----	11	30	

Well 33/4W-33R1

Type of record: Driller's log.

Altitude: 671 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil, black-----	3	3	
Sand, yellow-----	6	9	
Clay, yellow-----	6	15	
Clay, blue-----	3	18	
Sand, coarse-----	4	22	
Gravel-----	2	24	
Sand, coarse-----	6	30	

Well 33/4W-36C1

Type of record: Driller's log.

Altitude: 665 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Marl-----	4	4	
Clay-----	33	37	
Sand, fine-----	11	48	
Sand and gravel-----	12	60	
Sand, fine, and gravel-----	4	64	
Sand, fine, and gravel, with clay-balls-----	2	66	
Clay and gravel-----	9	75	
Shale-----	1	76	Clay?
Sand-----	1	77	
Shale-----	5	82	Clay?

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/4W-36C3

Type of record: Driller's log.

Altitude: 665 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Fill-----	3	3	
Sand and gravel-----	10	13	
Clay, blue-----	23	36	
Clay and sand-----	9	45	
Sand, fine-----	11	56	
Sand, fine, and gravel-----	3	59	
Sand and gravel-----	1	60	
Clay and gravel-----	9	69	
Sand and gravel-----	6	75	
Clay and gravel-----	10	85	
Sand and gravel-----	1	86	
Clay and gravel-----	12	98	
Mississippian and Devonian Systems:			
Lower Mississippian and Upper Devonian Series:			
Shale, brown-----	38	136	
Devonian System:			
Middle Devonian Series:			
Lime rock-----	11	147	
Lime rock, hard, brown-----	33	180	
Lime rock, gray-----	6	186	
Lime rock, brown-----	4	190	
Lime rock, gray-----	23	213	
Lime rock, brown-----	37	250	

Well 33/4W-36F1

Type of record: Driller's log.

Altitude: 675 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil-----	1	1	
Sand, yellow-----	3	4	
Sand, gray-----	11	15	
Clay-----	22	37	
Clay, soft-----	2	39	
Clay-----	2	41	
Sand, fine, muddy-----	14	55	
Clay-----	1	56	
Sand, fine to medium-----	2	58	
Clay, sandy-----	24	82	
Sand and gravel-----	13	95	
Mississippian and Devonian Systems:			
Lower Mississippian and Upper Devonian Series:			
Shale-----	5	100	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 33/4W-36F2

Type of record: Driller's log.

Altitude: 675 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	2	2	
Sand, yellow-----	3	5	
Sand, gray-----	7	12	
Clay, blue-----	27	39	
Sand, fine, muddy-----	4	43	
Clay, blue-----	39	82	
Gravel and clay-----	7	89.	
Sand and gravel-----	6	95	Brown shale at 95 feet.

Well 33/4W-36F3

Type of record: Driller's log.

Altitude: 675 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Cinders-----	1	1	
Sand, dirty-----	10	11	
Clay-----	26	37	
Gravel and clay-----	5	42	
Sand, dirty-----	14	56	
Sand, cleaner-----	6	62	
Clay-----	14	76	
Gravel, dirty-----	3	79	
Gravel, clean-----	2	81	
Sand, very fine-----	5	86	
Clay-----	10	96	Brown shale at 96 feet.

Well 34/1W-1A1

Type of record: Driller's log.

Altitude: 724 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	2	2	
Clay, yellow-----	26	28	
Clay, blue-----	22	50	
Sand and gravel-----	5	55	
Sand-----	15	70	
Gravel-----	78	148	
Shale, dark-gray-----	7	155	Shale fragments.
Gravel-----	44	199	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 34/1W-1A1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Mississippian and Devonian Systems:			
Lower Mississippian and Upper Devonian Series:			
Shale, brown-----	61	260	
Devonian System:			
Middle Devonian Series:			
Lime, very hard-----	41	301	

Well 34/1W-2H1

Type of record: Driller's log from memory. Altitude: 738 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine-----	50	50	
Sand, fine, heaving-----	50	100	
Clay, blue-----	5	105	
Sand, fine, clean-----	20	125	
Gravel, fine-----	4	129	

Well 34/1W-12D3

Type of record: Driller's log. Altitude: 718 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	35	35	
Clay, blue-----	35	70	
Sand-----	7	77	
Gravel, pea-sized-----	4	81	

Well 34/1W-12H1

Type of record: Driller's log. Altitude: 728 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand and clay-----	22	22	
Clay, blue-----	34	56	
Sand, white-----	12	68	
Gravel, pea-sized, gray-----	4	72	

Well 34/1W-22J1

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

Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	20	20	
Clay, blue-----	16	36	
Sand, white-----	4	40	
Gravel, coarse, gray-----	4	44	

Table 4.--Selected logs of wells and test holes in Starke County--Continued

Well 34/1W-23J1

Type of record: Driller's log.

Altitude: 737 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine to medium-----	15	15	
Clay, blue-----	68	83	
Gravel, medium-----	4	87	

Well 34/1W-23N2

Type of record: Driller's log.

Altitude: 727 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	14	14	
Clay and gravel; blue-----	56	70	
Sand and gravel; yellow-----	15	85	

Well 34/1W-27A2

Type of record: Driller's log.

Altitude: 724 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	35	35	
Clay, blue-----	25	60	
Sand-----	7	67	
Sand, coarse-----	4	71	

Well 34/1W-36H1

Type of record: Driller's log.

Altitude: 752 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil and sand-----	21	21	
Sand, fine-----	9	30	
Clay, blue-----	10	40	
Clay, blue, and gravel-----	35	75	
Gravel, pea-sized-----	5	80	

Well 34/2W-1R1

Type of record: Driller's log.

Altitude: 687 feet

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, red-----	15	15	
Sand, gray-----	17	32	
Clay, blue-----	6	38	
Sand, very fine, white-----	6	44	
Gravel-----	14	58	
Gravel with large boulders-----	2	60	

Table 4.--Selected log of wells and test holes in Starke County--Continued

Well 34/2W-1R1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	2	62	
Sand, fine-----	6	68	
Clay, soft, blue-----	7	75	
Mississippian and Devonian Systems:			
Lower Mississippian and Upper Devonian Series:			
Shale, hard-----	45	120	

Well 34/2W-11B1

Type of record: Driller's log. Altitude: 692 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand and clay-----	50	50	
Clay-----	71	121	
Sand-----	20	141	
Sand, coarse, gray-----	4	145	

Well 34.3W-13H2

Type of record: Driller's log. Altitude: 680 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Soil and sand-----	10	10	
Gravel and coarse sand-----	4	14	
Sand, medium-----	10	24	
Gravel and sand-----	9	33	
Clay, soft-----	17	50	
Clay, hard-----	12	62	
Sand, fine-----	8	70	
Clay, gravelly, sandy-----	15	85	
Clay, tough-----	16	101	
Sand, fine, and mud-----	2	103	
Clay, soft-----	7	110	
Clay, sandy, with shale-----	2	112	
Mississippian and Devonian Systems:			
Lower Mississippian and Upper Devonian Series:			
Shale, black-----	3	115	

Table 5.--Field chemical analyses of water from wells in Starke County, Ind.

(Results in parts per million. Analyses by U. S. Geological Survey.)

Well: See text for description of well-numbering system.

Material: G, gravel; Ls, limestone; Sd, sand; Sh, shale.

Geologic age: D, Devonian; M, Mississippian; Pl, Pleistocene.

U. S. Public Health Service drinking-water standards: Iron (Fe) - 0.3 ppm for iron and manganese together; Sulfate (SO_4) - 250 ppm; Chloride (Cl) - 250 ppm.

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)
32/1W- 1P1	Sd	Pl	5- 4-61	55	<0.1	371	70	4	344
1R1	Sd,G	Pl	5- 4-61	57	1.0	410	50	<4	328
3A1	Sd	Pl	5- 1-61	55	< .1	176	30	4	124
3D1	G	Pl	5- 1-61	52	.5	200	25	4	128
7G1	Sd,G	Pl	3-28-61	59	5.0	312	10	4	228
7H2	Sd	Pl	1957	53	1.2	195	--	8	192
7H3	Sd,G	Pl	3-29-61	56	1.0	229	30	8	184
9A1	Sd,G	Pl	5- 4-61	54	<.1	264	105	20	324
11K1	G	Pl	3-29-61	53	1.5	361	25	4	272
13B1	G,Sd	Pl	5- 4-61	49	1.5	288	70	8	272
14C1	G,Sd	Pl	5- 4-61	55	1.0	351	35	4	276
17C1	Sd,G	Pl	5- 4-61	55	<.1	356	115	32	416
18A1	Sd	Pl	5- 4-61	56	1.0	215	30	4	172
18M1	Sd	Pl	5-17-61	55	1.5	312	10	4	216
20E1	Sd,G	Pl	5- 4-61	50	.2	102	15	<4	36
21C1	Sd	Pl	3-29-61	57	.7	254	35	8	216
24B1	Sd	Pl	5- 4-61	53	1.0	410	160	24	472
25F1	Sd	Pl	5- 4-61	51	3.0	229	15	<4	140
28M1	G	Pl	5- 4-61	50	1.0	259	35	<4	196
28M2	G	Pl	5- 4-61	53	1.5	283	90	4	264
29N1	Sd	Pl	5- 4-61	53	.1	151	50	12	144
30E1	Sd	Pl	5- 4-61	54	.5	137	45	8	120
31C1	Sd,G	Pl	3-29-61	57	.3	176	30	4	136
32H1	Sd	Pl	5- 4-61	54	.5	215	105	8	252
32N1	Sd,G	Pl	5- 1-61	54	.3	156	65	<4	140
33G1	Sd	Pl	5- 4-61	56	1.0	224	90	12	256
32/2W- 1B1	Sd,G	Pl	3-30-61	--	.3	229	25	4	124
2A1	Sd	Pl	5- 1-61	53	.1	98	25	8	88
2D1	Sd	Pl	5- 1-61	53	.5	176	50	44	168
2N1	Sd	Pl	5- 4-61	54	.5	254	120	24	304
3A1	Sd	Pl	3-30-61	--	.1	195	105	8	208
8D1	G	Pl	5- 3-61	58	.2	181	45	4	140
9R1	Sd,G	Pl	5- 3-61	58	2.0	317	5	<4	176
10D1	Sd	Pl	5- 3-61	--	<.1	132	40	8	112

Table 5.--Field chemical analyses of water from wells in Starke County--Cont.

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)
32/2W-17M1	Ls?	D	3-30-61	--	.1	122	45	12	136
19B1	Sd	P1	5- 3-61	59	2.0	268	75	20	244
19N1	Sd,G	P1	5- 3-61	--	.7	307	5	<4	---
20A1	Sd,G	P1	3-30-61	--	2.0	317	10	4	192
20C1	G,Sd	P1	3-30-61	--	.3	200	10	4	96
21A1	Sd,G	P1	3-30-61	--	.5	254	5	4	---
21D1	Sd,G	P1	6-26-59	57	1.8	298	<5	8	224
22P1	Sd,G	P1	6-26-59	59	1.0	185	<5	12	152
23D1	Sd	P1	5- 3-61	--	2.0	332	5	<4	212
23J1	Sd	P1	3-30-61	56	2.0	351	15	8	208
25D1	Sd,G	P1	5- 4-61	52	2.0	254	5	<4	168
27R1	Sd,G	P1	5- 3-61	57	1.5	249	25	<4	172
28M1	G	P1	6-26-59	57	1.0	273	<5	8	204
29D1	Sd	P1	5- 3-61	--	.3	166	60	20	180
32R1	Sd	P1	5- 3-61	53	<.1	293	205	20	356
36D1	Sd,G	P1	3-28-61	56	4.0	200	65	4	200
36M1	Sd	P1	5- 4-61	--	<.1	205	50	48	236
32/3W- 7R1	Sd	P1	5- 2-61	54	2.0	288	70	16	276
8P1	Sd	P1	5- 2-61	--	<.1	132	25	4	96
9B1	Sd	P1	5- 2-61	57	<.1	146	25	12	104
10P1	Sd	P1	5- 3-61	--	<.1	156	50	20	124
11D1	Sd	P1	5- 3-61	--	.4	195	100	8	228
13A1	Sd	P1	5- 3-61	53	<.1	142	40	4	100
13N1	Sd	P1	6-25-59	57	.1	166	50	36	244
14D1	Sd	P1	6-26-59	57	.2	93	35	8	128
15R1	Sd	P1	6-26-59	57	.5	117	55	16	140
17K1	Sd	P1	6-23-59	--	.1	254	<5	8	160
20A1	Sd	P1	3-30-61	--	.1	88	30	12	100
20B1	Sd	P1	4-27-61	54	.2	171	45	12	140
20B2	Sd	P1	4-25-61	54	.2	176	35	88	180
22Q1	Sd,G	P1	5- 3-61	56	.5	166	25	4	116
26A1	Sd	P1	5- 3-61	59	<.1	117	40	12	100
26R1	Sd,G	P1	5- 3-61	--	<.1	68	15	8	52
29A1	Sd	P1	5- 2-61	53	<.1	83	20	8	72
29N1	Sd	P1	5-2 -61	--	<.1	146	50	36	324
32P2	Ls	D	4-25-61	54	1.5	346	215	24	484
33N1	Sd	P1	4-25-61	55	.1	327	10	4	128
33R1	Sd	P1	5- 2-61	55	<.1	181	75	12	180
35P1	Sd	P1	5- 3-61	57	<.1	195	45	16	200
36L1	Sd	P1	5- 3-61	--	.2	117	150	20	---

Table 5.--Field chemical analyses of water from wells in Starke County--Cont.

