STATE OF INDIANA

INDIANA DEPARTMENT OF CONSERVATION

DIVISION OF WATER RESOURCES

BULLETIN NO. 10

GROUND-WATER RESOURCES OF NORTHWESTERN INDIANA

Preliminary Report: Lake County

Prepared by the

GEOLOGICAL SURVEY

UNITED STATES DEPARTMENT OF THE INTERIOR

In cooperation with the

DIVISION OF WATER RESOURCES

INDIANA DEPARTMENT OF CONSERVATION

1961

INDIANA DEPARTMENT OF CONSERVATION

Donald E. Foltz, Director

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DIVISION OF WATER RESOURCES

Charles H. Bechert, Director

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Preliminary Report: Lake County

BY

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ABSTRACT

Lake County, in northwestern Indiana, has an area of about 517 square miles. Consolidated rocks of Middle Silurian age and unconsolidated rocks of Pleistocene age are the chief sources of ground water for domestic and stock, industrial, and public supplies. Water from these sources varies greatly in chemical quality, and field-chemical analyses show that locally the concentration of iron and sulfate exceed the maximum concentration recommended in the standards of the U. S. Public Health Service for drinking water.

This preliminary report contains tabulated records of about 1,400 wells and test holes giving information about well construction, water level, condition of occurrence, and characteristic of water-bearing material; selected logs for about 525 wells and test holes giving driller's description of materials penetrated and author's interpretation of their geologic ages; results for about 175 field chemical analyses giving hardness of water and the bicarbonate, carbonate, chloride, iron, and sulfate content; and water levels in 11 observation wells indicating the magnitude of short-term and long-term water-level fluctuations in the consolidated and unconsolidated rocks. These basic data include much of the material to be used in an interpretive report on the ground-water resources and geology of the area.

A base map of Lake County shows the location of each well or test hole listed in this report. Additional maps show the availability of ground-water in the county and generalized quality of water with respect to the hardness and iron and sulfate content of water in the rocks of Middle Silurian and Pleistocene ages.

INTRODUCTION

Purpose and Scope

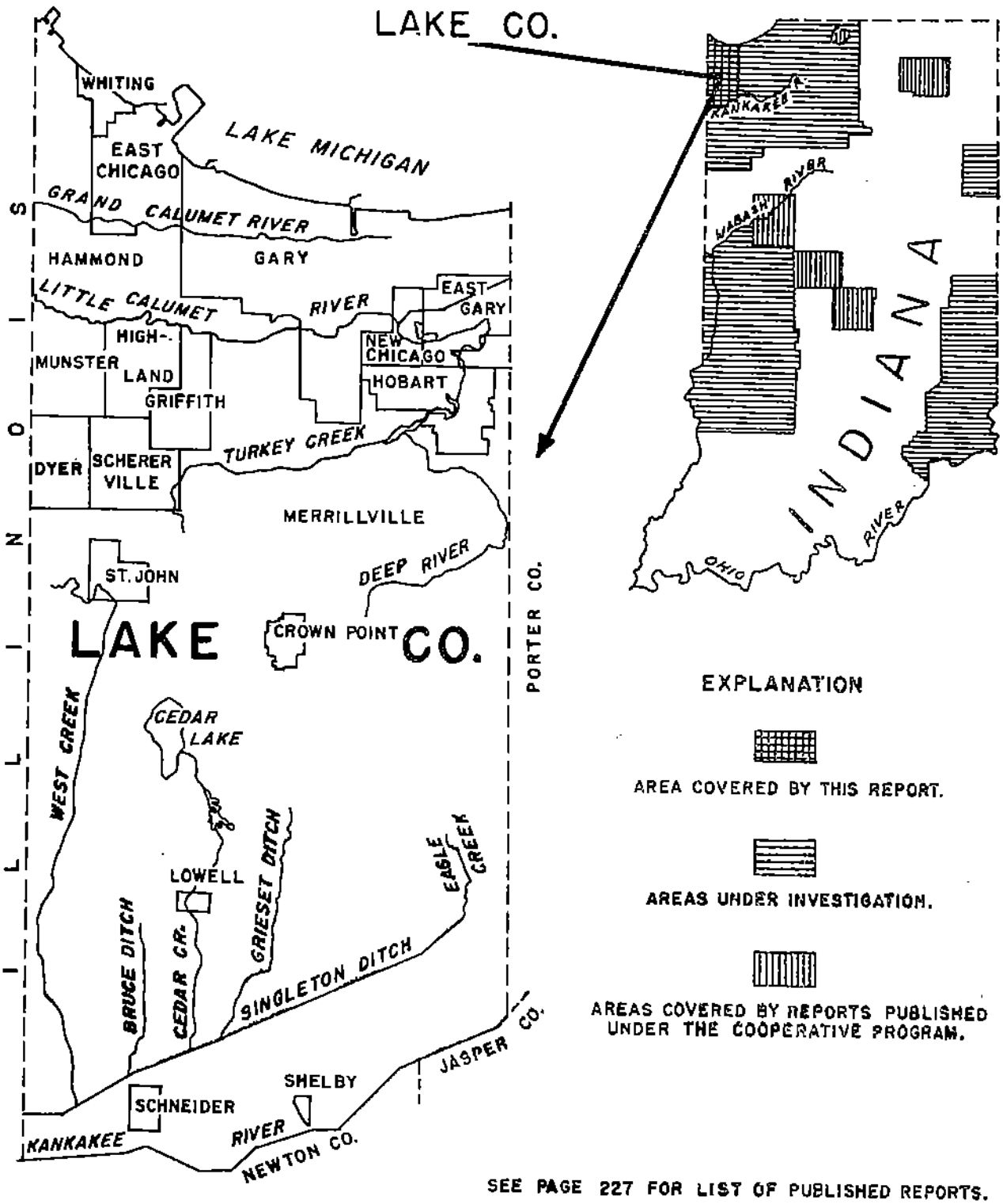
An investigation of the ground-water resources and geology of 10 counties in northwestern Indiana has been in progress since June 1954. This investigation is being made by the U. S. Geological Survey in cooperation with the Division of Water Resources, Indiana Department of Conservation, as a part of a broad program of these agencies to inventory and evaluate the ground-water resources of Indiana.

This report is the first of a series of preliminary reports to be published on the ground-water resources and geology of northwestern Indiana. The purpose of this report is to make the basic data collected during the investigation available to the public, and to provide a preliminary evaluation of the ground-water conditions and geology as an aid to development of ground-water resources. A more detailed and comprehensive analysis is in progress and will be published in an interpretive report on the ground-water resources and geology of the area.

The investigation was made under the general direction of A. N. Sayre and P. E. LaMoreaux, successive Chiefs of the Ground Water Branch of the Geological Survey, and under the immediate supervision of C. M. Roberts, District Geologist of the Ground Water Branch for Indiana.

Location and Areal Extent

Lake County is in the extreme northwestern part of Indiana (fig. 1). The county is a somewhat elongated rectangle with irregularly shaped northern and southern boundaries and includes about 517 square miles. It is bounded on the north by Lake Michigan, on the south by Jasper and Newton Counties, on the west by the State of Illinois, and on the east by Porter County.



SEE PAGE 227 FOR LIST OF PUBLISHED REPORTS.

FIGURE 1.-- Map of Indiana showing area covered by this report, areas under investigation and areas covered by reports published under the cooperative program.

Well-Numbering System

A numbering system is used to locate and identify the wells and test holes in this report. The number that is assigned each well indicates its location according to the official rectangular public-land survey. For example, in the number for well 34/8W-36E1 the numbers preceding the hyphen indicates that the well is in T. 34 N., R. 8 W. The first number after the hyphen indicates the section in which the well is located. Each quarter-quarter section (40-acre tract) within a section is assigned a letter symbol as shown on figure 2. Within the quarter-quarter section the wells are numbered consecutively. Therefore, well 36E1 is the first well listed in SW¼NW¼ sec. 36, T. 34 N., R. 8 W.

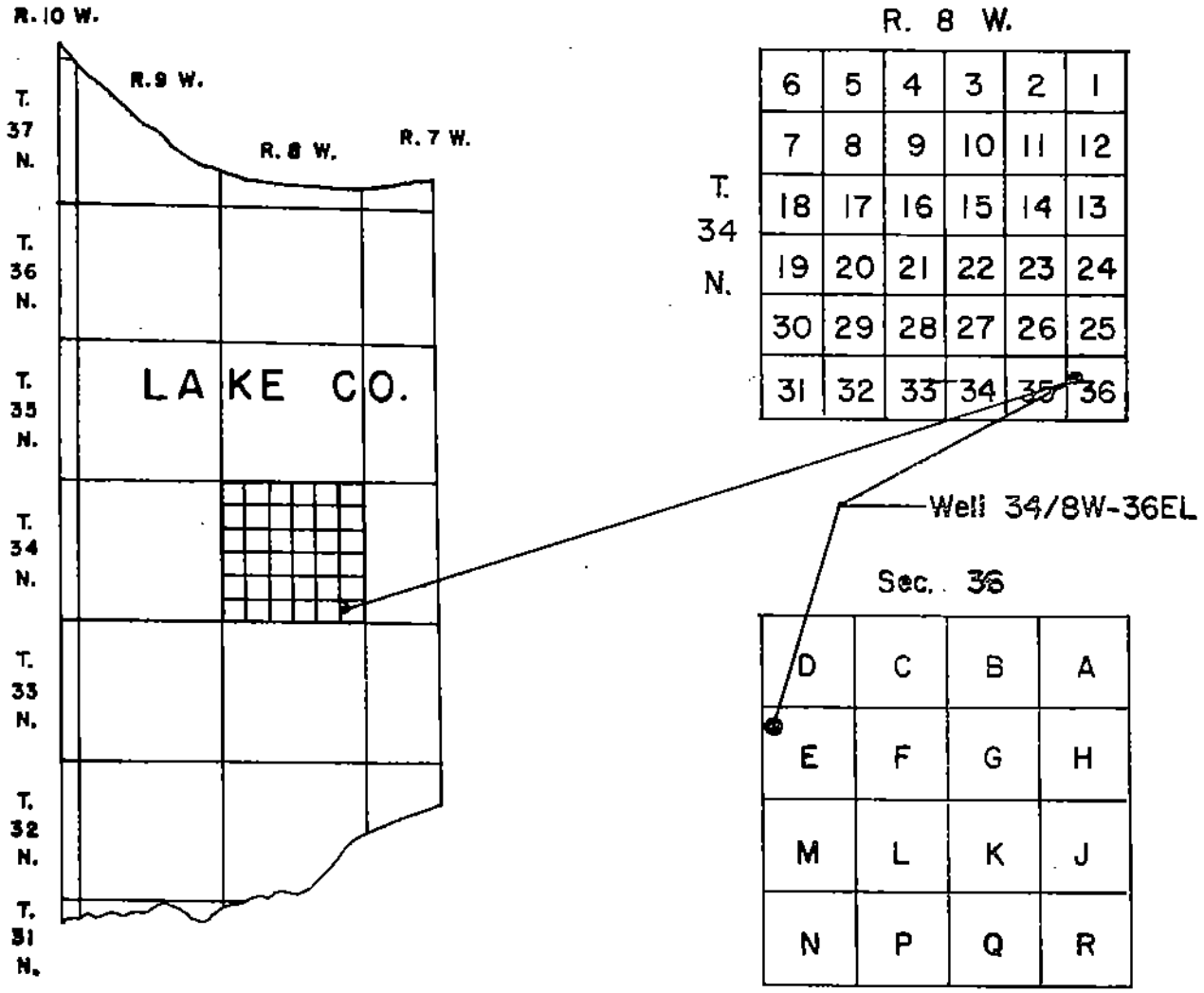


FIGURE 2.--Sketch showing well-numbering system.

Acknowledgments

The author thanks all persons who contributed time, information, and assistance during the collection, tabulation, and processing of data for this report. R. J. Vig, formerly of the Geological Survey, collected and helped process much of the basic data and assisted in the preparation of several parts of the report. H. C. Kost of the Indiana Department of Conservation assisted in the processing of data in the field. Well drillers, whose names are listed in the table of well records, furnished much of the information summarized in tables 2 and 3.

The author also thanks the following government agencies which provided information for the report: Divisions of Oil and Gas and Water Resources, Indiana Department of Conservation; Indiana State Highway Department; Indiana Toll Road Commission; Indiana State Board of Health; Illinois Geological Survey; and U. S. Corps of Engineers.

DATA COLLECTION AND PROCESSING

The well data were collected for drillers, water-works superintendents, owners, and others. The well records obtained from the drillers were of two types--written records and reports from memory. Tentative driller's locations were checked against the property records in the County Courthouse to verify the location, to locate the property, and to obtain the name of the current property owner. Discrepancies between driller's location and the location of property shown in the plat books were corrected. The locations of wells were checked further in the field if major discrepancies existed between the driller's location and the property record in the plat books, if the location given by the driller could not be verified from county records, or if the verified location was not sufficiently accurate to be used.

Plate 1 shows the location of water wells and test holes, and test holes drilled for purposes other than water supply. Most of these locations are shown to the nearest 10 acres. The basic data for these wells and test holes are summarized in table 2. In addition, selected driller's logs of wells and test holes and author's interpretations of the geologic age of the materials encountered are given in table 3.

Samples of water were collected at the time well sites were visited. These water samples were analyzed in the field office for hardness, alkalinity (carbonate and bicarbonate), chloride, and sulfate content by standard titration methods. The alkalinity is expressed as carbonate and bicarbonate. The total iron content was determined at the well site immediately after the water sample was collected. A visual method was used to determine the iron concentration in parts per million by matching the color of the treated sample to that of a liquid-color standard having a known iron concentration. The results of the field chemical analyses (table 4) were used to select sites for collecting larger water samples for more comprehensive and accurate chemical analyses by the laboratory of the U. S. Geological Survey.

