

entering the water-bearing formation from the lake (3).

#### Albion

The Albion Water Department began pumping water from three shallow wells in 1893. The wells were about 10 feet deep, and were situated about 15 feet from the site of the original water plant. In 1926, the first wells were replaced by two 10-inch wells (NoF24-1-1 and 2), 96 and 131 feet deep. Both are equipped with 10-inch screens 20 feet long. Each of the wells produced about 1,000 gallons a minute with 13 feet of drawdown in 1926, and there has been no noticeable decline in capacity since that time. The wells are pumped at a rate of about 400 gallons a minute by a common suction pump to a 100,000-gallon elevated steel tank, from which the water flows to the city mains.

#### Ligonier

Ligonier's municipal water-supply system was put into operation in 1899. In 1914 one dug well, 39 feet deep, and four tubular wells were in use. In 1920 eight tubular wells, about 125 feet deep, supplied the system, all wells being located within a short distance of the site now occupied by the water plant.

Well NoA22-1-4 (city well 4) was drilled in 1932, on a site west of the Elkhart River bridge on State Road 5. This well was drilled to a depth of 78 feet and is pumped by a suction pump at 500 gallons a minute. Five of the eight tubular wells at the water plant were abandoned in that year.

Water from the wells at the plant is chlorinated, passed through an iron-removal pressure filter, and pumped to a 100,000-gallon elevated wood storage tank. Water flows from storage by gravity to the mains. Water from well NoA22-1-4 is pumped directly to the downtown mains without treatment.

### Avilla

The Avilla municipal water supply system began selling water to the Avilla citizens in 1890. The wells currently in use (NoH34-1-1 and 2) were drilled in 1924. One is a 6-inch well, 118 feet deep, and the other is an 8-inch well, 122 feet deep. Each is equipped with a screen about 10 feet long and with a turbine pump, and produces about 75 gallons a minute. Water is pumped from the wells without treatment directly into a 125,000-gallon elevated steel tank, from which it flows by gravity into the distribution system.

### Cromwell

Water was first sold from the Cromwell city supply system in 1912. Three tubular wells, ranging in depth from 104 to 110 feet, were situated in the present pumping plant. In 1931 a 10-inch well (NoE16-1) was drilled to a depth of about 138 feet, and was equipped with a turbine pump. This well is capable of producing more than 750 gallons a minute. In 1937 a 3-inch well was constructed and equipped with a direct-lift gasoline-powered pump as stand-by in case of power failure. The water, untreated, is pumped from the wells directly to a 17,700-gallon steel pressure tank, from which it is distributed to the mains.

## QUALITY OF WATER

As water moves underground to wells or natural outlets of the water-bearing formations, it comes into contact with numerous minerals in the rocks. The soluble minerals are dissolved in the water under various conditions. The quantity of minerals contained by ground water depends on the types and solubility of the minerals at the time of contact with the water and on the velocity of the water as it moves through the openings in the rock. Inasmuch as most formations are both physically and chemically heterogeneous, water of varying chemical quality may be obtained from the same formation within a small area.

Samples of water have been collected periodically from municipal water-supply wells by the Indiana State Board of Health for more than 10 years. Chemical analyses have been made of the samples in Noble County collected at Kendallville, Ligonier, Albion, Avilla, and Cromwell. These analyses indicate that there has been no significant change in the chemical composition of the water during the past 10 years. The average composition, as determined from about 10 samples collected at Ligonier, Albion, Avilla, and Cromwell since 1937, is given in table 14.

In general, the quality of the water is fairly good. Most of the wells yield water that is moderately low in dissolved solids but quite hard. Most of the water contains sufficient iron to stain plumbing fixtures, but not enough usually to make the water unpleasant to taste.

No bacterial contamination of water-bearing formations in the county was reported during the investigation.

Table 14. Chemical analyses of water in Noble County, Indiana  
(Parts per million, except pH)

Locality	Well No.	Total hardness as CaCO <sub>3</sub>	Alkalinity as CaCO <sub>3</sub>	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Bicarbonate (HCO <sub>3</sub> )	Sulfate (SO <sub>4</sub> )	Chloride (Cl)	Dissolved Solids	pH
Kendallville											
Bixler Lake	-	220(4) <sup>c/</sup>	158(4)	0.26(4)	51(3)	13.3(3)	176(1)	72(4)	50(4)	345(3)	-
Suction wells <sup>a/</sup>	NoD33-1-1 to 27	606(4)	337(3)	3.2(3)	158(3)	38.8(3)	460(1)	227(4)	21(4)	817(3)	-
Park well	NoD33-1-1-31	504(4)	326(3)	3.9(4)	160(2)	30.4(2)	398(1)	166(3)	12(4)	640(2)	-
New wells <sup>b/</sup>	NoD33-1-38, 39	644(1)	322(1)	3.5(1)	-	-	-	-	19(1)	-	7.5(1)
South well	NoH4-4	425(4)	328(4)	4.0(1)	118(1)	40.6(1)	-	132(1)	13(4)	642(1)	-
Idgonier	-	324	303	2.1	-	-	-	26(2)	2.4	332(2)	7.5
Alblon	-	270	302	1.3	-	-	-	0(1)	1.7	396(1)	7.7
Avilla	-	326	338	2.0	-	-	-	0(1)	1.2	416(1)	7.7
Cromwell	-	324	276	1.9	-	-	-	-	1.6	-	7.5

Analyses made by Indiana State Board of Health

a/ Samples taken from suction header discharge.

b/ Average of two wells.

c/ Numbers in parentheses indicate number of samples in average. Unmarked numbers indicate average of five or more samples.

## SUMMARY AND CONCLUSIONS

It has been shown that the occurrence of ground water in Noble County is controlled largely by local precipitation, the topography of the land surface, and the type of character of the glacial deposits of sand, gravel, and clay. Although the deeply buried bedrock formations may eventually prove capable of yielding additional supplies of ground water, these formations have not been utilized, as adequate water supplies have been obtained at shallower depths in the glacial deposits.

The deposits of sand and gravel in Noble County were laid down by vast ice sheets which covered the county at least three times. The county lies near the junction of two lobes of the Wisconsin ice sheet, which entered from different directions. The physical conditions under which the glacial materials were deposited were extremely complex, and great variations in the type and texture of the deposits, both laterally and vertically, are common. The correlation of one type of material over a broad area is usually difficult or impossible. The beds of sand and gravel were deposited as broad outwash plains or channels beyond the melting ice fronts, as kame and esker deposits within the ice sheets, or as lenticular masses within the morainal deposits of glacial till or boulder clay.

The deposits of sand and gravel in Noble County constitute large underground reservoirs in which many millions of gallons of water are stored. These reservoirs are replenished by recharge from precipitation. Water is removed from the reservoirs by effluent seepage into lakes and streams, by evapo-transpiration losses, and by pumping from wells.

It has been estimated that the average daily recharge to the water-bearing formations in Noble County is about 150 million gallons a day. The

quantity of ground water that is available to wells may be somewhat greater inasmuch as water utilized in the upper parts of the drainage basin generally is wasted into the streams. Some of this water might be reused, if ground-water levels in the lower reaches of the drainage basins were lowered below stream levels, thereby inducing recharge to the water-bearing formations.

In 1947 the total pumpage from all wells in the county was estimated to be about 4 million gallons a day, or about 1,500 million gallons for the year. On the basis of these estimates, it is apparent that ground-water resources of the county as a whole have not been overdeveloped, as only about 3 per cent or less of the estimated average recharge is being used. Although some overdevelopment may have occurred in local areas, such areas are small. At the present rate of increase in demand for ground water in the county, an adequate supply of water is assured for many years.

Although numerous reports of a decline in the water table were heard during the investigation, the data collected in this and past investigations do not indicate a general lowering of the water table. In a few small areas water levels have undoubtedly been affected by the dredging of ditches, increased withdrawal by wells, or changes in agricultural practices. These effects are natural adjustments of the water pressures in the formations caused by changes in the local ground-water flow system. The effects are neither widespread nor serious.

The maximum water-level decline in the county has occurred in the Kendallville municipal well field. There ground-water levels have declined more or less continuously, probably about 14 feet since 1892. This decline is a natural result of the increased rates of pumping at the municipal well field, and does not necessarily indicate that the area is being overpumped.

Recent studies by J. I. Perrey, Surface Water Branch, United States Geological Survey, of the losses from Bixler Lake suggest that a large part of the water pumped from the municipal wells may be derived from recharge from the lake, probably at some distance from the well field.

The beds of sand and gravel in the vicinity of the well field are relatively shallow and are heterogeneous. Recent test drilling by the City of Kendallville and pumping tests made during the investigation indicated large variations in the type of materials and in their transmissibilities. The best locations for additional wells can be determined only by a well-planned program of test drilling.

In the Kendallville area, the available evidence indicates that deposits of sand and gravel occur at moderate depths in the NW $\frac{1}{4}$  sec. 4 of Allen Township (T. 34 N., R. 11 E.), in the E $\frac{1}{2}$  sec. 33, and in sec. 28 of Wayne Township (T. 35 N., R. 11 E.). It is believed that moderately large ground-water supplies may be developed in these areas.

In the eastern part of the county, beds of coarse sand and gravel occur in rather narrow bands, mainly along extinct channels. Partly-buried kame and esker deposits are found mainly along east-west lines in the eastern two-thirds of the county. The larger ground-water supplies are obtained from these deposits. Smaller farm and domestic supplies are obtained from buried lenticular sands and gravels in the morainal areas.

A deep channel or series of channels was cut through western Noble County by westward-flowing glacial streams. The channels were filled with coarse sand and gravel, which may provide large quantities of water to wells. The beds of sand and gravel are at least 130 feet thick at Ligonier, more than 200 feet thick near sec. 6 in Sparta Township, and 122 feet thick at Wolf Lake. The glacial streams flowed nearly parallel to the present courses of Soloman Creek and the Elkhart River, and the thickest beds of

gravel lie along them. Large supplies of ground water, several million gallons a day, probably could be obtained in these gravel-filled valleys. If ground-water levels should be lowered below stream levels, recharge probably would be induced to the formations.

Large supplies of ground water are most likely to be found in the narrow band of outwash extending northwestward from Wolf Lake to sec. 10, Sparta Township; in the area shown (on pl. 2) as being covered with outwash in the north part of Sparta and the south part of Perry Townships; and in the band of outwash paralleling the Elkhart River in Perry Township.

Flowing wells can be drilled in the lowlands upstream from the confluence of the North and South Branches of the Elkhart River to western Orange and eastern Noble Townships. Most of the flowing wells are about 100 feet deep, and penetrate the artesian formation about 800 feet above sea level. Depths of wells range from 40 to 200 feet, and the altitudes at which the formation is found range from 700 to 850 feet. The formation is continuous at about the 800-foot level and is found in most of Elkhart Township. The zone from which the flowing wells obtain water is not as uniform in occurrence in the valley of the South Branch of the Elkhart River.

It has been shown that the ground-water resources of Noble County are relatively large and have not been developed to their full capacity. The preceding report has discussed the occurrence of ground water in the county and has provided much of the basic information needed for the wise development of one of our most important natural resources. However, in order to obtain additional information on the detailed geology and ground-water conditions in the county, it is suggested that in future drilling a record be made of the location of the drilling, as well as a detailed description of the materials penetrated and information on water level, yield,



drawdown, and quality of the water. Well drillers and others are requested to cooperate with the Division of Water Resources, Indiana Department of Conservation, Indianapolis, by submitting to them copies of well records of any new drilling on forms that will be provided by the State upon request. The purpose of this request is to provide a permanent record of detailed information on the occurrence of ground water throughout Indiana.

APPENDIX A  
RECORDS OF WELLS IN NOBLE COUNTY,  
INDIANA

Explanation of well tables

Well number:

See explanation of well-numbering system on pages 6 and 7.

Location:

"3 N.,  $1\frac{1}{2}$  E. of Ligonier" indicates that well is located about 3 miles north and  $1\frac{1}{2}$  miles east of Ligonier.

Depth:

m = measured by writers.

Water level:

Water level is given in feet below land surface.

m = measured by writers.

+ = water level is above land surface

Remarks:

Log: "Yel. clay 0 - 10" indicates that yellow clay was penetrated from the land surface to a depth of 10 feet.

"Blue clay 10 - 106" indicates that blue clay was penetrated between the depths of 10 and 106 feet.

"Coarse gravel 106 - 111" indicates that the full thickness of gravel was not penetrated.

Notes:

- a. See hydrograph of Noble 1.
- b. See hydrograph of Noble 6.
- c. See hydrograph of Noble 5.
- d. See hydrograph of Noble 3.
- e. See hydrograph of Noble 2.
- f. Measured by writer after a recovery of 14 hours in south well (City of Kendallville).
- g. Measured by writer in old well at same site.
- h. W. B. = water-bearing.

Records of wells in Noble County (Perry Township, T. 35 N., R. 8 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoA2-2	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 2, 3 N., 1 $\frac{1}{2}$ E. of Ligonier	V. C. Kauffman	Oran Groff	June 1946	950	Domestic	53	2	43	June 1946	---	Largely clay above water-bearing sands.
NoA5-1	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 5, 4 N., 1 $\frac{1}{2}$ W. of Ligonier	Charles Emitt	O. A. Billman	1941	905	do.	111	2	40	1941	---	Log: Yel. clay 0 - 10; Blue clay 10 - 106; Coarse gravel 106 - 111+
NoA6-1	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 6, 3 N., 3 W. of Ligonier	Claude Loy	Claude Loy	1941	876	Farm	23	1 $\frac{1}{2}$	12	1941	---	Log: Sand and gravel (?) - 0 - 23+
NoA8-1	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 8, 2 N., 2 W. of Ligonier	C. A. Dancy	C. A. Dancy	Sept. 1947	897	do.	31	1 $\frac{1}{2}$	18.3m	Sept. 9, 1947	---	Log: Clay and gravel layers 0 - 26; hardpan 26 - 29; gravel 29 - 31+
NoA10-1	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 10, 2 N. of Ligonier	Ellsworth Peterson	O. A. Billman	1944	944	do.	42	2	25	1944	---	Log: Yel. clay 0 - 4; Sand and gravel 4 - 42; Blue clay below.
NoA10-2	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 10, 3 N., $\frac{1}{2}$ W. of Ligonier	Thomas H. Hite	Thomas H. Hite	1943	926	Domestic	25	1 $\frac{1}{2}$	8	1943	---	Log: Sand and gravel 0 - 25+
NoA11-1	N <sup>1</sup> E <sup>1</sup> N <sup>1</sup> W <sup>1</sup> sec. 11, 3 N., 1 E. of Ligonier	T. J. Spurgeon	O. A. Billman	1907	927	do.	38	1-	21	Nov. 5, 1947	---	Well finished in fine sand.
NoA11-2	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 11, 3 N., $\frac{1}{2}$ E. of Ligonier	Salem Church	do.	1927	941	Public Supply	45	2	40	1927	---	Log: Yel. clay 0 - 5; gravel 5 - 45+
NoA13-1	S <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 13, 1 N., 2 E. of Ligonier	R. E. Kinney	do.	1937	970	Farm	78	2	65	1937	---	Penant on farm is Fred Targgart. Log: Clay 0 - 60; Gravel 60 - 78+
NoA14-1-1	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 14, 2 N., 2 E. of Ligonier	do.	do.	About 1933	964	Domestic	80	2	70	About 1933	---	Penant is Roy H. Artley. Log: Clay 0 - 20; Gravel 20 - 80+
NoA14-1-2	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 14, 2 N., 2 E. of Ligonier	do.	do.	1941	961	Stock	100	2 $\frac{1}{2}$	88	1941	---	Log: Clay 0 - 80; Fine, muddy sand 80 - 90; Gravel 90 - 100+
NoA15-1	S <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 15, 1 N. of Ligonier	Elsa R. Schlaubaugh	do.	1941	952	Farm	90	3	70	1941	---	Log: Yel. clay 0 - 16; Dry gravel 16 - 21; Blue clay 21 - 85; Gravel 85 - 90+
NoA17-1	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 17, 1 $\frac{1}{2}$ N., 2 $\frac{1}{2}$ W. of Ligonier	Orever Smith	Grover Smith	Jan. 10, 1946	966	Domestic	23.5	1 $\frac{1}{2}$	16	Jan. 10, 1946	---	Log: Top soil 0 - 8; Sand and gravel 8 - 16 Clay with gravel stringers 16 - 20; Sand and gravel 20 - 23.5+
NoA19-1	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 19, 3 W. of Ligonier	Robert Moser	O. A. Billman	Spring 1944	951	do.	45	2	30	Spring 1944	---	---
NoA21-1	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 21, 1 N., 1 W. of Ligonier	O. V. Berger	do.	Spring 1946	919	do.	60	2	45	Spring 1946	---	Log: Blue clay 0 - 50; Gravel 50 - 60+.
NoA21-2	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 21, Ligonier Sewage Disposal Plant	City of Ligonier	Dwight Gard	1940	878	Industrial	35	3	8	1940	---	Water used for sprinkling and cleansing. Log: Sand and gravel 0 - 35+
NoA22-1-1, 2, 3	S <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 22, at city water plant	do.	Grover Stremmel	About 1920	910	Public supply	About 125	8	About 40	About 1920	---	Three wells pumped by one suction pump in pit. Log: Blue clay 0 - 40; Gravel 40 - 125+.
NoA22-1-4	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 22, at Ligonier, about 100 W. of c.l. of S.R. 5, 60' S. of S. bank of Elkhart River	do.	Smith-Monroe Co.	1932	875	do.	97	12	7	1932	500	Well pumped at 700 g.p.m. for 20 hrs. with 15-ft. drawdown. Log: Clay fill 0 - 4; Muck 4 - 8; Sand and gravel 8 - 97.
NoA25-1	S <sup>1</sup> E <sup>1</sup> S <sup>1</sup> sec. 25, 2 E. of Ligonier	Dale Waldron	Dale Waldron	1917	889	Stock	12	1 $\frac{1}{2}$	8	1917	---	Log: Clay and sand strips 0 - 9; Sand (?) 9 - 12+
NoA25-2	N <sup>1</sup> W <sup>1</sup> S <sup>1</sup> sec. 25, 2 E. of Ligonier	Mrs. A. H. Smith	O. A. Billman	About 1933	882	do.	113	2	Flows to date	---	---	---

Records of wells in Noble County (Perry Township, T. 35 N., R. 8 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoA27-1	NE1/4 sec. 22, at Ligonier, 145 ft. S. of College St., in line with Martin St.	City of Ligonier	Layne-Northern Co.	June 2, 1938	913	Test well	130	6	43	June 2, 1938	—	Abandoned. See Appendix B.
NoA30-1	Near the center of sec. 30, 1/2 S., 3 W. of Ligonier (General Location)	—	—	—	894	—	50	—	15	—	—	Well depths in area range from 20-50 feet. Log: Sand and gravel 0 - 50+.
NoA32-1	NE1/4 sec. 32, 1/2 S., 2 W. of Ligonier	Laura Simmons	J. Dunbar	1896	903	Domestic	60	2	3	1939	—	Largely clay to water-bearing materials at screen (?).
NoA34-1	NW1/4 sec. 34, 1 S. of Ligonier	Ed. Williams	O. A. Billman	Aug. 1947	918	do.	70	2	60	Aug. 1947	—	Old well in same formation used for 30 yrs. Log: Red clay 0 - 4; Dry gravel 4 - 60; Gravel 60 - 70+.
NoA34-2	NE1/4 sec. 34, 1 S. of Ligonier	Moser Implements	do.	Fall 1945	922	do.	75	2 1/2	70	Fall 1945	—	Log: Red clay 0 - 4; Dry gravel 4 - 16; Blue clay 16 - 60; Gravel 60 - 75+.