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)
32/4W- 1B1	B	P1	4-19-61	57	<.1	244	100	12	288
1N1	Sd	P1	6-24-59	--	3.0	83	100	12	176
2D1	Sd	P1	4-19-61	52	1.0	303	135	16	356
2L1	Sd	P1	4-25-61	54	.5	254	10	8	144
8H1	Sd,G	P1	6-22-59	53	1.0	566	<5	36	80
9K1	Ls	D	6-24-59	--	<.1	605	35	48	172
11D1	Sd	P1	5- 2-61	--	<.1	132	40	12	136
14A1	Sd,G	P1	5- 2-61	55	.4	244	5	<4	116
17E1	G	P1	5- 2-61	57	<.1	190	100	20	256
19M1	Sd	P1	5- 2-61	47	<.1	166	50	8	152
20E1	Sd	P1	5- 2-61	55	.7	181	130	12	268
24B1	Sd	P1	5- 2-61	51	7.5	176	70	8	188
27A1	Sd	P1	5- 2-61	52	1.0	59	70	20	160
28H1	Sd	P1	5- 2-61	55	<.1	107	15	24	132
28M1	Sd	P1	6-24-59	--	.1	220	70	12	264
29A1	Ls	D	6-23-59	--	<.1	254	<5	8	88
30N1	Sd	P1	5- 2-61	53	<.1	49	40	8	100
31A1	Sd	P1	5- 2-61	53	.2	156	65	12	160
31N1	Sd	P1	5- 2-61	48	.1	117	40	8	100
32R1	Sd,G	P1	5- 2-61	54	<.1	151	55	8	128
34M1	Sd	P1	5- 2-61	--	<.1	142	35	4	100
36N1	Sd	P1	5- 2-61	51	<.1	117	40	48	192
33/1W- 2A1	Sd	P1	4-20-61	59	<.1	122	40	8	144
2M1	Sd	P1	4-26-61	54	.1	102	30	16	92
4R1	Sd	P1	4-20-61	57	1.0	117	55	104	144
5R1	Sd	P1	4-20-61	49	<.1	137	45	4	116
5R2	Ls?	D?	4-20-61	50	<.1	185	60	16	180
7D1	Sd	P1	4-20-61	--	<.1	132	55	8	168
11H1	Sd	P1	4-20-61	55	<.1	83	20	4	68
12H1	Sd	P1	4-20-61	51	<.1	166	45	4	120
16J1	Sd	P1	4-20-61	57	.5	161	80	4	168
22D1	Sd	P1	4-20-61	55	<.1	112	25	<4	68
23R1	Sd	P1	4-20-61	53	<.1	146	40	60	176
25J1	Sd	P1	4-20-61	56	<.1	132	30	8	120
25R1	Sd	P1	4-20-61	53	<.1	195	30	8	164
27D1	Sd	P1	5- 1-61	55	1.5	234	60	8	244
29R1	Sd	P1	5- 1-61	55	.7	195	35	4	156
30Q1	Sd	P1	4-20-61	59	<.1	93	15	8	80
34D1	Sd	P1	5- 1-61	--	<.1	220	50	12	176
34D2	Sd	P1	5- 1-61	53	<.1	210	55	64	148
35H1	Sd	P1	4-20-61	48	<.1	190	40	4	152
35R1	Sd	P1	4-20-61	49	.1	390	30	4	288

Table 5.--Field chemical analyses of water from wells in Starke County--Cont.

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)
33/2W- 2D1	Sd	P1	4-26-61	--	0.5	137	80	8	168
3P1	Sd	P1	4-19-61	--	<.1	78	30	4	92
3R1	Sd	P1	6-25-59	--	3.0	132	80	28	220
6M1	Sd,G	P1	6-25-59	56	.7	142	40	28	124
8Q1	Sd	P1	4-19-61	--	1.0	234	155	4	276
11J1	Sd	P1	6-25-59	--	.2	161	35	8	172
13N1	Sd	P1	6-25-59	59	7.0	264	115	16	364
13N2	Sh	D,M	4-26-61	54	.7	210	10	4	120
25B1	Sd	P1	4-20-61	51	.8	127	80	8	140
25N1	Sd	P1	4-20-61	--	.5	78	30	<4	68
26D1	Sd	P1	4- -61	54	.1	190	40	12	224
27A1	Sd	P1	4-26-61	--	.5	98	20	4	40
28E1	Sd	P1	6-25-59	--	.1	98	40	8	124
28R1	Sd	P1	4-19-61	50	.1	166	20	<4	68
30L2	Sd	P1	3-30-60	56	1.5	395	5	12	264
31Q1	Sd	P1	4-19-61	50	<.1	278	45	8	236
33Q1	Sd	P1	4-19-61	--	<.1	49	25	4	36
34B1	Ls	D	3-30-61	53	.3	229	15	148	140
34H1	Sd	P1	4-26-61	56	.1	127	45	20	144
35D1	Sd	P1	4-20-61	54	<.1	88	35	16	148
33/3W- 1L1	Sd	P1	4-19-61	--	.3	337	90	24	316
25P1	Sd	P1	4-19-61	44	<.1	161	45	4	148
28R1	Sd	P1	4-19-61	52	7.5	185	265	44	448
33Q1	Sd,G	P1	6-24-59	57	<.1	156	20	8	156
34F1	Sd,G	P1	4-19-61	52	<.1	44	30	4	76
35N1	Sd	P1	4-19-61	54	<.1	137	25	4	120
33/4W-33R1	Sd,G	P1	4-19-61	--	2.5	400	130	12	384
34/1W- 2H1	Sd,G	P1	4-27-61	55	.5	273	25	<4	196
3M1	Sd,G	P1	4-18-61	--	.1	229	35	4	140
6F1	Sd	P1	4-27-61	54	.1	327	110	24	372
9D1	Sd	P1	4-18-61	--	1.0	98	80	8	108
9J1	Sd	P1	4-18-61	49	<.1	112	45	16	140
9R1	Sd	P1	4-18-61	45	<.1	132	25	4	84
12D2	Sd,G	P1	4-27-61	54	.1	366	20	<4	260
12H1	Sd,G	P1	4-27-61	--	<.1	371	25	<4	272
12M1	Sd	P1	4-27-61	54	.7	381	20	4	252
13M1	G	P1	4-18-61	52	.5	264	<5	4	188
15E1	Sd	P1	4-18-61	50	.1	59	45	16	92
17N1	Sd	P1	4-18-61	55	<.1	146	20	8	96
19K1	G	P1	4-27-61	--	.1	195	80	8	216

Table 5.--Field chemical analyses of water from wells in Starke County--Cont.

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)
34/1W-20A1	Sd	P1	4-18-61	--	<.1	98	20	4	48
20Q1	Sd	P1	4-18-61	49	<.1	244	85	68	264
21R1	Sd	P1	4-18-61	--	1.5	244	45	<4	180
22J1	Sd,G	P1	4-27-61	54	<.1	166	35	28	168
23J1	G	P1	4-18-61	48	<.1	127	35	4	112
23N2	Sd,G	P1	4-27-61	--	.1	156	25	8	132
24E1	Sd	P1	4-18-61	47	<.1	161	40	16	136
24H1	Sd	P1	4-18-61	50	<.1	98	20	4	68
24R1	Sd	P1	4-18-61	--	<.1	112	45	4	100
26B1	G	P1	4-26-61	--	.3	327	5	<4	220
26C1	Sd	P1	4-27-61	--	.2	205	40	12	164
28A1	Sd	P1	4-27-61	54	.5	288	15	4	164
28N1	Sd	P1	4-20-61	52	2.0	166	70	24	196
29J1	Sd,G	P1	4-20-61	55	.3	229	15	<4	132
36H1	G	P1	1957	51	.7	342	--	24	280
34/2W- 7P1	Sd	P1	4-19-61	52	>7.5	405	210	8	520
8M1	Sd	P1	4-19-61	55	.3	332	120	20	348
11B1	Sd	P1	4-26-61	57	>7.5	405	120	4	416
11N1	Sd	P1	4-19-61	--	7.5	390	90	8	340
12R1	Sd	P1	4-19-61	51	1.5	215	45	4	188
12R2	Sd	P1	4-26-61	54	<.1	181	45	8	176
14H1	Sd	P1	4-19-61	45	2.0	239	25	4	156
16M1	Sd	P1	6-25-59	--	4.0	312	70	16	336
19A1	Sd,G	P1	6-25-59	57	3.0	293	65	16	324
21N1	Sd	P1	4-19-61	--	<.1	288	50	8	248
23A1	Sd	P1	4-19-61	52	.1	185	40	8	140
26D1	Sd	P1	4-20-61	48	<.1	210	80	12	224
31A1	Sd	P1	4-19-61	--	6.0	317	90	12	316
33B1	Sd	P1	4-19-61	55	<.1	142	55	8	120
34/3W-25A1	Sd	P1	4-19-61	49	<.1	234	55	12	212