Observation wells were established at the beginning of the investigation in order to determine the factors affecting the changes in storage in the ground-water reservoir. Table 5 contains the water-level data obtained from these wells. Most of the wells were drilled originally for industrial or public supplies but generally are not now used for these purposes. The observation wells were chosen so as to obtain water-level information from artesian and water-table aquifers. Whenever possible, the wells were established at sites where the factors affecting the water levels in the aquifer were due chiefly to natural causes.

GEOLOGIC SOURCES OF GROUND WATER

The oldest known consolidated rocks underlying Lake County are of Cambrian and Ordovician age. These rocks consist of dolomite, dolomitic limestone, sandstone, and shale. Few wells have been drilled into these rocks for water supplies in Lake County because of the deep water levels, the small yields, and the poor quality of water.

The rocks of Ordovician age are overlain by dolomite or dolomitic limestone of Middle Silurian age, which is the chief bedrock source of ground water. Water from this aquifer is utilized extensively in the western half of the county for domestic, stock, and a few public supplies. Much of the material of Middle Silurian age listed in table 2 as limestone or limestone (?) is either dolomite or dolomitic limestone. The deposits of Middle Silurian age are overlain in the central part of the county by a thin veneer of dolomitic limestone of Middle Devonian age that thickens eastward and is overlain by shale of Late Devonian age. The rocks of Devonian age are not extensively used as a source of water in Lake County.

The bedrock is overlain by unconsolidated glacial drift of Pleistocene age. The drift forms several prominent topographic features in the county (Leverett and Taylor, 1915; Wayne, 1958), such as the Valparaiso moraine in the central half, the beach-lines and lake bottoms of glacial Lake Chicago in the northern part, and the glaciofluvial plain in the southern part. The drift ranges in thickness from less than 30 to more than 250 feet and consists of glaciofluvial sand and some gravel, till, thin glaciolacustrine clay, silt, and sand. Glaciofluvial sand and some gravel underlie much of the county and are the chief source of ground water in the unconsolidated rocks. Locally the glacial material is overlain by thin alluvium, eolian sand, and organically rich sand, silt, and clay of Recent age.

Ground water occurs in the consolidated and unconsolidated rocks of Lake County under confined (artesian) conditions or under unconfined (water-table) conditions. Under confined conditions the saturated water-bearing material is overlain directly by relatively impervious material, and the water will rise above the level at which it is encountered in the water-bearing material. Under unconfined conditions the water-bearing material is overlain directly by permeable unsaturated material and the water will not rise above the level at which it is encountered.

Plate 2 shows the availability of ground water in the consolidated and unconsolidated rocks underlying the county. In addition, plates 3 and 4 show pertinent information on quality of water in the principal aquifers.

Plate 3 shows the distribution of hardness and iron and sulfate content in the water-bearing rocks of Middle Silurian age; plate 4 shows similar information for the water-bearing deposits of Pleistocene age.

TYPES OF WELLS

Drilled, driven, and jetted wells are the principal types of water wells used in Lake County. Most water wells 3-inches or more in diameter are constructed by the cable-tool, or percussion, method, but a few wells have been drilled by the rotary and reverse-rotary methods. When the water-bearing material is sand and gravel, the well is generally finished with a well screen set in the water-bearing material below the bottom of the well casing. (See Rosenshein and Cosner, 1956, for a detailed description of a well screen.) A modification of this type of well, the gravel-packed well, has a gravel lining inserted between the well screen and the water-bearing material. When the water-bearing material is consolidated rock, the well casing is generally driven a short distance into the rock, and the well is finished as an open hole.

Water wells less than 3-inches in diameter are constructed in unconsolidated material by driving or jetting. The driven well consists of a small-diameter pipe having a drive point attached to the end, which is driven into shallow water-bearing material. The jetted well is constructed by forcing water under pressure out of a hollow-rod or small-diameter drill pipe that is fitted with a jetting bit. As the material is washed out of the hole ahead of the casing, the casing is driven down into the hole. After the water-bearing material is penetrated the well is generally finished with a well-point screen set in the water-bearing material below the bottom of the casing. Table 1 relates the grain-size in inches and millimeters to the slot and the gauze size of screens commonly used in water wells.

Table 1.--Grain size and equivalent screen openings

Grain size: After Wentworth (1922).
Equivalent screen openings: From commercial catalogs for water-well supplies.
Slot size: In thousandths (.001) of an inch.
Gauze size: Number of wire strands per lineal inch.

Material	Grain size		Equivalent screen opening	
	Inches	Millimeters	Slot size	Gauze size
Gravel----------	>.08	>2	>80	-------
Very coarse sand-	.04 - .08	1 - 2	40 - 80	<20
Coarse sand------	.02 - .04	.50 - 1	20 - 40	40 - 20
Medium sand------	.01 - .02	.25 - .50	10 - 20	60 - 40
Fine sand--------	.005 - .01	.125 - .25	6 - 10	90 - 60
Very fine sand---	.002 - .005	.062 - .125	-------	-------
Silt-------------	.00015 - .002	.004 - .062	-------	-------
Clay-------------	<.00015	<.004	-------	-------

Oil or gas test holes in Lake County generally were drilled by the cable-tool method. Structure test holes for foundations and bridges generally are drilled by the wash-boring method. In this method test hole samples usually are collected by driving a sampling tube into the material after specific intervals of boring.

SUMMARY

Preliminary evaluation of the basic data shows that adequate quantities of ground water are available for domestic, stock, and locally for public and some types of industrial supplies from the dolomite and dolomitic limestone of Middle Silurian age and the sand and gravel of Pleistocene age. The rocks of Cambrian and Ordovician age yield only small quantities of water and are a minor source of ground water in the county.

The quality of water from the rocks of Middle Silurian and Pleistocene age varies greatly. Locally water from these sources exceeds the U. S. Public Health Service drinking-water standards for iron and sulfate content.

RECORDS

The records of about 1,400 wells and test holes are given in table 2. The table contains information about well construction, water levels, yields and drawdowns, conditions of occurrence, thickness and characteristics of water-bearing materials, type of pump, and other data. The altitude of the land surface at all wells except test borings was interpolated from topographic maps. Altitudes of borings were leveled by the Federal or State agency for whom the borings were made.

Table 3 contains the selected logs of about 525 wells and test holes. This table gives the driller's description of the material encountered, pertinent remarks with regard to the material, and the driller's interpretation of the geologic age of the material.

The results of about 191 partial chemical analyses of water are given in table 4. Of this number 174 were determined in the field office of the Geological Survey, and 17 were determined by other governmental agencies or by commercial laboratories. This table gives information about geologic source, temperature, concentration in parts per million (ppm) of iron, carbonate, bicarbonate, sulfate, chloride, and hardness of water. The U. S. Public Health Service standards for drinking water are given in the table headnotes for iron and manganese together, sulfate, and chloride. No standards have been established for hardness of water. However, water with respect to hardness is generally classified as follows: 0-60 ppm, soft; 61-120 ppm, moderately hard; 121-200 ppm, hard; more than 200 ppm, very hard. Water having a hardness of more than 200 ppm requires softening for many purposes.

Table 5 contains the records of water levels in 11 observation wells. The water levels in all observation wells, except two, were obtained either by recording gages installed on the well or by manual measurements made

with an engineer's steel tape calibrated to a hundredth of a foot. Water levels in two of the wells were obtained from air-line gage readings. All water levels in table 5 are in feet below land-surface datum. Daily highest water levels are given for the observation wells equipped with recording gages and periodic water levels are given for the observation wells measured manually or by air-line gage. Factors affecting the water levels in the observation wells are also indicated. The location of the observation wells is shown on plate 1.

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Table 2.--Records of wells and test holes in Lake County, Indiana

Well number: See text for description of well-numbering system.
Altitude: Altitude of land-surface datum from topographic map, except as noted in text p 20.
Type of well: B, bored; Dn, driven; Dr, drilled; Du, dug; J, jetted.
Finish: Gp, gravel pack; Oe, open end; Oh, open hole; S, screen, dia, diameter in inches, g, gauze size, sl, slot size.
Character: D, drift; Do, dolomite; G, gravel; Ls, limestone; Sd, sand; Sh, shale; Ss, sandstone; T, till.
Geologic age: C, Cambrian; D, Devonian; M, Mississippian; O, Ordovician; Pl, Pleistocene; S, Silurian.
Condition of occurrence: C, confined; U, unconfined; see text for definition of terms.

Water level: In feet below land-surface datum on date of completion of well, except where otherwise noted.
Use: A, air conditioning; D, domestic; Do, destroyed; I, industrial; Ir, irrigation; N, not used; O, observation; P, public supply; S, stock; T, test.
Type of pump and horsepower: C, centrifugal; J, jet; L, lift; P, pitcher; S, submersible; T, turbine; numeral indicates rated horsepower of electric motor.
Remarks: Ca, field chemical analysis in table 4; dd, drawdown; E, electric log available for inspection; G, gamma-ray log available for inspection; gpm, gallons per minute; L, log of well in table 3.

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
31/9W-2G1	J. Tokarz	Lowell Well and Pump Co.	8- 5-54	635	J	62	2	Oh	------	-----	------	Ls(?)	S	C(?)	1	D	----	
2L1	H. Radlarczyk	------do------	1-13-56	635	J	56	2	Oh	------	-----	------	Ls(?)	S	C(?)	1	D	----	
32/7W-6N1	O. G. Fiofield	Peterson Bros.	3-18-58	640	Dr	79	4	Oh	68	68	11	Ls	S	C	8	D	----	Dd 4 ft after 2 hr pumping 5 gpm; Ca, L.
32/8W-1A1	------do------	----------	10-16-45	640	Dr	915	8-5	----------	53	-----	------	------	-----	----	---	---	----	Oil well; L.
18J1	J. Strickhorn	----------	Spring 1921	635	Dr	1,135	10-7	----------	73	-----	------	------	-----	----	---	---	----	Oil well; cased to 904 ft; saline water from 685-712 ft and at 904 ft; see Logan (1931); L.
27E1	C. Mathis	Lowell Well and Pump Co.	9-17-56	---	J	24	2	S; 60g	------	-----	------	Sd	Pl	----	7	D,S	J	
28B1	R. Mathis	------do------	9-12-56	640	J	24	2	------do------	------	-----	------	Sd	Pl	----	---	D,S	J	
28F1	Town of Shelby	Town	1952	642	Dn	18	4	S; 4ft, dia 4	------	-----	------	Sd	Pl	U	---	O	----	Observation well Lake 11; water level measured 6.80 ft below lsd, 3-16-56; sand 0-18 ft; fire-protection well; yields 300 gpm.
28M1	A. Schissler	R. Robinson	1953	635	Dr	87	4	Oh	50	50	37	Ls	S	C	2	P	J½	Water has hydrogen sulfide gas.
28M2	Town of Shelby	Town	1952	638	Dn	18	4	S; 4ft, dia 4	------	-----	------	Sd	Pl	U	---	P	J	Formerly observation well Lake 3; water level measured 4.90 ft below lsd 8-30-54; sand 0-18 ft; fire-protection well; yield 300 gpm.
28N1	L. Wilkins	Lowell Well and Pump Co.	3-31-56	635	Dr	55	3	Oh	45	54	1	Ls	S	C	5	D	J	Little dd reported after 1 hr pumping 11 gpm; L.
28P1	D. Viers	------do------	1956	635	Dr	77	3	Oh	55(?)	55	22	Ls(?)	S(?)	C	---	D	----	
28P2	J. Knight	------do------	1955	635	Dr	42	3	Oh	39	39	3	Ls(?)	S(?)	C	5	D	----	
28P3	W. Mulford	------do------	1950	635	Dr	71	3	Oh	49	55	16	Ls(?)	S	C	---	D	----	L.
33C1	G. Horner	------do------	8- 7-54	635	J	51	2	----------	51(?)	-----	------	Ls(?)	S(?)	C	---	D	J	Ca.
33C2	------do------	------do------	10- 6-54	635	J	18	2	S; 60g	------	-----	------	Sd	Pl	U(?)	---	D	J	
33C3	C. Hoblitzel	------do------	1950	635	Dr	104	3	Oh	40(?)	40(?)	64(?)	Ls(?)	S(?)	C	---	D	----	
33D1	J. Rider	------do------	4-20-56	635	Dr	46	3	Oh	44	44	2	Ls(?)	S	C	6	D	P	Little dd reported after 1 hr pumping 12 gpm; L.
33E1	J. Schissler	------do------	1-56	635	Dr	87	3	Oh	57(?)	65	2	Ls(?)	S(?)	C	---	D	----	
33E2	J. W. Froehlick	------do------	3-29-56	635	Dr	76	3	Oh	50	66	10	Ls	S	D	6	D	P	Little dd reported after 1 hr pumping 8 gpm; Ca, L.
33E3	M. Cinco	------do------	1955	635	Dr	66	3	Oh	42(?)	50	16	Ls(?)	S(?)	C	---	D	----	
33F1	L. A. and E. Davis	------do------	1950	635	Dr	44	3	Oh	36	40	4	Ls(?)	S(?)	C	---	D	----	
33F2	R. Barton	------do------	4-16-56	635	Dr	63	3	Oh	40	40	23	Ls(?)	S	C	12	D	L	Little dd reported after 1 hr pumping 7 gpm; L.
33F3	J. Head	------do------	1955	635	Dr	51	3	Oh	38	42	9	Ls(?)	S	C	---	D	----	
33F4	L. O. Kilmer	------do------	1955	635	Dr	44	3	Oh	30	38	6	Ls(?)	S	C	---	D	J½	Slight odor hydrogen sulfide gas; Ca, L.