Records of wells in Noble County (Elkhart Township, T. 35 N., R. 9 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoB3-1	SE1/4 sec. 3, 4 N. of Wawaka	Jacob Esch	do.	1937	899	Farm	60	2	0	1937	—	Blue clay to gravel at screen.
NoB5-1	SW1/4 sec. 5, 4 N., 2 W. of Wawaka	N. H. Cripe	A. Frahn	Aug. 9, 1947	923	do.	35.3m	1 1/2	28.3m	Aug. 9, 1947	—	Log: Yel. clay 0 - 25; Gravel 25 - 35+.
NoE10-1	SW1/4 sec. 10, 3 E. of Wawaka	Earl Stauff	O. A. Billman	1939	912	Domestic	135	2	8	1939	—	Well in same zone as barn flows. Wells within 1/2 mile of NoE10-1 all about same depth. Log: Clay loam 0 - 8; Blue clay 8 - 130; Sand and gravel 130 - 135+.
NoE11-1	NW1/4 sec. 11, 3 1/2 N., 1 E. of Wawaka	Kenneth Boyd	do.	1933	906	Farm	67	2	14	Sept. 1946	—	New screen in September 1946. Log: Yel. (at top) and blue clay 0 - 62; Sand and gravel 62 - 67+.
NoE11-2	NE1/4 sec. 11, 3 1/2 N., 2 E. of Wawaka	Mel. Dukes	Howard Gard	1939	894	Stock	103	2	+8	1939	—	Flowing well at tenant farm. Log: Clayey sand 0 - 9; Blue clay 9 - 82; Harpan 82 - 83 1/2; Blue clay 83 1/2 - 100; Sand and gravel 100 - 103+.
NoE14-1	NW1/4 sec. 14, 2 N., 1 E. of Wawaka	Ella Franks et al.	O. A. Billman	1943	899	do.	100	2	Flows	1943 to date	—	Blue clay to gravel at bottom.
NoE15-1	SW1/4 sec. 15, 2 N., 1/2 E. of Wawaka	George Zimmerman	do.	Spring 1947	895	do.	118	2	-19	Spring 1947	50	Well flows 50 g.p.m. from pipe 3 ft. above land surface. Log: Blue clay 0 - 116; Gravel 116 - 118+.
NoE15-2	SW1/4 sec. 15, 2 1/2 N. of Wawaka	Ray Halsey	do.	Oct. 22, 1947	896	Dairy	115+	2	Dairy	Oct. 22, 1947	60+	Well used for stock and milk cooling at dairy farm, 25 head cattle. Log: Yel. clay 1 - 10; Blue clay 10 - 50; Sand and gravel 50 - 60; Blue clay 60 - 115; Sand and gravel below.
NoE17-1	NE1/4 sec. 17, 3 N., 1 1/2 W. of Wawaka	D. K. Miller	Owner and Elvin Blough	1937	932	Farm	29	1 1/2	23	1937	—	Harpan above gravel.
NoE18-1	NW1/4 sec. 18, 3 N., 3 W. of Wawaka	Abner Stutzman	Robert Dillon	—	956	do.	85	2	70	1943	—	Well penetrated very hard clay at unknown depth.
NoE21-1	SW1/4 sec. 21, 1 N., 1/2 W. of Wawaka	Elmer Thompson	Elmer Thompson	Fall 1943	894	Industrial	18	1 1/2	0	Fall 1943	—	Water used for cleaning tomato seeds. Mud above sand.

Records of wells in Noble County (Elkhart Township, T. 35 N., R. 9 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No B21-2	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 21, 1 N., 1 W. of Wawaka	Lester Keefer	Lester Keefer	Oct. 1945	900	Stock	30	1 1/4	1	Oct. 1945	---	Owner reported drilling through 62 ft. of clay at site 1/8 mile southeast of well No B21-2. Log: Clay 0 - 25; Sand and gravel 25 - 30+.
No B23-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 23, 1 N., 1 1/2 E. of Wawaka	Loyal Frick	Loyal Frick	Spring 1947	919	do.	37	1 1/4	12	Spring 1947	---	Log: Clay (?) 0 - 29; Hardpan 29 - 32; Sand and gravel 32 - 39+.
No B24-1	N <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 24, 2 N., 3 E. of Wawaka	Mrs. Ies Slusher	---	---	913	Abandoned	23m	1 1/4	9.2m	Dec. 10, 1946	---	---
No B25-1	N <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 25, 1 N., 2 E. of Wawaka	Ed. Reidenbach	---	---	938	Farm	About 40	2	About 20	Spring 1947	---	New screen in 1947.
Mo B27-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 27, 1 E. of Wawaka	Ford Franks	The Texas Co.	Feb. 14, 1945	892	Oil test	204.0	10 to 7	---	---	---	Flowed at 85-ft. depth. See Appendix B.
No B28-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 28, in Wawaka	C. L. Smith	Smith Bros.	1945	913	Domestic	24	1 1/4	17	1945	---	Majority of wells in Wawaka less than 35 ft. deep. Sand and gravel full depth +.
No B30-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 30, 2 W. of Wawaka	Dee Smith	Dwight Jard	1944	889	Farm	135	2	About 15+	1944	---	Well still flows. Log: Clay 0 - 30; Fine sand 30 - 40; Blue clay 40 - 133; Very coarse gravel 133 - 135+.
No B31-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 31, 1 S., 2 W. of Wawaka	Ralph Buchanan	O. A. Billman	1925	984	Stock	183	2	120	1925	---	Log: Red clay 0 - 4; Coarse gravel 4 - 69; Blue clay 69 - 178; Gravel 178 - 183+.
No B31-2	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 31, 1 S., 2.5 W. of Wawaka	Charles Hubs	Ad. Wilson	Mar. 1947	963	Farm	95	2	About 4.5	Mar. 1947	---	Water level in nearby dug well 40 ft. deep is 20 feet below land surface. Log: Red sand 0 - 10; Clay 10 - 87; Gravel 87 - 95+.
No B36-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 36, 1 S., 3 E. of Wawaka	Jessie Thompson	---	---	930	Abandoned	17m	1 1/4	5.3m	Dec. 18, 1946	---	---

Records of wells in Noble County (Orange Township, T. 35 N., R. 10 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
Mo C1-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 1, 1 1/2 N., 3 E. of Rome City	Delbert Lambert	Delbert Lambert	1944	956	Domestic	32	1 1/4	8	1944	---	Screens replaced after 3-5 years of use, high incrustation rate. Largely sand and gravel through entire depth of well, some muck and clay at top.
Mo C2-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 2, 1 1/2 N., 2 1/2 E. of Rome City	Walter Gallup	William Briand	---	981	Farm	52	2	About 22	Spring 1946	---	---
Mo C2-2	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 2, 1 1/2 N., 2 E. of Rome City	W. H. Gallup	---	---	982	Domestic	19	2	15	1941	---	---
Mo C3-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 3, 1 1/2 N., 1 E. of Rome City	Frank Meyers	---	---	978	Abandoned	37m	1 1/4	27.4m	Jan. 17, 1947	---	---
Mo C3-2	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 3, 1 1/2 N., 1 1/2 E. of Rome City	H. E. Grossman	Omer and Charles Martin	1946	979	Domestic	27	1 1/4	21	1946	---	---
Mo C4-1	S <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 4, 1 1/2 N. of Rome City	Clark Holsinger	John Huser	1937	956	Farm	35	1 1/4	15	1937	---	Well 90 ft. deep S. of and across road from Mo C4-1.
Mo C6-1	N <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 6, 2 N., 2 W. of Rome City	C. D. Ross	---	---	939	Domestic	14	2	5	Average	---	Well at barn 70 ft. deep.
Mo C6-2	N <sup>1</sup> / <sub>2</sub> S <sup>1</sup> / <sub>2</sub> E. sec. 6, 2 N., 2 1/2 W. of Rome City	Floyd Douglas	Mary Tucker	Nov. 1946	947	Stock	63	2	53	Nov. 1946	---	---

Records of wells in Noble County (Orange Township, T. 35 N., R. 10 W.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
McC8-1	N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 8, 1 E., 1 W. of Rome City	Laura Meyers	M. Gard	About 1939	907	Domestic	40	2	35	About 1939	---	---
McC8-2	N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 8, 1 E., $\frac{1}{2}$ W. of Rome City	Clarence Chapman	Clarence Chapman	Spring 1946	931	do.	39	1 $\frac{1}{2}$	5	Average	---	Water used also for spraying in orchard. Flows in spring. Log: Gravelly hardpan 0 - 21; Fine sand 21 - 25; Clay 25 - 35; Gravel 35 - 39+. See Appendix B.
McC9-1-1	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 9, $\frac{1}{2}$ N. of Rome City	Kneipp Sanitarium	Layne-Northern Co.	June 1937	946	Test	143	8	40	June 1937	---	Bottom of 10-ft. screen at 50-ft. depth. Log: Clay 0 - 16; Sand and gravel 16 - 30; Fine sand with clay 30 - 52+.
McC9-1-2	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 9, $\frac{1}{2}$ N. of Rome City	do.	do.	Aug. 12, 1937	946	Semi-public	52	8	---	---	---	Log: Clay 0 - 15; Fine sand 15 - 30; Fine gravel 30 - 51+.
McC9-1-3	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 9, $\frac{1}{2}$ N. of Rome City	do.	do.	Mar. 15, 1946	946	do.	51	12	16	Mar. 15, 1946	---	Wells on east shore of Sylvan Lake generally 40 to 45 ft. deep. Log: Gravel (?) 0 - 40+.
McC9-2	N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 9, on NW shore of Sylvan Lake, $\frac{1}{2}$ NE of Rome City	Norbert Burgoff	Harry Tucker	1943	929	Domestic	40	2	45	1943	---	---
McC11-1	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 11, 2 E. of Rome City	Jay Varner	---	About 1900	968	do.	130	2	5	1946	---	Well at abandoned school.
McC12-1	N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 12, 1 N., 3 E. of Rome City	Vernon O. Grannis	---	---	981	Abandoned	60m	2	31.5m	Jan. 17, 1947	---	Sand, gravel, and hardpan layers are generally penetrated in this area.
McC15-1	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 15, 1 S., $\frac{1}{2}$ E. of Rome City	Isabellost Golf Course	---	---	916	Sprinkling greens	18.3m	1 $\frac{1}{2}$	5.1m	Dec. 10, 1946	---	Log: Dry gravel 0 - 20; Hardpan 20 - 25; W.B./gravel 25 - 31; Blue clay 31 - 61; Quicksand 61 - 71; Pea gravel 71 - 78+.
McC16-1	N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 16, in Rome City	Belvy Mercer	Harry Tucker	Fall 1946	934	Domestic	78	2 $\frac{1}{2}$	12	Fall 1946	---	Log: Yellow clay 0 - 6; Blue clay 6 - 101; Gravel 101 - 106+.
McC18-1	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 18, 1 S., 2 W. of Rome City	A. W. Altman	O. A. Billman	1940	924	do.	106	2	4	1940	---	Log: Gravel 0 - 55; Hardpan 55 - 59; Gravel 59 - 64+.
McC20-1-1	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 20, 1 $\frac{1}{2}$ S., 1 W. of Rome City	John Schenborn	Harry Tucker	1944	927	Farm	64	2	18	1944	---	Flows 15 g.p.m. from pipe outlet 3 ft. above land surface. Log: Dry gravel 0 - 40; Hardpan 40 - 48; Fine sand 48 - 58; Pea gravel 58 - 65+.
McC20-1-2	N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 20, 1 S., $\frac{1}{2}$ W. of Rome City	do.	do.	April 1946	901	Stock	65	2	4.4	Apr. 1946	---	Penetrated a considerable thickness of dry gravel in upper section of the well.
McC25-1	S $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 25, 3 W. of Kendallville	Silveria Swogger	A. Bonar	Sept. 1939	988	do.	90	2	80	Sept. 1939	---	Water level lowered by dredging of ditch south of house. Log: Red clayey sand 0 - 3; Quicksand and gravel 3 - 34+.
McC25-2	N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 25, 1 N., 3 W. of Kendallville	Fred Butler	M. Gard	Apr. 1947	956	Domestic	34	2	26	Apr. 2, 1947	---	Dug well (abandoned) to 20-ft. depth. Log: Open well 0 - 20; Blue clay 20 - 30; Gravel 30 - 44+.
McC29-1	N $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 29, 3 S., 1 W. of Rome City	C. A. Surface	A. Bonar	Apr. 1947	956	Farm	44	2	32	Apr. 1947	---	Log: Gravel 0 - 35; Hardpan 35 - 39; Pea gravel 39 - 46+.
McC29-2	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 29, at Brimfield	Mary Reser	Harry Tucker	Mar. 1947	952	Domestic	46	2	20	Mar. 1947	---	Boulder clay at about 25-ft. depth. Generally clay above gravel.
McC31-1	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 31, $\frac{1}{2}$ W. of Brimfield	Paul Kimmell	M. Gard	Sept. 1946	952	do.	55	2	45	Sept. 1946	---	Well at abandoned building location about $\frac{1}{2}$ mile north of Stallinger home.
McC33-1	N $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 33, $\frac{1}{2}$ S., 1 E. of Brimfield	Dale Stallinger	---	---	999	Abandoned	50m	2	46.2m	Dec. 18, 1946	---	---

Records of wells in Noble County (Orange Township, T. 35 N., R. 10 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No035-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 35, 1 S., 2 $\frac{1}{2}$ E. of Rindfield	Harry Trembridge	Charles Knaushofer	---	980	Domestic	120	2	54	---	---	New screen required every 2 or 3 years; screen becomes incrustated. Log: Clay 0 - 65; Very fine sand 65 - 71; Clay 7 - 114; Sand and gravel 114 - 120+

Records of wells in Noble County (Wayne Township, T. 35 N., R. 11 E.)

No01-1	N $\frac{1}{2}$ S $\frac{1}{2}$ sec. 1, 5 N., 3 E. of Kendallville	Lester Lovett	---	About 1896	1029	Abandoned	121 $\frac{1}{2}$	2	64.3m	Dec. 17, 1946	---	---
No01-2	N $\frac{1}{2}$ S $\frac{1}{2}$ sec. 1, 4 $\frac{1}{2}$ N., 3 $\frac{1}{2}$ E. of Kendallville	Oratta Mieser	Lower & Lovett	1908	1027	Domestic	102	2	25	1908	---	Log: Clay 0 - 95 $\frac{1}{2}$ ; Sand and gravel 95 $\frac{1}{2}$ - 102 $\frac{1}{2}$ .
No03-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 3, 4 N., 1 $\frac{1}{2}$ E. of Kendallville	Paul Harp	---	---	1024	Farm	125	2	80	1943	---	---
No03-2	S $\frac{1}{2}$ N $\frac{1}{2}$ sec. 3, 5 N., 1 $\frac{1}{2}$ E. of Kendallville	Kenneth Baerick	Fred Lower	1930	1023	do.	34	2	4	1930	---	Log: Clay and hardpan 0 - 30; Gravel 30 - 34 $\frac{1}{2}$ .
No04-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 4, 4 N. of Kendallville	Charles Knott	---	---	9 $\frac{1}{2}$	Domestic	30	1	10	Spring 1946	---	Log: Sand and gravel 0 - 30+.
No06-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 6, 4 N., 2 E. of Kendallville	Byron Jodesall	M. Gard	Summer 1942	980	do.	90	2	40	Summer 1942	---	---
No07-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 7, 3 N., 1 E. of Kendallville	Leyman Schaffer	Fred Lower	1937	972	Farm	79	2	20	1937	---	Log: Clay 0 - 48; Fine sand 48 - 75 $\frac{1}{2}$ ; Gravel 75 $\frac{1}{2}$ - 79 $\frac{1}{2}$ .
No07-2	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 7, 3 N., 2 E. of Kendallville	Clarence Bucher	M. Gard	---	1001	Domestic	65	2	50	---	---	Log: Clay 0 - 50; Gravel 50 - 65 $\frac{1}{2}$ .
No09-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 9, 3 N., of Kendallville	Schiller Pfaffner	W. Fran	1920 - 1930 (?)	989	do.	50	2	47	1920 - 1930 (?)	---	Log: Clay 0 - 45; hardpan 45 - 48; Gravel 48 - 50; Clay below.
No010-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 10, 3 N., 1 E. of Kendallville	Richard Brennan	---	---	1046	Abandoned	75+	2	66m	Dec. 17, 1946	---	---
No011-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 11, 3 N., 1 $\frac{1}{2}$ E. of Kendallville	Homer A. Baiker	---	About 1875	1002	Domestic	76	2	22	1939	---	Log: Clay 0 - 5; Sand and gravel 5 - 76 $\frac{1}{2}$ .
No013-1	N $\frac{1}{2}$ S $\frac{1}{2}$ sec. 13, 2 $\frac{1}{2}$ N., 3 E. of Kendallville	William Elsemann	William Elsemann	---	991	Stock	14.4m	1 $\frac{1}{2}$	1.7m	April 1, 1947	---	Sand and gravel with thin layers of hardpan full depth of well. Hardpan below well point.
No013-2	N $\frac{1}{2}$ S $\frac{1}{2}$ sec. 13, 3 N., 4 E. of Kendallville	Aman Estate	---	---	1034	Farm	100+	2	100	1945	---	---
No016-1	N $\frac{1}{2}$ S $\frac{1}{2}$ sec. 16, 3 N., of Kendallville	George Jahring	---	1910	975	do.	72	2	60	June 1946	---	---
No017-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 17, 2 N., 1 W. of Kendallville	Martin Wible	Martin Wible	1935	975	Milk cooling - stock	27	1 $\frac{1}{2}$	18	1935	---	Log: Clay 0 - 24; Boulder clay 24 - 26; Gravel 26 - 27; Clay below.
No019-1	N $\frac{1}{2}$ S $\frac{1}{2}$ sec. 19, 2 N., 2 W. of Kendallville	T. Rickemberger	M. Gard	1943	960	Domestic	About 50	2	30	Dec. 1945	---	Screen thought to be set in quicksand.
No020-1	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 20, 1 $\frac{1}{2}$ N., 1 W. of Kendallville	Roy Wible	---	---	998	Abandoned	118	2	70	---	---	---
No020-2	S $\frac{1}{2}$ S $\frac{1}{2}$ sec. 20, 1 N., 1 W. of Kendallville	George Ansdies	M. Gard	1937	985	Stock	52	2	8	1937	---	Well on north shore of pond west of Duck Lake. Log: Muck, marl 0 - 15; Blue clay 15 - 32; Sand 32 - 34; Blue clay 34 - 40; Sand 40 - 43; Clay 43 - 48; Sand 48 - 52 $\frac{1}{2}$ .
No020-3	N $\frac{1}{2}$ S $\frac{1}{2}$ sec. 19, 1 $\frac{1}{2}$ N., 1 W. of Kendallville	Earl Rickenberg	---	---	992	Farm	135	2	60	Oct. 1947	---	---