Table 6.--Water levels in observation wells in Starke County, Indiana

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

Starke 1. (32/1W-7H1). Joe Tomassi. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 32 N., R. 1 W.
Drilled unused artesian well in gravel, diameter 6 inches, reported depth 180
feet. Highest water level is 12.18 below lsd, June 15, 1944; lowest 17.44
below lsd, Sept. 15, 1941. Records available: 1935-46.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1935							
Oct. 3	15.79	July 6	13.82	Aug. 2	14.39	June 2	15.90
17	16.08	17	14.04	15	14.70	17	15.72
Nov. 1	16.01	Aug. 3	14.19	21	14.88	July 1	15.88
17	15.30	17	14.38	Sept. 18	15.79	15	16.13
Dec. 3	15.29	Oct. 4	14.64	Oct. 2	14.49	Aug. 2	16.64
17	15.17	15	15.38	16	16.12	17	17.09
		Nov. 3	15.36	Nov. 29	16.20	Sept. 15	17.44
		Dec. 6	15.28	Dec. 18	16.22	Oct. 7	17.15
1936							
Jan. 2	15.21	1938		1940		Nov. 1	16.97
16	14.68	Jan. 4	15.07	Jan. 8*	16.33	15	16.45
Feb. 15	15.38	16	15.05	Feb. 8	16.49	Dec. 1	16.26
Mar. 2	15.46	31	15.04	Mar. 18	16.21	15	16.18
17	15.38	Feb. 15	14.69	Apr. 1	16.40	1942	
Apr. 4	15.41	Mar. 1	14.34	16	16.32	Jan. 2	16.05
20	15.49	20	14.31	May 6	16.30	15	16.04
May 16	14.71	Apr. 1	13.99	17	15.27	Feb. 2	16.00
June 1	14.83	May 1	14.27	June 4	14.83	16	15.37
17	15.18	15	14.16	18	14.78	Mar. 2	15.18
July 2	15.67	June 5	14.20	July 5	14.86	21	14.60
31	16.04	July 3	14.08	15	14.98	Apr. 1	14.28
Aug. 2	16.14	20	14.59	Aug. 5	15.35	20	14.26
17	16.27	Aug. 2	14.08	19	15.57	May 6	14.34
Sept. 1	16.26	17	14.10	Sept. 4	15.81	16	14.28
18	16.20	Sept. 1	14.94	16	16.03	June 1	14.32
Nov. 5	15.55	15	14.90	Oct. 19	16.29	15	14.51
Dec. 1	15.37	Oct. 1	14.87	Nov. 7	16.31	July 1	14.64
15	15.41	15	14.93	15	16.14	15	14.79
1937							
Jan. 4	14.94	Nov. 4	15.08	Dec. 16	16.48	Aug. 1	15.06
Feb. 3	14.53	Dec. 5	14.96	1941		15	15.30
15	14.54	16	14.98	Jan. 2	16.27	Sept. 2	15.91
Mar. 1	14.53	1939		31	15.98	Oct. 1	16.23
16	14.44	Jan. 17	14.85	Feb. 17	15.94	19	16.17
Apr. 1	14.53	Feb. 3	14.62	Mar. 1	15.94	Nov. 4	16.15
15	14.04	Mar. 1	13.92	15	15.91	14	16.15
May 19	13.83	May 9	13.60	Apr. 1	15.85	Dec. 18	15.79
June 1	14.13	17	13.62	16	15.86	1943	
15	14.07	June 1	13.74	30	16.63	Jan. 1	15.36
		July 12	14.00	May 15	15.78		

Table 6.--Water levels in observation wells in Starke County--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1943		Mar. 1	14.99	Feb. 1	16.30	Jan. 24	13.46
		16	14.47	16	16.30	31	13.47
Jan. 16	15.10	Apr. 1	14.41	Mar. 2	16.27	Feb. 7	13.52
Feb. 8	15.01	17	13.50	Apr. 2	16.40	14	13.55
15	14.92	25	12.90	17	15.10	21	13.60
Mar. 1	14.83	May 2	12.50	May 1	14.90	28	13.62
17	14.79	16	12.50	17	14.00	Mar. 7	13.60
Apr. 3	14.14	June 1	12.46	June 4	13.00	15	13.96
May 1	14.30	15	12.18	15	13.10	21	13.72
15	13.71	July 3	12.85	July 2	13.14	28	13.60
June 1	12.78	25	13.70	Nov. 1	13.54	Apr. 4	13.67
17	12.85	Aug. 12	13.98	8	13.69	11	14.13
July 1	13.12	Sept. 1	14.70	15	13.71	18	13.52
15	13.40	21	15.00	23	13.74	25	13.52
31	13.64	Oct. 11	13.98	29	13.75	May 2	13.51
Aug. 16	13.87	Nov. 3	15.65	Dec. 7	13.73	9	13.54
Sept. 1	14.09	16	15.80	13	13.76	16	13.56
15	14.16	Dec. 2	15.87	20	13.90	23	13.59
Oct. 2	14.34	21	15.45	27	13.91	June 6	13.63
18	14.57						
1944		1945		1946			
		Jan. 5	15.17	Jan. 3	13.88		
Jan. 26	14.74	18	16.22	10	13.74		
Feb. 15	14.20			17	13.54		

Starke 2. (32/2W-14C1). S. A. Craigmile. NE $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 14, T. 32 N., R. 2 W. Drilled unused artesian well in gravel, diameter 6 inches, depth 82.5 feet. Land-surface datum is 714 feet above msl. Highest water level is 0.83 below lsd, June 17, 1949; lowest 6.99 below lsd, Aug. 2, 1939. Records available: 1935-59.

1935		June 1	2.61	Mar. 1	3.01	Jan. 16	3.14
		17	3.91	16	3.07	31	3.11
Oct. 17	4.98	July 2	4.02	Apr. 1	2.96	Feb. 15	2.55
Nov. 1	4.90	31	6.74	15	2.36	Mar. 1	2.39
17	3.36	Aug. 2	6.81	May 19	2.95	20	2.36
Dec. 3	3.49	17	5.09	June 1	3.26	Apr. 1	2.41
17	3.28	Sept. 1	4.59	15	2.94	May 1	2.96
		18	4.35	July 6	3.19	15	3.10
1936		Nov. 5	2.51	17	3.20	June 5	3.09
		Dec. 1	3.34	Oct. 4	3.44	July 3	3.01
Jan. 2	3.53	15	3.56	15	3.69	20	3.43
16	3.22			Nov. 3	3.72	Aug. 2	2.96
Feb. 15	3.81	1937		Dec. 6	3.67	17	3.01
Mar. 2	2.84	Jan. 4	2.62			Sept. 1	3.94
17	2.89	Feb. 3	2.94	1938		15	3.87
Apr. 4	3.11	15	2.95	Jan. 4	3.16	Oct. 1	3.81
20	3.73					15	3.83
May 16	3.39					Nov. 4	3.64
						Dec. 5	2.96
						16	3.23

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 2--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level		
1939		Apr. 30	3.44	May 1	2.90	Aug. 16	4.10		
		May 15	3.60	May 15	2.14	Aug. 30	4.50		
Jan. 17	3.01	June 2	3.83	June 1	2.29	Sept. 6	4.70		
Feb. 3	2.79	June 17	3.41	June 17	2.70	Sept. 14	4.60		
Mar. 1	1.99	July 1	3.82	July 1	3.40	Sept. 21	4.70		
May 9	2.90	July 15	4.23	July 15	3.40	Sept. 27	4.20		
May 17	3.25	Aug. 2	4.68	July 31	3.12	Oct. 4	2.80		
June 1	3.43	Aug. 17	5.17	Sept. 15	2.64	Oct. 11	3.00		
July 12	3.65	Sept. 15	5.59	Oct. 2	3.37	Oct. 18	3.30		
Aug. 2	6.99	Oct. 7	4.97	Oct. 18	3.11	Oct. 25	3.10		
Aug. 15	4.38	Oct. 18	4.86	1944				Nov. 1	3.26
Aug. 21	4.48	Nov. 1	4.20	Jan. 26	3.64	Nov. 8	4.04		
Sept. 18	5.09	Nov. 15	3.70	Feb. 15	3.46	Nov. 15	3.21		
Oct. 2	5.09	Dec. 1	3.77	Mar. 1	2.70	Nov. 23	3.24		
Oct. 16	4.92	Dec. 15	3.93	Mar. 16	1.15	Nov. 29	2.77		
Nov. 29	4.48	1942		Apr. 1	2.25	Dec. 7	3.04		
Dec. 18	4.37	Jan. 2	3.24	Apr. 17	2.15	Dec. 13	3.34		
1940		Jan. 15	3.84	Apr. 25	1.88	Dec. 20	3.47		
Jan. 8	4.50	Feb. 2	3.13	May 2	2.65	Dec. 27	3.27		
Feb. 8	4.38	Feb. 16	2.58	May 16	2.66	1946			
Mar. 18	3.86	Mar. 2	3.22	June 1	1.68	Jan. 3	2.85		
Apr. 1	3.88	Mar. 21	2.43	June 15	3.15	Jan. 10	2.29		
Apr. 16	3.27	Apr. 1	2.80	July 3	3.77	Jan. 17	2.84		
May 6	2.42	Apr. 20	3.03	July 25	4.26	Jan. 24	3.10		
May 17	2.85	May 6	3.25	Sept. 1	4.80	Jan. 31	3.27		
June 4	2.96	May 16	3.11	Sept. 21	4.93	Feb. 7	3.20		
June 18	3.05	June 1	3.60	Oct. 11	4.70	Feb. 14	2.78		
July 5	3.58	June 15	3.79	Nov. 3	4.80	Feb. 21	2.89		
July 15	3.84	July 1	3.90	Nov. 16	4.55	Feb. 28	2.69		
Aug. 5	4.54	July 15	3.97	Dec. 2	4.55	Mar. 7	2.40		
Aug. 19	4.84	Aug. 1	4.44	Dec. 21	4.60	Mar. 15	2.37		
Sept. 4	4.97	Sept. 2	4.78	1945				Mar. 21	2.59
Sept. 16	4.90	Oct. 1	4.25	Jan. 5	4.42	Mar. 28	2.62		
Oct. 19	4.71	Oct. 19	4.29	Jan. 18	4.20	Apr. 4	3.20		
Nov. 7	4.61	Nov. 4	4.06	Feb. 1	4.40	Apr. 11	3.05		
Nov. 15	4.43	Nov. 14	3.53	Feb. 16	3.70	Apr. 18	3.24		
Dec. 16	3.83	Dec. 8	3.61	Mar. 2	3.45	Apr. 25	3.25		
1941		1943		Mar. 16	3.70	May 2	3.40		
Jan. 2	3.42	Jan. 4	2.47	Mar. 19	3.15	May 9	3.50		
Jan. 31	3.86	Jan. 16	2.97	Apr. 2	2.30	May 16	3.39		
Feb. 17	3.50	Feb. 8	2.52	Apr. 17	2.93	May 23	3.46		
Mar. 1	3.88	Feb. 15	2.97	May 1	3.16	May 31	3.68		
Mar. 15	3.47	Mar. 1	2.98	May 17	1.67	June 6	3.75		
Apr. 1	3.48	Mar. 17	1.93	June 4	2.88	June 13	2.48		
Apr. 16	3.64	Apr. 3	3.03	June 15	3.16	June 20	2.26		
				July 2	3.36	July 27	3.19		
						July 4	3.50		

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 2--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1946		May 22	2.68	Apr. 8	2.31	Feb. 18	2.43
		29	3.02	15	2.87	25	2.23
July 12	3.82	June 5	2.79	22	3.33	Mar. 4	2.55
18	3.96	12	2.95	28	3.57	11	2.68
27	4.21	19	3.31	May 6	3.37	18	2.99
Aug. 1	4.33	26	3.58	13	2.23	25	3.05
8	4.55	July 3	3.78	20	3.03	Apr. 8	3.27
15	4.66	10	3.98	27	3.46	15	3.21
22	4.65	17	4.10	June 3	3.71	22	3.26
29	4.81	24	4.29	10	3.79	29	3.07
Sept. 5	4.97	31	4.38	18	3.94	May 7	3.55
19	5.14	Aug. 7	4.52	24	3.56	14	3.65
27	5.15	14	4.69	July 1	3.67	21	3.25
Oct. 3	5.08	21	4.81	8	4.08	28	3.25
10	5.08	28	4.83	15	4.11	June 4	2.83
17	5.05	Sept. 4	4.51	22	2.07	11	3.65
24	4.85	11	4.46	29	3.56	17	.83
30	4.25	18	4.37	Aug. 5	3.74	24	3.43
Nov. 7	3.84	25	3.95	12	4.49	July 2	3.69
14	3.84	Oct. 2	3.83	19	4.54	8	3.95
21	3.71	9	4.16	26	4.59	15	4.13
27	3.81	16	4.32	Sept. 2	4.99	22	4.29
Dec. 5	3.92	23	4.24	9	4.95	30	4.08
12	3.62	30	3.99	16	5.03	Aug. 7	4.29
19	4.23	Nov. 6	4.04	23	5.13	12	4.47
26	3.88	13	3.76	Oct. 1	5.08	20	4.73
		20	3.68	7	5.29	27	4.92
1947		28	3.72	14	5.36	Sept. 3	5.03
		Dec. 4	3.66	19	5.07	10	5.03
Jan. 2	3.77	11	3.30	21	5.08	17	5.29
9	4.02	18	3.41	28	5.08	24	5.49
16	3.59	26	3.58	Nov. 4	4.86	Oct. 1	5.51
23	3.57			11	4.57	8	5.09
30	2.94	1948		18	4.46	31	4.87
Feb. 6	3.41			26	4.53	Nov. 12	4.85
13	3.68	Jan. 2	3.12	Dec. 4	4.57	18	4.69
20	3.69	8	3.06	9	4.62	25	4.65
27	3.86	15	3.17	16	3.81	Dec. 2	4.65
Mar. 6	3.89	22	3.34	23	3.91	9	4.29
13	3.86	29	3.69	30	3.86	19	4.67
20	3.71	Feb. 5	3.88			31	2.79
27	2.57	12	3.94	1949			
Apr. 3	2.68	19	3.29	Jan. 6	3.09	1950	
10	2.94	26	2.47	13	2.97	Jan. 13	2.34
17	2.88	Mar. 4	3.03	20	.97	20	2.35
24	2.51	11	3.22	28	2.26	27	2.43
May 1	2.49	18	3.06	Feb. 4	3.12	Feb. 11	2.97
8	3.10	25	2.36	11	3.15	Mar. 3	2.98
15	3.13	Apr. 1	2.18				