32/8W-33F5	J. Maelch	--------do---------	1956	635	Dr	47	3	Oh	40	44	3	Ls(?)	S	C	---	D	----	
33F6	E. Erway	--------do---------	1955	635	Dr	41	3	Oh	34	38	3	Ls(?)	S	C	---	D	----	
32/9W-2Q1	C. R. Crisler	--------do---------	1954	650	J	36	2	S; 60g	------	------	-------	Sd	Pl	-----	---	D,S	C	Ca.
3C1	N. E. and H. Loop	--------do---------	---------	680	J	37	2	---------do----------	------	------	-------	Sd	Pl	-----	23	D,S	J½	
3H1	J. Jenson	--------do---------	---------	670	J	27	2	S; 60g, dia 1½	------	------	-------	Sd	Pl	-----	12	D	J	
4L1	Trustees West Creek Township	H. F. Hutfilz	---------	690	J	40	2	S; 60g	------	------	-------	Sd	Pl	-----	---	N	----	Well polluted.
4L2	--------do---------	Shanhy Well and Pump Co.	---------	690	Dr	73	3	Oh	70	70	3	Ls	S	C	---	P	----	Ca.
4N1	Mr. Blanchard	Hub Plumbing Co.	4-22-55	700	J	58	2	S; 4ft, 60g, dia 1	------	------	-------	Sd	Pl	-----	40	D	----	Ca.
4N2	N. Blanchard	Lowell Well and Pump Co.	---------	700	J	51	2	S; 60g	------	------	-------	Sd	Pl	-----	---	D	J	
5A1	M. A. Carsten	P. Fox and Son Co.	10-21-43	680	Dr	2,438	10	----------	25	------	-------	-------	------	-----	---	---	----	Oil well; L.
5J1	Roberts Motel	Lowell Well and Pump Co.	---------	690	J	39	2	S; 60g	------	------	-------	Sd	Pl	-----	---	P	J	Ca.
5J2	R. Gust	--------do---------	---------	690	J	52	2	---------do----------	------	------	-------	Sd	Pl	-----	30	D	----	
5J3	F. W. Strickland	--------do---------	8-17-54	690	J	52	2	---------do----------	------	------	-------	Sd	Pl	-----	22	D	J	
5J4	M. D. Hayden	--------do---------	---------	690	J	50	2	---------do----------	------	------	-------	Sd	Pl	-----	33	D	J	
5N1	H. Strickland	--------do---------	---------	680	J	30	2	---------do----------	------	------	-------	Sd	Pl	-----	---	D	J½	Ca.
11B1	G. E. Stafford	--------do---------	---------	650	J	21	2	S; 60g, dia 1½	------	------	-------	Sd	Pl	-----	---	D,S	J	
21L1	Indiana State Highway Department	Indiana State Highway Department	4- 5-54	631	---	20	---	----------	------	------	-------	-------	------	-----	---	---	----	Test pit; L.
21L2	--------do---------	--------do---------	4- 5-54	632	---	19	---	----------	------	------	-------	-------	------	-----	---	---	----	Do.
28C1	--------do---------	--------do---------	4- 5-54	629	---	19	---	----------	------	------	-------	-------	------	-----	---	---	----	Test pit; sand 0-10 ft.
28C2	--------do---------	--------do---------	4- 5-54	628	---	14	---	----------	------	------	-------	-------	------	-----	---	---	----	Test pit; L.
30B1	S. Little	----------	3-17-43	635	Dr	1,315	8	----------	33	------	-------	-------	------	-----	---	---	----	Oil well; L.
33L1	F. E. Duncan	----------	1941	630	Dr	1,605	---	----------	63	------	-------	-------	------	-----	---	---	----	Do.
33R1	Indiana State Highway Department	Indiana State Highway Department	4-12-54	632	---	18	---	----------	------	------	-------	-------	------	-----	---	---	----	Test pit; coarse yellow sand 0-18 ft.
33R2	--------do---------	--------do---------	4-12-54	632	---	16	---	----------	------	------	-------	-------	------	-----	---	---	----	Test pit; L.
34D1	Town of Schneider	----------	1927	635	Dr	585	6	Oh	60(?)	------	-------	Do	S	C	12	P	T15	Water has hydrogen sulfide gas.
36E1	M. Horschback	Lowell Well and Pump Co.	1955	635	Dr	80	3	Oh	59(?)	59(?)	21(?)	Ls(?)	S	C	---	D	J½	Ca.
32/10W-1N1	B. O. Stowe	Peterson Bros.	4-13-56	670	Dr	103	4	Oh	77	77	26	Ls	S	C	30	D	S½	Dd 10 ft after 5 hr pumping 8 gpm; Ca, L.
12Q1	D. Flockinger	Lowell Well and Pump Co.	12- 8-54	690	J	39	2	S; 60g	------	------	-------	Sd	Pl	-----	28	D	J½	
12R1	D. Bailey	--------do---------	1-18-54	680	J	39	2	---------do----------	------	------	-------	Sd	Pl	-----	24	D,S	----	Ca.
13C1	M. E. Collins	--------do---------	4-55	670	Dr	88	3	Oh	80	82	6	Ls(?)	S	C(?)	---	D,S	J	Ca, L.
13C2	--------do---------	--------do---------	4-30-54	670	J	77	3	S; 60g	------	------	-------	Sd	Pl	-----	42	D,S	J	
24M1	F. D. Bradsmoir	Krammer Bros.	1951	635	Dr	86	6	Op	------	------	-------	Ls	S	C	+8	I	S	Temperature 56.5°F.
33/7W-6E1	L. Fairchild	W. Matthews	1951	680	J	118	2	Oh	113	113	5	Ls(?)	S(?)	C	0	N	----	Abandoned, gas in well.
7N1	M. Franklin	Porter County Well Service	7-53	690	J	87	2	S; 4ft, 60g	------	60	37	Sd	Pl	U	60	S	----	Yield 15 gpm; Ca, L.
9D1	C. McColley	Hub Plumbing Co.	12-19-46	695	J	64	2	S; 4ft, 60g, dia 1	------	------	-------	Sd	Pl	-----	---	D,S	J	Ca.
17P1	H. Carson	Lowell Well and Pump Co.	---------	675	J	42	2	S; 60g	------	------	-------	Sd	Pl	-----	26	D	J	Ca.
18P1	F. Homfold	--------do---------	---------	675	J	45	2	---------do----------	------	------	-------	Sd	Pl	-----	---	N	J	
20C1	R. Creekmur	Hub Plumbing Co.	11- 3-48	700	J	48	2	S; 4ft, 60g, dia 1	------	------	-------	Sd	Pl	-----	---	D	J	
28C1	H. Sherman	--------do---------	11- 8-55	670	J	44	2	---------do----------	------	------	-------	Sd	Pl	-----	35	D,S	----	Ca.
33/8W-1H1	J. and M. Doak	Lowell Well and Pump Co.	---------	690	J	34	2	S; 60g	------	------	-------	Sd	Pl	-----	13	D	J	
4H1	E. Woodke	Hub Plumbing Co.	6-21-51	740	J	75	2	---------do----------	------	------	-------	Sd	Pl	-----	50	D	J	
5D1	Fleming Farm Service	--------do---------	2-26-51	750	J	123	2	S; 4ft, 60g, dia 1	------	------	-------	Sd,G	Pl	-----	---	D,S	----	
5J1	W. C. Emory	--------do---------	7-21-53	710	J	48	2	---------do----------	------	------	-------	Sd	Pl	-----	20	S	----	
5M1	G. Stublmacher	--------do---------	5-16-56	770	J	130	2	---------do----------	------	------	-------	Sd	Pl	-----	80	D,S	----	
6Q1	R. L. Lucas	--------do---------	1-12-53	730	J	83	2	---------do----------	------	------	-------	Sd	Pl	-----	50	D,S	----	
7D1	D. E. Rose	Lowell Well and Pump Co.	6- 2-56	730	J	72	2	S; 4ft, 60g	------	------	-------	Sd	Pl	C	28	D	----	Yield 11 gpm; Ca, L.
7G1	A. Corchidas	--------do---------	---------	725	J	63	2	S; 60g	------	------	-------	Sd	Pl	-----	---	D	----	
7K1	A. L. Ping	Hub Plumbing Co.	3-17-54	720	J	58	2	S; 4ft, 60g, dia 1	------	------	-------	Sd	Pl	-----	38	Jr	J½	Yield 5 gpm; has two additional 2-inch wells 50 ft and 56 ft deep, respectively; Ca.
9G1	J. Kuhn	--------do---------	4- 1-48	745	J	64	2	---------do----------	------	------	-------	Sd	Pl	-----	---	D,S	J	Ca.
9Q1	W. C. Emory	--------do---------	1-25-49	730	J	65	2	---------do----------	------	------	-------	Sd	Pl	-----	---	D	----	
10N1	F. Wichman	--------do---------	8-30-49	730	J	55	2	---------do----------	------	------	-------	Sd	Pl	-----	---	D	----	
12B1	E. Bordine	--------do---------	3-27-56	695	J	45	2	---------do----------	------	------	-------	Sd	Pl	-----	30	D	J	Ca.
12D1	R. Fitzpatrick	--------do---------	8-14-49	740	J	69	2	---------do----------	------	------	-------	Sd	Pl	-----	---	D	----	
13M1	E. H. and A. Mayers	Lowell Well and Pump Co.	---------	720	J	28	2	S; 60g	------	------	-------	Sd	Pl	-----	17	S	L	
18K1	J. M. Daum	--------do---------	---------	725	J	73	2	---------do----------	------	------	-------	Sd	Pl	-----	---	D	----	
18N1	J. Surprise	H. F. Hutfilz	---------	695	J	40	2	---------do----------	------	------	-------	Sd	Pl	-----	---	D	----	
18P1	F. Ewer	Hub Plumbing Co.	11-22-55	700	J	56	2	S; 4ft, 60g, dia 1	------	------	-------	Sd	Pl	-----	35	D	J	Ca.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
33/8W-18P2	E. Yana	Lowell Well and Pump Co.	--------	700	J	51	2	S; 60g	-------	------	------	Sd	Pl	----	31	D	J½	
21R1	K. E. Truelove	Hub Plumbing Co.	4-10-48	680	J	35	2	S; 4ft, 60g, dia 1	-------	------	------	Sd	Pl	----	---	D	L	Ca.
23D1	D. M. Story	Lowell Well and Pump Co.	--------	700	J	60	2	S; 60g	-------	------	------	Sd	Pl	----	30	D	----	
23P1	R. Cummins	-------do--------	10- 9-56	675	J	40	2	--------do----------	-------	------	------	Sd	Pl	----	16	D	J	Ca.
23Q1	P. Hoffman	-------do--------	--------	670	J	30	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	J	
29D1	V. L. Taylor	-------do--------	--------	690	J	50	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	----	Ca.
36M1	R. Ellis	Guske's Well and Pump Co.	--------	645	Dr	20	4	S; 5ft	-------	10	10	Sd	Pl	U	10	S	----	For fire protection; sand 0-20 ft.
33/9W-1J1	W. Hook	Hub Plumbing Co.	4-20-52	715	J	43	2	S; 4ft, 60g, dia 1	-------	------	------	Sd	Pl	----	28	D	J	Ca.
1L1	R. W. Boyles	-------do--------	11-19-53	695	J	38	2	--------do----------	-------	------	------	Sd	Pl	C	10	D	----	
1M1	J. Rice	-------do--------	5-26-55	700	J	50	2	--------do----------	-------	------	------	Sd	Pl	----	20	D	J	
1N1	M. Ebner	Lowell Well and Pump Co.	4-23-56	700	J	47	2	S; 4ft, 60g	-------	30	17	Sd,G	Pl	C	12	D	J	Yield 12 gpm; L.
2A1	V. K. Roberts	H. F. Hutfilz	--------	690	J	26	2	S; 60g	-------	------	------	Sd	Pl	C	---	---	----	Flowed.
2B1	-------do--------	-------do--------	8- 7-37	725	J	34	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	----	
2K1	O. Kristic	-------do--------	--------	720	J	42	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	----	
2L1	W. C. Schwartz	Lowell Well and Pump Co.	--------	720	J	51	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	J½	
2M1	D. Hafston	H. F. Hutfilz	1937	705	---	20	1½	--------do----------	-------	------	------	Sd	Pl	----	---	D	----	
3N1	D. Hawkinson	-------do--------	--------	700	J	18	2	--------do----------	-------	------	------	Sd	Pl	C	---	D	----	Flowed.
3J1	H. F. Hutfilz	-------do--------	1952	710	J	28	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	----	
3L1	K. Kain	-------do--------	--------	720	J	52	2	S; 80g	-------	------	------	Sd	Pl	----	---	D	----	
3L2	C. W. McKinney	-------do--------	--------	720	J	40	2	S; 60g	-------	------	------	Sd	Pl	----	---	D	L	
3P1	S. Mosoback	-------do--------	--------	730	J	40	2	S; 3.5ft, 60g	-------	------	------	Sd	Pl	----	---	D	----	
3R1	K. Harmon	-------do--------	9- 5-37	710	J	24	2	S; 60g	-------	------	------	Sd	Pl	----	---	D	----	
3R2	H. F. Hutfilz	-------do--------	--------	715	J	25	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	----	
4E1	O. Bischof	Wehling Well Works	1950	740	Dr	354	5	Oh	181	181	173	Ls(?)	S	C	75	D,S	----	Ca.
4M1	H. O. Stephenson	Lowell Well and Pump Co.	--------	720	J	38	2	S; 80g	-------	------	------	Sd	Pl	----	---	S	L	
5B1	R. Combs	-------do--------	10-17-56	730	J	50	2	S; 60g	-------	------	------	Sd	Pl	----	---	D	L(?)	
5C1	C. V. Story	Hub Plumbing Co.	9- 1-56	710	J	50	2	S; 3.5ft, 60g, dia 1	-------	------	------	Sd	Pl	----	---	D	P	
5R1	Mr. Lewandowski	Lowell Well and Pump Co.	8- 3-56	730	J	56	2	S; 60g	-------	------	------	Sd	Pl	----	30	D	J¾	
7G1	H. Yarck	Peterson Bros.	11-20-55	710	Dr	150	4	Oh	135	135	15	Ls	S	C	55	D	J	Dd 40 ft after 5 hr pumping 4 gpm; Ca, L.
7G2	L. Hixenman	H. F. Hutfilz	--------	715	J	52	2	S; 60g	-------	------	------	Sd	Pl	U	---	D	----	
7H1	J. Cox	Lowell Well and Pump Co.	--------	700	J	42	2	--------do----------	-------	------	------	Sd	Pl	----	---	D	L	
7K1	W. Juuti	Peterson Bros.	8-15-55	710	Dr	161	4	Oh	138	138	23	Ls	S	C	50	D	S	Dd 30 ft after 10 hr pumping 8 gpm; L.
8M1	V. Stoner	-------do--------	5- 2-56	720	Dr	163	4	Oh	148	148	15	Ls	S	C	60	D	S½	Dd 10 ft after 4 hr pumping 10 gpm; Ca, L.
8M2	J. Tarno	-------do--------	4-11-57	715	Dr	165	4	Oh	148	148	17	Ls	S	C	45	D	S½	Dd 32 ft pumping 10 gpm; L.
11G1	H. F. Hutfilz	H. F. Hutfilz	--------	720	J	42	2	S; 60g	-------	------	------	Sd	Pl	----	---	D	----	
11K1	M. W. Jones	Lowell Well and Pump Co.	--------	720	J	49	2	--------do----------	-------	------	------	Sd	Pl	----	28	D	----	
11L1	T. Herschal	-------do--------	--------	705	J	37	2	--------do----------	-------	------	------	Sd	Pl	----	24	D,S	L	Ca.
12A1	A. G. Stoner	-------do--------	--------	715	J	98	2	--------do----------	-------	------	------	Sd	Pl	C	24	D	J	
12B1	G. T. Postono	-------do--------	10-29-56	720	J	49	2	--------do----------	-------	------	------	Sd	Pl	C	21	D	J¾	
12C1	D. E. McLaughlin	-------do--------	8-22-56	690	J	36	2	--------do----------	-------	------	------	G	Pl	C	---	D	J¾	Flowed.
12D1	B. A. McCauly	-------do--------	4-24-56	690	J	46	2	S; 4ft, 60g	-------	26	20	Sd,G	Pl	C	7	D	J	Yield 12 gpm; L.
12D2	E. Dreyer	Hub Plumbing Co.	11-23-54	710	J	38	2	S; 4ft, 60g, dia 1	-------	------	------	Sd	Pl	C	25	D	----	
12E1	D. O. Kreitzman	H. F. Hutfilz	7-27-37	695	J	35	2	S; 60g	-------	------	------	Sd	Pl	C(?)	---	D	----	
12E2	R. W. Turkington	Hub Plumbing Co.	10-22-48	690	J	34	2	----------	-------	------	------	Sd	Pl	C(?)	---	D	J	
12E3	G. W. Abbott	Lowell Well and Pump Co.	--------	700	J	55	2	S; 60g	-------	------	------	Sd	Pl	C	10	D	L	
12G1	T. J. Odonnell	-------do--------	3-27-56	700	J	61	2	S; 3ft, 60g	-------	45	16	Sd,G	Pl	C	16	D	J	Yield 12 gpm; L.
12G2	Mr. Nance	Hub Plumbing Co.	10-21-55	705	J	72	2	S; 4ft, 60g, dia 1	-------	------	------	Sd	Pl	----	50	D	----	