Records of wells in Noble County (Wayne Township, T. 35 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoD23-1	SW $\frac{1}{4}$ sec. 21, 2 N., 2 E. of Kendallville on S.R. 3	S. F. Rollins	McLomb	1927	998	Domestic	85	2	8	1927	---	Log: Clay 0 - 20; Clay with streaks of gravel 20 - 50; Clay 50 - 65; Gravel 65 - 85+.
NoD22-1	NE $\frac{1}{4}$ sec. 22, 2 N., 1 E. of Kendallville	H. J. Kline	H. J. Kline	---	996	do.	52	2	18	---	---	Log: Clay 0 - 35; Sand and gravel 35 - 52.
NoD22-2	SE $\frac{1}{4}$ sec. 22, 1 N., 2 E. of Kendallville	Walter Bognar	M. Gard	Spring 1947	1040	do.	160	2 $\frac{1}{2}$	105	Spring 1947	---	Hard and stony formations entire depth of well. Log: Red clay 0 - 10; Blue clay 10 - 125; Cemented gravel 125 - 137; Blue clay 137 - 155; Cemented gravel 155 - 160+.
NoD23-1	SE $\frac{1}{4}$ sec. 23, $\frac{1}{2}$ N., 2 E. of Kendallville	Clarence Likoe	Fred Lower	About 1942	1036	Farm	80	2	55	About 1942	---	Log: Yel. clay 0 - 10; Gravel and sand 10 - 20; Blue clay 20 - 65; Sand and gravel 65 - 80+.
NoD23-2	NE $\frac{1}{4}$ sec. 23, 2 N., 1 E. of Kendallville	Paul Fehelmank	Ernie Warner	1946	1020	Stock	43	2	41	1946	---	Well in pasture. Log: Clay 0 - 4; Hardpan 4 - 6; Sand and gravel 6 - 43+.
NoD26-1	SE $\frac{1}{4}$ sec. 26, $\frac{1}{2}$ N., 2 E. of Kendallville	Norman Strater	M. Ward	1930	1009	do.	190	2	100	1946	---	Log: Red clay 0 - 12; Blue clay with thin layers of sand 12 - 185; Gravel 185 - 190+.
NoD27-1	NE $\frac{1}{4}$ sec. 27, $\frac{1}{2}$ N., 1 E. of Kendallville	Chas. Westfall	A. Bonar	July 1945	966	Domestic	88	2	18	July 1945	---	Well at cottage east of Round Lake. Log: Clay 0 - 82; Sand 82 - 88+.
NoD27-2	NE $\frac{1}{4}$ sec. 27, 1 N., $\frac{1}{2}$ E. of Kendallville	Rudolph Rehrinkal	O. A. Hillman	---	995	Farm	163	2	About 100	---	---	Log: Blue clay 0 - 160; Gravel 160 - 165+.
NoD27-3	SW $\frac{1}{4}$ sec. 27, 1 N., $\frac{1}{2}$ E. of Kendallville at east end of Long Lake	Roy Wentworth	---	---	968	Domestic	8.3m	1 $\frac{1}{2}$	2.2m	Apr. 1, 1947	---	---
NoD28-1	SW $\frac{1}{4}$ sec. 28, North edge of Kendallville	Henry Kimmel	A. Bonar	Nov. 1945	985	do.	60	2	45	Nov. 1945	---	Log: Clay 0 - 20; Dry gravel 20 - 45; Clay 45 - 51; Gravel 51 - 60+.
NoD30-1	SE $\frac{1}{4}$ sec. 30, 2 W. of Kendallville on U.S. Route 6	J. W. Evers	O. A. Hillman	Winter 1945	970	Stock	75	2	50	Winter 1945	---	Log: Blue clay 0 - 70; Gravel 70 - 75+.
NoD31-1	NE $\frac{1}{4}$ sec. 31, 2 W. of Kendallville on U.S. Route 6	Kenneth Gardner	A. Bonar	1945	976	Farm	80	2	35	1945	---	Log: Clay 0 - 72; Gravel 72 - 80+.
NoD31-2	NE $\frac{1}{4}$ sec. 31, 1 W. of Kendallville (General location)	---	Fred Lower	---	About 970	---	60	---	---	---	---	Log: Yel. clay 0 - 16; Sand 10 - 20; Blue clay 20 - 60; Gravel below.
NoD32-1	SW $\frac{1}{4}$ sec. 32, at Sewage Disposal Plant, Kendallville	City of Kendallville	Gordon and Bonar	1939	956	Industrial	60	4	4	1939	---	Water used for sprinkling and cleaning. Well pumped at 60 g.p.m. Log: Sand and gravel 0 - 4; Clay 4 - 60+ (Production well finished at 44 ft.).
NoD32-2	NE $\frac{1}{4}$ sec. 32, $\frac{1}{2}$ N. of Kendallville	Jacob Shell	M. Gard	Aug. 1946	969	Domestic	113	2	30	Aug. 1946	---	Log: Fill 0 - 5; Sand 5 - 9; Clay 9 - 45; Gravel 45 - 47; Blue clay and "marl" 47 - 102; Gravel 102 - 113+.
NoD33-1-21	SE $\frac{1}{4}$ sec. 33, along west shore of Hixler Lake at Kendallville Light Plant	City of Kendallville	William Reinbolt	Aug. 1926	965.0	Abandoned	38.1	6	a	---	---	Well known as Noble 1 in observation-well program.
NoD33-1-23	SE $\frac{1}{4}$ sec. 33, along west shore of Hixler Lake at Kendallville Light Plant	do.	do.	About 1926	967.5	do.	39.9	6	b	---	---	Well replaced NoD33-1-21 as observation well Noble 1.
NoD33-1-28E	SE $\frac{1}{4}$ sec. 33 (7)	do.	do.	Oct. 1924	About 967	Test	44	---	---	---	---	Well presumably located on Hixler Lake shore, called "East test well" in old records. See Appendix B.



Records of wells in Noble County (Wayne Township, T. 35 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
MoD33-1-29	S4382 sec. 33 (?)	City of Kendallville	William Reinbolt	Oct. 1924	About 967	Test	45	-	-	-	-	Well presumably located on Hixler Lake shore, called "test test wells" in old records. Log: Sand 0 - 3; Blue clay 3 - 18; Gravel bedpan (counted) 18 - 21; Water gravel 21 - 45+.
MoD33-1-30	S4382 sec. 33, 400+ ft. N. of Hixler Lake, 155 ft. N. of power house	do.	Layne-Northem Co.	July 2, 1940	991	do.	115	6	41	July 2, 1940	-	Test well for "Park Well" location. See Appendix B.
MoD33-1-31	S4382 sec. 33, 400+ ft. W. of Hixler Lake, 155 ft. E. of power house.	do.	do.	Dec. 11, 1940	991.0	Public supply	113	38 - 10	42	Dec. 11, 1940	290 (1940)	Known as the "Park Well". See Appendix B.
MoD33-1-32	S4382 sec. 33, 48 ft. E. of "Park Well" (MoD33-1-31)	do.	A. Bonger	Nov. 1945	985.1	Observation	87m	2	34.4m	Apr. 7, 1946	-	Abandoned after completion of pumping tests. See Appendix B.
MoD33-1-33	S4382 sec. 33, 85 ft. N., 115 ft. E. of "Park Well" (MoD33-1-31)	do.	do.	Nov. 1945	983.6	do.	78.2m	2	32.6m	Apr. 8, 1946	-	do.
MoD33-1-34	S4382 sec. 33, 103 ft. N., 96 ft. E. of "Park Well" (MoD33-1-31)	do.	do.	Nov. 1945	991.7	do.	105.8m	2	40.8m	Apr. 8, 1946	-	do.
MoD33-1-35	N4382 sec. 33, 45 ft. W. of Lake Park Dr., 540 ft. S. of E. Mitchell St.	do.	Layne-Northem Co.	Oct. 23, 1940	970	Test	73	6	21.3	Oct. 3, 1946	-	Site chosen for permanent supply well: City well 3. See Appendix B.
MoD33-1-36	N4382 sec. 33, 50 ft. S. of Mitchell St. and 112 ft. E. of Lake Park Dr.	do.	do.	Oct. 24, 1946	965	do.	61	6	15.3	Oct. 24, 1946	-	Site abandoned. See Appendix B.
MoD33-1-37	N4382 sec. 33, 240 ft. S. of Mitchell St.	do.	do.	Oct. 31, 1946	969	do.	68	6	19	Oct. 31, 1946	-	Site chosen for permanent supply well: City well 5. See Appendix B.
MoD33-1-38	N4382 sec. 33, 45 ft. W. of Lake Park Dr., 540 ft. S. of E. Mitchell St., Kendallville	do.	do.	Feb. 10, 1947	970	Public supply	60	38 - 30	21.5	Feb. 3, 1947	-	City well 3. See Appendix B.
MoD33-1-39	N4382 sec. 33, 240 ft. S. of Mitchell St., 300 ft. E. of wall MoD33-1-38, Kendallville	do.	do.	Feb. 28, 1947	969	do.	61	38 - 30	19.25	Feb. 28, 1947	-	City well 5. See Appendix B.
MoD33-2-1	N4382 sec. 33, 75 ft. W. of Pa. R.R. and N.Y.C. R.R. tracks, Kendallville	New York Central R. R.	Smith-Morris Co.	-	977	Abandoned	188	8	48	-	-	"Drawdown 42 ft. when pumping 125 g.p.m. continuously." Screen at bottom 7 1/2 in. by 16 feet. (#20 slot).
MoD33-3-1	S4382 sec. 33, 70 ft. N. of Wayne St., E. of Oak St., Kendallville	Puritan Ice Cream Co.	B. J. Moore (?)	1944	975	do.	290	9-3	-	-	-	70-ft. well constructed at this site, and later abandoned. Some gravel at 76-ft. depth found to be unsatisfactory, encountered clay in remaining depth of well.
MoD33-3-2 and 3	S4382 sec. 33, 70 ft. N. of Wayne St., E. of Oak St., 140 ft. E. of wall MoD33-3-1, Kendallville	do.	Gilliam	1944	975	Industrial	52	4	16	1944	-	Use about 24,000 gallons daily supplied from two wells spaced 10 ft. apart. Log: Clay 0 - 45; Sand and gravel 45 - 52;
MoD33-4-1	N4382 sec. 33, near SE corner of Harris and Oak St. in SE corner of power house, Kendallville	Flint and Walling Mfg. Co.	-	1910	983	do.	264	10	55	Nov. 8, 1934	-	Water used in boiler, use about 1,000 g.p.m. Well cleaned and yield improved in 1934.
MoD33-5-1	S4382 sec. 33, SE of intersection of Sheridan St., extended and E.I.C. R.R. tracks Kendallville	Artificial Ice Co.	E. J. Bacon	About 1940	989	do.	238	6	57±	Apr. 26, 1945	-	Yield about 100 g.p.m. in 1945. Original yield was about 150 g.p.m.

Records of wells in Noble County (Wayne Township, T. 35 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
MoD33-5-2	SE1/4 sec. 33, SE of intersection of Sheridan St., extended and N.Y.C. R.R. tracks, Kendallville	Artificial Ice Co.	S. J. Bacon	—	989	Industrial	34	6	—	—	45±	Screen length 10 ft. ±.
MoD33-5-3 and 4	SW1/4 sec. 33, SE of intersection of Sheridan St., extended and N.Y.C. R.R. tracks, Kendallville	do.	William Reinholt	About 1900	989	do.	220	4	—	—	40±	Pumped 240 g.p.m. at first.
MoD33-6-1 to 4	SW1/4 sec. 33, SE of intersection of Pa. R.R. and N.Y.C. tracks, Kendallville	McCray Mfg. Co.	do.	—	985	do.	About 75	2 1/2	About 7	1941	40±	Pumped 240 g.p.m. at first. Largely sand and gravel.
MoD33-7	SE1/4 sec. 33, 422 S. Oak St., 180 ft. S. of Hancock St., W. of Oak St., Kendallville	Dr. Meyer	—	—	996	Abandoned	180	—	—	—	—	Destroyed. See Appendix B.
MoD33-8	NE1/4 sec. 33, 217 West Grove St., 75 ft. S. of centerline of W. Grove St., Kendallville	City Dairy	A. Bonar	1941	964	Industrial	100	2	10	1941	—	Screen placed at 60-ft. depth. Log: Clay 0 - 55; Gravel 55 - 60; Clay 60 - 100+
MoD33-9	SW1/4 sec. 33, 275 ft. S. and 95 ft. W. of intersection of Bush and Lincoln Sts., Kendallville	Main Dairy	do.	1941	985	do.	103 1/2	4	32	1941	10 (Jet pump)	Log: Clay 0 - 96; Gravel 96 - 103 1/2+
MoD34-1	NE1/4 sec. 34, 1 E. of Kendallville	Oathem Flichinger	do.	—	1013	Domestic	132	2	120	—	—	Log: Sandy clay 0 - 124; Gravel 124 - 132+
MoD36-1	SE1/4 sec. 36, 3 E. of Kendallville	Julius Hesch	Fred Lower	—	998	do.	170	2	About 145	1944	—	Log: Yel. clay 0 - 20; Sand 20 - 35; Blue clay 35 - 65; Dry gravel 65 - 85; Blue clay 85 - 160; Gravel 160 - 170+

Records of wells in Noble County (Sparta Township, T. 34 N., R. 8 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
MoE1-1	SE1/4 sec. 1, 1/2 N., of Eagle Lake	C. W. Caskey	O. A. Hillman	1913	885	Farm	89	2	—	1913	—	Water level stood 5 feet above land surface in 1913. Log: Clay 0 - 80; Sand and gravel 80 - 83+
MoE2-1	SW1/4 sec. 3, 2 1/2 S. of Ligonier, on U.S. Route 33	Harvey Hook	do.	About 1943	876	Domestic	77	2	65	About 1943	—	Well originally about 60 ft. deep. Water level declined to a stage below the screen in 1943+
MoE3-1	NE1/4 sec. 5, 2 1/2 S. of Ligonier, 2 W. of U.S. Route 33	Roy Secrist	Roy Secrist	1942	880	do.	25	1 1/2	3	1942	—	All wells in neighborhood reported to be shallower. Log: Sand and gravel 0 - 25+
MoE4-1	NE1/4 sec. 6, 2 S. of Ligonier, 3 1/2 W. of U.S. Route 33	Stanley Long	Stanley Long	1935	863	Farm	14	1 1/2	9	1935	—	Log: Sand and gravel 0 - 14+
MoE7-1	SW1/4 sec. 7, 1 1/2 N., 1 1/2 W. of Cromwell	Herschel Hiteer	O. A. Hillman	1944	898	do.	30	1 1/2	12	1944	—	Log: Sand and gravel 0 - 30+
MoE11-1	NE1/4 sec. 11, 1 N., 1/2 W. of Kinswell	Fred Geiger	Bonar and Gordon	1940	913	Domestic	55	3	About 45	1940	—	Another well south of house 112 ft. deep. Log: Sandy blue clay 0 - 50; Coarse gravel 50 - 55; Blue clay below.
MoE12-1	SW1/4 sec. 12, 1 N. of Kinswell	Walter Wolf	—	1900	938	Farm	60	2	40	1900	—	Log: Yel. sand 0 - 8; Blue clay 8 - 41; Fine sand 41 - 60; Gravel below.
MoE15-1	NE1/4 sec. 15, 2 E. of Cromwell	L. L. McCallin	O. A. Hillman	1943	903	Domestic	66	2	16	1943	—	Log: Hardpan and top soil 0 - 8; Sand and gravel 8 - 66+
MoE16-1	NE1/4 sec. 16, at Cromwell	City of Cromwell	B. J. Moore	1931	951	Public supply	138	6	70	Spring 1945	750+	Log: Sand 0 - 20; Blue clay 20 - 80; Gravel 80 - 138+ (questionable log)

Records of wells in Noble County (Sparta Township, T. 34 N., R. 8 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No E17-1	S½S½ sec. 17, ½ S. of Cromwell wall, ½ W. of Cromwell	Frederick Keldash	O. A. Hillman	1943	947	Farm	80	2	70	1943	---	Log: Blue clay 0 - 75; Gravel 75 - 80+.
No E19-1	S½S½ sec. 19, 1 S., 2 W. of Cromwell	Meredith Grvider	do.	---	921	Stock	47	2	32	About 1941	---	---
No E20-1	N½S½ sec. 20, ½ S., 1 W. of Cromwell	T. D. Howell	D. Gard	1942	926	Farm	62	2	52	1942	---	Very hard water. Log: Yel. clay 0 - 4; Blue clay 4 - 58; Sand and gravel 58 - 62+.
No E21-1	S½S½ sec. 21, 1 S. of Cromwell	Dane Secrist	O. A. Hillman	1943	977	Stock	About 110	2	100	1943	---	Blue clay to sand and gravel at bottom of well.
No E23-1	S½S½ sec. 23, 1½ W. of Kimmel	R. Johnston	do.	June 1941	900	Domestic	31	1½	25	June 1941	---	Very hard water. Dry gravel to water in bottom 6 feet.
No E24-1	N½S½ sec. 24, at Kimmel	D. E. Price	D. E. Price	1934	919	do.	60	1½	18	1947	---	80 ft. of gravel reported penetrated in nearby wells. Log: Gravel 0 - 60+; (thin strip shale at 18-ft. depth).
No E26-1	S½S½ sec. 26, 1½ S., 1 W. of Kimmel	Harold Knapper	D. Gard	Mar. 18, 1944	907	Farm	32	2	18	Mar. 18, 1944	---	See Appendix B.
No E26-2	S½S½ sec. 26, 2 S., 1 W. of Kimmel	Carl and Floyd Murphy	O. A. Hillman	1922	903	Industrial	40	2	16	1922	---	Well at mint still. Wells in neighborhood are shallow. Largely sand and gravel.
No E27-1	N½S½ sec. 27, 1 S., 2 W. of Kimmel	Hollenbaugh Estate	do.	1940	904	Farm	87.5	2	40	1940	---	Old well 40 ft. deep.
No E27-2	S½S½ sec. 27, 2 S., 2 W. of Kimmel	Harold Pocharsky	---	1937	915	do.	75	2	16	1945	---	---
No E27-3	S½S½ sec. 27, 2 S., 2 W. of Kimmel	Alvin Wilkinson	Ad. Wilson	1944	905	Industrial	72	3	12	1944	---	Well at mint still. Log: Clay 0 - 62; Gravel 62 - 72+.
No E28-1	N½S½ sec. 28, 1½ S. of Cromwell	Ralph Sponhauer	Mel. Gard	About 1920	975	Stock	95	2	About 80	1941	---	New screen in 1946. Dug well at house 25 ft. deep. Log: Gravel 0 - 30; Blue clay 30 - 70; Dry gravel 70 - 85; Water gravel 85 - 95+.
No E28-2	N½S½ sec. 28, 2 S. of Cromwell	Dane Secrist	O. A. Hillman	About 1943	937	do.	60	2	50	About 1943	---	Log: Yel. clay 0 - 4; Soft blue clay 4 - 54; Gravel 54 - 60+.
No E28-3	S½S½ sec. 28, 2½ S. of Cromwell	Ernest Galloway	D. Gard	1945	947	Farm	83	2	60	1945	---	Log: Yel. clay 0 - 10; Blue clay 10 - 75; Gravel 75 - 83+.
No E28-4	S½S½ sec. 28, 2½ S., 1 E. of Cromwell	J. R. Twites	---	---	937	do.	76	2	55	July 23, 1947	---	---
No E29-1	N½S½ sec. 29, 1½ S., ½ W. of Cromwell	Roy Coy	D. Gard	Mar. 1945	943	do.	65	2	45	Mar. 1945	---	Log: Yel. clay 0 - 4; Blue clay 4 - 60; Sand and gravel 60 - 65+.
No E32-1	N½S½ sec. 32, 2½ S. of Cromwell	Ernest H. Galloway	O. A. Hillman	1936	972	Domestic	99	2	95	1936	---	Log: Blue clay 0 - 96; Gravel 96 - 99; Blue clay below.
No E33-1	N½S½ sec. 33, 2½ S. of Cromwell	Floyd Galloway	Anderson Galloway	1879	954	Abandoned	60	48	60-	1879	---	Old dug well, abandoned and filled. Log: Yel. clay 0 - 30; Yel. sand 30 - 60+.
No E35-1	S½S½ sec. 35, 3 S., 1 W. of Kimmel	French Lawson	M. Gard	1938	910	Industrial	65	2	35	1938	---	Well at mint still. Log: Lom 0 - 4; Blue clay 4 - 53; Fine sand 53 - 56; Gravel 56 - 65+.
No E36-1	N½S½ sec. 36, 2 S. of Kimmel	do.	---	---	915	Farm	30	1½	About 15	---	---	---

Records of wells in Noble County (Sparta Township, T. 34 N., R. 8 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoF6-2	S24S24 sec. 36, 2 1/2 S. of Kinsell	George Staats	D. Gard	Jan. 1946	949	Farm	75	2	45	Jan. 1946	—	Well driven in bottom of old dug well about 35 feet deep. Log: Open pit 0 - 35; Blue clay 35 - 65; Sand and gravel 65 - 75.

Records of wells in Noble County (York Township, T. 34 N., R. 9 E.)