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 2--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1950		July 5	4.30	Oct. 19	5.68	Sept. 6	5.68
		13	3.46	26	5.67	13	5.70
Mar. 10	2.89	28	4.09	Nov. 2	5.72	20	5.77
17	2.38	31	4.43	11	5.72	27	5.82
24	2.88	Nov. 15	2.93	17	5.72	Oct. 4	5.87
31	2.75	23	2.87	23	5.64	11	5.89
Apr. 7	2.27	30	3.37	Dec. 3	5.56	18	5.89
May 5	3.25	Dec. 8	3.01	7	5.42	25	5.92
12	3.58	14	3.13	12	5.46	Nov. 1	5.88
19	3.71	22	3.07	21	5.38	8	5.90
26	3.67	29	2.65	29	5.37	15	5.92
June 2	3.97					22	5.88
9	3.55	1952		1953		29	5.90
16	2.29	Jan. 5	2.77	Jan. 4	5.37	Dec. 6	5.78
23	2.26	10	3.09	11	5.36	13	5.79
30	3.66	17	2.97	18	5.06	20	5.79
July 7	1.69	24	3.01	25	4.79	27	5.82
28	3.72	Feb. 9	3.01	Feb. 1	4.93		
Aug. 4	4.14	15	3.07	8	4.95	1954	
18	4.36	22	3.08	15	4.88	Jan. 3	5.79
Sept. 1	4.51	29	3.01	22	4.50	10	5.78
15	4.53	Mar. 7	2.99	Mar. 1	4.66	17	5.78
22	4.79	14	2.99	8	4.41	24	5.79
29	4.87	21	3.04	15	3.66	31	5.78
Oct. 6	4.85	28	3.01	22	3.81	Feb. 7	5.76
13	4.84	Apr. 5	3.09	29	4.14	14	5.54
Nov. 17	4.89	12	3.60	Apr. 5	4.01	21	5.12
Dec. 2	4.59	19	3.99	12	4.22	28	4.68
8	4.57	May 2	4.09	19	4.13	Mar. 7	4.72
15	4.31	9	4.07	25	4.14	14	4.75
22	2.39	23	4.01	May 3	3.98	21	4.70
29	4.39	30	3.78	10	4.38	28	3.72
1951		June 6	4.04	17	4.12	Apr. 4	3.63
		13	4.03	24	4.19	11	3.64
Jan. 5	3.34	27	4.04	31	4.50	18	3.70
12	3.35	July 3	4.02	June 7	4.50	25	3.68
19	3.35	10	4.50	14	4.38	May 2	3.88
Feb. 2	2.36	18	4.07	21	4.71	9	4.06
9	2.30	25	4.08	28	4.13	16	4.12
17	2.43	Aug. 1	4.09	July 5	4.37	23	4.14
23	2.96	15	4.08	12	4.64	30	4.10
Mar. 22	1.85	21	4.09	19	4.79	June 6	4.30
30	2.53	29	4.04	26	4.78	10	4.58
Apr. 5	1.76	Sept. 5	4.07	Aug. 2	4.78	13	5.16
20	1.49	9	5.55	9	4.90	20	4.92
May 18	3.51	12	4.11	16	5.16	27	4.88
June 8	4.34	Oct. 3	4.07	23	5.36	July 4	5.03
29	4.07	15	5.63	30	5.50	11	5.04

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 2--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level			
1954		May 15	4.48	Apr. 1	4.60	Feb. 27	5.30			
			5.38		8	4.69	Mar. 3	5.04		
July 18	5.08		29	4.97	15	4.76	10	5.10		
	25	5.10	June 5	4.48	22	4.64	17	5.12		
Aug. 1	5.20		12	4.53	29	4.70	24	5.16		
	8	5.30		19	4.58	May 6	4.77	31	5.17	
	15	5.37		26	4.57	13	4.84	Apr. 7	3.69	
	22	5.38	July 3	5.02	20	4.53	14	3.80		
	24	5.50		10	5.06	27	4.78	21	3.87	
	29	5.38		17	5.12	June 3	4.80	28	3.81	
Sept. 5	5.43		24	5.17	10	4.87	May 5	3.86		
	12	5.82		31	5.36	17	4.41	12	3.99	
	19	6.02	Aug. 7	4.94	24	3.85	19	4.12		
	26	6.13		14	5.20	July 1	4.57	26	4.30	
Oct. 3	4.84			21	6.38	8	4.62	June 23	4.19	
	10	4.14		28	5.98	15	4.69	30	3.70	
	17	3.42	Sept. 4	5.86	22	4.80	July 7	4.95		
	24	3.93		11	5.95	29	4.94	14	5.06	
	31	4.13		18	6.04	Aug. 5	5.17	21	5.12	
Nov. 7	4.02		Oct. 2	5.96	12	5.25	28	5.14		
	14	3.84		9	5.84	19	5.41	Aug. 4	5.26	
	21	3.86		16	5.61	26	5.47	11	5.30	
	28	3.92		23	5.56	Sept. 2	5.69	18	5.29	
Dec. 5	4.02		30	5.48	9	5.57	25	5.33		
	12	4.23	Nov. 6	5.42	16	5.64	Sept. 22	5.42		
	19	5.12		13	5.82	23	5.82	29	5.55	
	26	4.87		20	5.30	30	5.91	Oct. 6	5.57	
				27	5.04	Oct. 7	5.57	13	5.55	
1955				Dec. 4	5.06	14	5.61	Nov. 24	4.19	
Jan. 2	3.75			11	5.18	21	5.60	Dec. 1	4.10	
	9	3.84		18	5.21	28	5.66	8	3.78	
	16	3.95		25	5.20	Nov. 4	5.70	15	2.90	
	23	4.25				11	5.74	22	3.24	
	30	4.40				18	5.82			
Feb. 6	4.52		1956			25	5.84	1958		
	13	4.49	Jan. 1	5.19	Dec. 2	5.90				
	20	3.98		8	5.28	9	5.87	Jan. 5	3.42	
	27	3.90		15	5.32	16	5.86	12	3.53	
Mar. 6	3.94			22	5.38	23	5.86	19	3.67	
	13	3.78		29	5.31	30	5.85	26	3.81	
	20	3.76						Feb. 2	4.04	
	27	3.79	Feb. 5	5.22				9	4.20	
Apr. 3	3.71			12	5.08	1957		16	4.04	
	10	3.97		19	4.84	Jan. 6	5.85	23	3.86	
	17	4.11		26	4.79	13	5.84	Mar. 2	3.79	
	24	4.19	Mar. 4	4.41	27	5.67	27	5.67	9	3.71
May 1	4.22			11	4.50	Feb. 3	5.45	16	3.76	
	8	4.30		18	4.53	10	5.49	23	3.92	
				25	4.57	17	5.44	30	4.09	
						27	5.30			

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 2--Cont

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1958		Aug. 10	3.71	Dec. 28	4.71	Apr. 19	3.20
		17	3.69			May 3	3.41
Apr. 6	3.80	24	3.82			10	3.62
13	4.59	31	4.18	1959		17	4.03
20	4.71	Sept. 7	4.50			June 7	5.26
27	4.96	14	4.67	Jan. 4	4.79	14	5.21
May 4	4.87	21	4.71	11	4.75	21	5.18
11	4.81	28	4.78	18	4.49	28	5.17
18	4.77	Oct. 5	4.81	25	4.30	July 5	5.20
25	4.74	12	4.82	Feb. 1	3.75	12	5.29
June 1	4.73	19	4.82	15	3.03	Aug. 2	5.46
8	4.71	26	4.83	22	2.95	9	5.53
15	3.17	Nov. 2	4.84	Mar. 1	2.87	16	5.60
29	3.74	9	5.85	8	2.79	23	5.69
July 6	3.96	16	4.22	15	2.82	30	5.79
13	4.03	30	4.41	22	2.84		
20	3.99	Dec. 7	4.58	29	2.85		
27	3.72	14	4.62	Apr. 5	2.87		
Aug. 3	3.74	21	4.69	12	2.90		

Starke 3. (32/2W-14C2). S. A. Craigmile. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 32 N., R. 2 W. Driven unused water-table(?) well in sand, diameter 2 inches, depth 40.5 feet. Land-surface datum is about 713 feet above msl. Highest water level is 0.00 at lsd, Apr. 17, 1944; lowest 5.45 below lsd, Sept. 15, 1941. Records available: 1935-46.

1935		Aug. 2	3.18	Aug. 3	3.83	Sept. 1	3.86
		17	4.95	Oct. 4	3.27	15	3.78
Oct. 17	4.33	Sept. 1	4.42	15	3.51	Oct. 1	3.83
Nov. 1	4.32	18	4.10	Nov. 3	3.52	15	3.94
17	3.24	Nov. 5	2.34	Dec. 6	3.48	Nov. 4	3.52
Dec. 3	3.38	Dec. 1	3.24			Dec. 5	2.78
17	3.16	15	3.44	1938		16	3.11
1936		1937		Jan. 4	3.01	1939	
		Jan. 4	2.54	16	3.00	Jan. 17	2.89
Jan. 2	3.15	Feb. 3	2.84	31	2.97	Feb. 3	2.62
16	3.12	15	2.83	Feb. 15	2.42	Mar. 1	1.84
Feb. 15	3.42	Mar. 1	2.89	Mar. 1	2.26	May 9	1.00
Mar. 2	3.11	16	2.99	20	2.20	17	3.07
17	2.97	Apr. 1	2.74	Apr. 1	2.28	June 1	3.28
Apr. 4	2.93	15	2.22	May 1	2.89	July 12	3.50
20	3.26	May 19	2.83	15	2.98	Aug. 2	4.39
May 16	3.04	June 1	3.14	June 5	2.94	15	3.70
June 1	3.25	15	2.81	July 3	2.86	21	4.37
17	3.70	July 6	3.07	20	3.49	Sept. 18	4.97
July 2	3.91	17	3.07	Aug. 2	3.13	Oct. 2	4.97
31	3.07			17	3.17		