33/9W-12G3	Community Church	---------do---------	10- 9-50	705	J	48	2	S; 60g	------	------	------	Sd	Pl	------	----	P	J		
12G4	T. J. O'Donnell, Jr.	Lowell Well and Pump Co.	3-27-56	710	J	58	2	---------do----------	------	------	------	Sd	Pl	C(?)	13	D	J		
12G5	R. Adam	---------do---------	----------	700	J	38	2	---------do----------	------	------	------	Sd	Pl	------	28	D	J		
12H1	J. Buckness	---------do---------	6- 8-56	690	J	48	2	S; 4ft, 60g	------	31	17	Sd	Pl	C	7	D	J½	Yield 12 gpm; see log well 12H2.	
12H2	C. Rufnagle	---------do---------	6- 4-56	710	J	46	2	---------do----------	------	36	10	Sd	Pl	C	28	D	J	Yield 11 gpm; Ca, L.	
12H3	G. Shaw	Hub Plumbing Co.	5- 8-57	700	J	55	2	S; 4ft, 60g, dia 1	------	48	7	Sd	Pl	C	25	D	-----	L.	
13R1	J. Surprise	H. F. Hutfilz	----------	720	J	80	2	S; 60g	------	------	------	Sd	Pl	------	----	D	-----		
14D1	P. Parrot	---------do---------	1937	710	J	80	2	---------do----------	------	------	------	Sd	Pl	------	----	D	-----		
16E1	N. A. Cumming	Sheehy Well and Pump Co.	6-54	745	Dr	703	12	Oh	168	168	535	Ls	S	C	70	Ir	T	Slight odor hydrogen sulfide gas; L, S.	
18K1	E. Bradbury	Lowell Well and Pump Co.	----------	715	J	52	2	S; 60g	------	------	------	Sd	Pl	------	40	D	J½		
18K2	D. P. Chavalas	---------do---------	----------	705	J	44	2	S; 100g	------	------	------	Sd	Pl	------	----	D	L	Ca.	
21N1	E. Jackson	---------do---------	----------	710	J	56	2	S; 60g	------	------	------	Sd	Pl	------	----	D	J½		
21N2	G. Dawes	---------do---------	----------	710	J	50	2	---------do----------	------	------	------	Sd	Pl	------	----	D	J½		
21N3	W. Menzies	---------do---------	----------	710	J	51	2	---------do----------	------	------	------	Sd	Pl	C(?)	3	D	-----	Yield 15 gpm.	
21Q1	Dixie Lumber Co.	Fitzgerald Well and Pump Co.	6-14-56	685	J	45	2	S; 3ft, 60g	------	------	------	Sd	Pl	------	----	P	P		
21Q2	E. Warne	Lowell Well and Pump Co.	----------	695	J	28	2	S; 60g, dia 1½	------	------	------	Sd	Pl	------	----	P	P		
21R1	Mr. Swett	Sheehy Well and Pump Co.	1955	880	Dr	117	3	Oh	105(?)	105(?)	12(?)	Ls	S	C	20	D	-----		
21R2	G. Bruce	H. G. Hutfilz	----------	690	Dn	26	1½	S; 60g	------	------	------	Sd	Pl	------	----	D	-----		
22B1	L. E. Matter	Lowell Well and Pump Co.	----------	720	J	76	2	---------do----------	------	------	------	Sd	Pl	------	50	D	L	Ca.	
22N1	Lowell Lumber Co. Transit Mix	---------do---------	7-17-56	685	J	54	4	S; 10ft, 60g, dia 3½	------	------	------	Sd	Pl	------	22	I	J3		
22R1	E. Warne	---------do---------	1856	710	Dr	163	3	Oh	139	139	24	Ls(?)	S	C	75	D	J	Water has hydrogen sulfide gas.	
23B1	R. J. Brannock	---------do---------	----------	680	J	34	2	S; 60g	------	------	------	Sd	Pl	------	----	D	L		
23G1	R. M. Tunnell	---------do---------	----------	670	J	27	2	---------do----------	------	------	------	Sd	Pl	------	----	D	J		
23N1	W. Demerling	---------do---------	----------	690	J	55	2	---------do----------	------	------	------	Sd	Pl	------	28	D	J		
23N2	Town of Lowell	Mr. Fleck	1900(?)	690	Dr	285	6	---------do----------	------	------	------	Ls	S	------	40(?)	P	T	Water has hydrogen sulfide gas; other Town well same depth.	
23Q1	H. Houson	Lowell Well and Pump Co.	----------	670	J	34	2	S; 60g	------	------	------	Sd	Pl	------	8	D	L		
23R1	----------	----------	----------	670	---	------	---	---------do----------	------	------	------	D	Pl	U	---	---	-----	Spring issuing at base of hill; many seeps in area.	
24A1	J. Surprise	H. F. Hutfilz	----------	720	J	82	2	S; 60g	------	------	------	Sd	Pl	------	---	D	-----		
24B1	H. F. Sanko	Lowell Well and Pump Co.	4-18-56	720	J	82	2	S; 4ft, 60g	------	------	------	Sd	Pl	C	42	---	-----	Yield 14 gpm; L.	
24F1	H. Burnham	Wehling Well Works	6-56	710	Dr	152	5	Oh	128	130	22	Ls(?)	S	C	66	D	-----	Little dd reported after 3 hr pumping 29 gpm.	
24K1	L. Cunningham	Lowell Well and Pump Co.	----------	700	J	42	2	S; 60g	------	------	------	Sd	Pl	C(?)	28	D	J½		
24K2	F. Blaker	---------do---------	11- 5-56	700	J	46	2	---------do----------	------	------	------	Sd	Pl	C(?)	26	D	-----		
24P1	P. Mahler	H. F. Hutfilz	----------	700	J	43	2	---------do----------	------	------	------	Sd	Pl	------	---	D	-----		
24P2	C. W. Bartell	Lowell Well and Pump Co.	----------	690	J	39	2	---------do----------	------	------	------	Sd	Pl	C(?)	16	D	-----		
24P3	R. Ballou	---------do---------	10-29-56	695	J	51	2	---------do----------	------	------	------	Sd	Pl	C(?)	30	D	J½		
25C1	Lowell Lumber Co.	---------do---------	11- 8-56	700	J	50	2	---------do----------	------	------	------	Sd	Pl	C(?)	31	D	-----		
25D1	P. Burns	---------do---------	10-13-55	700	J	48	2	---------do----------	------	------	------	Sd	Pl	C(?)	26	D	-----	Ca.	
25E1	A. Fuller	---------do---------	----------	700	J	46	2	---------do----------	------	------	------	Sd	Pl	C(?)	---	D	J		
25E2	B. Bratton	---------do---------	----------	700	J	50	2	---------do----------	------	------	------	Sd	Pl	C(?)	28	D	J½		
25F1	J. Bartholomew	---------do---------	4-19-56	700	J	50	2	S; 4ft, 60g	------	40	10	Sd,G	Pl	C	31	D	J½	Yield 8 gpm; Ca, L.	
25F2	Lowell Lumber Co.	---------do---------	4-11-56	700	J	50	2	---------do----------	------	40	10	Sd,G	Pl	C	31	D	-----	Yield 8 gpm; see log well 25F1.	
25F3	---------do---------	---------do---------	11- 8-56	700	J	50	2	S; 60g	------	------	------	Sd	Pl	C	31	D	-----		
26A1	M. Driscoll	----------	1914	680	Dr	1,025	---	---------do----------	73	------	------	-------	------	------	----	---	-----	Oil well; see Logan, 1931, p 418; L.	
27A1	Warne and Jones Supermart	Lowell Well and Pump Co.	----------	700	J	70	2	S; 60g	------	------	------	Sd	Pl	------	---	P	J1		
27A2	L. Braun	---------do---------	----------	710	J	54	2	---------do----------	------	------	------	Sd	Pl	------	35	D	-----		
28D1	S. A. Williams	---------do---------	----------	715	J	78	2	---------do----------	------	------	------	Sd	Pl	------	---	P	J½	Ca.	
28D2	H. Wiotbrock	---------do---------	----------	720	J	46	2	---------do----------	------	------	------	Sd	Pl	------	---	P	J		
28D3	B. Shipley	---------do---------	----------	720	J	63	2	---------do----------	------	------	------	Sd	Pl	------	---	D	J		
29G1	P. A. Rosenwinkel	Peterson Bros.	4-22-56	720	Dr	150	4	Oh	149	149	1	Ls	S	C	70	D	-----	Dd 5 ft after 2 hr pumping 10 gpm; Ca, L.	
29R1	Rono's Restaurant	Lowell Well and Pump Co.	----------	715	J	70	2	S; 60g	------	------	------	Sd	Pl	U(?)	---	P	-----		
30C1	C. Bonck	---------do---------	----------	700	J	61	2	---------do----------	------	------	------	Sd	Pl	U(?)	31	D	J1		
30C2	A. Maddora	---------do---------	----------	690	J	38	2	---------do----------	------	------	------	Sd	Pl	C	10	D	L		
30E1	G. W. Stuppy	Peterson Bros.	12-17-56	690	Dr.	150	4	Oh	134	134	16	Ls	S	C	40	D	S½	Dd 40 ft after 3 hr pumping 8 gpm; water has hydrogen sulfate gas; Ca, L.	