NoF1-1	S24S24 sec. 1, 2 N., of Albion	Roseco Rimwell	Owner and Ad. Wilson	1943	936	Industrial	84	3	About 32	1943	—	Well at mint still. Log: Blue clay 0 - 70; Gravel 70 - 84+
NoF3-1	N24S24 sec. 3, 2 1/2 N., 2 W. of Albion	T. J. Hile	A. Bonar	Aug. 28, 1947	914	Stock	43	2	4	Aug. 28, 1947	—	Well in pasture 650 ft. west of N.-S. gravel road. Log: Gravel 0 - 8; Blue clay 8 - 35; Sand 35 - 43+
NoF4-1	S24S24 sec. 4, 2 N., 4 W. of Albion	Mrs. Osa Morris	O. A. Billman	Jan. 1946	909	Domestic	180	2	4	Jan. 1946	—	Log: Dry sand 0 - 20; Blue clay 20 - 60; Fine sand 60 - 70; Blue clay 70 - 175; Gravel 175 - 180+
NoF4-2	S24S24 sec. 4, 2 N., 3 W. of Albion	Dallas Black	Mal. Gard	About 1917	908	Abandoned	160	2	8 16.3m	About 1917 Oct. 15, 1947	—	Well now in use is 35 ft. deep. Log: Fine sand 0 - 35; Blue clay 35 - 160; Sand and gravel below.
NoF4-3	S24S24 sec. 4, 2 N., 2 1/2 W. of Albion	Harman Buz	do.	1939	913	Farm	115	2	14	1939	—	A 14.5-ft. well, 7 ft. from 115-ft. well, was driven through blue clay for its entire depth. Quicksand at 48 ft. depth, water at 88 ft. depth. (insufficient).
NoF6-1	S24S24 sec. 6, 3 N., 1/2 E. of Kinsell, north of Eagle Lake	do.	do.	Aug. 1909	886	Stock	196	2	18.5	Aug. 1909	—	Log: Sandy marl 0 - 10; Soft blue clay 10 - 195; Sand and gravel 195 - 196+. Flows.
NoF7-1	S24S24 sec. 7, 1 N., 1 E. of Kinsell	Herbert Wolf	O. A. Billman	Aug. 28, 1946	948	Farm	90	2	60	Aug. 28, 1946	—	Log: Yel. clay 0 - 16; Dry gravel 16 - 32; Blue clay 32 - 85; Coarse gravel 85 - 90+.
NoF9-1	N24S24 sec. 9, 1 1/2 N., 2 1/2 W. of Albion	Albert Laffie	—	—	895	do.	104	2	2	1947	—	Well originally flowed.
NoF10-1	S24S24 sec. 10, 1 N., 2 1/2 W. of Albion	Otis Marquiss	O. A. Billman	1944	934	Domestic	About 70	2	50	1944	—	—
NoF11-1	S24S24 sec. 11, 1 1/2 N., 1 W. of Albion	John C. Palmer	do.	Fall 1946	952	do.	68	2	50	Fall 1946	—	—
NoF12-1	S24S24 sec. 12, 1 1/2 N., 1 W. of Albion	Carlos Palmer	do.	1941	966	do.	118	2 1/2	60	1941	—	Log: Blue clay 0 - 50; Fine sand 50 - 60; Blue clay 60 - 115; Gravel 115 - 118+.
NoF14-1	S24S24 sec. 14, 1/2 N., 1 1/2 W. of Albion	S. S. Steale	Ad. Wilson	1942	943	Farm	70	2	About 35	1942	—	Used well 56 ft. deep at tenant house on south side of road south of well NoF14-1.
NoF15-1	N24S24 sec. 15, 1/2 N., 2 W. of Albion	Ada Moore	O. A. Billman	1942	933	Domestic	90+	2	19	1942	—	—
NoF16-1	S24S24 sec. 16, 1/2 N., 3 E. of Kinsell	John P. Dietach	A. Bonar	Aug. 26, 1947	904	Farm	91	2	10	Aug. 26, 1947	—	Log: Sand 0 - 20; Soft blue clay 20 - 83; Sand 83 - 91+.
NoF17-1	S24S24 sec. 17, 1 1/2 E. of Kinsell	R. H. Buckles	R. H. Buckles	1946	892	Domestic	19	1 1/2	7	1946	—	Well screens became clogged after 1 year of use. 7 to 8 ft. of hard blue clay at surface; gravel below is at least 35 ft. thick, as shown by gravel pit nearby.
NoF18-1	S24S24 sec. 18, 1/2 N., 1 1/2 E. of Kinsell	Mrs. Blanch Buff	O. A. Billman	About 1932	947	Farm	120	2	—	—	—	Fine sand at 40-ft. depth, water-bearing gravel at screen, blue clay remainder of depth.

Records of wells in Noble County (York Township, T. 34 N., R. 9 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Motor level (feet)	Date	Yield (g.p.m.)	Remarks
NoF19-1	S23W1/2 sec. 19, 1 S., 1 E. of Kinsell	Russell Mangus	O. A. Billman	Oct. 1945	924	Domestic	138	2 1/2	27	Oct. 1945	—	Log: Yel. clay 0 - 40; Fine sand (water bearing) 40 - 60; Blue clay 60 - 130; Sand and gravel 130 - 138+.
NoF20-1	N23W1/2 sec. 20, 2 E. of Kinsell	Rose Weidenbrenner	Glenn Hire	1937	899	Stock	20	1 1/2	5	1937	—	Log: Muck 0 - 5; Yel. (?) clay 5 - 17; Gravel 17 - 20+.
NoF20-2	S23W1/2 sec. 20, 1/2 S., 2 1/2 E. of Kinsell	Lafe Crothers	Ralph Crothers	Aug. 1946	904	Domestic	24	1 1/2	12	Aug. 1946	—	Log: Yel. clay 0 - 5; Sand and gravel 5 - 24+.
NoF20-3	N23W1/2 sec. 20, 2 E. of Kinsell	Robert Owen	Clyde "Sandy" Rogers	Fall 1947	900	do.	22	1 1/2	14	Fall 1947	—	Log: Clay 0 - 4; Sand and gravel 4 - 22+.
NoF24-1-1	S23W1/2 sec. 24, at city water plant	City of Albion	Kersey	1926	920	Public supply	96	10	12	1926	—	Pumped 1,000 g.p.m. with 13-ft. drawdown. Muck and hard clay encountered in top section of well, penetrated at least 50 ft. of sand and gravel.
NoF24-1-2	S23W1/2 sec. 24, at city water plant	do.	do.	1926	920	do.	131	10	12	1926	—	Located about 40 ft. from NoF24-1-1. Pumped 1,000 g.p.m. with 13-ft. drawdown.
NoF24-2	S23W1/2 sec. 24, 1/2 S. of Albion	Vaughn Webber	Ted Peppinger	Nov. 8, 1947	944	Domestic	51	2	37	Nov. 8, 1947	—	Log: Yel. clay 0 - 10; Dry gravel 10 - 37; Water-bearing gravel 37 - 51+.
NoF27-1	N23W1/2 sec. 27, 1 S., 2 1/2 W. of Albion	Joseph Seaburg	O. A. Billman	Summer 1944	943	Farm	65	2	50	Summer 1944	—	Log: Clay 0 - 55; Sand and gravel 55 - 65+.
NoF28-1	N23W1/2 sec. 28, 1 S., 2 1/2 E. of Kinsell	Carl Wexler	do.	Summer 1946	934	Domestic	187	2	37	Summer 1946	—	Log: Blue clay 0 - 177; Gravel 177 - 187+.
NoF29-1	S23W1/2 sec. 29, 2 S., 2 1/2 E. of Kinsell	Roy Eaton	D. Gard	1942	976	Farm	80	2	77	Nov. 7, 1947	—	New screen required each year. Screens are sealed by incrustation. Log: Yel. clay 0 - 8; Blue clay 8 - 73; Stony hardpan 73 - 76; Gravel 76 - 80+.
NoF33-1	N23W1/2 sec. 33, 3 S., 4 W. of Albion	Oscar Ebey	Glenn Hire	1945	935	do.	40	2	25	1945	—	Well driven in bottom of old dug well. Log: Clay (?) 0 - 30; Gravel 30 - 40+.
NoF33-2	N23W1/2 sec. 33, 2 S., 3 1/2 W. of Albion	Levi Price	Chas. Embalsner	1934	933	do.	66	2	26	1934	—	Well at house toward north across road about 40 feet deep.
NoF34-1	S23W1/2 sec. 34, 2 1/2 S., 2 1/2 W. of Albion	James Dasey	do.	About 1912	916	do.	40	2	6	1941	—	Wells in neighborhood all about 40 feet deep. In service 40-50 years with maintenance required. Log: Clay 0 - 37; Sand 37 - 40+.
NoF35-1	N23W1/2 sec. 35, 2 1/2 S., 1 W. of Albion, 300 ft. S. of S. shore of Mitchell Lake	J. C. Roscoe	Ad. Wilson	1941	883	Stock	87	2	7	1941	—	Flows perennially. Log: Blue clay 0 - 79; Fine sand 79 - 83; Coarse sand 83 - 87+.
NoF35-2	N23W1/2 sec. 35, 2 S., 1 W. of Albion	Leonard Moore	M. Gard	June 1947	936	Farm	67	2	35	June 1947	—	Thin strip of sand at 25-ft. depth. Clay from 25- to 64-ft. depths very stony, required dynamite. Log: Red clay 0 - 8; Blue clay 8 - 64; Medium sand 64 - 67+.

Records of wells in Noble County (Jefferson Township, T. 34 N., R. 10 E.)

NoJ3-1	N23W1/2 sec. 3, 1 S., 2 E. of Brinsfield	Adam Bruun	Henry Ruessell	Feb. 1911	971	Domestic	54	2	50	1944	—	A second formation in general use is found at the 90-ft. depth. Log: Clay 0 - 46; Gravel 46 - 54+.
NoJ4-1	N23W1/2 sec. 4, 1 S., 1/2 E. of Brinsfield	Glenn Kesler	M. Gard	Fall 1926	954	do.	58	2	About 40	Fall 1946	—	Thin layer of sand at 40-ft. depth. Log: Clay 0 - 55; Sand and gravel 55 - 58+.

Records of wells in Noble County (Jefferson Township, T. 34 N., R. 10 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No04-2	SW <sup>1</sup> / <sub>4</sub> sec. 4, 2 N., 2 E. of Albion	Wilbur Hart	—	Before 1910	982	Farm	92	2	84	1941	—	Largely clay with thin layers of sand. Coarse gravel at screen.
No05-1	NE <sup>1</sup> / <sub>4</sub> sec. 5, 3 N., 1 E. of Albion	Mrs. E. Hannah	Ad. Wilson	1932	980	do.	95	2	75	1932	—	Log: Blue clay 0 - 90; Gravel 90 - 95+.
No07-1	NE <sup>1</sup> / <sub>4</sub> sec. 7, 2 N., 1 E. of Albion	Besse Owens	A. Bonar	Sept. 3, 1947	961	Domestic	77	2	90	Sept. 3, 1947	—	Water contains iron. Log: Blue clay 0 - 35; Dry gravel 35 - 40; Blue clay 40 - 66; Sand and gravel 66 - 77+.
No09-1	SE <sup>1</sup> / <sub>4</sub> sec. 9, 1 N., 3 E. of Albion	Charles Weiser	—	—	972	Farm	96	2	90	1941	—	—
No10-1	SE <sup>1</sup> / <sub>4</sub> sec. 10, 1 E., 4 E. of Albion	Byron Graves	—	—	986	ch.	85	2	65	Dec. 1946	—	Well originally 56 ft. deep. Deepened to 85 ft. in 1946 by A. Bonar. Log: ? 0 - 56; Clay 56 - 80; Gravel 80 - 85+.
No11-1	NE <sup>1</sup> / <sub>4</sub> sec. 11, 1 N., 3 1/2 W. of Lisbon	Ray Glass	M. Gard	1945	1008	do.	105+	2 1/2	93	1945	—	Log: Clay 0 - 65; Dry gravel 65 - 100; Clay 100 - 105; Gravel below.
No11-2	NE <sup>1</sup> / <sub>4</sub> sec. 11, 1 N., 4 1/2 W. of Lisbon	J. W. McCoy	—	About 1904	1005	do.	80	2	70	1945	—	—
No12-1	SE <sup>1</sup> / <sub>4</sub> sec. 12, 3 W. of Lisbon	Lloyd Becker	Ad. Wilson	Spring 1944	1019	Domestic	102	2	87	Spring 1944	—	Thin layer gravel at 65 ft. depth clay reported stony near bottom of well. Log: Clay 0 - 95; Gravel 95 - 102+.
MO013-1	NE <sup>1</sup> / <sub>4</sub> sec. 13, 3 W. of Lisbon	Rolla Becker	—	About 1890	1029	Observation	29.6	3/8	c	—	—	Well number used in observation-well program is Noble 5.
No13-2	SW <sup>1</sup> / <sub>4</sub> sec. 13, 1 S., 3 1/2 W. of Lisbon	O. L. Zellers	—	About 1912	1040	Farm	280	2	—	—	—	Clay to water-bearing gravel at bottom of well.
No15-1	SW <sup>1</sup> / <sub>4</sub> sec. 15, 3 E. of Albion, South shore of Skinner Lake, (general direction).	—	A. Bonar	About 1930	931	Domestic	70+	—	—	—	—	Several wells drilled for lake cottages. Log: Clay 0 - 70; Gravel below.
No16-1	NE <sup>1</sup> / <sub>4</sub> sec. 16, 3 E. of Albion, west shore of Skinner Lake (general location).	—	do.	Sept. 1945	931	do.	60	2	19	Sept. 1945	—	Several wells drilled for lake cottages. Log: Clay 0 - 25; Gravel 25 - 60+.
No17-1	NE <sup>1</sup> / <sub>4</sub> sec. 17, 1 N., 1 E. of Albion	C. W. Heave	Ad. Wilson	Spring 1941	933	do.	110	2	80	Spring 1941	—	Log: Yel. clay 0 - 30; Sand and gravel 30 - 31 1/2; Hardpan and clay 31 1/2 - 102; Gravel 102 - 110+.
MO018-1	SE <sup>1</sup> / <sub>4</sub> sec. 18, near or on school ground in Albion	Corporation	—	1887	926	—	1914	—	—	—	—	Test for gas "Albion Gas well," abandoned and filled. See Appendix B.
No18-2	SE <sup>1</sup> / <sub>4</sub> sec. 18, 1 E. of Albion	Noble Co. Saddle Club	A. Bonar	Aug. 30, 1947	972	Public supply	139	2	70	Aug. 30, 1947	—	Log: Clay 0 - 4; Sand and gravel 4 - 14; Stony clay 14 - 130; Gravel 130 - 139+.
No21-1	NE <sup>1</sup> / <sub>4</sub> sec. 21, 2 E. of Albion	Leo Rumbaugh	Chas. Brumbaugh	About 1917	972	Abandoned	124	2	59.4m	Dec. 20, 1946	—	Thin layer of hardpan penetrated at 115 ft. depth. Log: Yel. clay 0 - 15; Blue clay 15 - 115; Sand and gravel 115 - 124+.
No22-2	SE <sup>1</sup> / <sub>4</sub> sec. 21, 1 S., 3 E. of Albion	John Singleton	A. Bonar	Spring 1945	999	do.	40	2	About 35	Spring 1945	—	Fine sand clogged screen. Sand reported at 20 and 60 ft. depths, picked up at 128 ft.
No24-1	SW <sup>1</sup> / <sub>4</sub> sec. 24, 1 N., 1 1/2 E. of Bakerstown	S. I. Russell	—	About 1925	992	Farm	90	2	55	Mar. 1947	—	—
No25-1	SE <sup>1</sup> / <sub>4</sub> sec. 25, 1 1/2 E. of Bakerstown	Earl Hill	—	—	1011	do.	About 110	2	About 100	1939	—	—

Records of wells in Noble County (Jefferson Township, T. 34 N., R. 10 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No027-1	S23SW $\frac{1}{4}$ sec. 27, at Bakerstown	Albert Harkenberg	Ed. Wilson	1927	977	Farm	95	2	45	1927	---	Log: Blue clay 0 - 25; Sand 25 - 30; Blue clay 33 - 90; Gravel 90 - 95 <sup>+</sup> . Blue clay to water-bearing material at bottom of well.
No027-2	NW $\frac{1}{4}$ sec. 27, 1 S., E. of Albion	Mrs. J. Lovell	Chas. Brumbaugh (?)	About 1910	952	do.	240	2	50	About 1910	---	Use about 500 gallons a day. Clay to water-bearing materials at bottom of well. Some sand and gravel at 35 ft. depth.
No027-3	S23SW $\frac{1}{4}$ sec. 27, 1 $\frac{1}{2}$ S., SE. of Albion	Henry Schults	M. Gard	Aug. 1944	975	do.	44	2	30	Aug. 1944	---	High iron content. Log: Clay 0 - 108; Medium sand 108 - 110; Clay below.
No028-	NW $\frac{1}{4}$ sec. 28, 1 $\frac{1}{2}$ S., 2 $\frac{1}{2}$ E. of Albion	Leonard Summers	A. Bonar	Aug. 1947	935	do.	110	2	30	Aug. 1947	---	Depth, water level, and log recorded by driller at time of drilling. See Appendix B.
No029-1	NW $\frac{1}{4}$ sec. 29, 1 S., 2 E. of Albion	Edward Stohman	Gleenn Hirt	1943	962	do.	99	2	65	1943	---	Flowed with outlet 16 ft. above land surface. Flows perennially. Log: Blue clay 0 - 95; Hardpan 95 - 96; Sand and gravel 96 - 101 <sup>+</sup> .
No030-1	S23SW $\frac{1}{4}$ sec. 30, 1 $\frac{1}{2}$ S. of Albion	Ora Tucker	Chas. Brumbaugh	About 1914	890	do.	101	2	--	---	---	Log: Fill 0 - 8; Muck 8 - 12; Blue clay 12 - 50; Fine sand 50 - 70; Blue clay 70 - 200; Fine sand 200 - 220 <sup>+</sup> .
No031-1	S23SW $\frac{1}{4}$ sec. 31, 3 S., $\frac{1}{2}$ E. of Albion	Arthur Buid	O. A. Hillman	1946	911	Stock	220	2	0	1946	---	Log: Clay 0 - 30; Gravel 30 - 75; Clay 75 - 80; Gravel 80 - 89 <sup>+</sup> .
No034-1	S23SW $\frac{1}{4}$ sec. 34, 3 S., 4 E. of Albion	Ralph Longardener	A. Bonar	Apr. 1947	970	Domestic	89	2	80	Apr. 1947	---	---
No036-1	S23SW $\frac{1}{4}$ sec. 36, 1 S., 1 $\frac{1}{2}$ E. of Bakerstown	Kidon and Carl Engle	---	---	963	Farm	80	2	About 70	---	---	---
No036-2	S23SW $\frac{1}{4}$ sec. 36, $\frac{1}{2}$ S., 1 $\frac{1}{2}$ E. of Bakerstown	Carl Engle	Ted Peppinger	About 1933	993	Unused	40	2	About 30	About 1933	---	---

Records of wells in Noble County (Allen Township, T. 34 N., R. 11 E.)

No01-1	S23SW $\frac{1}{4}$ sec. 1, $\frac{1}{2}$ S., 3 E. of Kendallville	Paul Fulk	John Baughman	About 1905	1003	Domestic	70	2	60	1942	---	Wells in neighborhood all about same depth. Log: Clay 0 - 65; Gravel 65 - 70 <sup>+</sup> .
No02-1	S23SW $\frac{1}{4}$ sec. 2, 1 S., 3 E. of Kendallville	Roy Nickerson	A. Bonar	About 1942	966	do.	98	2	85	1942	---	Well at edge of bottom of ravine. Log: Clay 0 - 92; Sand 92 - 98 <sup>+</sup> .
No03-1	S23SW $\frac{1}{4}$ sec. 3, 1 S., 1 $\frac{1}{2}$ E. of Kendallville	Heuer Meyer	W. Reinbolt	1923	1008	Farm	100	2	82	1935	---	---
No04-1	NW $\frac{1}{4}$ sec. 4, 1 S., of Kendallville	Mira Smith	M. Gard	---	1017	Domestic	243	2	90	---	---	Log: Clay 0 - 20; Dry gravel 20 - 40; Clay 40 - 50; Gravel 90 - 94; Clay 94 - 238; Gravel 238 - 243 <sup>+</sup> .
No04-2	NW $\frac{1}{4}$ sec. 4, NW corner of Garden and Gertrude Streets, Kendallville	Dan McReary	---	---	987	Abandoned	About 90	2	34 $\frac{1}{2}$	Apr. 13, 1946	---	Used as observation well during tests on "South Well".
No04-3-1	S23SW $\frac{1}{4}$ sec. 4, SW corner Ohio Street and Pa. R.R., Kendallville	Kraft Cheese Co.	Smith-Monroe Co.	1935	1001	Industrial	235	6	65	1935	---	Iron deposition (?) in screen reduces yield considerably. Acid treated about every 5 years. Kraft Cheese Co. "South Well".
No04-3-2	S23SW $\frac{1}{4}$ sec. 4, 19 ft. N. of No04-3-1	do.	do.	1935	1001	do.	245	8-6	65	1935	---	Kraft Cheese Co. "North Well", same screen conditions as in well No04-3-1.
No04-3-3	S23SW $\frac{1}{4}$ sec. 4, West of No04-3-2	do.	---	Sept. 11, 1929	1001	Abandoned and filled	252	12	42	Apr. 2, 1935	---	Originally produced 400 g.p.m. See Appendix B.