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 3--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1939		Nov. 15	3.53	Aug. 16	2.96	Sept. 6	4.50
		Dec. 1	3.60	Sept. 1	3.26	14	4.40
Oct. 16	4.85	15	3.74	15	2.49	21	4.50
Nov. 29	4.35			Oct. 2	3.22	27	4.00
Dec. 18	4.05	1942		18	2.94	Oct. 4	2.60
						11	2.80
1940		Jan. 2	3.10	1944		18	3.10
		15	3.65			25	2.90
Jan. 8	4.32	Feb. 2	2.95	Jan. 26	3.47	Nov. 1	3.15
Feb. 8	4.47	16	2.42	Feb. 15	3.34	8	3.28
Mar. 18	3.68	Mar. 2	3.05	Mar. 1	2.92	15	3.05
Apr. 1	3.70	21	2.29	16	1.50	23	3.06
16	3.09	Apr. 1	2.65	Apr. 1	2.47	29	2.60
May 6	2.28	20	3.39	17	0.00	Dec. 7	2.88
17	2.69	May 6	3.11	25	1.76	13	3.17
June 4	2.79	16	2.94	May 2	2.77	20	3.31
18	2.90	June 1	3.46	16	2.39	27	3.11
July 5	2.70	15	3.63	June 1	2.65		
15	3.69	July 1	3.73	15	3.00	1946	
Aug. 5	4.35	15	3.82	July 3	3.65		
19	4.67	Aug. 1	4.27	25	4.10	Jan. 3	2.69
Sept. 4	4.81	15	4.75	Aug. 12	4.80	10	2.14
16	4.75	Sept. 2	4.65	Sept. 1	4.65	17	2.68
Oct. 19	4.55	Oct. 1	4.08	21	4.85	24	2.97
Nov. 7	4.41	19	4.14	Oct. 11	4.55	31	3.13
15	4.25	Nov. 4	3.92	Nov. 3	4.60	Feb. 7	3.03
Dec. 16	3.64	14	3.22	16	4.38	14	2.58
		Dec. 18	3.46	Dec. 2	4.40	21	2.73
				21	4.30	28	2.51
1941		1943				Mar. 7	2.12
				1945		15	2.18
Jan. 2	3.25	Jan. 4	2.32			21	2.44
31	3.69	16	2.83	Jan. 5	4.19	28	2.47
Feb. 17	3.32	Feb. 8	2.24	18	4.10	Apr. 4	3.02
Mar. 1	3.72	15	2.83	Feb. 1	4.19	11	2.90
15	3.30	Mar. 1	2.78	16	3.50	18	3.07
Apr. 1	3.31	17	1.78	Mar. 2	2.90	25	3.10
16	3.50	Apr. 3	2.91	19	3.15	May 2	2.26
30	3.27	May 1	2.75	Apr. 2	2.10	9	3.31
May 15	3.43	15	2.00	17	2.80	16	3.23
June 2	3.64	June 1	2.16	May 1	3.00	23	3.31
17	3.26	17	2.57	17	1.50	31	3.53
July 1	3.66	July 1	3.25	June 4	2.70	June 6	3.61
15	4.04	15	3.23	15	3.00	13	2.31
Aug. 2	4.53	31	2.93	July 2	3.17	20	2.05
17	5.00			Aug. 16	4.00	27	3.06
Sept. 15	5.45			30	4.40	July 4	3.29
Oct. 7	4.80						
18	4.68						
Nov. 1	3.98						

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 5. (33/3W-10Q2). State of Indiana. Kankakee State Game Preserve. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 33 N., R. 3 W. Driven unused water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 16.4 feet. Land-surface datum is about 670 feet above msl. Highest water level is 0.91 below lsd, Mar. 15, 1942; lowest 7.87 below lsd, Sept. 30, 1941. Records available: 1941-42.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1941		Nov. 15	3.86	1942		Feb. 28	3.43
		30	4.71			Mar. 15	.91
Sept. 30	7.87	Dec. 15	5.17	Jan. 15	4.62	Apr. 17	1.76
Oct. 15	6.35	31	4.79	Feb. 1	3.82	30	4.19
31	5.52			15	2.02		

Starke 6. (32/2W-14K1). S. A. Craigmile. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 32 N., R. 2 W. Driven unused water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 13.3 feet. Land-surface datum is about 713 feet above msl. Highest water level is 0.65 below lsd, Mar. 16, 1944; lowest 4.88 below lsd, Aug. 26, Oct. 14, 1948. Records available: 1942-49.

1942		Oct. 18	2.17	Feb. 16	2.45	1946	
				Mar. 2	2.65		
Aug. 1	4.46	1944		19	2.35	Jan. 3	1.90
15	4.78			Apr. 2	1.35	10	1.24
Sept. 2	4.77	Jan. 26	2.69	17	2.05	17	1.95
Oct. 1	3.65	Feb. 15	2.62	May 1	2.40	24	2.30
19	4.15	Mar. 1	2.10	17	.70	31	2.42
Nov. 4	3.34	16	.65	June 4	1.75	Feb. 7	2.15
14	2.85	Apr. 1	2.57	15	2.45	14	1.72
Dec. 18	3.61	17	1.70	July 2	2.55	21	1.95
		25	1.19	Aug. 16	3.35	28	1.84
1943		May 2	1.82	30	3.15	Mar. 7	1.24
		16	1.70	Sept. 6	3.75	15	1.40
Jan. 4	2.14	June 1	2.10	14	3.65	21	1.71
16	2.76	15	2.51	21	3.65	28	1.75
Feb. 8	2.15	July 3	3.07	27	3.15	Apr. 4	2.41
15	2.56	25	3.65	Oct. 4	1.55	11	2.18
Mar. 1	2.60	Aug. 12	3.90	11	1.85	18	2.38
17	1.87	Sept. 1	4.20	18	2.25	25	2.40
Apr. 3	2.37	21	4.30	25	2.05	May 2	2.06
May 1	2.13	Oct. 11	3.74	Nov. 1	2.38	9	2.53
15	1.90	Nov. 3	3.80	8	2.61	16	2.50
June 1	2.01	16	3.35	15	2.18	23	2.58
17	2.17	Dec. 2	3.65	23	2.29	31	2.83
July 1	2.82	21	3.55	29	1.73	June 6	2.95
15	2.60			Dec. 7	2.16	13	1.50
31	2.30	1945		13	2.50	20	1.33
Aug. 16	2.14			20	2.60	27	2.45
Sept. 1	2.29	Jan. 5	3.35	27	2.32	July 4	2.68
15	2.11	18	3.41			12	2.91
Oct. 2	2.59	Feb. 1	3.53			18	3.09

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 6--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1946		Apr. 3	1.80	1948		Sept. 16	4.29
		10	1.74			23	4.48
July 27	3.35	17	1.68	Jan. 2	2.10	Oct. 1	4.62
Aug. 1	3.50	24	1.69	8	2.16	7	4.77
8	3.70	May 1	2.54	15	2.26	14	4.88
15	3.75	8	3.24	22	2.28	19	4.09
22	3.63	15	3.26	29	2.33	21	4.11
29	3.81	22	2.83	Feb. 5	2.84	28	4.09
Sept. 5	3.93	29	2.36	12	2.98	Nov. 4	4.06
19	4.02	June 5	2.23	19	2.42	11	3.63
27	3.99	12	2.09	26	2.69	18	3.56
Oct. 3	3.97	19	2.21	Mar. 4	2.51	26	3.63
10	3.94	26	2.83	11	2.75	Dec. 9	2.61
17	4.36	July 3	2.89	18	2.48	16	3.09
24	3.75	10	2.91	25	1.81	23	3.02
30	3.14	17	3.04	Apr. 1	1.73	30	2.94
Nov. 7	2.64	24	3.19	8	1.70		
14	2.64	31	3.57	15	1.77	1949	
21	2.65	Aug. 7	3.77	22	2.28		
27	2.81	14	3.91	28	2.64	Jan. 6	2.78
Dec. 5	3.01	21	4.04	May 6	2.34	13	3.61
12	2.74	28	4.02	13	1.21	20	1.28
19	2.85	Sept. 4	3.46	20	1.26	28	2.33
26	2.94	11	3.38	27	1.69	Feb. 4	2.32
		18	3.31	June 3	2.89	11	2.16
1947		25	3.13	10	2.93	18	1.42
		Oct. 2	3.04	18	3.09	25	1.33
Jan. 2	2.69	9	3.09	24	4.52	Mar. 4	1.50
9	3.04	16	3.24	July 1	2.76	11	1.70
16	2.69	23	3.22	8	2.78	18	1.63
23	2.76	30	2.99	15	2.64	25	2.18
30	2.08	Nov. 6	3.06	22	2.63	Apr. 8	1.98
Feb. 6	2.63	13	3.09	29	1.86	15	1.98
13	2.93	20	2.90	Aug. 5	2.29	22	1.93
20	2.97	28	2.74	12	4.59	29	2.06
27	3.07	Dec. 4	2.67	19	4.78	May 7	1.80
Mar. 6	3.11	11	2.41	26	4.88	14	2.54
13	3.13	18	2.44	Sept. 2	4.08		
20	3.04	26	1.43	9	4.18		
27	2.10						

Starke 7. (32/2W-14F1). S. A. Craigmile. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 32 N., R. 2 W. Driven unused water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 10.0 feet. Land-surface datum is about 714 feet above msl. Highest water level is +1.89 above lsd, Sept. 22, 1950; lowest 3.03 below lsd, Aug. 5, 1948. Records available: 1942-50.

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 7--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1942		Oct. 11	2.60	Feb. 14	.55	Jan. 9	1.63
		Nov. 3	2.68	21	.54	16	1.65
Aug. 1	2.18	16	2.20	28	.54	23	1.63
15	2.34	Dec. 2	2.10	Mar. 7	.45	30	1.52
Sept. 2	2.41	21	2.25	15	.40	Feb. 6	1.47
Oct. 1	1.75			21	.37	13	1.54
19	1.89	1945		28	.35	20	1.55
Nov. 4	1.55	Jan. 5	2.16	Apr. 4	.42	27	1.61
14	1.05	18	2.30	11	.38	Mar. 6	1.65
Dec. 18	1.39	Feb. 1	2.46	18	.40	13	1.70
		16	1.80	25	.44	20	1.68
1943		Mar. 2	1.18	May 2	1.03	27	1.06
		19	.90	9	.48	Apr. 3	1.36
Jan. 16	.74	Apr. 2	.75	16	.45	10	1.24
Feb. 8	.11	17	.80	23	.44	17	1.09
15	.74	May 1	.90	31	.56	24	.91
Mar. 1	.75	17	.40	June 6	.65	May 1	.81
Apr. 3	.77	June 4	.55	13	.37	8	1.47
May 1	.36	15	.70	20	.28	15	1.36
15	+.15	July 2	.67	27	.37	22	.53
June 1	+.02	Aug. 16	1.50	July 4	.48	29	.48
17	.38	30	1.90	12	.70	June 5	.38
July 1	1.09	Sept. 6	2.00	18	.86	12	.22
15	1.07	14	2.30	27	1.14	19	.22
31	.51	21	2.40	Aug. 1	1.25	26	1.29
Aug. 16	.10	27	1.70	8	1.44	July 3	.38
Sept. 1	.43	Oct. 4	.70	15	1.63	10	.39
15	.11	11	.70	22	1.60	17	.58
Oct. 2	.52	18	.80	29	1.82	24	.69
18	.55	25	.70	Sept. 5	1.98	31	.82
		Nov. 1	.80	19	2.25	Aug. 7	.98
1944		8	.91	27	2.33	14	1.24
		15	.80	Oct. 3	2.39	21	1.34
Jan. 26	2.20	23	.77	10	2.54	28	1.32
Feb. 15	1.10	29	.70	17	2.67	Sept. 4	1.16
Mar. 1	.15	Dec. 7	.73	24	2.55	11	1.09
16	.10	13	.78	30	2.34	18	1.06
Apr. 1	+.03	20	.87	Nov. 7	2.07	25	.95
17	+.20	27	.80	14	1.97	Oct. 2	.88
25	.13			21	1.89	9	1.12
May 2	.26	1946		27	1.86	16	1.26
16	.30	Jan. 3	.71	Dec. 5	1.88	23	1.32
June 1	.60	10	.60	12	1.80	30	1.27
15	.66	17	.59	19	1.75	Nov. 6	1.31
July 3	1.18	24	.64	26	1.75	13	1.24
25	2.00	31	.68			20	1.19
Aug. 12	2.35	Feb. 7	.69	1947		28	1.25
Sept. 1	2.35					Dec. 4	1.20
21	2.80			Jan. 2	1.70	11	1.12