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
33/9W-31N1	Dr. Suddarth	Wehling Well Works	2-52	695	Dr	184	5	Oh	110	110	74	Ls(?)	S	C	43	D,S	J1	Ca.
33N1	Mr. Holshaw	Shoehy Well and Pump Co.	1955	685	Dr	98	4	Oh	90(?)	90(?)	8(?)	Ls	S	C	18	D	----	
36M1	J. M. Harper	Lowell Well and Pump Co.	--------	660	J	40	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	J	Ca.
33/10W-1B1	E. Huseman	Wehling Well Works	5-52	720	Dr	215	5	Oh	102	102	113	Ls(?)	S	C	37	D	----	Ca.
1P1	N. Vadas	-------do--------	1955	710	Dr	247	5	Oh	105	165	82	Ls(?)	S	C	26	D	----	Dd 5 ft after 3 hr pumping 35 gpm.
12B1	W. Orr	-------do--------	1949	710	Dr	200	5	Oh	138	138	122	Ls(?)	S	C	25	D	----	Yield 12 gpm; Ca.
12G1	J. Huseman	-------do--------	12-53	700	Dr	230	4	Oh	127	127	103	Ls(?)	S	C	18	D	----	
12K1	W. E. Welsh	-------do--------	1950	680	Dr	188	5	Oh	90	90	98	Ls(?)	S	C	22	D	----	
12P1	A. Huseman	-------do--------	1948	705	Dr	170	5	Oh	96	96	74	Ls(?)	S	C	34	D	----	Dd 4 ft after 3 hr pumping 12 gpm.
13D1	H. Brandt	-------do--------	--------	700	Dr	142	5	Oh	100	100	42	Ls(?)	S	C	42	D	----	Little dd reported pumping 12 gpm.
13E1	W. Horlitz	-------do--------	4-52	720	Dr	168	5	Oh	130	130	38	Ls(?)	S	C	57	D	J	Ca.
13L1	L. C. Bradley	Lowell Well and Pump Co.	--------	710	J	38	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	L	Ca.
24N1	M. Parmely	Wehling Well Works	8-55	725	Dr	190	5	Oh	117	117(?)	73(?)	Ls(?)	S	C	60	D	----	
25D1	E. Frias	-------do--------	3-55	685	Dr	117	4	Oh	100	100	17	Ls(?)	S	C	20	D	----	
25M1	H. H. Mussman	Peterson Bros.	3-20-56	680	Dr	125	4	Oh	123	123	2	Ls	S	C	30	D,S	S½	Dd 10 ft after 4 hr pumping 8 gpm; Ca, L.
34/7W-5A1	H. W. Kostbade	Hub Plumbing Co.	1-25-56	720	J	40	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	18	D	J	
6N1	H. Batterman	-------do--------	9-22-48	700	J	38	2	---------do---------	------	-----	------	Sd	Pl	----	---	D	L	Ca.
6N2	C. A. Snyder	-------do--------	7-14-59	700	J	35	2	---------do---------	------	25	10	Sd	Pl	U	25	D	----	Yield 9 gpm; gray sand overlain by 20 ft clay.
6R1	P. Smidt	-------do--------	12-27-56	700	J	45	2	---------do---------	------	30	15	Sd	Pl	U(?)	30	D	J	Yield 10 gpm; L.
7N1	Trustees Winfield Township	-------do--------	12-28-55	710	J	40	2	S; 4ft, 40g, dia 1	------	-----	------	Sd	Pl	----	30	P	----	
8N1	W. Kmetz	Peterson Bros.	2-20-58	730	Dr	182	4	Oh	165	169	13	Ls	S	C	40	---	S½	Dd 30 ft after 2 hr pumping 10 gpm; some dissolved gas: Ca, L.
17B1	M. Thoms	Hub Plumbing Co.	6- 4-54	750	J	65	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	50	D	----	
18D1	J. Hutton	-------do--------	4-28-50	710	J	45	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
18P1	M. R. Hughes	Nelson Well and Pump Service	7-15-59	715	J	35	2	S; 3.5ft, 80g, dia 1	------	28	7	Sd	Pl	C	20	D,S	J	Yield 13 gpm; Ca.
20D1	J. Pilsitz	Hub Plumbing Co.	3-20-57	750	J	89	2	S; 4ft, 60g, dia 1	------	73	16	Sd	Pl	C	60	D(?)	----	L.
20D2	W. V. Evett	Wroo Well Drilling	4-15-57	760	J	98	3	S; 5ft, 60g, dia 1½	------	87	9	Sd,G	Pl	C	34	D,S	----	Little dd reported after 2 hr pumping 65 gpm; Ca, L.
28E1	L. Lawson	-------do--------	8- 1-56	740	J	100	2	S; 3.5ft, 80g dia 1½	------	70	30	Sd,G	Pl	C	40	---	----	Ca, L.
28H1	C. Chaskarskis	Hub Plumbing Co.	5-23-46	765	J	75	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	---	D	L	Ca.
29F1	E. L. Donk	Lowell Well and Pump Co.	--------	700	J	38	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	J½	Ca.
29J1	L. Lawson	Wroo Well Drilling	8-56	715	J	81	2	S; 4ft, 80g, dia 1	------	35	46	Sd,G	Pl	C(?)	35	D	½	Ca, L.
30P1	G. Stokes	Hub Plumbing Co.	3-18-55	680	J	55	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	30	D	J½	
31C1	C. Stonor	Fitzgerald Well and Pump Co.	4-18-50	680	J	25	2	S; 3ft, 60g	------	21	10	Sd	Pl	C	3	D	----	Yield 15 gpm.
31F1	E. Fricke	Hub Plumbing Co.	7-14-49	680	J	67	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	J	Ca.
31F2	B. Crapeau	-------do--------	4- 7-49	680	J	68	2	---------do---------	------	-----	------	Sd	Pl	----	---	D	----	
32L1	A. Gibbs	-------do--------	2-23-50	705	J	38	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	L	
34/8W-2B1	J. Hilgol	-------do--------	7-25-50	670	J	62	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	----	
3P1	N. Wirtz	-------do--------	11-26-48	690	J	58	2	S; 4ft, 80g, dia 1	------	-----	------	Sd	Pl	----	---	D	L	Screen replaced four times.
3Q1	H. Meyer	-------do--------	6-22-54	690	J	57	2	---------do---------	------	-----	------	Sd	Pl	----	25	D,S(?)	J	
4M1	C. Niemeyer	-------do--------	11-14-51	700	J	30	2	S; 4ft, 80g, dia 1	------	-----	------	Sd	Pl	----	20	D	J	
4N1	M. Feder	Westville Well Co.	1952	710	Dr	100	4	S; 30ft	------	55	45	Sd,G	Pl	C	35	I	T5	

34/8W-4N2	City of Crown Point	Layne-Northern Co., Inc.	2-12-57	710	Dr	104	4	----------	------	39	61	Sd	Pl	U	39	T	----	L.
4P1	L. C. Smith	Hub Plumbing Co.	11-11-52	700	J	48	3	S; 4ft, 80g, dia 2	------	------	------	Sd	Pl	------	20	P	J½	
4P2	W. Graves	------do------	7- 5-51	700	J	42	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	------	15	D	L	
5A1	City of Crown Point	Layne-Northern Co., Inc.	4-11-57	690	Dr	79	6	S	------	31	48	Sd	Pl	C	26	P	T2	At sewage-disposal plant; Ca, L.
5F1	R. Nichols	Wroe Well Drilling	9-29-57	700	J	54	2	S; 4ft, 80g, dia 1	------	30	24	Sd	Pl	C(?)	---	D	----	L.
5G1	City of Crown Point	Layne-Northern Co., Inc.	2-20-57	700	Dr	76	4	----------	------	38	35	Sd	Pl	U	38	T	----	L.
5J1	------do------	------do------	6-22-50	705	Dr	100	6	----------	------	34	39	Sd	Pl	C	25	T	----	L.
5J2	P. Keiser	Hub Plumbing Co.	9-27-49	700	J	50	2	S	------	------	------	Sd	Pl	C(?)	---	D	----	
5J3	Erie Railroad Co.	Layne-Northern Co., Inc.	2- 1-33	700	Dr	80	24	S; 15ft, dia 13	------	------	------	Sd	Pl	C(?)	18	Dom	----	
5K1	City of Crown Point	------do------	10-27-38	710	Dr	105	30	Gp; S; 40ft, dia 12	------	52	53	Sd	Pl	C	25	N	T	Well pumped sand; dd 25 ft pumping 740 gpm; L.
5K2	------do------	------do------	8-24-35	710	Dr	139	----	----------	138	31	87	Sd	Pl	C	---	T	----	L.
5K3	------do------	------do------	10-10-35	710	Dr	98	30	Gp; S; 40ft, dia 12	------	------	------	Sd	Pl	C	20	Dom	----	Dd 44 ft pumping 700 gpm.
5K4	------do------	------do------	8-31-35	710	Dr	138	----	----------	137	38	59	Sd	Pl	C	18	T	----	L.
5K5	------do------	------do------	10-25-38	710	Dr	105	----	----------	------	32	72	Sd	Pl	C	---	T	----	L.
5L1	Lowell Lumber Co.	Lowell Well and Pump Co.	10-26-55	700	J	89	2	S; 60g	------	------	------	Sd	Pl	C(?)	18	D	----	
5M1	R. Richards	Hub Plumbing Co.	2- 1-56	700	J	39	2	S; 3.5ft, 60g, dia 1	------	30	9	Sd	Pl	C(?)	30	D	----	Yield 8 gpm.
5M2	W. Kretschmar	------do------	1- 6-54	695	J	46	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	C(?)	15	D	J½	
5M3	V. W. Albright	------do------	12-28-51	695	J	61	2	------do------	------	------	------	Sd	Pl	------	---	D	J	
5P1	W. L. Zurbriggen	Lowell Well and Pump Co.	---------	710	J	25	2	S; 60g; dia 1½	------	------	------	Sd	Pl	------	10	D	J	
5R1	City of Crown Point	Layne-Northern Co., Inc.	6-13-50	710	Dr	103	6	----------	------	35	68	Sd	Pl	C	25	T	----	L.
5R2	------do------	------do------	11- 7-50	710	Dr	100	30	Gp; S; 40ft, 80sl, dia 12	------	55	46	Sd	Pl	C	29	P	T	Dd 33 ft pumping 700 gpm; L.
6E1	L. Doty	Hub Plumbing Co.	7-25-55	710	J	70	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	------	50	D	----	
6E2	F. J. Stevens	------do------	9-27-52	710	J	77	2	------do------	------	------	------	Sd	Pl	------	35	D	J	
6E3	A. Krueger	------do------	---------	710	J	86	2	------do------	------	50	36	Sd	Pl	U	50	D	----	Ca, L.
6G1	T. Vesely, Jr.	------do------	9- 7-55	705	J	73	2	------do------	------	------	------	Sd	Pl	------	55	D	----	
6G2	National Construction Corp.	------do------	11-17-56	705	J	75	2	S; 3.5ft, 60g, dia 1	------	65	10	Sd	Pl	C	50	D	----	Ca, L.
6G3	------do------	------do------	---------	710	J	75	2	S; 4ft, 60g, dia 1	------	55	20	Sd	Pl	U	55	D	----	L.
6G4	M. Krell	Fitzgerald Well and Pump Co.	8-13-59	710	J	70	2	------do------	------	52	18	Sd,G	Pl	C	18	D	----	Yield 10 gpm; Ca, L.
6H1	Mr. Ball	------do------	8-14-59	710	J	68	2	------do------	------	52	16	Sd,G	Pl	C	18	D	----	Yield 10 gpm; L.
6H2	T. Fitzgerald	------do------	8- 6-59	710	J	59	2	S; 3ft, 60g, dia 1	------	42	17	Sd	Pl	C	18	D	----	Yield 10 gpm; white sand overlain by 42 ft brown and blue clay.
6H3	------do------	------do------	8- 7-59	710	J	58	2	------do------	------	42	16	Sd	Pl	C	25	D	----	Yield 8 gpm; white sand overlain by 42 ft brown and blue clay.
6J1	W. E. Kurtz, Inc.	Hub Plumbing Co.	10-12-48	690	J	63	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	------	---	D	----	
6K1	C. Kleinschmidt	------do------	4- 7-55	710	J	69	2	------do------	------	------	------	Sd	Pl	------	40	D	J½	
6K2	E. Patz	------do------	9- 7-51	710	J	74	2	------do------	------	------	------	Sd	Pl	------	---	D	----	
6K3	H. Lewis	------do------	2-18-48	710	J	64	2	------do------	------	------	------	Sd	Pl	------	---	D	J	
6L1	D. Kane	------do------	9-22-53	710	J	71	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	------	30	D	J	
6L2	Mrs. Kuhn	------do------	8-11-48	710	J	80	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	------	---	D	J	
6N1	S. Kuzemka	------do------	7- 8-55	720	J	81	2	------do------	------	------	------	Sd	Pl	------	50	D	----	
6N2	J. Zukowski	------do------	5- 9-55	720	J	70	2	------do------	------	------	------	Sd	Pl	------	50	D	J½	
6P1	F. Raab	------do------	7-31-54	715	J	69	2	------do------	------	------	------	Sd	Pl	------	50	D	J½	
6P2	K. Homeier	------do------	4-21-55	720	J	83	2	------do------	------	------	------	Sd	Pl	------	45	D	J½	
7C1	W. W. Kiney	------do------	7-26-54	710	J	80	2	------do------	------	------	------	Sd	Pl	------	30	D	J½	
7C2	E. Ruffing	------do------	10-29-56	710	J	75	2	------do------	------	60	15	Sd	Pl	C	40	D	----	L.
7L1	G. Bondsza	------do------	1- 9-48	700	J	93	2	S; 3.5ft, 60g, dia 1	------	------	------	Sd	Pl	------	---	D	----	Screen changed 6 times.
7L2	H. DeHaan	------do------	12-15-50	740	J	104	2	S; 4ft, 60g, dia 1	------	95	9	Sd	Pl	C	55	D	P	Yield 10 gpm; Ca, L.
8C1	Lake County	----------	1889	735	Dr	3,100	----	----------	140	------	------	-------	------	------	---	---	----	At county courthouse; see Blatchley, W. S. (1897, p 44); gas well; L.
8K1	E. Gard	Hub Plumbing Co.	2- 4-54	735	J	52	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	------	39	A	L	
8R1	M. Schuller	------do------	1-21-53	750	J	76	2	------do------	------	------	------	Sd	Pl	------	60	D,S	----	
9D1	M. Feder	Westville Well Co.	1952(?)	715	Dr	110	6	S; 30ft	------	55	55	Sd,G	Pl	C	35	I	T10	Yield 400 gpm.
9D2	City of Crown Point	Layne-Northern Co., Inc.	3-28-57	710	Dr	103	6	----------	------	48	53	Sd	Pl	C	30	T	----	L.
9F1	A. N. Lindblade	Hub Plumbing Co.	5- 5-49	720	J	43	2	S; 60g	------	------	------	Sd	Pl	------	---	D	L	
9F2	City of Crown Point	Layne-Northern Co., Inc.	4- 5-57	710	Dr	109	6	----------	------	28	77	Sd	Pl	U	28	T	----	L.
9K1	P. Q. Row	Hub Plumbing Co.	11-17-46	720	J	60	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	------	---	D	L	
11L1	Lake County Home	Layne-Northern Co., Inc.	4-16-40	700	Dr	92	18	Gp; S; 8, dia 7	------	78	14	Sd	Pl	C	29	P	T7½	Dd 20 ft pumping 60 gpm; have two rock wells 355 ft and 350 ft, used for stand by; water from rock wells has hydrogen sulfide gas; Ca, L.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone: Depth to top (feet)	Water-bearing zone: Thickness (feet)	Water-bearing zone: Character	Water-bearing zone: Geologic age	Water-bearing zone: Conditions of occurrence	Water level (feet)	Use	Type of pump and horsepower	Remarks
34/8W-11L2	Lake County Home	Layne-Northern Co., Inc.	2-23-40	700	Dr	98	----	----------	-------	78	14	Sd	Pl	C	---	T	----	See log well 11L1.
12R1	T. Vor Meulen	Hub Plumbing Co.	10-21-49	700	J	29	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
14H1	C. Huber	--------do---------	12-26-47	690	J	47	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
14K1	E. Rose	--------do---------	1-28-50	700	J	46	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
15E1	W. Graves	--------do---------	9-14-51	720	J	50	2	---------do----------	-------	-----	-------	Sd	Pl	----	28	D	J	
15E2	H. Graves	--------do---------	8-16-52	720	J	38	2	---------do----------	-------	-----	-------	Sd	Pl	----	25	D	----	
15E3	E. Mills	--------do---------	7-20-53	720	J	40	2	S; 4ft, 80g, dia 1	-------	-----	-------	Sd	Pl	----	28	D	----	
15E4	A. Dance	--------do---------	4-14-17	715	J	50	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
15E5	H. D. Mills	Lowell Well and Pump Co.	---------	715	J	42	2	S; 60g	-------	-----	-------	Sd	Pl	----	---	D	J½	
16A1	Mr. Wagenblast	Hub Plumbing Co.	12-20-48	700	J	60	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	25	D	J	
16A2	R. Hall	--------do---------	8-28-52	700	J	60	2	S; 3.5ft, 60g,dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
16D1	C. Phillips	--------do---------	7- 3-50	750	J	62	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	L	
16N1	W. Heisterberg	--------do---------	6-11-48	760	J	74	2	---------do----------	-------	-----	-------	Sd	Pl	----	70	D	----	
16N1	K. Fraiker	--------do---------	11- 5-55	770	J	83	2	---------do----------	-------	-----	-------	Sd	Pl	----	60	D	----	
16N2	H. Arndt	--------do---------	11-23-53	765	J	80	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
16N3	C. Wille	--------do---------	6-18-49	765	J	84	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
16P1	A. Hill	Sheehy Well and Pump Co.	8-56	740	Dr	276	4	Oh	160	175	101	Ls	S	C	50	D	S1	Much dd pumping 5 gpm; gas reported in well; L.
16P2	R. H. Shanaman	Hub Plumbing Co.	4-29-54	740	J	62	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	40	D	----	
17H1	L. Searle	--------do---------	8-19-54	750	J	66	2	---------do----------	-------	-----	-------	Sd	Pl	----	55	D	J	
17H2	--------do---------	--------do---------	11-14-52	750	J	64	2	---------do----------	-------	-----	-------	Sd	Pl	----	53	D	J	
17H3	--------do---------	--------do---------	8- 8-52	750	J	67	2	---------do----------	-------	-----	-------	Sd	Pl	----	50	D	J	
17H4	--------do---------	--------do---------	10- 6-56	750	J	67	2	---------do----------	-------	50	17	Sd	Pl	C(?)	---	D	J1	Ca, L.
17H5	H. Lewis	--------do---------	2-18-55	750	J	67	2	---------do----------	-------	-----	-------	Sd	Pl	C(?)	50	D	J½	
17R1	C. Kaiser	--------do---------	4-12-50	770	J	72	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
17R2	Mr. Popperdine	Fitzgerald Well and Pump Co.	8-18-59	770	J	82	2	---------do----------	-------	75	15	Sd	Pl	C	60	D	----	Yield 10 gpm; L.
18J1	C. Doty	Hub Plumbing Co.	3-13-52	760	J	85	2	S; 3.5ft, 80g,dia 1	-------	-----	-------	Sd	Pl	----	60	D	----	
18J2	H. Goethal	--------do---------	2- 7-53	770	J	82	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	65	D	----	
18J3	G. Ammerman	--------do---------	6-16-52	770	J	79	2	---------do----------	-------	-----	-------	Sd	Pl	----	60	D	----	
18J4	E. Tretter	--------do---------	4-23-51	770	J	84	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
18J5	R. Wurble	--------do---------	8-19-48	760	J	80	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
18J6	G. Cooper	--------do---------	10-21-47	770	J	74	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
18J7	W. B. Lycan	Lowell Well and Pump Co.	1956	760	Dr	252	3	Oh	219	219	33	Ls	S(?)	C	64	D	----	Water has hydrogen sulfide gas.
18J8	Mr. Hulander	Hub Plumbing Co.	9-30-50	760	J	75	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J(?)	
18J9	M. Cirrincione	Peterson Bros.	2-20-57	750	Dr	295	4	Oh	258(?)	-----	------	Ls(?)	S(?)	C	90	D	S1	Dd 20 ft after 5 hr pumping 20 gpm.
18L1	A. Mathers	Hub Plumbing Co.	---------	750	J	84	2	S; 4ft, 60g, dia 1	-------	75	9	Sd	Pl	C(?)	---	D	----	L.
18P1	A. Russell	--------do---------	12- 7-56	730	J	71	2	---------do----------	-------	50	21	Sd	Pl	C(?)	---	D	----	Ca, L.
18P2	H. S. Lamoro	--------do---------	12- 7-56	730	J	101	2	---------do----------	-------	60	41	Sd	Pl	U(?)	60	D	J¾	Yield 10 gpm; Ca, L.
18Q1	A. Kazimer	--------do---------	7-20-55	760	J	87	2	---------do----------	-------	-----	-------	Sd	Pl	----	60	D	----	
18Q2	F. Blakeman	--------do---------	7-11-47	770	J	83	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
18R1	J. J. Brown	Sheehy Well and Pump Co.	1955	760	Dr	270	4	Oh	130(?)	180	90(?)	Ls	S(?)	C	80(?)	D	----	Water has hydrogen sulfide gas.
18R2	C. Gustko	Hub Plumbing Co.	7- 0-54	755	J	85	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	60	D	----	
18R3	A. Burns	--------do---------	9- 7-49	750	J	81	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	J	
18R4	K. Scott	--------do---------	1-13-47	755	J	76	2	S; 4ft, 80g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
18R5	Mr. Uhrhammer	Wroe Well Drilling	7-22-59	750	J	67	2	---------do----------	-------	40	27	Sd	Pl	C	20	D	----	Yield 15 gpm; Ca, L.
19D1	J. Zauda	Hub Plumbing Co.	2-13-51	770	J	94	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
19G1	J. Carmichael	--------do---------	4-29-55	760	J	72	2	---------do----------	-------	-----	-------	Sd	Pl	----	60	D	J	
19G2	G. Pizer	--------do---------	1- 4-55	760	J	67	2	---------do----------	-------	-----	-------	Sd	Pl	----	55	D	----	Ca.
19G3	E. Grzeskowiak	--------do---------	10-20-54	760	J	83	2	---------do----------	-------	-----	-------	Sd	Pl	----	60	D	----	
19P1	W. Busse	--------do---------	5-18-55	725	J	78	2	---------do----------	-------	-----	-------	Sd	Pl	----	3	D	----	
19P2	D. J. Dobrowski	--------do---------	4-26-54	710	J	78	2	---------do----------	-------	73	13	Sd	Pl	C	40	D	----	L.
19P3	A. Beesel	--------do---------	1957	720	J	86	2	---------do----------	-------	-----	-------	Sd	Pl	----	62(?)	D	----	Screen changed four times.
20A1	E. Heisterberg	--------do---------	8-47	700	J	75	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	
20A2	F. Halfman	--------do---------	5-22-50	750	J	69	2	---------do----------	-------	-----	-------	Sd	Pl	----	---	D	----	