Records of wells in Noble County (Allen Township, T. 36 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoH6-4	NE1/4 sec. 4, SW corner Centre and Garden Sts.	City of Kendallville	Layne-Northern Co.	July 2, 1928	985	Public supply	105	26-12	32	May 1946	---	Well reworked in March 1933, was originally 99 ft. deep, produced 285 g.p.m. with 67-in. diameter. See Appendix B. Log: Clay 0 - 60; Gravel 60 - 100+.
NoH6-1	SE1/4 sec. 6, 1/2 S., 2 W. of Kendallville	Harold Idwille	M. Gard	---	1011	Stock	100+	2	90	---	---	Log: Blue clay 0 - 117; Fine sand 117 - 121; Blue clay 121 - 245; Medium-yel. sand 245 - 261+.
NoH7-1	SW1/4 sec. 7, 2 S., 1 1/2 W. of Kendallville	Lawrence Bender	Bonar and Gordon	July 1940	1035	Domestic	261	2	125	July 1940	---	2-in. well 105 ft. deep about 20 ft. E. of NoH7-2, water level at bottom of well.
NoH7-2	SE1/4 sec. 7, 2 S., 1 W. of Kendallville	Albert Varner	---	---	1031	do.	23.0m	3	11.0m	Dec. 9, 1946	---	Hardpan and clay to water-bearing sand at screen.
NoH8-1	NE1/4 sec. 8, 2 1/2 S., 1/2 W. of Kendallville	Harry Specker	---	---	1023	do.	102	2	104	---	---	Log: Clay 0 - 50; Gravel 50 - 115; Fine sand below.
NoH9-1	SE1/4 sec. 9, at Lisbon, SW corner of intersection of S.R. 3 and E-W rd.	Harry Bossor	A. Bonar	Oct. 1945	1045	do.	125	2	115	Oct. 1945	---	Log: Red clay 0 - 10; Blue clay 10 - 85; Quicksand 85 - 150; Coarse gravel 150 - 154; Quicksand below.
NoH10-1	NE1/4 sec. 10, 1 S., 1 1/2 E. of Kendallville	Glenn Henry	M. Gard	---	1019	Farm	154	2	80	---	---	New screen every 6 years. Log: Clay 0 - 137; Gravel 137 - 141+; (thin layer gravel at 90 ft., boulders at 87 ft.,).
NoH11-1	NE1/4 sec. 11, 1 1/2 E. of Lisbon	Arthur Lung	Chas. Emmebesser	Aug. 1936	1035	do.	141	2	110	1942	---	Screen becomes incrustated with cemented gravel. Well depth 90 and 180 ft. in neighborhood. Log: Clay 0 - 36; Gravel 36 - 40+.
NoH13-1	NE1/4 sec. 13, 3 E. of Lisbon	Albert Stabe	M. Gard	Spring 1945	975	Domestic	40	2	4	Spring 1945	---	Supplies horse, 100+ hogs, 25 head cattle; also used for cooling milk. Log: Stony blue clay 0 - 120; Blue clay 120 - 170; Red clay 170 - 173; Blue clay 173 - 193; Sand and gravel 193 - 198+.
NoH13-2	NE1/4 sec. 13, 2 1/2 E. of Lisbon	Mrs. Lentous Rauh	do.	1932	1006	Farm	198	2	80	1932	---	Sand at 12 and 25 ft. depths; difficult to obtain well at greater depth in neighborhood. Largely clay, some sand at 40 ft. depth.
NoH14-1	NE1/4 sec. 14, 2 1/2 E. of Lisbon	Paul Miller	Randall	1943	1024	Domestic	52	2	---	---	---	Dug well near well NoH15-1 27 ft. deep. Water level: 26.5 ft. below ground level Dec. 5, 1946.
NoH14-2	SE1/4 sec. 14, 1 S., 2 1/2 E. of Lisbon	Ed. Huelisenbeck	---	About 1902	995	Farm	80	2	65	1945	---	Log: Clay 0 - 32; Sand 32 - 37; Clay 37 - 70; Dry gravel 70 - 115; Gravel 115 - 118+.
NoH15-1	SE1/4 sec. 15, 1 S., 1 E. of Lisbon	Alan Lewis	A. Bonar	June 1945	1028	do.	118	2	110	June 1945	---	Log: Yel. clay 0 - 15; Hardpan (cemented gravel) 15 - 130; Gravel 130 - 138+.
NoH15-2	SE1/4 sec. 15, 1 S., 1 1/2 E. of Lisbon	Edward Lemper	O. A. Billman	Apr. 1945	1045	Domestic	138	2	130	Apr. 1945	---	Abandoned, use spring for supply. Log: Clay 0 - 250+.
NoH16-1	SE1/4 sec. 16, 1/2 S. of Lisbon	Evan Smith	---	---	1047	Farm	128	2	123	1947	---	154 ft. well located on ditch bank south of house, 225 ft. blue clay penetrated at home site. Log: Blue clay 0 - 150; Gravel 150 - 154+.
NoH19-1	NE1/4 sec. 19, 1 S., 2 W. of Lisbon	Roy Walters	A. Bonar	---	1038	None	250	2	---	---	---	
NoH19-2	NE1/4 sec. 19, 1 S., 2 1/2 W. of Lisbon	Roy Postor	O. A. Billman	1939	1003	Domestic	154	2	About 50	1939	---	



Records of wells in Noble County (Allen Township, T. 34 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
MoH23-1	S½S½W¼ sec. 23, 1 N., ½ E. of Avilla	Menrad W. Meyer	H. Dunn	June 1945	981	Domestic	112	2	106	June 1945	---	Sand penetrated at 87 ft., had water level 80 ft. below land surface. Log: Blue clay 0 - 87; Thin layer sand 87 - 88; Clay and stone 88 - 107; Sand and gravel 107 - 112.
MoH25-1	S½S½E¼ sec. 25, 2 E. of Avilla	T. C. McMarrell	Chas. Croy	---	929	Farm	80	2	About 30	Summer 1946	---	Clay to gravel at and below screen.
MoH26-1	N½S½E¼ sec. 26, 1 N., ½ E. of Avilla	F. W. Fitch	---	1932	962	Domestic	70	2	70	1932	---	Log: Clay 0 - 50; Gravel 50 - 139.
MoH26-2	S½S½W¼ sec. 26, 1 E. of Avilla	John Krieg	---	---	954	Farm	73	2	70	1945	---	Well west of and across road from MoH28-2 is 20 ft. deep.
MoH28-1	S½S½W¼ sec. 28, ½ W. of Avilla	John Diehs	A. Bonar	1941	1010	Domestic	139	1½	115	1941	---	Well located at S. side of boiler room. Blue clay and barphen full depth fine sand from 90 to 92 ft., also from 150-152 ft. depth. About 9 ft. of sand and gravel at bottom.
MoH28-2	S½S½W¼ sec. 28, 1 N., ½ W. of Avilla	Gleason Williamson	---	---	1009	do.	128	2	120	1946	---	Log: Blue clay 0 - 125; Gravel 125 - 130.
MoH28-3	S½S½E¼ sec. 28, ½ N., ½ W. of Avilla	Avilla Old Peoples Home	E. J. Bacon	Dec. 1947	1013	Semi-public	314	8	120.0m	May 14, 1948	---	Avilla West Well, produces about 75 g.p.m. with 10-h.p. motor on pump.
MoH30-1	S½S½E¼ sec. 30, 1 N., 2½ W. of Avilla	Elmer Wells	Ad. Wilson	1937	1000	Domestic	130	2	About 75	1937	---	Avilla East Well, produces about 75 g.p.m. with 7½-h.p. motor on pump.
MoH34-1-1	S½S½E¼ sec. 34, in Avilla, 1 block W. of S.R. 3, 1 block S. of S.R. 8 extended.	Town of Avilla	---	Sept. 1924	970	Public supply	122	8	90	Sept. 1924	---	Log: Yel. clay 0 - 10; Blue clay 10 - 75; Gravel (dry) 75 - 85; Blue clay 85 - 90; Gravel 90 - 110.
MoH34-1-2	N½S½E¼ sec. 34, in Avilla, 30 ft. east of MoH34-1-1	do.	---	Sept. 1924	970	do.	118	6	---	---	---	Iron and lime present in water. Largely clay for full depth of well, quicksand at screen.
MoH34-2	N½S½W¼ sec. 34, ½ W. of Avilla	Linus Fisher	A. Bonar	Nov. 1947	970	Domestic	About 110	2	107	Nov. 1947	---	Log: Yel. clay 0 - 10; Soft blue clay 10 - 60; Gravel 60 - 65.
MoH35-1	S½S½E¼ sec. 35, ½ S., ½ E. of Avilla	Herman Lash	M. Card	1937	938	do.	55	2	About 48	Summer 1946	---	Supplies 140 head cattle. Very good gravel at screen.

Records of wells in Noble County (Washington Township, T. 33 N., R. 8 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
Mo11-1	S½S½E¼ sec. 1, 2½ W. of Wolf Lake	Glos Lemon	Malvin Wheeler	July 1945	955	Farm	65	2	90	July 1945	---	Log: Yel. clay 0 - 10; Soft blue clay 10 - 60; Gravel 60 - 65.
Mo12-1	S½S½E¼ sec. 2, 3 W. of Wolf Lake	Prentice Wiley	Ad. Wilson	---	943	do.	100	2	65	June 24, 1947	---	Supplies 140 head cattle. Very good gravel at screen.
Mo14-1	N½S½W¼ sec. 4, 2 N., 1 W. of Washington Center	Ray Prentice	O. A. Hillman	1944	940	do.	61	2	52	1944	---	Dug well abandoned and filled was 30 ft. deep. Log: Yel. clay 0 - 6; Blue clay 6 - 56; Gravel 56 - 61.
Mo19-1	S½S½E¼ sec. 9, at Washington Center	Washington Township School	do.	1924	921	Public supply	105	4	40	1924	---	Log: Sand and gravel 0 - 20; Blue clay 20 - 100; Gravel 100 - 105.
Mo19-2	S½S½E¼ sec. 9, at Washington Center	I. G. Ritter	Test Peppinger	Sept. 19, 1947	926	Domestic	73	2	36.1g	Oct. 22, 1947	---	Water has little mineral content. Log: Sand and gravel (dry) 0 - 40; Blue clay 40 - 60; Very fine buff sand 60 - 70; Coarse sand and gravel 70 - 73.
Mo19-3	N½S½E¼ sec. 9, 1 W. of Washington Center	Imanol D. Gaff	Ad. Wilson	1943	908	do.	60	2	12	1943	---	Clay to water-bearing sand and gravel at screen.

Records of wells in Noble County (Washington Township, T. 33 N., R. 8 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No10-1	SE1/4 sec. 10, 1/2 N., 1 E. of Washington Center	Walter and Albert Stump	Ad. Wilson	1945	938	Farm	90	2	90-	1945	---	Clay to water-bearing sand and gravel at screen.
No11-1	NE1/4 sec. 13, 1/2 S., 2 1/2 E. of Washington Center	Geor ge Stults	do.	Spring 1944	932	do.	95	2	20	Spring 1944	---	Wells at various depths in neighborhood. Blue clay and harden prominent with layers of sand at depths of 11, 32, and 50 ft.
No11-1-1	NE1/4 sec. 14, 1 E. of Washington Center	Charles Beers	O. A. Billman	May 1947	944	do.	86	2	49	May 1947	---	---
No11-2	NE1/4 sec. 14, 1 1/2 E. of Washington Center	O. P. Piper	do.	Aug. 1946	940	do.	102	2	48	Aug. 1946	---	Thin layer of sand at 30 ft. depth. Log: Clay 0 - 5; Gravel 5 - 10; Clay 10 - 95; Gravel 95 - 102+.
No11-5-1	SE1/4 sec. 15, at cottage on east shore of Smalley Lake	Harold E. Pearson	do.	Spring 1946	906	Domestic	90	2	25	Spring 1946	---	Log: Sand and gravel 0 - 25; Sandy blue clay 25 - 85; Gravel 85 - 90+.
No11-8-1	NE1/4 sec. 18, 1 N. of Wilmet	Roginald Oelder	D. Card	Oct. 1947	934	Farm	87	3	65	Oct. 1947	---	Dynamited at 48 ft. depth. Log: Very stony blue clay 0 - 71; Fine sand 71 - 80; Coarse gravel 80 - 83; Fine gravel (uniform) 83 - 87+.
No11-8-2	NE1/4 sec. 18, 1/2 N. of Wilmet	John L. Scott	do.	Oct. 1947	907	do.	50	2	30	Oct. 1947	---	Use about 300 gallons a day for 7 head cattle 20 hogs, and domestic use.
No11-9-1	NE1/4 sec. 19, 1/2 E. of Wilmet	T. E. Hittner	O. A. Billman	Winter 1946	894	Domestic	19	1 1/2	14	Winter 1946	---	Log: Sand and gravel 0 - 19+.
No12-1	SE1/4 sec. 20, 1/2 S., 1 E. of Wilmet	Joseph Adams	Malvin Wheeler	Apr. 22, 1947	906	do.	42	2	22	Apr. 22, 1947	---	Well at barn 58 ft. deep. Log: Reddish clay 0 - 4; Sand and gravel 4 - 42+.
No12-2	SE1/4 sec. 20, 1 S., 1 1/2 E. of Wilmet	do.	Mal Card	1934	923	Stock	80	2	30	1934	---	Log: Clay with strips of sand and gravel 0 - 75; Good sand and gravel 75 - 80+.
No12-1-1	NE1/4 sec. 21, 1 S., 2 E. of Wilmet	Scott Rider	Ad. Wilson	1937	925	Domestic	40	2	32	1937	---	Clay to water-bearing sand and gravel at screen.
No12-2-1	NE1/4 sec. 22, 1 1/2 S., 1 E. of Washington Center	Noah S. Stump	Malvin Wheeler	Dec. 1943	943	do.	102	2	67	Dec. 1943	---	See Appendix B.

Records of wells in Noble County (Noble Township, T. 33 N., R. 9 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No11-1	NE1/4 sec. 1, 3 S., of Albion	Bantman Keta	Glenn Hre	About 1937	896	Stock	42	2	-9	About 1937	---	Flows perennially. Log: Clay 0 - 40; Gravel 40 - 42+.
No13-1	SE1/4 sec. 3, 1/2 N., 1 E. of Wolf Lake	Harvey Keister	do.	1946	926	Farm	60	2	35	1946	---	Log: Clayey gravel 0 - 55; Gravel 55 - 60+.
No13-2	NE1/4 sec. 3, 1 N., 1 E. of Wolf Lake	D. Burnhiser	Ad. Wilson	1943	935	Domestic	45	2	35	1943	---	---
No13-3	SE1/4 sec. 3, 1 N., 2 E. of Wolf Lake	Vernon Geiger	do.	---	963	Farm	105	2	60	1942	---	Well across road and NW of No13-3 is 67 ft. deep. Largely clay, with thin layers of sand through full depth of well.
No14-1	NE1/4 sec. 4, 1 N., of Wolf Lake	Levi Price	Glenn Hre	1936	899	Stock	42	2	0.5	1936	---	Log: Muck 0 - 5; Blue clay 5 - 35; Coarse gravel 35 - 42+.
No16-1	SE1/4 sec. 6, 1 W. of Wolf Lake	Mrs. Hazel Locky	do.	1940	951	do.	109	2	50	1947	---	Log: Yel. clay 0 - 31. Cemented gravel, coarse, hard 31 - 90; Yel. clay 90 - 105; Gravel (poor size) 105 - 109+.
No17-1	NE1/4 sec. 7, 2 W. of Wolf Lake	Joseph A. Stankey	O. A. Billman	About 1925	948	Domestic	85	2	60	About 1925	---	Old well was 55 ft. deep.

Records of wells in Noble County (Noble Township, T. 33 N., R. 9 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
No. 1-1	Section 8, at cottage on N. shore of Bear Lake.	Ed. Overhauser	T. M. Blair	Oct. 1947	908	Domestic	75	2	6	Oct. 1947	—	Log: Yel. clay 0 - 20; Blue clay 20 - 71; Sand and gravel 71 - 75+.
No. 1-1	Section 9, at Wolf Lake (village)	Ad. Wilson	Ad. Wilson	About 1922	911	do.	50	1 1/2	About 15	About 1922	—	Log: Clay 0 - 3; Sand and gravel 3 - 50+.
No. 1-2	Section 9, at Wolf Lake (village)	Edward Woods Standard Service	Glenn Hire	May 1938	910	Public supply	122	2	18	May 1938	—	Water used in drinking fountain for public use. Sand and gravel 0 - 115; Cemented gravel 115 - 119; Sand and gravel 119 - 122.
No. 1-3	Section 9, 1/2 N., 1/2 E. of Wolf Lake	Merle Brewer	do.	Fall 1946	905	Domestic	31	2	About 10	Fall 1946	—	Log: Clay, sand and gravel 0 - 10; Gravel 10 - 31+.
No. 11-1	Section 11, 1 N., 1 W. of Burr Oak	J. N. Kestel	Ad. Wilson	1940	914	do.	45	2	About 10	1940	—	Water is high in iron content. Log: Blue clay 0 - 10; Sand and gravel 10 - 45+.
No. 12-1	Section 12, 1/2 N., of Burr Oak	Walter Meyer	Chas. Bumbeliser	Nov. 3, 1947	936	Farm	45	2	40.9m	Nov. 3, 1947	—	Log: Yel. sand and gravel 0 - 45+.
No. 13-1	Section 13, 1/2 S. of Burr Oak	R. O. Dancoer	Walter Gordon	Aug. 1947	935	do.	48	2	45	Aug. 1947	—	Log: Red sandy clay 0 - 45; Fine sand 45 - 48; Blue clay 48+.
No. 14-1	Section 14, 1/2 S., 1 W. of Burr Oak	Mrs. O. J. Stangland	Hire and Wilson	May 1945	922	do.	260	2	About 25	May 1945	—	See Appendix B.
No. 14-2	Section 14, 1/2 N., 1/2 W. of Merriam, on U.S. Route 33	Frank Ott	Glenn Hire	Oct. 1942	924	do.	109	2	28	Oct. 1942	—	Log: Clay 0 - 60; Clay with large stones 60 - 90; Clay 90 - 105; Sand 105 - 109+.
No. 15-1	Section 15, 2 N., 2 1/2 W. of Merriam	W. Vanmeter	Ad. Wilson	1942	923	do.	190	2	25	1942	—	Stones in clay omitted. Log: Dry gravel 0 - 10; Stony clay 10 - 185; Gravel 185 - 190+.
No. 15-2	Section 15, 2 N., 2 W. of Merriam	Victor Edwards	Glenn Hire	About 1939	920	Domestic	33	1 1/2	30	About 1939	—	Log: Reddish clay 0 - 30; Sand and gravel 30 - 33+.
No. 17-1	Section 17, on east shore of Bear Lake	Clyde Smith	Ad. Wilson	1945	901	do.	120	2	5	1945	—	Log: Blue clay 0 - 117; Gravel 117 - 120+.
No. 18-1	Section 18, on north shore of east tip of High Lake	Eugene Shaw	Glenn Hire	June 1940	899	do.	70	2	10	June 1940	—	Well supplies several cottages. Log: Lake sand 0 - 15; Soft clay, (yellowish) 15 - 66; Clam, fine sand 66 - 70+.
No. 19-1	Section 19, 1 N., 1/2 W. of Merriam	Ed. Burub	do.	1937	915	Stock	74	2	25	1937	—	Well north, and across road from No. 19-1 is 166 ft. deep, water level is 40 ft. below land surface. Log: Clay 0 - 20; Clay and sand 20 - 22; Yel. clay, stony 22 - 68; Gravel 68 - 74+.
No. 19-2	Section 19, 1 N., 1/2 W. of Merriam	John and Merle Adair	do.	1945	911	Farm	64	2	25	1945	—	Wells at various depths in neighborhood. Log: Clay 0 - 50; Small stones 50 - 53; Clay 53 - 57; Coarse gravel 57 - 64+.
No. 21-1	Section 21, 1 N., 2 1/2 W. of Merriam	J. P. Stangland	do.	1946	913	Industrial	30	3	20	1946	—	Well used at mint still. Log: Marl 0 - 27; Coarse gravel and sand mixture 27 - 50; Marl below.
No. 22-1	Section 22, 1 N., 2 1/2 W. of Merriam	Thomas Mangum	do.	1937	919	Stock	23.5m	1 1/2	15.0m	Oct. 2, 1947	—	Log: Clay 0 - 1; Fine sand 1 - 19; Gravel, dirty fine 19 - 24+.
No. 22-1	Section 22, 1 N., 2 1/2 W. of Merriam	Thomas Mangum	do.	1937	920	Farm	187	2	40	1937	—	Water is of good quality. Log: Clay with coarse gravel and stones 0 - 185+; Gravel 185+ - 187+.