Table 6.--Water levels in observation wells in Starke County--Cont.
Starke 7--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1947		Aug. 5	3.03	Mar. 18	.64	1950	
		12	.48	25	.11		
Dec. 18	1.14	19	.53	Apr. 8	.53	Jan. 13	.68
26	1.11	26	.61	15	.53	20	.69
		Sept. 2	.82	22	.49	27	.98
1948		9	.88	29	.45	Feb. 11	.42
		16	1.06	May 7	.45	Mar. 3	.18
Jan. 2	1.04	23	1.09	14	.46	17	.17
8	1.11	Oct. 1	1.21	21	.33	24	.16
15	1.05	7	1.36	28	.33	31	.09
22	1.05	14	1.41	June 4	.15	Apr. 7	+ .09
29	1.09	19	1.45	11	.23	May 5	+ .14
Feb. 5	1.15	21	1.52	17	+1.03	12	+ .11
12	1.27	28	1.65	24	+ .01	19	+ .01
19	1.17	Nov. 4	1.62	July 2	+ .01	26	+ .12
26	1.15	11	1.54	8	.13	June 2	+ .11
Mar. 4	.98	18	1.50	15	.15	9	+ .23
11	1.27	26	1.54	22	+ .01	16	+ .43
18	.59	Dec. 4	1.52	30	+ .01	23	+1.41
25	.74	9	1.55	Aug. 7	.15	30	+1.41
Apr. 1	.61	16	1.45	12	.25	July 7	+1.41
8	.58	23	1.43	20	.43	28	+ .55
15	.51	30	1.34	27	.47	Aug. 4	+ .41
22	.48			Sept. 3	.69	18	+ .26
28	.82	1949		10	.73	Sept. 1	+ .12
May 6	.43	Jan. 6	1.26	17	.87	15	.09
13	.12	13	1.99	24	.77	22	+1.89
20	.13	20	+ .91	Oct. 1	1.25	29	.22
27	.22	28	.83	8	.99	Oct. 6	.30
June 3	.26	Feb. 4	.81	31	.99	13	.29
10	.27	11	.85	Nov. 12	1.19	Nov. 17	.69
18	.27	18	.74	18	1.19	Dec. 2	1.59
24	.13	25	.68	25	1.18	8	1.58
July 1	.16	Mar. 4	.65	Dec. 2	1.19	15	.50
8	.28	11	.67	9	1.26	22	.55
15	.29			19	1.25	29	.63
22	.23			31	.79		
29	2.78						

Starke 8. (32/2W-14C3). S. A. Craigmile. NE $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 14, T. 32 N., R. 2 W. Driven unused water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 17.8 feet. Land-surface datum is about 712 feet above msl. Highest water level is 0.06 below lsd, Mar. 16, 1944 and May 17, 1945; lowest 5.66 below lsd, Sept. 23, 1948. Records available: 1942-49.

1942		Aug. 15	2.81	Oct. 19	2.31	Dec. 18	1.67
		Sept. 2	3.01	Nov. 4	2.00		
Aug. 1	2.60	Oct. 1	4.05	14	1.60		

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 8--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1943		Mar. 19	1.40	May 16	1.54	Apr. 10	2.86
		Apr. 2	.40	23	1.89	17	2.78
Jan. 16	1.22	17	1.20	31	2.05	24	2.41
Mar. 17	.44	May 1	1.39	June 6	2.09	May 1	2.24
Apr. 3	1.51	17	.06	13	.57	8	3.27
May 1	1.24	June 4	1.25	20	.67	15	3.29
15	.79	15	1.40	27	1.73	22	2.81
June 1	.67	July 2	1.70	July 4	1.95	29	3.01
17	1.19	Aug. 16	2.40	12	2.15	June 5	2.83
July 1	1.80	30	2.80	18	2.29	12	3.19
15	1.70	Sept. 6	2.90	27	2.46	19	3.64
31	1.45	14	2.80	Aug. 1	2.56	26	3.90
Aug. 16	1.01	21	2.90	8	2.78	July 3	3.96
Sept. 1	1.36	27	2.10	15	2.86	10	4.14
15	.92	Oct. 4	1.10	22	2.75	17	4.25
Oct. 2	1.60	11	1.20	29	3.07	24	4.39
18	1.25	18	1.50	Sept. 5	3.29	31	4.41
		25	1.30	19	2.42	Aug. 7	4.68
1944		Nov. 1	1.46	27	3.44	14	4.85
		8	1.57	Oct. 3	3.32	21	5.00
Jan. 26	1.61	15	1.37	10	3.23	28	4.97
Feb. 15	1.67	23	1.39	17	3.19	Sept. 4	4.60
Mar. 1	1.66	29	.91	24	2.95	11	4.49
16	.06	Dec. 7	1.29	30	1.85	18	4.39
Apr. 1	.66	13	1.55	Nov. 7	1.60	25	3.95
17	.56	20	1.64	14	1.92	Oct. 2	3.84
25	.40	27	1.35	21	1.72	9	4.14
May 2	.76			27	1.91	16	4.13
16	.76	1946		Dec. 5	2.07	23	4.11
June 1	1.20	Jan. 3	1.00	12	1.69	30	3.80
15	1.50	10	.73	19	2.04	Nov. 6	3.92
July 3	2.10	17	1.22	26	2.05	13	3.49
25	2.60	24	1.36			20	3.37
Aug. 12	2.85	31	1.44	1947		28	3.60
Sept. 1	2.90	Feb. 7	1.30	Jan. 2	.89	Dec. 4	3.51
21	3.16	14	.88	9	4.04	11	3.18
Oct. 11	2.75	21	1.10	16	3.58	18	3.29
Nov. 3	2.85	28	.88	23	3.48	26	3.62
16	2.40	Mar. 7	.70	30	2.55		
Dec. 2	2.50	15	.68	Feb. 6	3.36	1948	
21	2.55	21	1.02	13	3.65	Jan. 2	2.77
		28	1.04	20	3.61	8	2.86
1945		Apr. 4	1.48	27	3.98	15	2.32
Jan. 5	2.40	11	1.32	Mar. 6	3.84	22	3.18
18	2.18	18	1.53	13	3.80	29	3.75
Feb. 1	2.34	25	1.59	20	3.74	Feb. 5	3.84
16	1.38	May 2	1.49	27	2.81	12	3.89
Mar. 2	1.38	9	1.69	Apr. 3	2.83	19	3.19

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 8--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1948		June 24	1.96	Oct. 28	5.07	Feb. 11	3.25
		July 1	3.79	Nov. 4	4.88	18	2.42
Feb. 26	3.38	8	3.86	11	4.53	25	2.36
Mar. 4	2.99	15	4.29	18	4.41	Mar. 4	2.53
11	3.22	22	4.13	26	4.45	11	2.72
18	3.08	29	4.02	Dec. 4	1.62	18	3.02
25	2.34	Aug. 5	4.26	9	4.56	25	3.03
Apr. 1	2.18	12	4.51	16	3.49	Apr. 8	2.99
8	2.29	19	4.31	23	3.71	15	3.29
15	3.03	26	4.43	30	3.62	22	3.58
22	3.51	Sept. 2	5.16			29	3.35
28	3.81	9	5.12	1949			
May 6	3.61	16	5.29	Jan. 6	2.86		
13	2.41	23	5.66	13	1.82		
20	3.32	Oct. 1	4.22	20	.67		
27	3.09	7	4.38	28	2.17		
June 3	3.94	14	4.46	Feb. 4	2.94		
10	4.03	19	5.08				
18	4.16	21	5.09				

Starke 9. (32/2W-11N1). S. A. Craigmile. SE $\frac{1}{2}$ SW $\frac{1}{2}$ sec. 11, T. 32 N., R. 2 W. Driven unused water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 15.7 feet. Highest water level is +0.74 above lsd, Feb. 6, 1947; lowest, dry (?), Sept. 1, 21, 1944. Records available: 1942-47.

1942		July 1	2.00	July 25	3.00	Aug. 16	2.80
		15	2.00	Sept. 1	Dry(?)	Sept. 6	3.30
Aug. 1	2.99	31	1.52	21	Dry(?)	14	3.20
15	3.24	Aug. 16	1.23	Oct. 11	2.80	21	3.20
Sept. 2	3.33	Sept. 1	1.64	Nov. 3	3.14	27	2.60
Oct. 1	2.65	15	1.15	16	2.95	Oct. 4	1.20
19	2.72	Oct. 2	1.98	Dec. 2	2.60	11	1.40
Nov. 4	2.48	18	1.62	21	2.50	18	1.70
14	1.94					25	1.50
Dec. 18	2.18	1944		1945		Nov. 1	1.72
1943		Jan. 26	2.23	Jan. 18	2.64	8	1.94
		Feb. 15	1.96	Feb. 1	2.75	15	1.61
Jan. 16	1.58	Mar. 1	1.15	Feb. 16	1.80	23	1.69
Feb. 8	1.25	16	+ .25	Mar. 2	1.40	29	1.12
15	1.70	Apr. 1	.86	19	1.85	Dec. 7	1.55
Mar. 1	1.67	17	1.00	Apr. 2	.58	13	1.87
17	.35	25	.74	17	1.50	20	2.00
Apr. 3	1.70	May 2	1.38	May 1	1.75	27	1.75
May 1	1.54	16	1.44	17	.05		
15	.83	June 1	1.55	June 4	1.48	1946	
June 1	.06	15	1.87	15	1.80	Jan. 3	1.34
17	1.35	July 3	2.40	July 2	1.90	10	.89

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 9--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1946		June 13	.70	Nov. 21	2.02	Apr. 3	+ .36
		20	.58	27	2.15	10	+ .04
Jan. 17	1.39	27	1.78	Dec. 5	2.34	17	+ .13
24	1.70	July 4	2.05	12	1.95	24	+ .40
31	1.85	12	2.32	19	2.13	May 1	+ .33
Feb. 7	1.71	18	2.50	26	2.31	8	.08
14	1.28	27	2.82			15	.19
21	1.50	Aug. 1	2.98	1947		22	+ .31
28	1.30	8	3.17			29	+ .25
Mar. 7	.82	15	3.29	Jan. 2	2.26	June 5	+ .08
15	.84	22	3.26	9	.60	12	.03
21	1.19	29	3.43	16	.12	19	.17
28	1.24	Sept. 5	3.62	23	.46	26	.53
Apr. 4	1.85	19	3.75	30	+ .54	July 3	.79
11	1.68	27	3.74	Feb. 6	+ .74		
18	1.89	Oct. 3	3.58	13	.58		
25	1.87	10	3.46	20	.49		
May 2	2.03	17	3.45	27	.68		
9	2.12	24	3.22	Mar. 6	.68		
16	2.04	30	2.54	13	.62		
23	2.06	Nov. 7	2.03	20	.69		
June 6	2.30	14	2.10	27	+ .05		

Starke 10. (32/2W-11R1). Fred A. White. SE $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 11, T. 32 N., R. 2 W. Driven unused water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 24.7 feet. Highest water level is +0.40 above lsd, Apr. 22, 1946; lowest 6.03 below lsd, Aug. 26, 1945. Records available: 1945-46.

1945		July 21	5.16	Sept. 1	3.00	1946	
		28	5.10	Nov. 3	1.20		
June 23	3.94	Aug. 5	5.27	17	4.81	Jan. 26	.10
30	4.29	12	5.50	Dec. 1	4.90	Feb. 3	1.80
July 7	4.80	26	6.03			Apr. 22	+ .40
14	4.84						

Starke 11. (34/1W-27A1). David Bergstrom. Grovertown. NE $\frac{1}{2}$ NE $\frac{1}{2}$ sec. 27, T. 34 N., R. 1 W. Previously shown as NW $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 26, T. 34 N., R. 1 W. Driven unused artesian(?) well in gravel, diameter 1 $\frac{1}{2}$ inches, depth 67 feet. Land-surface datum is about 726 feet above msl. Highest water level is 12.68 below lsd, Apr. 27, 1950; lowest 19.35 below lsd, Jan. 23, 1954. Records available: 1948-60.