34/8W-20D1	F. Adank	--------do--------	8- 4-55	750	J	66	2	--------do---------	------	-----	------	Sd	Pl	----	50	D	J		
20N1	J. Matra	--------do--------	6-20-55	770	J	60	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	60	D	J½		
20N2	M. Roffman	--------do--------	7-28-51	765	J	84	2	--------do---------	------	-----	------	Sd	Pl	C(?)	65	D	L		
20L1	Youche Country Club	Layne-Northern Co., Inc.	7-19-46	740	Dr	60	8	S; 20ft, dia 6	------	60	25	Sd	Pl	C	30	Ir	----	Dd 20 ft pumping 112 gpm; Ca, L.	
20M1	Mr. Hart	Hub Plumbing Co.	12-29-55	740	J	67	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	50	D	J½		
20M2	Mr. Kylo	--------do--------	8-20-55	740	J	60	2	--------do---------	------	-----	------	Sd	Pl	----	50	D	J		
20M3	Mr. Wilkinson	--------do--------	6-15-55	740	J	65	2	--------do---------	------	-----	------	Sd	Pl	----	50	D	J½		
20M4	D. Kowall	Fitzgerald Well and Pump Co.	10-15-56	740	J	60	2	S; 3ft, 60g	------	46	17	Sd	Pl	C	8	D	----	Yield 14 gpm; Ca, L.	
20N1	V. Luka	Hub Plumbing Co.	11-51	755	J	75	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	50	D	----		
20N2	H. Phillips	--------do--------	2-21-56	755	J	73	2	--------do---------	------	-----	------	Sd	Pl	----	55	D	----		
21D1	N. Sprgaue	--------do--------	8-30-48	760	J	74	2	--------do---------	------	-----	------	Sd	Pl	----	---	---	----	Screen changed 4 times.	
21D2	O. Fifield	--------do--------	1-15-51	750	J	59	2	--------do---------	------	-----	------	Sd	Pl	----	---	---	----		
21D3	W. Fifield	J. Eich and Son	7-24-59	730	J	78	3	S; 6ft, 8sl, dia 2	------	54	25	Sd	Pl	U	54	D	----	Yield 25 gpm; L.	
21E1	C. Kaiser	Hub Plumbing Co.	2-12-54	770	J	82	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	55	D	----		
21L1	W. E. Abramson	--------do--------	1-10-56	740	J	73	2	--------do---------	------	-----	------	Sd	Pl	C	---	D	----	L.	
21L2	D. Balogh	--------do--------	10-25-56	730	J	85	2	--------do---------	------	60	25	Sd	Pl	C	---	D	----		
21M1	A. Fogleman	--------do--------	1-24-56	740	J	67	2	--------do---------	------	-----	------	Sd	Pl	----	55	D	----		
22D1	G. Schmidt	--------do--------	12-10-54	720	J	95	2	--------do---------	------	-----	------	Sd	Pl	----	40	D	----		
22L1	A. Lauerman	--------do--------	11- 9-55	735	J	55	2	--------do---------	------	-----	------	Sd	Pl	C(?)	35	D	----		
22N1	C. Willy	Gary Well and Pump Co.	8- 6-59	745	J	53	2	--------do---------	------	49	4	Sd	Pl	C	40	D,S	L½	Yield 10 gpm; Ca, L.	
23G1	G. Boebe	Hub Plumbing Co.	8-21-48	700	J	48	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	L		
23L1	R. Whitton	Fitzgerald Well and Pump Co.	8-11-55	710	J	70	2	S; 3ft, 60g, dia 1	------	-----	------	Sd	Pl	----	40	D	----	Yield 15 gpm.	
23L2	H. Wilde	Hub Plumbing Co.	--------	710	J	45	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	---	----		
25B1	W. B. Ponder	--------do--------	3-20-46	710	J	65	2	--------do---------	------	-----	------	Sd	Pl	----	---	D	----		
25E1	R. W. Sickles	--------do--------	4- 3-53	720	J	60	2	--------do---------	------	-----	------	Sd	Pl	----	45	D	J		
25J1	L. Muttermaugh	--------do--------	9-24-54	685	J	74	2	--------do---------	------	-----	------	Sd	Pl	----	12	S	----		
25Q1	--------do--------	--------do--------	8-21-54	700	J	65	2	--------do---------	------	-----	------	Sd	Pl	----	25	S	J½		
25Q2	--------do--------	--------do--------	7-15-53	700	J	46	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	30	D	----		
26B1	J. Wilson	--------do--------	10- 7-53	720	J	90	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	50	D	J½		
26C1	H. A. Gerlach	--------do--------	3-21-55	715	J	110	2	--------do---------	------	-----	------	Sd	Pl	----	50	D,S	J	Ca.	
26C2	R. White	--------do--------	6-19-53	710	J	92	2	--------do---------	------	-----	------	Sd	Pl	----	40	D	----		
26K1	J. Ross	--------do--------	8-10-50	700	J	37	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----		
28L1	A. Elsinga	--------do--------	8-27-54	750	J	75	3	S; 6ft, 60g, dia 1¼	------	-----	------	Sd	Pl	----	60	D,S	J1		
28N1	C. Dinga	--------do--------	7-20-48	760	J	75	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	60(?)	D	L	Ca.	
29D1	J. M. Klaus	--------do--------	5-27-55	750	J	64	2	--------do---------	------	-----	------	Sd	Pl	----	40	D	P	Ca.	
29E1	Girl Scouts of Hammond	--------do--------	5-10-47	745	J	80	2	--------do---------	------	-----	------	Sd	Pl	----	---	P	----		
30A1	G. Josh	--------do--------	11-13-54	750	J	74	2	--------do---------	------	55	19	Sd	Pl	C	50	D	----		
30A2	--------do--------	--------do--------	11- 9-48	750	J	58	2	--------do---------	------	-----	------	Sd	Pl	C(?)	---	D	----	Screen changed four times.	
30A3	P. Sopsic	--------do--------	4-30-51	750	J	54	2	--------do---------	------	-----	------	Sd	Pl	C(?)	---	D	J		
30A4	T. Vonoly	--------do--------	5-17-54	735	J	50	2	--------do---------	------	-----	------	Sd	Pl	C(?)	---	D	J		
30A5	--------do--------	--------do--------	6- 1-46	740	J	53	2	S; 3.5ft, 80g, dia 1	------	-----	------	Sd	Pl	C(?)	---	D	----		
30B1	W. A. Heath	--------do--------	9-50	710	J	87	2	S; 4ft, 60g, dia 1	------	60	7	Sd	Pl	C	---	D	J½	Ca, L.	
30R1	C. Kremar	--------do--------	7-11-50	780	J	72	2	--------do---------	------	-----	------	Sd	Pl	----	---	D	----		
31B1	C. Lewis	--------do--------	12-27-48	750	J	60	2	--------do---------	------	-----	------	Sd	Pl	----	---	D	----		
32C1	E. Schmidt	--------do--------	8- 7-50	765	J	68	2	--------do---------	------	-----	------	Sd	Pl	----	---	D	L		
32N1	M. Luko	--------do--------	11- 2-50	750	J	118	2	--------do---------	------	-----	------	Sd	Pl	----	60	D	----		
33F1	E. Lubicke	--------do--------	11- 4-52	740	J	79	2	--------do---------	------	-----	------	Sd	Pl	----	50	D	J		
34Q1	E. Hockel	--------do--------	12-13-50	730	J	54	2	--------do---------	------	-----	------	Sd	Pl	----	---	D	J		
36E1	M. DuPlan	--------do--------	4- 9-54	700	J	39	2	--------do---------	------	-----	------	Sd	Pl	----	20	S	----		
34/9W-1A1	B. Solkow	--------do--------	8-17-54	700	J	73	2	--------do---------	------	-----	------	Sd	Pl	----	25	D	J		
1A2	A. Van Sossan	--------do--------	6-11-54	700	J	61	2	--------do---------	------	-----	------	Sd	Pl	----	30	D	----		
1A3	M. Roproglo	--------do--------	10-12-49	700	J	67	2	S; 4ft, 80g, dia 1	------	-----	------	Sd	Pl	----	---	D	L		
1A4	F. Raab	--------do--------	10- 8-51	700	J	45	2	--------do---------	------	-----	------	Sd	Pl	----	---	D	J		
1A5	M. Finkleatein	--------do--------	5- 9-46	700	J	71	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J		
1R1	J. Tromp	--------do--------	6-10-54	690	J	94	2	--------do---------	------	-----	------	Sd	Pl	----	10	D	J		
1R2	--------do--------	--------do--------	8-10-55	695	J	128	2	--------do---------	------	-----	------	Sd	Pl	----	25	D	J½		
1R3	E. Bonnett	--------do--------	12-16-52	700	J	51	2	--------do---------	------	-----	------	Sd	Pl	----	15	D	J		
1R4	J. Glassford	--------do--------	6-28-55	695	J	66	2	--------do---------	------	-----	------	Sd	Pl	----	40	D	----		
1R5	E. F. Endris	Lowell Well and Pump Co.	1956	690	J	98	2	S	------	-----	------	Sd	Pl	----	---	D	J½		
1R6	S. Woods	Hub Plumbing Co.	--------	695	J	107	2	S	------	101	6	Sd	Pl	C	---	D	----	L.	
1R7	E. H.Gudonschwager	--------do--------	10-23-56	705	J	88	2	S; 4ft, 60g, dia 1	------	55	33	Sd	Pl	C(?)	55	D	----	L.	
2Q1	E. Doutsch	--------do--------	5-12-52	700	J	75	2	--------do---------	------	-----	------	Sd	Pl	----	35	D	J		
4E1	Dr. Kuhn	Sheehy Well and Pump Co.	1950	680	Dr	102	5	Ok	------	160(?)	32(?)	Ls(?)	S	C	---	D	1½	Flowing; Ca.	
5D1	Michigan-Wisconsin Pipeline Co.	Layne-Northern Co., Inc.	9- 2-50	710	Dr	100	8	Gp; S; 30ft, 10Ssl	------	65	33	Sd,G	Pl	C	31	I	T7½	Dd 11 ft after 10 hr pumping 110 gpm; L.	
5D2	--------do--------	--------do--------	10-26-50	710	Dr	104	8	--------do---------	------	56	47	G,Sd	Pl	C	28	I	T	Dd 12 ft after 7 hr pumping 150 gpm; L.	
5D3	J. Wottgren	Triangle Drilling Co.	8-17-57	690	Dr	108	4	Ok	116	116	52	Ls(?)	S	C	11	D	----	Dd 20 ft after 1 hr pumping 12 gpm; L.	