Records of wells in Noble County (Noble Township, T. 33 N., R. 9 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoJ22-2	NE1/4 sec. 22, 1/2 N., 1/2 W. of Merriam	Mrs. Pauline Klingeman	Glenn Hise	1941	904	Industrial	52	2	20	1941	—	Well at sink still. Log: Muck 0 - 2; Blue clay 2 - 47; (stood open full thickness) Sand and gravel 47 - 52.
MoJ23-1	SE1/4 sec. 23, 1 NW of Merriam along U.S. Route 33	Arthur McLellan	—	—	937	Observation	27.5	1 1/2	0	—	—	Observation well Noble 3. All sand and gravel.
NoJ24-1	SE1/4 sec. 24, 1/2 N. of Merriam	H. D. Zumbro	Ad. Wilson	1912	947	Farm	184	2	100	1941	—	Log: Blue clay 0 - 90; Vel. clay soft 90 - 180; Fine sand 180 - 184.
NoJ25-1	SE1/4 sec. 25, at Merriam, 0.1 W. of S. R. 9, S. side of U.S. Route 33	Dean Kiestler	Glenn Hise	Nov. 1945	937	Domestic	196	2	60	Nov. 1945	—	Log: Red dry clay 0 - 30; Clay, layers of gravel and stone 30 - 190; Hardpan 190 - 192; Gravel 192 - 194+.
NoJ25-2	NE1/4 sec. 25, 1/2 W. of Merriam	Miss Ona Lagman	do.	Oct. 1944	960	do.	66	2	57	Oct. 1944	—	Log: Hard blue clay 0 - 60; Sand and gravel (fine) 60 - 66+.
NoJ26-1	NE1/4 sec. 26, 1/2 N., 1/2 W. of Merriam	R. C. McDowell	Walter Jordan	Spring 1941	943	Farm	194	3	50	Spring 1947	—	1.5-ft. thickness of clay, increases in hardness with depth. Hardpan at bottom of clay. Log: Vel. clay 0 - 15; Blue clay 15 - 24; Dry sand 24 - 30; Blue clay 30 - 186; Coarse gravel 186 - 194+.
NoJ28-1	NE1/4 sec. 28, 1/2 N., 2 1/2 W. of Merriam	O. N. Butler	T. M. Bair	Fall 1944	920	do.	151	2	50	Fall 1944	—	Blue clay to water-bearing sand and gravel at bottom of well.
NoJ30-1	NE1/4 sec. 30, 5 W. of Merriam	Marie Adair	Malvin Wheeler	June 1947	921	Domestic	190	2	40	June 1947	—	Stone encountered at 163 ft. depth. Log: Clay 0 - 90; Fine sand 90 - 95; Very hard blue clay 95 - 110; Blue clay 110 - 185; Sand and gravel 185 - 190+.
NoJ31-1	SE1/4 sec. 31, 1/2 S., 5 W. of Merriam	B. F. Wolfe	do.	Apr. 15, 1947	926	Farm	93	2	58	Apr. 15, 1947	—	Log: Sort blue clay 0 - 80; Sand and gravel, fine at top, 80 - 95+.
NoJ33-1	SE1/4 sec. 33, on E. shore of Big Lake, at cottage	Glenn J. Gebby	Ad. Wilson	1937	898	Domestic	265	2	8	1937	—	Log: Very fine sand 0 - 23; Coarse gravel 23 - 265+.
NoJ33-2	SE1/4 sec. 33, on E. shore of Big Lake, S. of ditch at cottage	Mrs. Sarah Bowman	Glenn Hise	Sept. 1947	903	do.	89	2	15	Sept. 1947	—	Log: Clay 0 - 10; Sand with thin clay streaks, stood open 10 - 81; Gravel 81 - 89+.
NoJ33-3	NE1/4 sec. 33, 1/2 S., 3 W. of Merriam	William S. Barick	T. M. Bair	About 1907	917	Farm	231	2	About 15	About 1907	—	Log: Very fine sand 0 - 231+.
MoJ35-1	SE1/4 sec. 35, 1/2 S., 1 W. of Merriam	Lawrence Ott	—	—	About 980	Abandoned	33	3/8	8	—	—	—

Records of wells in Noble County (Green Township, T. 33 N., R. 10 E.)

NoK2-1	SE1/4 sec. 2, 1 S., 1/2 E. of Bakerston	Chauncey McCoy	Ted Peppinger	About 1937	972	Farm	70	2	About 50	1937	—	Thin layer of sand at 35 ft. depth. Log: Open pit (old dug well) 0 - 35; Blue clay 35 - 62; Sand and gravel 62 - 70+.
NoK2-2	NE1/4 sec. 2, 1 S., 1/2 E. of Bakerston	Jesse Targart	Walter Gordon	Apr. 1947	991	Domestic	98	2 1/2	90	Apr. 1947	—	Three springs on farm. See Appendix B.
NoK3-1	NE1/4 sec. 3, 2 1/2 N., 1/2 mi. E. of Green Center	Mabel Crothers	do.	Fall 1945	973	Farm	96	2	60	Fall 1945	—	Water contains iron. Log: Clay, soft 0 - 76; Fine white sand 76 - 96+.
NoK5-1	NE1/4 sec. 5, 3 N., 1 W. of Green Center	Harmon Boggs	Ad. Wilson	1942	956	do.	86	2	—	—	—	Log: Clay 0 - 80; Sand and gravel (?) 80 - 86+.
NoK5-2	SE1/4 sec. 5, 2 N., 2 W. of Green Center	Carlos McWilliam	Chas. Brounough	1922	964	do.	95	2	About 30	1922	—	Flowing well on low ground 1/4 mi. S. of house, 55 ft. deep. Static water level 8 ft. above land surface.

Records of wells in Noble County (Green Township, T. 33 N., R. 10 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
NoK6-1	SW <sup>1</sup> / <sub>4</sub> sec. 6, 2 <sup>1</sup> / <sub>2</sub> E. of Albion	Howard Foster	---	---	923	Stock	35	2	22.14	Dec. 18, 1946	---	Located on top of hill.
NoK6-2	SW <sup>1</sup> / <sub>4</sub> sec. 6, 2 <sup>1</sup> / <sub>2</sub> E., 2 <sup>1</sup> / <sub>2</sub> W. of Green Center	L. E. Peppinger	---	About 1900	939	Farm	130	2	30	1946	---	New screen required every 4-5 years.
NoK7-1	SE <sup>1</sup> / <sub>4</sub> sec. 7, 1 <sup>1</sup> / <sub>2</sub> E., 2 W. of Green Center	Mrs. B. F. Walberg	Ted Peppinger	May 1942	948	Domestic	80	2	50	May 1942	---	Water contains iron, dynamite required to penetrate stony clay, wells 55 ft. deep on low ground flow. Log: Clay 0 - 62; Sand and gravel 62 - 80+ (Some water sand at 30 ft. depth). Neighbor's well is 68 ft. deep. Log: Clay 0 - 65; Sand 65 - 67; Clay 67 - 146; Good sand and gravel 146 - 154 <sup>+</sup>
NoK9-1	NE <sup>1</sup> / <sub>4</sub> sec. 9, 1 E. of Green Center	George Bower	---	---	964	Abandoned	154	2	80	About 1934	---	Old well was 64 ft. deep, abandoned because of water-level decline. Log: Clay 0 - 62; Sand 62 - 64; Blue clay 64 - 84; Sand, fine at top, grades to gravel at bottom 84 - 96 <sup>+</sup> .
NoK10-1	SE <sup>1</sup> / <sub>4</sub> sec. 10, 1 <sup>1</sup> / <sub>2</sub> E. of Green Center	Roy Kimmel	Ted Peppinger	Nov. 1946	971	Farm	96	2	65	Nov. 1946	---	Yel. clay at top, sandy blue clay, coarse gravel at screen.
NoK10-2	NE <sup>1</sup> / <sub>4</sub> sec. 10, 1 <sup>1</sup> / <sub>2</sub> E. of Green Center	George Bower	Bonar and Gordon	1937	969	do.	156	2	---	---	---	Some lime in water, old wells at 64, 80, 109 and 122-ft. depths. Two springs on farm. Blue clay between given well depths, good gravel at each depth, gravel at 140 ft. depth 20 ft. thick plus (1) ft. below.
NoK11-1	SW <sup>1</sup> / <sub>4</sub> sec. 11, 1 E., 1 <sup>1</sup> / <sub>2</sub> E. of Green Center	William J. McCoy	Ted Peppinger	Feb. 1945	979	do.	140	2	About 100	Feb. 1945	---	Log: Clay 0 - 40; Gravel (dry) 40 - 80; Hardpan and stone 80 - 130; Gravel 130 - 134 <sup>+</sup> .
NoK12-1	NE <sup>1</sup> / <sub>4</sub> sec. 12, 1 <sup>1</sup> / <sub>2</sub> E., 3 E. of Green Center	Daniel Schaefer	A. Bonar	1943	969	do.	134	2	100	1943	---	See Appendix B.
NoK13-1	SW <sup>1</sup> / <sub>4</sub> sec. 13, 1 E., 2 E. of Green Center	Henry Butler	Walter Gordon	1942	961	do.	120	2	90	Winter 1946	---	Iron in water, well pumps clayey water.
NoK14-1	SW <sup>1</sup> / <sub>4</sub> sec. 14, 1 E. of Green Center	Mrs. Vandolick	Thompson Bros	About 1922	937	do.	109	2	About 55	About 1922	---	Old well 160 ft. deep, abandoned. Log: Yel. clay 0 - 10; Blue clay 10 - 21; Sand and gravel 21 - 23; Blue clay 23 - 38; Sand and gravel 38 - 44 <sup>+</sup> .
NoK15-1	SW <sup>1</sup> / <sub>4</sub> sec. 15, 1 E., 1 <sup>1</sup> / <sub>2</sub> E. of Green Center	George Hoffman	Ted Peppinger	1944	943	Domestic	44	2	34	1944	---	Log: Yel. clay 0 - 15; Blue clay 15 - 130; Quicksand 130 - 160; Gravel 160 - 165 <sup>+</sup> .
NoK16-1	NE <sup>1</sup> / <sub>4</sub> sec. 16, 1 E., 1 W. of Green Center	James Brumbaugh Estate	Chas. Brumbaugh	About 1914	992	Farm	165	2	About 65	About 1914	---	See Appendix B.
NoK16-2	NE <sup>1</sup> / <sub>4</sub> sec. 16, 1 E. of Green Center	W. F. Peppinger	Ted Peppinger	1943	969	Abandoned test	190	2	---	---	---	Log: Yel. clay 0 - 15; Blue clay stony 15 - 70; Gravel 70 - 71 <sup>+</sup> ; Sandy clay 71 <sup>+</sup> - 128; Medium sand 128 - 138 <sup>+</sup> .
NoK17-1	NE <sup>1</sup> / <sub>4</sub> sec. 17, 1 E., 2 W. of Green Center	L. T. Young	Walter Gordon	Nov. 1947	975	Farm	138	2 <sup>1</sup> / <sub>2</sub>	98	Nov. 1947	---	Temperature 52° F. Dec. 1947. One screen in use entire life of well without maintenance. See Appendix B.
NoK17-2	SE <sup>1</sup> / <sub>4</sub> sec. 17, 1 W. of Green Center	Wilbur Smith	do.	About 1929	982	do.	144	2	40	About 1929	---	Water high in iron content. Log: Blue clay 0 - 41; Fine sand 41 - 42 <sup>+</sup> ; Blue clay 42 <sup>+</sup> - 173; Fine sand 173 - 188; Coarse gravel 188 - 191 <sup>+</sup> .
NoK19-1	NE <sup>1</sup> / <sub>4</sub> sec. 19, 3 W. of Green Center	Cecil Gaff	do.	1937	963	do.	191	2	41	1937	---	Log: Yel. clay 0 - (?); Blue clay (sticky) (?) - 60; Coarse gravel 60 - 63; Clay below.
NoK22-1	SE <sup>1</sup> / <sub>4</sub> sec. 22, 1 S., 1 E. of Green Center	Robert Delaney	do.	Spring 1947	933	do.	63	2	About 40	Spring 1947	---	

Records of wells in Green County (Green Township, T. 23 N., R. 10 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
KoE22-2	SW $\frac{1}{4}$ sec. 22, at Green Center	William Litch	Ted Peppinger	1943	949	Domestic	108	2	80	1943	---	Well north and across rd. from KoE22-2 is 40 ft. deep. See Appendix B.
KoE23-1	NE $\frac{1}{4}$ sec. 23, 1 S., 2 E. of Green Center	J. L. Hill	do.	Summer 1947	934	Farm	70	2	95	Summer 1947	---	Logs: Yel. clay 0 - 14; Blue clay 14 - 40; Sand 40 - 45; Blue clay with stones 45 - 60; Sand and gravel 60 - 70+.
KoE23-2	NE $\frac{1}{4}$ sec. 23, 2 E. of Green Center	Noah Litch	Bonar and Gordon	1931	947	do.	108	2	73	1931	---	Water contains iron. Logs: Clay 0 - 5; Gravel 5 - 23; Clay 23 - 44; Hardpan 44 - 47; Clay 47 - 103 $\frac{1}{2}$ ; Gravel 103 $\frac{1}{2}$ - 108+.
KoE24-1	NE $\frac{1}{4}$ sec. 24, 3 E. of Green Center	Lee Hill	Ted Peppinger	1944	924	do.	21	3	15	1944	---	Water contains small quantity of iron. Clay to water-bearing materials at screen.
KoE25-1	SW $\frac{1}{4}$ sec. 25, 1 S., 2 E. of Green Center	Gleam Arnhart	---	About 1932	922	do.	62	3	54	1945	---	Iron in water, new screen about every 5 ym. Logs: Sandy clay 0 - 56; Medium gravel 56 - 62+.
KoE26-1	SW $\frac{1}{4}$ sec. 26, 2 S., 1 E. of Green Center	Franklin Geiger	Walter Gordon	Jan. 1944	921	do.	47	2	38	Jan. 1944	---	Logs: Clay 0 - 41; Sand and gravel 41 - 47+.
KoE28-1	NE $\frac{1}{4}$ sec. 28, 1 S., 1 W. of Green Center	Marion Clouse	Ted Peppinger	1942	956	do.	105	2	---	---	---	Logs: Yel. and blue clay 0 - 50; Sand and gravel (dry) 50 - 60; Blue clay 60 - 100 $\frac{1}{2}$ ; Sand and gravel 100 $\frac{1}{2}$ - 105+.
KoE29-1	NE $\frac{1}{4}$ sec. 29, 1 S., 2 W. of Green Center	Harry Shroyer	Walter Gordon	1931	949	do.	327	2	80	1931	---	See Appendix B.
KoE30-1	NE $\frac{1}{4}$ sec. 30, 1 S., 2 W. of Green Center	Pete Harlan	Walter TrueLove	About 1936	969	do.	258	2	About 100	1942	---	See Appendix B.
KoE3-1	NE $\frac{1}{4}$ sec. 31, 3 S., 2 W. of Green Center	Ellis Clouse	Walter Gordon	June 24, 1946	981	do.	154	2	About 70	June 24, 1946	---	Old well about 70 ft. deep, water level at bottom of wall.
KoE32-1	NE $\frac{1}{4}$ sec. 32, 2 S., 1 W. of Green Center	Lloyd Clarion	Ted Peppinger	July 1943	932	do.	137	2	40	July 1943	---	Thin layers of sand and gravel at 30 ft. and 60 ft. depths. Logs: Yel. clay 0 - 10; Blue clay 10 - 132 $\frac{1}{2}$ ; Sand and gravel 132 $\frac{1}{2}$ - 137+.
KoE32-2	NE $\frac{1}{4}$ sec. 32, 3 S., 2 W. of Green Center	Hamon Clouse	---	---	954	do.	115	2	25	1940	---	---
KoE32-3	SW $\frac{1}{4}$ sec. 32, 3 S., 1 W. of Green Center	J. Leslie Gaff	William Keeds	Fall 1943	916	do.	90	2	20	Fall 1943	---	Logs: Clay 0 - 10; Sand and fine gravel 10 - 30+
KoE33-1	NE $\frac{1}{4}$ sec. 33, 2 S., 1 W. of Green Center	Leo Ingers	Walter Gordon	Feb. 1947	924	do.	137	2 $\frac{1}{2}$	60	Feb. 1947	---	Spring at foot of hill SE. of house. Logs: Clay 0 - 130; Sand 130 - 137+ (strat. of sand at 35 or 40 ft. depth).
KoE33-2	SW $\frac{1}{4}$ sec. 33, 2 S. of Green Center	W. F. Peppinger	Allison Dull	About 1905	900	do.	189	2	12	1941	---	Logs: Yel. clay 0 - 10; Blue clay (no stones) 10 - 186; Sand and gravel 186 - 189; Clay below.
KoE34-1	NE $\frac{1}{4}$ sec. 34, 2 S., 1 E. of Green Center	Harry Riddle	---	---	904	do.	40	3	About 25	Nov. 1947	---	Logs: Sand and gravel 0 - 30; Clay 30 - 34; Sand and gravel 34 - 40+.
KoE34-2	NE $\frac{1}{4}$ sec. 34, 2 S., 1 E. of Green Center	Clarence Barnhart	Bonar and Gordon	About 1930	910	do.	56	2	11-5	1944	---	---
KoE35-1	SW $\frac{1}{4}$ sec. 35, 3 S., 2 E. of Green Center	Marlin RodA	Gleam Elre	Jan. 1947	905	do.	53	2	45	Jan. 1947	---	Logs: Clay 0 - 48 $\frac{1}{2}$ ; Sand and gravel 48 $\frac{1}{2}$ - 53+.
KoE35-2	SW $\frac{1}{4}$ sec. 35, 2 S., 2 E. of Green Center	do.	---	---	914	Domestic	43	2	39	June 1947	---	Logs: Clay 0 - 38 $\frac{1}{2}$ ; Sand and gravel 38 $\frac{1}{2}$ - 43+.

Records of wells in Noble County (Green Township, T. 33 N., R. 10 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
Mo12-3	SE1/4 sec. 3, 2 1/2 S., 1 E. of Green Center	Marshall Warren	Ted Peppinger	1944	900	Farm	53	2	38	1944	---	Old well 270 ft. deep. Log: Yel. clay 0 - 10; Blue clay 10 - 47; Firm sand and gravel 47 - 53; Blue clay below.

Records of wells in Noble County (Sean Township, T. 33 N., R. 11 E.)