1948		Aug. 3	16.03	Sept. 23	13.58	Apr. 25	15.76
		10	16.14	Oct. 15	17.60		
July 1	15.51	18	16.03	Nov. 7	17.25	1950	
9	15.69	Sept. 7	15.58			Mar. 24	14.05
27	15.92	14	16.92	1949		Apr. 27	12.68
				Apr. 15	15.85		

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 11--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1950		Mar. 31	15.76	Feb. 16	14.62	1953	
		Apr. 7	15.76	23	14.80	Jan. 5	18.21
May 26	13.56	14	15.40	Mar. 1	15.46	10	17.95
June 3	13.72	21	15.28	9	15.01	17	18.13
10	13.84	28	15.21	13	14.92	24	18.20
17	13.78	May 6	15.32	16	14.91	31	18.30
24	13.82	12	15.14	22	14.62	Feb. 7	18.55
July 1	13.83	19	14.96	29	14.86	14	18.10
8	14.17	26	15.01	Apr. 5	14.80	21	18.01
15	14.41	June 2	15.00	12	14.62	28	17.95
22	13.81	9	15.13	19	14.37	Mar. 7	17.83
29	14.07	16	15.30	26	14.35	14	17.37
Aug. 5	14.32	23	15.38	May 3	14.48	21	17.20
12	14.64	30	15.52	10	14.62	28	17.15
19	14.89	July 7	15.68	17	14.65	Apr. 4	17.11
26	15.16	14	15.02	24	14.56	11	17.11
Sept. 2	15.32	21	15.15	31	14.41	18	17.10
9	15.49	28	15.43	June 7	14.69	25	17.05
16	16.72	Aug. 4	15.67	14	14.59	May 2	16.94
23	15.87	11	15.83	21	14.68	9	16.80
30	16.02	18	15.95	28	14.90	16	16.78
Oct. 7	16.18	25	16.10	July 5	15.22	23	16.76
14	16.27	Sept. 1	16.24	12	15.33	June 2	16.76
21	16.40	8	16.34	19	15.50	6	16.80
28	16.53	15	16.57	26	15.64	13	16.91
Nov. 4	16.61	22	16.60	Aug. 2	15.94	20	17.07
11	16.75	29	16.74	9	16.22	27	17.06
18	16.80	Oct. 6	16.81	16	16.31	July 4	17.10
26	16.82	13	16.82	23	16.52	11	17.17
Dec. 2	16.62	20	17.19	30	16.64	18	17.35
9	16.19	27	16.00	Sept. 6	16.86	25	17.52
16	16.18	Nov. 3	15.90	10	17.16	Aug. 1	17.52
23	16.22	10	16.01	13	17.00	8	17.51
30	16.38	17	15.55	20	17.13	15	17.71
		24	15.44	27	17.26	22	17.90
1951		Dec. 1	15.40	Oct. 4	17.42	29	17.99
		8	15.32	11	17.50	Sept. 5	18.09
Jan. 6	15.99	15	15.44	18	17.62	12	18.20
13	15.85	22	15.49	25	17.71	19	18.28
20	15.92	29	15.49	Nov. 1	17.84	26	18.37
27	16.01			8	17.90	Oct. 3	18.65
Feb. 3	16.16	1952		15	17.92	10	18.70
10	16.29			22	18.14	17	18.62
17	16.20	Jan. 5	14.97	29	17.97	24	18.77
24	15.88	12	14.99	Dec. 6	18.14	31	18.78
Mar. 3	15.78	19	14.72	13	18.20	Nov. 7	18.82
10	15.77	26	14.63	20	18.21	14	18.90
17	15.80	Feb. 2	14.63	27	18.18		
24	15.76	9	14.55				

Table 6.--Water levels in observation wells in Starke County--Cont.

Starke 11--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1953		Sept. 18	17.28	Aug. 6	16.46	June 23	16.25
		25	17.38	13	16.78	30	16.33
Nov. 21	18.94	Oct. 2	17.30	20	16.93	July 7	16.49
28	18.99	9	16.76	27	17.08	14	16.60
Dec. 5	19.06	16	14.28	Sept. 3	17.26	21	16.72
12	19.07	23	14.24	10	17.40	28	16.92
19	19.09	30	14.33	17	17.50	Aug. 4	17.04
26	19.17	Nov. 6	14.56	24	17.68	11	17.26
		13	14.58	Oct. 1	17.84	18	17.23
1954		20	14.76	8	17.60	25	17.35
		27	14.88	15	17.55	Sept. 1	17.44
Jan. 2	19.18	Dec. 4	15.04	22	17.62	8	17.57
9	19.26	11	15.06	29	17.64	15	17.65
16	19.32	18	15.15	Nov. 5	17.66	22	17.80
23	19.35	25	15.23	12	17.63	29	17.90
30	19.33			19	17.61	Oct. 6	18.10
Feb. 6	19.30	1955		26	17.63	13	18.13
13	19.22	Jan. 1	14.86	Dec. 3	17.74	20	18.18
20	18.77	7	14.42	10	17.79	27	18.30
27	18.61	15	14.58	17	17.83	Nov. 3	18.34
Mar. 6	18.45	22	14.80	24	17.89	10	18.40
13	18.40	29	14.93	31	17.95	17	18.50
20	18.36	Feb. 5	15.06	1956		24	18.54
27	17.85	12	15.24	Jan. 7	17.91	Dec. 1	18.60
Apr. 3	17.66	19	15.20	14	18.04	8	18.70
10	17.32	26	15.06	21	18.16	15	18.73
17	17.05	Mar. 5	14.85	27	18.24	22	18.80
24	16.80	12	14.87	Feb. 4	18.28	29	18.82
May 1	16.76	19	14.94	11	18.22	1957	
7	16.65	27	14.89	18	18.16	Jan. 5	18.88
15	16.66	Apr. 2	14.78	25	17.60	12	18.93
22	16.78	9	14.90	Mar. 3	17.48	19	18.94
29	16.88	17	15.04	10	17.39	26	18.83
June 5	16.65	23	14.82	17	17.43	Feb. 2	18.82
12	16.75	30	14.74	24	17.40	9	18.78
19	16.80	May 7	14.85	31	17.40	16	18.65
26	16.80	14	15.10	Apr. 7	17.40	23	18.60
July 3	16.90	21	15.25	14	17.43	Mar. 2	18.58
10	16.40	28	15.40	21	17.54	9	18.50
17	16.44	June 4	15.50	28	17.52	16	18.30
24	16.65	11	15.12	May 4	16.55	23	17.70
31	16.80	18	15.23	12	15.95	30	17.30
Aug. 7	16.95	25	15.49	19	15.89	Apr. 6	18.40
14	17.02	July 2	15.82	26	15.88	13	18.12
21	17.15	9	15.84	June 2	16.04	20	17.80
24	17.11	16	15.98	9	15.85	27	16.76
28	16.90	23	16.15	16	16.65	May 4	16.80
Sept. 4	17.06	30	16.35				
11	17.20						

Table 6.--Water levels in observation wells in Starke County--Cont.
Starke 11--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1957		Apr. 5	15.93	Feb. 28	16.20	Jan. 30	15.85
		12	16.02	Mar. 7	16.12	Feb. 6	15.60
May 11	16.64	19	16.16	14	15.94	13	15.15
18	16.58	26	16.20	21	15.70	20	15.20
25	16.56	May 3	16.30	28	15.48	27	15.27
June 1	16.50	10	16.38	Apr. 4	15.15	Mar. 5	15.35
8	16.48	17	16.52	11	15.15	12	15.45
15	16.34	24	16.65	18	15.13	19	15.60
22	16.00	31	16.75	25	15.20	26	15.65
29	15.90	June 7	16.75	May 2	14.80	Apr. 2	15.35
July 6	16.02	14	16.60	9	15.00	9	15.12
13	16.14	21	16.02	16	15.05	16	14.95
20	16.28	28	15.40	23	14.95	23	14.70
27	16.48	July 5	15.55	30	15.15	30	14.75
Aug. 3	16.50	12	15.65	June 6	15.22	May 7	14.84
10	16.35	19	15.75	13	15.40	14	14.92
17	16.38	26	15.95	20	15.50	21	14.94
23	16.55	Aug. 2	15.95	27	15.55	28	15.10
30	16.75	9	15.93	July 4	15.65	June 4	15.25
Sept. 7	16.88	16	15.78	11	15.80	11	15.32
14	17.00	23	15.65	18	15.70	18	15.15
21	17.14	30	15.85	25	15.56	25	14.88
28	17.24	Sept. 6	16.02	Aug. 1	15.75	July 2	15.08
Oct. 5	17.33	13	16.25	8	15.85	9	15.00
12	17.45	20	16.30	15	16.08	16	15.40
19	17.48	27	16.42	22	16.34	23	15.60
26	16.88	Oct. 4	16.45	29	16.52	30	15.80
Nov. 2	16.88	11	16.60	Sept. 5	16.80	Aug. 6	15.60
9	16.86	18	16.80	12	16.88	13	15.75
16	16.53	25	16.85	19	16.94	20	15.85
23	16.23	Nov. 1	16.90	26	17.14	27	16.05
30	16.22	8	16.98	Oct. 3	16.95	Sept. 3	16.28
Dec. 7	16.32	15	17.46	10	16.85	10	16.40
14	15.38	22	16.88	17	16.70	17	16.50
21	15.92	29	16.95	24	16.65	24	16.55
28	15.73	Dec. 6	16.98	31	16.53	Oct. 1	16.70
1958		13	16.95	Nov. 7	16.50	8	16.80
		20	17.02	14	16.28	15	15.86
Jan. 4	15.76	27	17.15	21	15.95	22	16.98
11	15.80			28	16.95	29	17.00
18	15.82	1959		Dec. 5	16.00	Nov. 5	17.10
25	15.85	Jan. 3	17.22	12	16.06	12	17.15
Feb. 1	15.90	10	17.25	19	16.12	19	17.08
8	15.96	17	17.28	26	16.13	26	17.10
15	16.02	24	17.30	1960		Dec. 3	17.12
22	16.15	31	17.38	Jan. 2	16.16	10	17.20
Mar. 1	15.93	Feb. 7	17.00	9	16.28	17	17.26
8	15.81	14	16.54	16	15.87	24	17.32
15	15.70	21	16.28	23	15.88	31	17.36
22	15.79						
29	15.85						

PUBLICATIONS OF COOPERATIVE GROUND-WATER PROGRAM

Report

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

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.

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EXPLANATION

- A1 Water well or test hole
- H1 Observation well
- R1 Flood-control test boring
- G1 Oil or gas well or test boring

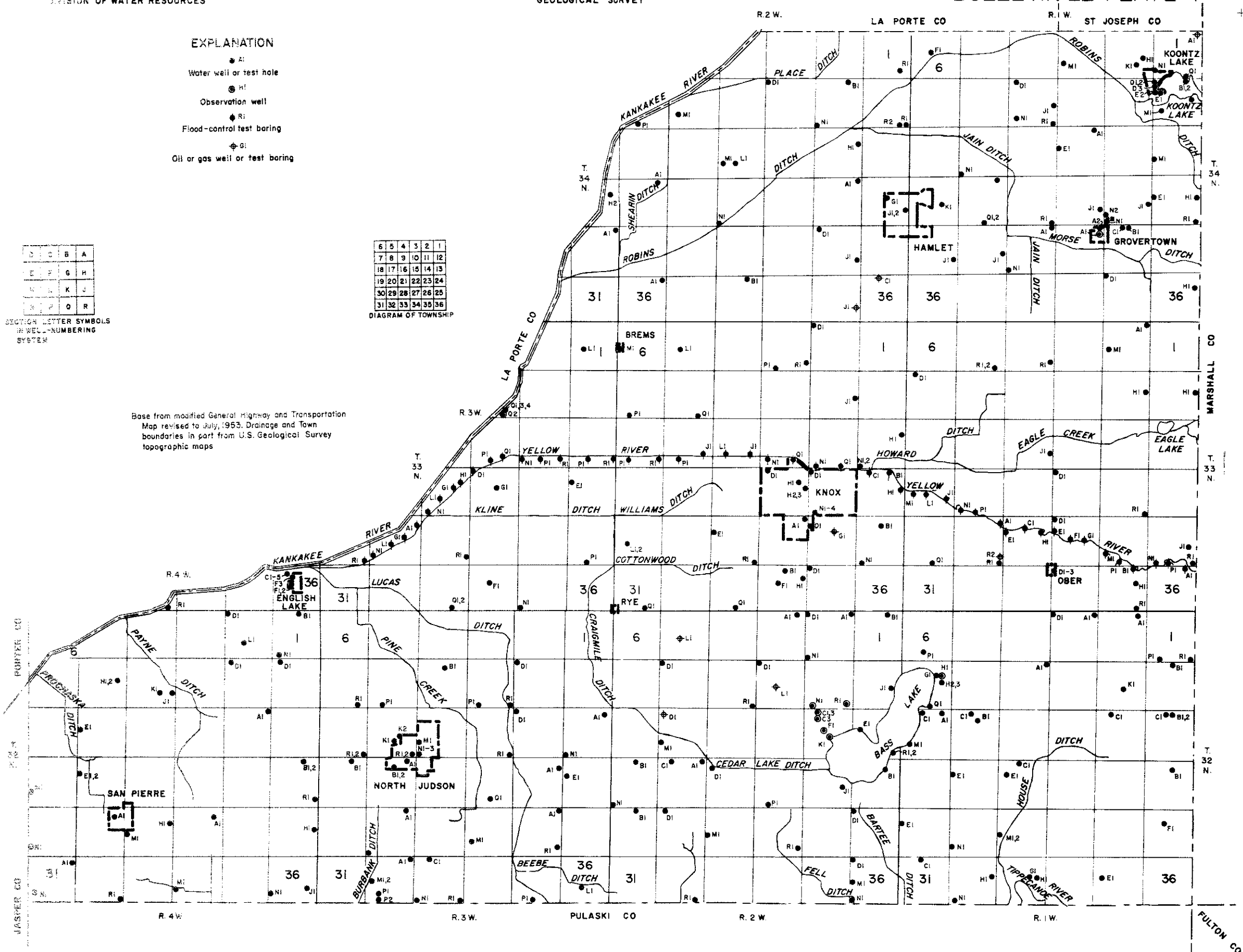
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E	F	G	H
I	J	K	L
M	N	O	P