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
34/9W-5E1	Michigan-Wisconsin Pipeline Co.	Layne-Northern Co., Inc.	--------	710	Dr	125	6	----------	------	65	60	Sd	Pl	C	28	O	----	Observation well Lake 6; water level measured 33.52 ft below lsd. 8-17-56; E, G, L.
5E2	R. Patnoe	Hub Plumbing Co.	4-16-55	710	J	102	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	---	----	
5R1	W. Clause	H. F. Hutfilz	1937	680	Dr	25	3	Oc	------	-----	------	Sd	Pl	----	0	---	----	
5R2	L. Valois	Triangle Drilling Co.	12- 1-57	680	Dr	124	4	Oh	95	95	29	Ls(?)	S	C	---	D	----	Dd 12 ft pumping 12 gpm; Ca, L.
8A1	F. Moohlman	Hub Plumbing Co.	8-13-48	690	J	97	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	Well deepened from 56 to 96 ft, 7-16-52.
8B1	S. Williamson	H. F. Hutfilz	10-26-37	680	J	31	2	S; 60g	------	-----	------	Sd	Pl	C	0	D	----	Ca.
8J1	J. Rutledge	Lowell Well and Pump Co.	1955	710	Dr	158	3	Oh	143	143	15	Ls(?)	S	C	---	D	----	
9A1	M. Turner	-------do--------	4-26-55	715	J	50	2	S; 60g	------	-----	------	Sd	Pl	----	24	D	J	
9A2	P. Faurot	Triangle Drilling Co.	--------	720	Dr	183	4	Oh	155	155	28	Ls(?)	S	C	28	D	----	Yield 9 gpm; Ca, L.
9B1	J. Burke	-------do--------	10-30-56	700	J	55	2	S; 3ft, 60g, dia 1	------	30	25	Sd	Pl	C	---	D	----	Flowed; little dd reported after 1 hr pumping 7 gpm; sand overlain by 30 ft clay.
9B2	-------do--------	Lowell Well and Pump Co.	6-17-54	690	J	85	2	S; 60g	------	-----	------	Sd	Pl	C	---	D	J	Flowed.
9E1	Mr. Turkington	Hub Plumbing Co.	1-12-49	695	J	76	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	---	D	----	
9H1	Mr. Mohr	Triangle Drilling Co.	1957	720	Dr	188	4	Oh	133	153	35	Ls(?)	S	C	30	D	----	Yield 9 gpm; L.
9K1	E. Akers	Hub Plumbing Co.	5- 8-50	720	J	114	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J	
9K2	J. Horod	-------do--------	9-13-48	720	J	111	2	S; 4ft, 100g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
9K3	F. Sheaks	-------do--------	8-28-49	720	J	104	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J	
9K4	W. R. Helm	-------do--------	5-24-48	720	J	99	2	--------do---------	------	-----	------	Sd	Pl	----	---	D	----	
9M1	J. W. Patrick	Lowell Well and Pump Co.	1955	700	Dr	143	3	Oh	133	133	10	Ls(?)	S	C	---	P	$L\frac{1}{2}$	Limestone overlain by sand; Ca.
9N1	J. R. Parat	-------do--------	--------	720	J	74	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	J	
10D1	A. Howe	Hub Plumbing Co.	6- 6-47	720	J	112	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	----	
10H1	E. S. Urbanski	-------do--------	8-11-53	735	J	67	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	50	D	J	
11A1	Mr. Kilbury	Sheehy Well and Pump Co.	1955	710	Dr	210	3	Oh	190(?)	190(?)	20(?)	Ls	S	C	30	D	----	
11A2	H. Ibs	Hub Plumbing Co.	10- 7-46	720	J	84	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
11A3	C. Dacus	Wroo Well Drilling	1958	695	Dr	205	4	Oh	172	172	33	Ls	S	C	60	D	----	Dd 20 ft after 2 hr pumping 25 gpm; Ca, L.
11M1	J. Lucy	Sheehy Well and Pump Co.	10-56	730	Dr	205	4	Oh	160	180	25	Ls	S	C	50	D	$J\frac{1}{2}$	
11M2	J. R. Graves	Hub Plumbing Co.	9-20-56	730	Dr	92	2	S; 4ft, 60g, dia 1	------	63	29	Sd	Pl	C	50	D	----	Ca, L.
12B1	C. Allen	-------do--------	1- 4-52	720	J	93	2	--------do----------	------	-----	------	Sd	Pl	C(?)	45	D	----	
12B2	E. Contrell	-------do--------	3- 7-49	720	J	80	2	--------do----------	------	-----	------	Sd	Pl	----	---	D	----	
12D3	J. Bryant	Nelson Well and Pump Service	6-56	720	J	46	3	S; 5ft, 80g, dia $1\frac{1}{2}$	------	-----	------	Sd	Pl	----	---	D	$J1\frac{1}{2}$	
12C1	Sky-Line Poultry Farm	Hub Plumbing Co.	6- 1-51	710	J	38	2	S; 4ft, 80g, dia 1	------	-----	------	Sd	Pl	----	---	D,S	J	
12F1	N. Brown	Wroo Well Drilling	1958	720	J	68	2	S; 5ft, 80g, dia 1	------	37	31	Sd	Pl	----	---	---	$J\frac{1}{2}$	L.
12K1	E. G. Howe	Sheehy Well and Pump Co.	10-55	720	Dr	187	4	Oh	155(?)	155(?)	32(?)	Sh	D	C	25	D	L	Ca.
12P1	Mr. Sparacino	Hub Plumbing Co.	7-25-55	730	J	72	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	50	D	----	
12P2	J. Macko	-------do--------	5-24-55	730	J	56	2	--------do----------	------	-----	------	Sd	Pl	----	---	D	----	
12P3	C. Hopkins	Triangle Drilling Co.	9- 5-57	730	Dr	233	4	Oh	176	176	57	Ls(?)	S	C	35	D	----	Dd 30 ft after 1 hr pumping 10 gpm; water has hydrogen sulfide gas; L.
12P4	W. Foor	J. R. Stinnett	9-21-55	730	Dr	245	4	Oh	------	-----	------	Ls	S	C	25	D	----	Dd 40 ft after 3 hr pumping 15 gpm; Ca.
13B1	J. Kemmerley	Sheehy Well and Pump Co.	--------	730	Dr	238	4	Oh	185	201	37	Ls	S	C	63	D,S	J1	Dd 90 ft after 1 hr pumping 8 gpm; water has hydrogen sulfide gas; Ca, L.