Mo12-1	NE1/4 sec. 1, 1 S., 2 1/2 E. of Avilla	Charles Waller	Charles Gray	About 1920	908	Domestic	85	2	About 25	About 1920	---	Water level in shallow gravel is 4 ft. below surface. Log: Clay 0 - 20; Blue gravel 20 - 35; Boulder clay 35 - 80; Coarse gravel 80 - 85+
Mo12-2	SE1/4 sec. 1, 2 S., 2 E. of Avilla	Victor Zumbrenen	do.	1948	888	Farm	66	2	50	1945	---	Log: Blue clay with some sand streaks 0 - 60; Sand and gravel 60 - 66+
Mo12-3	SE1/4 sec. 1, 1 1/2 S., 1 1/2 E. of Avilla	Vi Treulove	do.	1936	916	do.	32	2	30	1936	---	Owner reports a water-level decline of 3-4 ft. during 15 years caused by dredging in area. Log: Clay and bursden 0 - 20; Very fine sand 20 - 32+
Mo12-1	NE1/4 sec. 2, 1 S., 1 E. of Avilla	Herman Brunen	---	---	936	Domestic	60	2	49	Spring 1947	---	Log: Blue clay 0 - 54; Good sand and gravel 54 - 60+
Mo12-2	NE1/4 sec. 2, 1 1/2 S., 1 1/2 E. of Avilla	Morris Tarian	A. Boar	Summer 1946	916	Farm	47	2	40	Summer 1946	---	Soft water. Log: Clay 0 - 14; Gravel with water 14 - 20; Blue clay 20 - 39; Bursden 39 - 40; Fine gravel 40 - 47+
Mo12-3	SE1/4 sec. 2, 2 S., 1 E. of Avilla	Mhdn Rotkamp	---	About 1900	911	do.	40	2	25	Oct. 1946	---	Owner reports noticeable water-level decline. Log: Clay 0 - 7; Gravel 7 - 40.
Mo12-4	SE1/4 sec. 2, 2 S., 1 1/2 E. of Avilla	Jessie Veegardner	---	About 1900	929	do.	48	2	40	July 1947	---	Largely clay to screen.
Mo12-1	NE1/4 sec. 3, 1 S., 1 E. of Avilla on S.R. 3	Chester Cantator	Chas. Gray	June 1946	925	do.	51	2	20	June 1946	---	New screen required every 2 years. Log: Yel. clay 0 - 25; Fine sand 25 - 42; Gravel 42 - 51+
Mo12-1	NE1/4 sec. 4, 1 S., 1 1/2 E. of Avilla	Owen Suite	A. Boar	Sept. 1946	936	Domestic	106	2	71	Sept. 1946	---	Log: Clay 0 - 65; Sand and gravel (medium at top, fine at bottom) 65 - 116+
Mo12-1	NE1/4 sec. 5, 1 S., 2 E. of Avilla	Charles Ragerman	M. Gard	1935	978	Stock	85	2	About 85	About 1935	---	Wells in upper part of water-bearing material require much maintenance. Log: Clay 0 - 75; Sand and gravel 75 - 85+
Mo12-2	SE1/4 sec. 5, 2 S., 2 E. of Avilla	Frank Weaver	---	About 1900	939	Farm	98	2	15	Aug. 1947	---	Log: Clay 0 - 54; Sand 54 - 58+
Mo12-3	SE1/4 sec. 5, 2 S., 2 W. of Avilla	Edward Zolman	---	1936	961	do.	128	2	63	Oct. 1947	---	Iron in water. Log: Clay 0 - 18; Coarse gravel 18 - 20; Clay 20 - 116; Gravel 116 - 128+
Mo12-1	NE1/4 sec. 6, 1 S., 3 1/2 E. of Avilla	M. M. Yarian	---	---	992	Abandoned	104	2	88.20	Dec. 20, 1946	---	---
Mo12-2	SE1/4 sec. 6, 2 N., 3 E. of Green Center	Jonas K. Bell	Charles Martin	Oct. 1944	1003	Farm	126	2	About 25	Oct. 1944	---	Well west of and across road from Mo12-2 is about same depth. Log: Clay 0 - 120; (streak of sand at about 85 ft. depth) Sand and gravel (?) 120 - 126+
Mo12-1	SE1/4 sec. 7, 2 1/2 N. of Eye	R. T. Pfildner	---	Before 1911	963	do.	131	2	70	About 1935	---	Iron in water.
Mo12-1	NE1/4 sec. 9, 2 S., 1 W. of Avilla	Arthur Schenrich	William Reinbolt	About 1920	939	do.	60	2	---	---	---	Largely clay to water-bearing materials at screen.

Records of wells in Noble County (Swan Township, T. 33 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
Well-1	SE $\frac{1}{4}$ sec. 10, 2 $\frac{1}{2}$ S., $\frac{1}{2}$ W. of Avilla	E. L. Young	—	Before 1904	933	Farm	About 75	2	28	1942	—	Well requires new screen every 4 years. Screen becomes incrustated with cemented gravel. Clay to water-bearing materials at screen.
Well-2	SE $\frac{1}{4}$ sec. 10, 3 S. of Avilla	J. Small	Charles Croy	1943	931	do.	80	2	About 50	1943	—	Log: Clay 0 - 72; Gravel 72 - 80+.
Well-1	SE $\frac{1}{4}$ sec. 11, 3 S., 1 E. of Avilla, on S.R. 3.	Ovid B. Harrod	do.	July 1945	904	Domestic	62	2	18	July 1945	—	Well at barn 20 ft. deep used for stock. Log: Clay 0 - 35; Boulder clay 35 - 45; Blue clay 45 - 57; Sand 57 - 62+.
Well-2	NE $\frac{1}{4}$ sec. 11, 3 S., 1 E. of Avilla, on S.R. 3.	James Anderson	do.	Fall 1946	905	do.	73	2	30	Fall 1946	—	Log: Blue clay 0 - 70; Sand 70 - 73+.
Well-1	NE $\frac{1}{4}$ sec. 12, 2 S., 2 $\frac{1}{2}$ E. of Avilla	George Freeman	—	—	885	Farm	50	2	13	Summer 1945	—	Old well 40 ft. deep, deepened in summer 1945, driller penetrated clay between the 40 and 50 ft. depths.
Well-2	NE $\frac{1}{4}$ sec. 12, 2 S., 2 E. of Avilla	A. H. King	—	1910	889	do.	48	2	15	1940	—	Log: Red clay 0 - 8; Blue clay 8 - 44; Medium to coarse sand and gravel 44 - 48+.
Well-3	SE $\frac{1}{4}$ sec. 12, 3 S., 2 E. of Avilla	Perry Whan	—	1932	881	Domestic	98	2	20	1943	—	Well at barn is 65 ft. deep, used for stock. ALL sand and gravel (?).
Well-1	NE $\frac{1}{4}$ sec. 13, 3 S., 2 E. of Avilla	John Miant	—	—	879	—	—	—	—	—	—	Gravel-pit location, reportedly 80 ft. + gravel penetrated at site of excavation.
Well-1	NE $\frac{1}{4}$ sec. 14, 2 $\frac{1}{2}$ S., $\frac{1}{2}$ E. of Avilla	R. C. Hostler	Charles Croy	Summer 1945	916	Farm	52	2	About 45	Jan. 1948	—	Old well 43 ft. deep, "went dry" in 1946. Clay to water-bearing materials at screen, some gravel at 43 ft.
Well-1	NE $\frac{1}{4}$ sec. 15, 2 $\frac{1}{2}$ S. of Avilla	Robert Koch	Walter Gordon	Aug. 27 <sup>th</sup> 1947	908	do.	45	2	15	Aug. 27, 1947	—	Log: Yel. clay 0 - 12; Blue clay 12 - 39; Sand and gravel 39 - 43+.
Well-2	NE $\frac{1}{4}$ sec. 15, 3 S., $\frac{1}{2}$ E. of Avilla	Albert Coils	Charles Croy Sr.	1933	924	do.	79.5	2	42	1946	—	Log: Clay 0 - 75; (thin strip of sand at 50 ft. depth) Coarse sand and gravel 75 - 79 $\frac{1}{2}$ +
Well-1	NE $\frac{1}{4}$ sec. 16, 2 $\frac{1}{2}$ S., $\frac{1}{2}$ W. of Avilla	Seckle Yarian	do	About 1906	914	Abandoned	48	2	36.2m	Jan. 15, 1947	—	Well at abandoned school.
Well-2	SE $\frac{1}{4}$ sec. 16, 2 $\frac{1}{2}$ S., 1 $\frac{1}{2}$ W. of Avilla	K. Whannettler	—	—	917	Farm	30	2	About 15	1944	—	—
Well-1	SE $\frac{1}{4}$ sec. 17, 4 W. of Swan	M. Whannettler	—	1907	922	do.	30	2	15	Summer 1943	—	Log: Clay 0 - 27; Sand and gravel 27 - 30+.
Well-2	SE $\frac{1}{4}$ sec. 17, 4 $\frac{1}{2}$ E. of Green Center	Harry Norman	Charles Croy	1939	921	Domestic	40	2	25	1939	—	Water high in sulfate content. Log: Clay 0 - 30; Sand 30 - 40+.
Well-1	NE $\frac{1}{4}$ sec. 18, 1 N., 3 E. of Green Center	J. Lucky	—	—	935	Abandoned	About 60	2	46.8m	Apr. 1, 1947	—	—
Well-2	SE $\frac{1}{4}$ sec. 18, $\frac{1}{2}$ N., 2 $\frac{1}{2}$ E. of Green Center	James Amerson	A. Bonar	1937	932	Domestic	About 50	2	About 30	About 1937	—	Log: Clay 0 - 452; Sand and gravel 452 - 50+.
Well-1	SE $\frac{1}{4}$ sec. 19, $\frac{1}{2}$ N. of Ego	B. Kottinlney	—	—	923	Farm	85	2	About 35	About Fall 1947	—	Water high in iron content.
Well-1	SE $\frac{1}{4}$ sec. 20, $\frac{1}{2}$ E. of Ego	Andrew Hollis	Dunn	1943	917	do.	50	2	About 10	About 1943	—	Clay to water-bearing materials at screen.
Well-2	SE $\frac{1}{4}$ sec. 20, at Ego	Frank Brianski	Walter Gordon	July 1945	918	do.	110	2	20	July 1946	—	Water-bearing materials grade from medium sand at top to coarse gravel at bottom. Log: Sandy blue clay 0 - 85; Sand and gravel 85 - 110+.

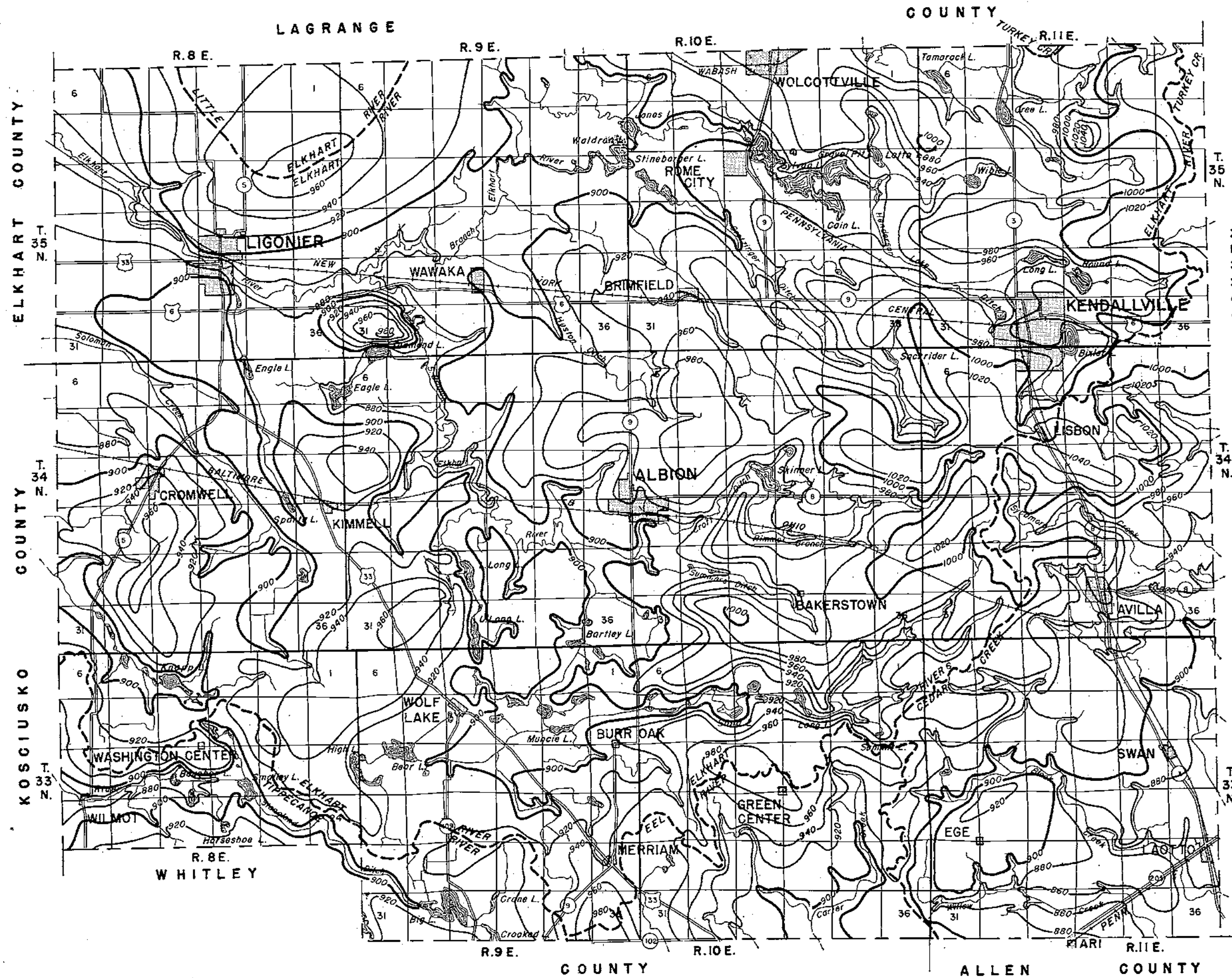


Records of wells in Noble County (Shaw Township, T. 33 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
Mo121-1	NE1/4 sec. 21, 1 E., 1 1/2 N.	Boas Johnson	—	Jan. 1934	915	Farm	32	2	25	Winter 1940	—	Water high in iron content, screen became incrustated after 8 years service.
Mo121-2	SE1/4 sec. 21, 1 1/2 N. of Age	Albert Cusey	Boas and Gordon	1940	900	do.	43	2	40	1940	—	Iron in water. Clay to fine sand and gravel at screen.
Mo122-1	NE1/4 sec. 22, 1/2 S., 3 W. of Swan	Leon Setzler	Charles Croy	June 1947	903	do.	54	2	42	June 1947	—	Log: Clay 0 - 39; Sand 39 - 54+.
Mo122-2	NE1/4 sec. 22, 1/2 S., 1 1/2 W. of Swan	Charles E. Ruff	Chas Croy Sr.	1911	893	do.	66	2	About 15	Oct. 1945	—	New screen in 1945. Log: Clay 0 - 30; Sand 30 - 35; Blue clay 35 - 60; Sand and gravel (1) 60 - 66+.
Mo129-1	NE1/4 sec. 23, 1/2 S. of Swan	E. C. Christensen	—	—	882	do.	54	2	30	1932	—	Well originally was 40 ft. deep. Wells in and near Swan all shallow, 40 to 60 ft. deep.
Mo129-2	NE1/4 sec. 23, 1/2 W., 1 W. of Leotto	William Letter	Chas. Croy Sr.	1910	870	do.	35	2	15	1910	—	Iron in water.
Mo129-3	SE1/4 sec. 23, 2 W. of Leotto	John Cusey	—	—	887	do.	45	2	35	1944	—	Clay to water-bearing materials at screen.
Mo129-4	NE1/4 sec. 25, SE corner of crossing of Penn. R.R. tracks at Leotto	Penn. R.R.	Layne-Northern Co.	Oct. 31, 1937	878	Abandoned feet	21.8	—	28.3	Oct. 31, 1937	—	See Appendix B.
Mo129-5	NE1/4 sec. 25, at Leotto, 1 block W. of S.R. 3, 60 ft. E. of C.J. S.R. 205	Klmer Bredell	Charles Croy	Winter 1946	875	Domestic	65	2	50	Winter 1946	—	Wells in Leotto all about 60 to 70 ft. deep. Log: Yel. clay 0 - 10; Sand 10 - 11 1/2; Blue clay 11 1/2 - 55; Sand 55 - 65+.
Mo126-1	SE1/4 sec. 26, 1 SW of Leotto on S.R. 205	William Fordyce	do.	Aug. 27, 1927	872	do.	51	2	50	Aug. 27, 1927	—	Log: Clay 0 - 30; Sand 30 - 54+.
Mo126-2	SE1/4 sec. 26, 1 SW of Leotto S. of Penn.R.R. tracks	Aaron Bartler	do.	Mar. 1944	880	Farm	101	2	30	Mar. 1944	—	Log: Clay 0 - 50; Fine sand 50 - 56; Clay 56 - 96; Coarse gravel 96 - 101+.
Mo126-3	NE1/4 sec. 26, 2 W. of Leotto	Carl Houser	do.	Nov. 1944	887	do.	45	2 1/2	35	Nov. 1944	—	Clay to water-bearing materials at screen.
Mo127-1	NE1/4 sec. 27, 2 W. of Leotto	do.	do.	Nov. 1944	884	Domestic	48	2	28	Nov. 1944	—	Log: Yel. clay 0 - 34; Blue clay 34 - 44; Sand and gravel 44 - 48+.
Mo127-2	NE1/4 sec. 27, 3 W. of Leotto	Clarence Leiter	Chas. Croy Sr.	1934	887	Farm	34	2	30	1934	—	Very hard water. Old well about 90 ft. deep. Clay to water-bearing materials at screen.
Mo127-3	NE1/4 sec. 27, 1/2 S., 2 W. of Leotto	Dalton Rhodes	Charles Croy	1940	879	do.	51	2	17	1940	—	Well at barn is 80 ft. deep. Log: Yel. clay 0 - 10; Blue clay 10 - 46 1/2; Coarse sand and gravel 46 1/2 - 51+.
Mo127-4	SE1/4 sec. 27, 1 S., 3 W. of Leotto	Ort and Company	A. Bonar	About 1927	874	do.	50	3	35	1944	—	Water of very good quality. Log: Clay 0 - 45 1/2; Sand and gravel 45 1/2 - 50+.
Mo128-1	SW1/4 sec. 28, 1 N., 1 W. of Arl	Frank Fulk	—	—	875	do.	64	2	46	1939	—	Old well is 48 ft. deep, deepened in 1939. Log: Clay (1) 0 - 44; Sand 44 - 48; Blue clay 48 - 56; Fine sand 56 - 61; Coarse gravel 61 - 64+.
Mo130-1	SE1/4 sec. 30, 1 S. of Age	C. Harshbarger	—	—	895	Abandoned	42	2	37.2m	Dec. 18, 1946	—	—
Mo131-1	NE1/4 sec. 31, 1 S., 1 W. of Age	Joseph Koger	Walter Gordon	Sept. 1946	898	Farm	125	2	60	Sept. 1946	—	See Appendix B.
Mo132-1	NE1/4 sec. 31, 1 S., 1/2 E. of Age	S. W. Steinberger	Charles Croy	—	885	do.	45	2	40	Spring 1946	—	Clay to water-bearing materials at screen.

Records of wells in Noble County (Shaw Township, T. 33 N., R. 11 E.)

Well number	Location	Owner	Driller	Date drilled	Altitude above sea level (feet)	Use	Depth (feet)	Diameter (inches)	Water level (feet)	Date	Yield (g.p.m.)	Remarks
Well 33-1	SW 1/4 sec. 33, 1 N. of Ari	E. V. Ickes	Walter Gordon	Sept. 1947	862	Domestic	87.5	2	25	Sept. 1947	—	Log: Clay 0 - 45; Sand and gravel 45 - 48; Silty clay 48 - 83; Sand 83 - 87 1/2.
Well 36-1	NE 1/4 sec. 36, 1 1/2 S. of Leotta on S.R. 3	J. McBuffy	Charles Gray	Nov. 18, 1947	872	Farm	130	2	30	Nov. 18, 1947	—	See Appendix B.