SECTION LETTER SYMBOLS
 IN WELL-NUMBERING
 SYSTEM

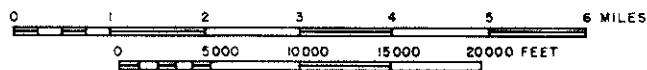
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25	26	27	28	29	30
31	32	33	34	35	36

DIAGRAM OF TOWNSHIP

Base from modified General Highway and Transportation
 Map revised to July, 1953. Drainage and Town
 boundaries in part from U.S. Geological Survey
 topographic maps



MAP OF STARKE COUNTY, INDIANA, SHOWING LOCATION OF WELLS AND TEST HOLES



By J. S. Rosenhein and J. D. Hunn
 1961

EXPLANATION

Production from glaciofluvial sand and gravel



Depths of domestic wells generally less than 50 feet. Depths of public-supply wells generally deeper. Many domestic wells driven to depths less than 25 feet and locally where improperly located may be subject to contamination by septic wastes. Yields adequate to more than adequate for domestic use. Larger yields possible locally

Production from glaciofluvial sand and gravel



Depths of wells generally from 50 to 100 feet. Shallower production possible locally. In populous areas such as in vicinity of Bass Lake very shallow wells may be susceptible to contamination by septic wastes. Yields adequate to more than adequate for domestic use. Larger yields possible

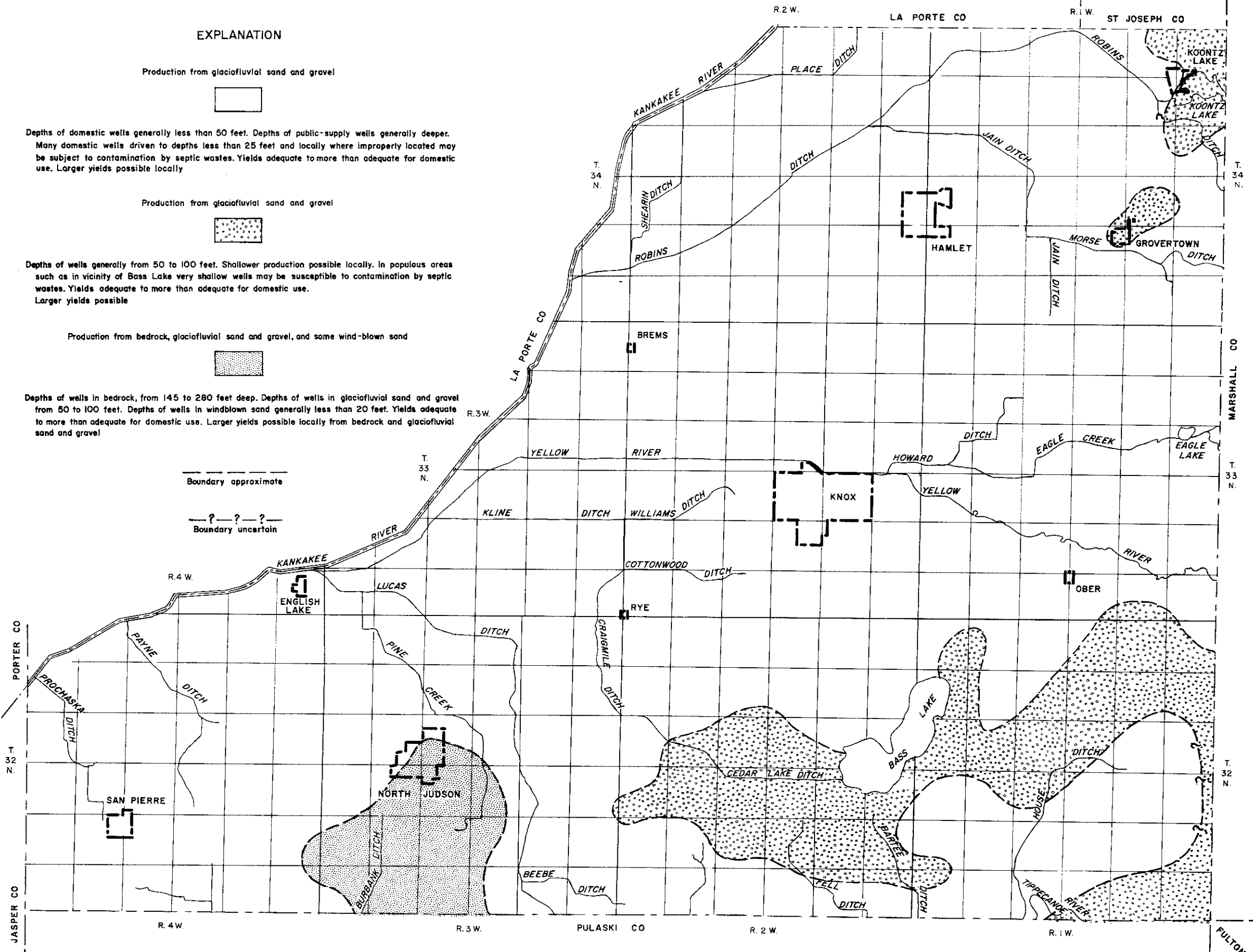
Production from bedrock, glaciofluvial sand and gravel, and some wind-blown sand



Depths of wells in bedrock, from 145 to 280 feet deep. Depths of wells in glaciofluvial sand and gravel from 50 to 100 feet. Depths of wells in windblown sand generally less than 20 feet. Yields adequate to more than adequate for domestic use. Larger yields possible locally from bedrock and glaciofluvial sand and gravel

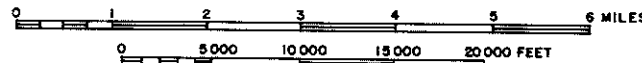
Boundary approximate

Boundary uncertain



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

Base from modified General Highway and Transportation Map revised to July, 1953. Drainage and town boundaries in part from U.S. Geological Survey topographic maps



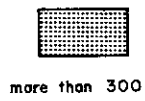
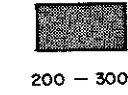
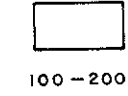
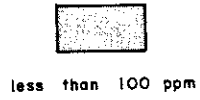
By J. S. Rosenshein and J. D. Hunn
1961

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

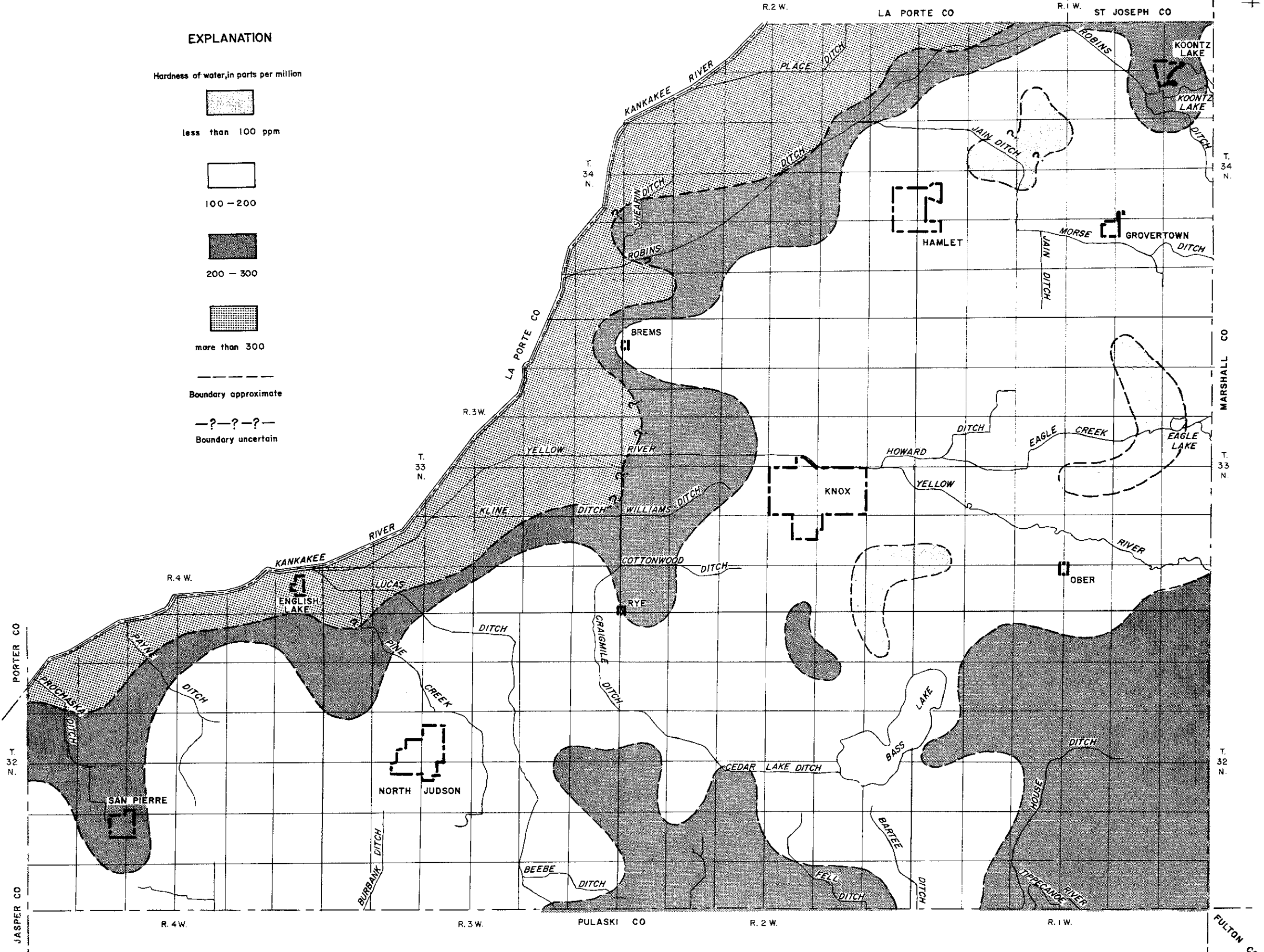
EXPLANATION

Hardness of water, in parts per million



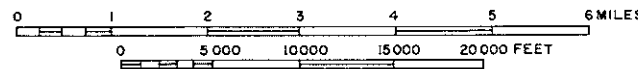
Boundary approximate

Boundary uncertain



Base from modified General Highway and Transportation Map revised to July, 1953. Drainage and Town boundaries in part from U.S. Geological Survey topographic maps

MAP OF STARKE COUNTY, INDIANA, SHOWING HARDNESS OF WATER IN SAND AND GRAVEL OF PLEISTOCENE AGE



By J. S. Rosenshein and J. D. Hunn
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