**EXPLANATION**

— 900 —  
CONTOURS ON LAND SURFACE SHOWING ALTITUDE  
IN FEET ABOVE MEAN SEA LEVEL

- - -  
DRAINAGE DIVIDE

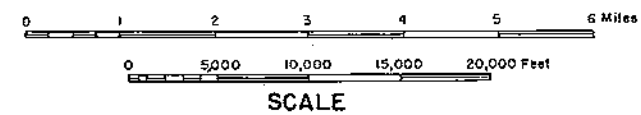
MAP OF  
**NOBLE COUNTY, INDIANA**  
SHOWING  
MAJOR DRAINAGE DIVIDES  
AND  
GENERALIZED CONTOURS OF LAND SURFACE

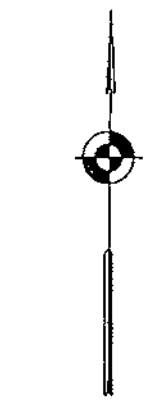
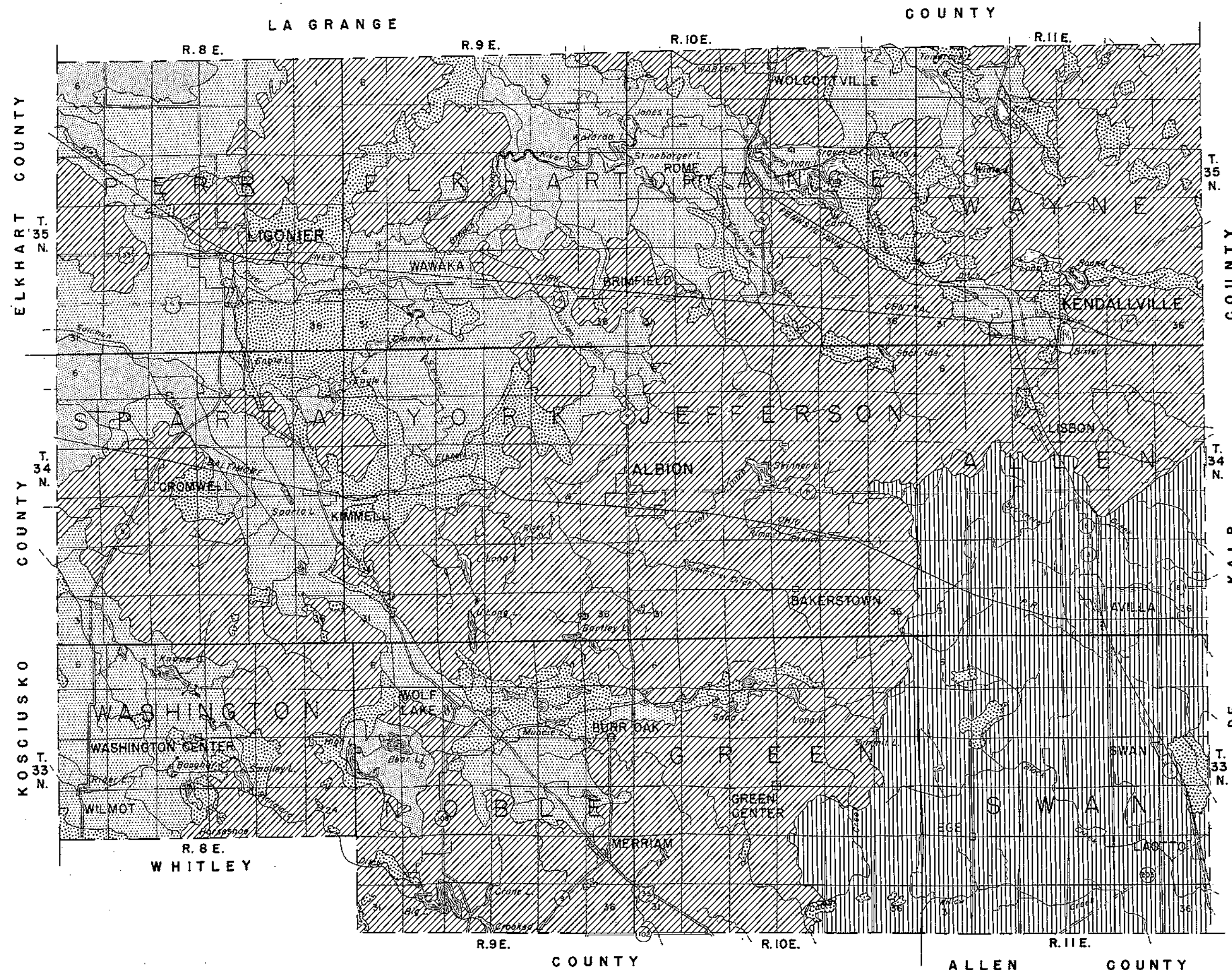
6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

DIAGRAM OF TOWNSHIP

	R.8E	R.9E	R.10E	R.11E
T.35N	A	B	C	D
T.34N	E	F	G	H
T.33N	I	J	K	L

LETTER DESIGNATION OF TOWNSHIPS  
IN WELL-NUMBERING SYSTEM





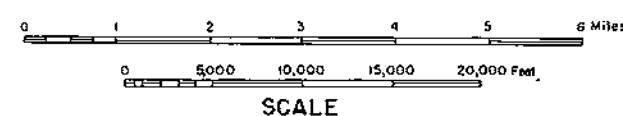
EXPLANATION

- GENTLY ROLLING CLAYEY GLACIAL TILL. LEACHED 2 TO 2 1/2 FEET.
- ROLLING TO HUMMOCKY MORAINES, LARGELY OF CLAY TILL. LEACHED 2 1/2 TO 3 FEET.
- MORAINAL RIDGES, KAME AND ESKER DEPOSITS, OF COARSE SAND AND GRAVEL, GENERALLY POORLY STRATIFIED.
- OUTWASH PLAINS AND TERRACES, MAINLY OF SAND AND GRAVEL, CONTAINING MANY WATER-WORN BOULDERS.
- FLAT OUTWASH PLAINS, UNDERLAIN BY SAND AND GRAVEL.

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

MAP OF  
**NOBLE COUNTY, INDIANA**  
SHOWING  
SURFICIAL GLACIAL DEPOSITS

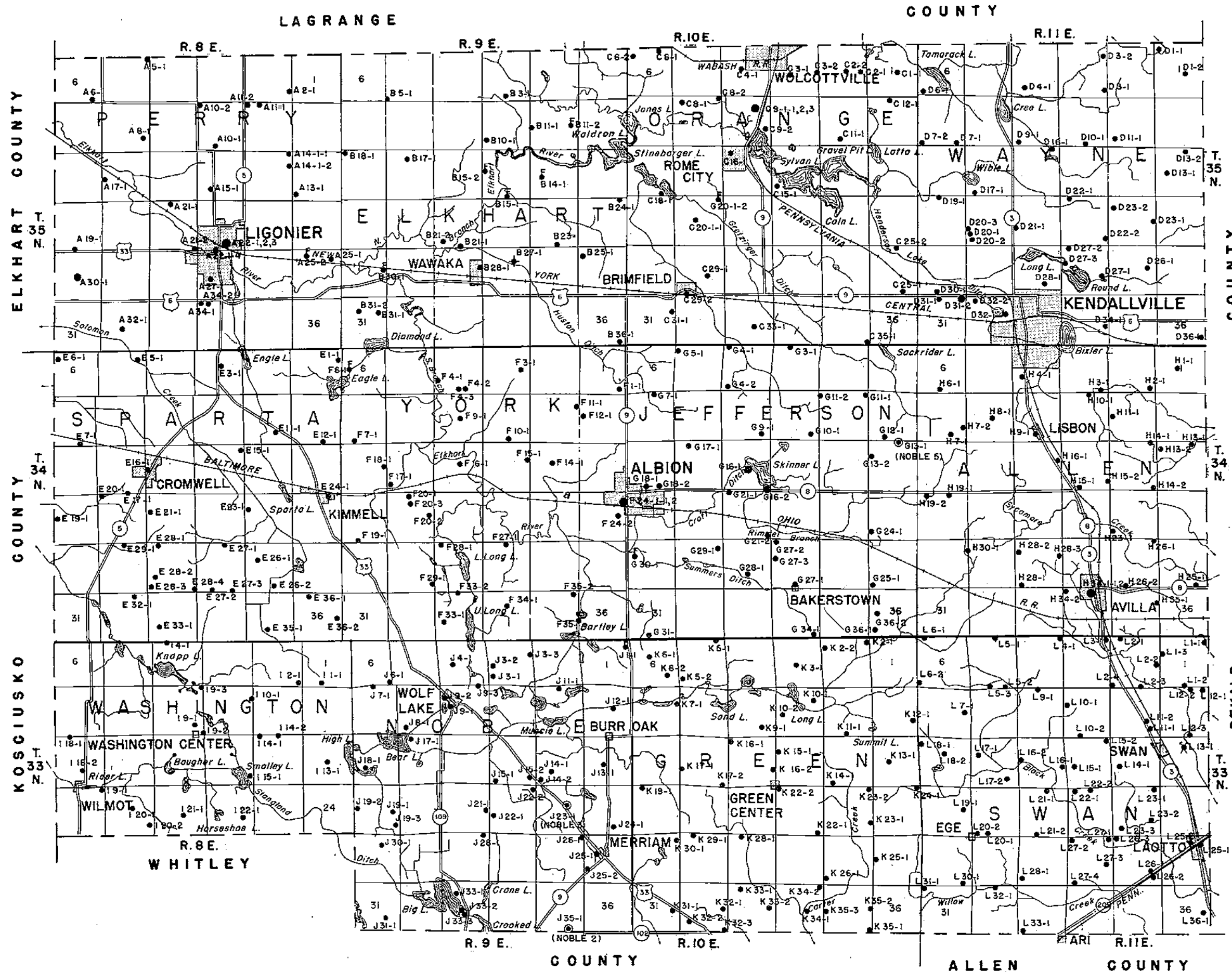


SCALE

	R. 8 E.	R. 9 E.	R. 10 E.	R. 11 E.
T. 35 N.	A	B	C	D
T. 34 N.	E	F	G	H
T. 33 N.	I	J	K	L

LETTER DESIGNATION OF TOWNSHIPS  
IN WELL-NUMBERING SYSTEM





- EXPLANATION**
- A 17-1 Well
  - A 22-1,2,3 Group of wells
  - A 25-2 Flowing well
  - B 27-1 Well drilled for oil or gas
  - ⊙ G 13-1 Observation well
  - ⊗ L 13-1 Gravel pit

NOTE: See Figures 5 and 6 for detailed location of wells in Kendallville

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

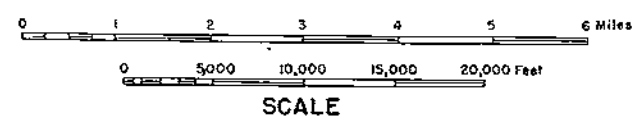
DIAGRAM OF TOWNSHIP

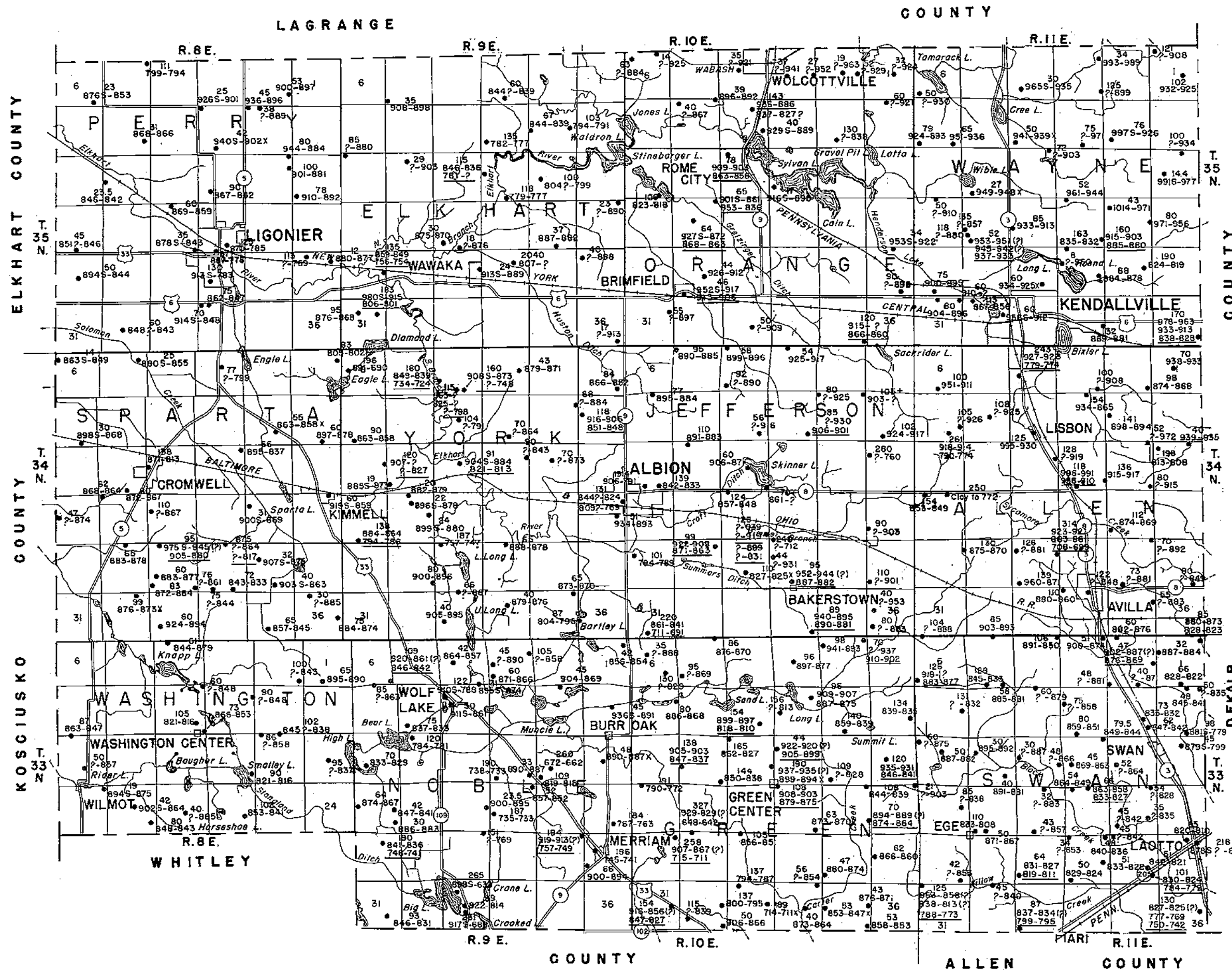
	R.8 E.	R.9 E.	R.10 E.	R.11 E.
T.35 N.	A	B	C	D
T.34 N.	E	F	G	H
T.33 N.	I	J	K	L

LETTER DESIGNATION OF TOWNSHIPS  
IN WELL-NUMBERING SYSTEM

MAP OF  
**NOBLE COUNTY, INDIANA**  
SHOWING

**LOCATIONS OF WELLS**





EXPLANATION

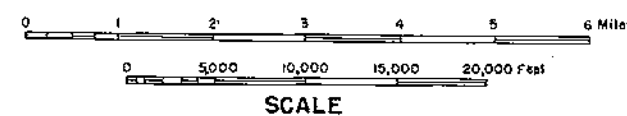
- 76 Depth of well
- 880-860 Altitudes; Top of formation-Bottom of well
- 880-860 Altitudes; Top of formation-Bottom of well.
- 880-860X Altitudes; Top of formation-Bottom of formation.
- 942 S At or within 5 feet of land surface.
- 950? ? Altitudes; indefinite - Not known.
- 910-902 Formation screened in well. Altitude of screen.
- 910-902(?) Questionable whether formation is water bearing.

Note: Where more than one water-bearing formation is shown per well, elevations given refer to top and bottom of formation except that given for bottom of well.

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

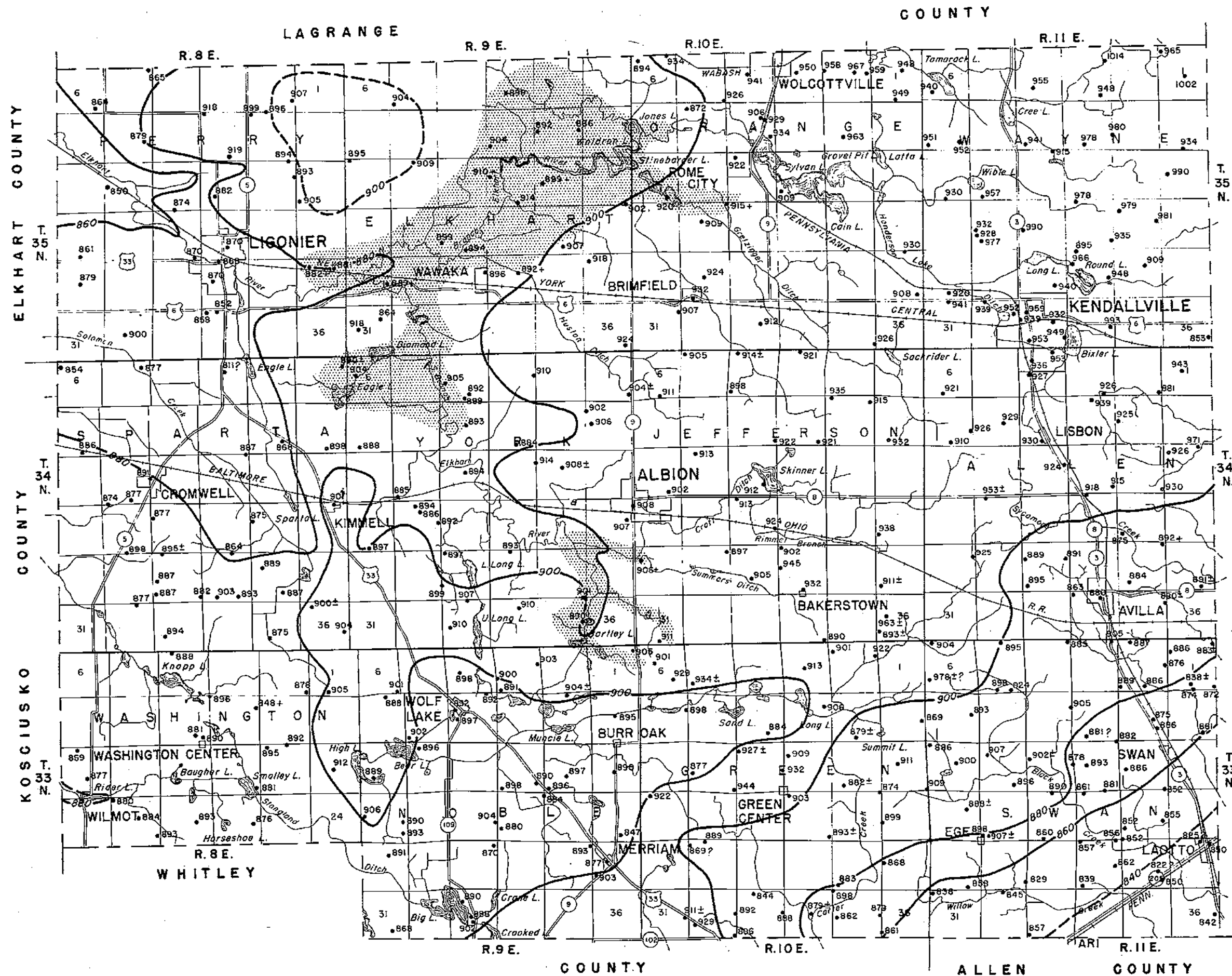
DIAGRAM OF TOWNSHIP

MAP OF  
**NOBLE COUNTY, INDIANA**  
SHOWING  
WELL DEPTHS AND ALTITUDES  
OF  
WATER-BEARING FORMATIONS



	R.8E.	R.9E.	R.10E.	R.11E.
T.35N.	A	B	C	D
T.34N.	E	F	G	H
T.33N.	I	J	K	L

LETTER DESIGNATION OF TOWNSHIPS  
IN WELL-NUMBERING SYSTEM



EXPLANATION

- 893 Altitude of water level in well
- 912± Approximate altitude
- 927? Questionable data
- 900- A few feet below given altitude
- 870+ A few feet above given altitude
- Approximate extent of flowing-well area
- 900 Contours of the water table and piezometric surface. Contour interval, 20 feet

MAP OF  
**NOBLE COUNTY, INDIANA**  
SHOWING  
ALTITUDE OF WATER LEVELS IN WELLS  
AND  
CONTOURS OF THE WATER TABLE AND  
PIEZOMETRIC SURFACE IN OUTWASH MATERIALS

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

	R8E	R9E	R10E	R11E
T. 35N.	A	B	C	D
T. 34N.	E	F	G	H
T. 33N.	I	J	K	L

LETTER DESIGNATION OF TOWNSHIPS  
IN WELL-NUMBERING SYSTEM