34/9W-13C1	V. Yancey	Hub Plumbing Co.	8-18-53	740	J	107	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	50	D	----		
13C2	Mr. Maddon	Sheehy Well and Pumping Co.	1955	730	Dr	265	3	Oh	230(?)	230(?)	35(?)	Ls(?)	S	C	90	D	----		
13C3	C. White	Hub Plumbing Co.	9-11-52	730	J	96	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	32	D	J		
13C4	J. Orintas	------do------	3-21-52	730	J	85	2	------do------	------	------	------	Sd	Pl	----	40	D	J		
13F1	W. S. Thundor	Lowell Well and Pump Co.	1956	760	Dr	235	3	Oh	218	218	17	Ls(?)	S	C	68	D	L	Water has hydrogen sulfide gas.	
13F2	T. McCabe	Hub Plumbing Co.	3- 5-53	755	J	80	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	60	D	J		
13G1	L. Wellman	------do------	12-16-52	750	J	91	2	------do------	------	------	------	Sd	Pl	----	35	D	----		
13G2	J. Danovski	------do------	3-28-51	730	J	86	2	------do------	------	------	------	Sd	Pl	----	65	D	J		
13G3	M. Anderson	------do------	7- 6-51	740	J	70	2	------do------	------	------	------	Sd	Pl	----	---	D	----		
13G4	J. Bianco	J. Eich and Son	7-30-59	750	J	77	2	------do------	------	57	21	Sd	Pl	C	50	D	J	Yield 12 gpm; Ca, L.	
13H1	W. Lively	Hub Plumbing Co.	9-22-52	750	J	80	2	------do------	------	------	------	Sd	Pl	----	60	D	----		
13H2	C. Ziller	------do------	8-22-52	750	J	80	2	------do------	------	------	------	Sd	Pl	----	60	D	----		
13H3	L. Ziller	------do------	6- 2-50	750	J	84	2	------do------	------	------	------	Sd	Pl	----	65	D	----		
13J1	J. Solsky	------do------	7-20-54	760	J	78	2	------do------	------	------	------	Sd	Pl	----	65	D	J		
13J2	Mr. Libik	------do------	3-12-51	760	J	78	2	S; 3.5ft, 80g,dia 1	------	------	------	Sd	Pl	----	---	D	J		
13K1	G. Forburger	Lowell Well and Pump Co.	2-23-53	750	J	77	2	S; 60g	------	------	------	Sd		----	57	D	L		
13L1	W. A. Radzwill	------do------	------	760	Dr	236	3	Oh	218	218	18	Ls(?)	S	C	68	D	L	Water has hydrogen sulfide gas; Ca.	
14D1	M. Doll	Hub Plumbing Co.	4-19-46	735	J	84	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	---	D	L		
14E1	R. Turkington	------do------	6-25-47	730	J	88	2	------do------	------	------	------	Sd	Pl	C(?)	---	D	----		
14E2	G. Wild	Triangle Drilling Co.	12- 5-57	700	Dr	138	4	Oh	118	118	20	Ls(?)	S	C	7	---	----	Little dd reported pumping 12 gpm; Ca, L.	
15A1	Mr. Bosich	Sheehy Well and Pump Co.	1955	730	Dr	155	4	Oh	135(?)	135(?)	20	Ls	S	C	50(?)	D	----		
15A2	M. Schmidt	Hub Plumbing Co.	5-21-47	730	J	75	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	---	D	----		
15H1	E. S. Cross	Peterson Bros.	6-27-56	740	Dr	178	4	Oh	167	167	11	Ls	S	C	80	---	S½	Dd 20 ft after 5 hr pumping 10 gpm; L.	
15H2	C. Jonson	Hub Plumbing Co.	12-22-47	740	J	70	2	S; 3.5ft, 80g,dia 1	------	------	------	Sd	Pl	----	---	D	----	Screen changed 3 times.	
16E1	J. Brau	------do------	5-27-52	720	J	77	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	30	D	----	Ca.	
16N1	Mr. Williams	Sheehy Well and Pump Co.	1955	740	Dr	185	4	Oh	170(?)	170(?)	15(?)	Ls	S	C	52	D	----		
16R1	J. Boono	Fitzgerald Well and Pump Co.	8- 1-56	725	J	108	2	S; 3ft, 80g	------	90	28	Sd	Pl	C	68	D	----	Yield 10 gpm; L.	
16R2	Automatic Fusseo Co.	Lowell Well and Pump Co.	------	725	J	90	2	S; 60g	------	------	------	Sd	Pl	----	---	I	J½		
17B1	Mr. Wilk	Sheehy Well and Pump Co.	1955	720	Dr	159	3	Oh	148(?)	148(?)	11(?)	Ls	S	C	32(?)	D	----		
17G1	J. M. Tomko	Triangle Drilling Co.	8-29-59	725	Dr	185	4	Oh	153	153	32	Ls(?)	S	C	40	D	----	Dd 15 ft after 1 hr pumping 9 gpm; L.	
19A1	E. Swidor	Sheehy Well and Pump Co.	7-10-57	670	Dr	96	4	Oh	88	88	8	Ls	S	C	+25	I	----	Yield 165 gpm; water from overlying gravel flowed 50 gpm; Ca, L.	
19N1	F. DeVries	Wohling Well Works	5-56	720	Dr	238	5	Oh	180	180	78	Ls(?)	S	C	48	---	----	Temperature 52°F.	
20A1	N. Titoi	R. Robinson	2- 8-56	740	Dr	194	3	Oh	174	174	20	Ls	S	C	41	---	J	Dd 3 ft after 2 hr pumping 10 gpm; L.	
20B1	E. Jung	Hub Plumbing Co.	2-10-56	740	J	112	2	S; 3.5ft. 100g, dia 1	------	60	52	Sd	Pl	U	80	D	----	Dirty sand overlain by 40 ft clay	
20F1	R. Hargis	Sheehy Well and Pump Co.	1955	730	Dr	167	4	Oh	155(?)	155(?)	12(?)	Ls	S	C	40	D	----		
20N1	R. Potts	Lowell Well and Pump Co.	12-56	745	Dr	188	3	Oh	168	168	20	Ls(?)	S	C	58	D	J½		
20J1	H. V. Lear	------do------	------	760	J	76	2	S; 60g	------	------	------	Sd	Pl	----	42	D	L		
20J2	N. L. Pfeifer	J. R. Stinnett	8-22-53	760	Dr	212	8	Oh	182(?)	182(?)	30	Ls	S	C	65	D,Ir	T	Little dd reported after 5 hr pumping 30 gpm.	
20Q1	H. Krotz	Triangle Drilling Co.	1958	755	Dr	253	4	Oh	188	188	87	Ls(?)	S	C	85	---	----	Yield 7 gpm; L.	
20Q2	R. Szarmach	------do------	1958	755	Dr	243	4	Oh	188	188	55	Ls(?)	S	C	70	---	----	Little dd reported pumping 8 gpm; L.	
20R1	R. Wilson	Hub Plumbing Co.	4-22-54	760	J	77	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	U	86	D	----		
20R2	E. Pigulski	------do------	3-11-54	760	J	73	2	------do------	------	------	------	Sd	Pl	U	85	D	----		
20R3	M. Courtney	------do------	5- 7-54	760	J	77	2	------do------	------	------	------	Sd	Pl	U	86	D	----		
20R4	L. Anvick	Triangle Drilling Co.	9- 8-58	760	Dr	218	4	Oh	191	191	27	Ls(?)	S	C	85	D	J½	Dd 9 ft pumping 9 gpm; see log well 20R5.	
20R5	J. Stanko	------do------	1958	760	Dr	243	4	Oh	188	189	54	Ls(?)	S	C	85	D	---	Dd 15 ft pumping 9 gpm; Ca, L.	
21A1	H. Houser	Lowell Well and Pump Co.	------	750	Dr	86	2	S; 60g	------	------	------	Sd	Pl	----	---	D	J½		
21A2	M. Ishmail	------do------	------	760	J	90	2	------do------	------	------	------	Sd	Pl	----	72	D	J½		
22CC	R. Wakefield	Hub Plumbing Co.	10-25-55	745	J	66	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	C	50	D	----	Ca.	
21C2	L. LaPalm	------do------	12-19-56	750	J	71	2	------do------	------	63	8	Sd	Pl	C	55	D	J	Yield 9 gpm; L.	
21D1	F. R. Gilby	Lowell Well and Pump Co.	------	740	J	57	2	S; 60g	------	------	------	Sd	Pl	----	---	D	----		

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
34/9W-21D2	P. Malavolta	Sheehy Well and Pump Co.	1955	740	Dr	190	4	Oh	173(?)	173(?)	17(?)	Ls	S	C	70	D	----	Ca.
21F1	J. Blackwell	Hub Plumbing Co.	4- 1-57	760	J	71	2	S; 4ft, 60g, dia 1	------	55	16	Sd	Pl	C(?)	55	D	----	L.
21F2	H. Moeckel	------do------	1956	760	J	70	2	------do------	------	------	------	Sd	Pl	C(?)	50	D	----	Ca.
21F3	E. R. Pullins	------do------	12- 5-55	755	J	71	2	------do------	------	------	------	Sd	Pl	C(?)	55	D	----	Ca.
21H1	Mr. Ross	Sheehy Well and Pump Co.	1955	770	Dr	175	3	Oh	160(?)	160(?)	15(?)	Ls	S	C	45	D	----	
21H2	B. G. Simon	Hub Plumbing Co.	12-17-48	765	J	139	2	S; 3.5ft, 100g,dia 1	------	------	------	Sd	Pl	----	---	D	L	Ca.
21J1	Franciscan Fathers	Kramer Bros.	------	760	Dr	305	8	Oh	186	186	119	Ls	S	C	---	P	----	Yield 30 gpm; L.
21J2	Cedar Lake Golf Club	Lowell Well and Pump Co.	------	770	J	152	2	S; 60g	------	------	------	Sd	Pl	----	---	P	L	
21N1	G. Raeth	Hub Plumbing Co.	6-12-53	765	J	86	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	66	D	----	
22D1	A. Shubert	Lowell Well and Pump Co.	5-26-56	740	J	127	2	------do------	------	120	7	Sd	Pl	C(?)	56	D	L	Yield 9 gpm; L.
22D2	G. Dickinson	------do------	5- 2-50	750	J	129	2	------do------	------	120	9	Sd	Pl	C(?)	56	D	J½	Yield 9 gpm; see log well 22D1.
22D3	Mr. Zurawski	Sheehy Well and Pump Co.	1955	740	Dr	180	4	Oh	165(?)	165	15	Ls	S	C	50	D	----	
22D4	W. C. Wagner	Hub Plumbing Co.	5-30-49	740	J	124	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	C(?)	---	D	----	
22H1	Mr. Borg	Sheehy Well and Pump Co.	1955	720	Dr	142	3	Oh	130(?)	130(?)	12(?)	Ls	S	C	14(?)	D	----	
22H2	J. Grosman	------do------	1955	740	Dr	182	3	Oh	170(?)	170(?)	12(?)	Ls	S	C	58(?)	D	----	
22H3	Ellers Funeral Home	------do------	7-53	730	Dr	175	4	Oh	158(?)	158(?)	17(?)	Ls	S	C	50(?)	D	----	
22H4	Mr. Gonson	------do------	1956	710	Dr	130	3	Oh	120(?)	120(?)	10(?)	Ls	S	C	4(?)	D	----	
22H5	R. Ackerman	Hub Plumbing Co.	2-26-48	720	J	124	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	---	D	----	
22N1	Trustees Hanover Township	Lowell Well and Pump Co.	------	740	J	48	2	S; 60g	------	------	------	Sd	Pl	----	---	P	J½	At Schiller School.
22Q1	R. Evans	Peterson Bros.	3-12-57	710	Dr	148	4	Oh	140	140	8	Ls	S	C	30	D	J1	Dd 3 ft pumping 5 gpm; L.
22Q2	C. Fortier	Nelson Well and Pump Service	3-10-56	710	J	94	2	S; 5ft, 80g, dia 1	------	------	------	Sd	Pl	----	---	D	----	
22Q3	H. Snedon	Lowell Well and Pump Co.	12-12-55	700	J	130	2	Oh	134	134	2	Ls(?)	S	C	---	D	L	
22Q4	Mr. Askron	Sheehy Well and Pump Co.	1955	705	Dr	140	3	Oh	130(?)	130(?)	10(?)	Ls(?)	S	C	9	D	----	
23A1	D. Fuchs	------do------	1955	770	Dr	225	3	Oh	190(?)	190(?)	35(?)	Ls	S	C	80(?)	D	----	Ca.
23B1	Mr. Hendrickson	------do------	1955	760	Dr	222	3	Oh	190(?)	190(?)	32(?)	Ls	S	C	68(?)	D	----	
23H2	A. Doty	Hub Plumbing Co.	6-29-51	760	J	83	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	70	D	J½	
23H3	F. Rooney	------do------	8-13-48	755	J	85	2	------do------	------	------	------	Sd	Pl	----	---	D	J	Screen changed three times.
23C1	M. Shearer	Sheehy Well and Pump Co.	1955	705	Dr	160	3	Oh	138(?)	138(?)	22(?)	Ls	S	C	17(?)	D	----	
23C2	M. Pahnke	Hub Plumbing Co.	3-31-55	740	J	94	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	40	D	----	
23C3	M. Shearer	------do------	2-16-49	720	J	73	2	------do------	------	------	------	Sd	Pl	----	---	D	----	Screen changed four times.
23D1	Salesians Society	Lowell Well and Pump Co.	1956	740	Dr	189	3	Oh	166	166	23	Ls(?)	S	----	---	D	----	
23D2	H. Goetz	Hub Plumbing Co.	8- 4-54	750	J	91	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	84	D	----	
23E1	Mr. Wedge	------do------	6-11-55	740	J	95	2	------do------	------	------	------	Sd	Pl	C	60	D	----	
23E2	E. Bapple	------do------	3-24-55	715	J	85	2	------do------	------	------	------	Sd	Pl	C	50	D	L	
23E3	A. Annerud	Sheehy Well and Pump Co.	------	700	Dr	147	4	Oh	130	130	17	Ls	S	C	6	P	----	Ca, L.
23F1	Mr. Rulo	R. Robinson	7- 2-55	760	J	95	2	S; 4ft, 60g, dia 1	------	72	23	Sd	Pl	C	46	---	J½	Yield 6 gpm; L.
23F2	C. Hummel	Hub Plumbing Co.	3-28-52	760	J	85	2	------do------	------	------	------	Sd	Pl	C	65	D	----	
23F3	W. Koepke	Lowell Well and Pump Co.	------	700	J	104	2	S; 60g	------	------	------	Sd	Pl	C	---	D	----	
23F4	F. Stobbart	R. Robinson	7-18-50	760	Dr	247	4	Oh	194	198	49	Ls	S	C	65	---	J1	Dd 3 ft after 3 hr pumping 10 gpm; L.
23G1	C. and T. Cremeens	Sheehy Well and Pump Co.	3-56	770	Dr	227	3	Oh	207	207	20	Ls	S	C	75	D	J1	Yield 15 gpm.
23G2	J. Mitch	------do------	1955	765	Dr	221	3	Oh	195(?)	195(?)	26(?)	Ls	S	C	72	D	----	

34/8W-23G3	Mr. Jones	-------do--------	1955	765	Dr	224	3	Oh		190(?)	190(?)	34(?)	Ls	S	C	65	D	----	
23G4	D. McCarthy	-------do--------	1955	770	Dr	258	3	Oh		195(?)	185(?)	81(?)	Ls	S	C	78	D	----	
23G5	J. Sullivan	R. Robinson	6-30-56	760	Dr	235	3	Oh		200	203	32	Ls	S	C	75	D	L	Dd 2 ft after 3 hr pumping 10 gpm; L.
23G6	J. Walkiers	Hub Plumbing Co.	11- 8-54	760	J	103	2	S; 4ft, 60g, dia 1		------	------	------	Sd	Pl	C	40	D	----	
23G7	F. Patrick Jr.	--------do--------	4- 8-54	765	J	80	2	--------do--------		------	------	------	Sd	Pl	C	70	D	----	
23G8	C. Manley	--------do--------	9-21-54	760	J	84	2	--------do--------		------	------	------	Sd	Pl	C	70	D	J½	
23G9	G. Evans	--------do--------	5-25-53	765	J	75	2	--------do--------		------	------	------	Sd	Pl	C	70	D	----	
23G10	J. Cilek	--------do--------	3-23-56	760	J	91	2	--------do--------		------	------	------	Sd	Pl	C	---	D	----	
23G11	A. W. Moffer	--------do--------	11-18-56	765	J	86	2	----------		------	75	11	Sd	Pl	C	70	D	----	L.
23G12	D. Johnson	--------do--------	--------	770	J	91	2	----------		------	73	18	Sd	Pl	C	---	D	----	See log well 23G11; Ca.
23G13	G. Hetzler	Lowell Well and Pump Co.	11-12-55	770	J	88	2	S; 60g		------	------	------	Sd	Pl	C	45	D	L	
23G14	G. McIntosh	--------do--------	1955	770	Dr	244	3	Oh		202	210	34	Ls	S	C	---	D	----	Limestone overlain by 8 ft shale.
23L1	L. Werner	--------do--------	4-16-56	750	J	71	2	S; 4ft, 60g, dia 1		------	50	21	Sd,G	Pl	C	47	D	L	Yield 10 gpm; L.
23L2	Mr. Paquette	Shoehy Well and Pump Co.	1956	760	Dr	218	3	Oh		197	197	21	Ls	S	C	79	D	L	L.
23L3	G. Kokkinos	Hub Plumbing Co.	7- 6-49	760	J	78	2	S; 4ft, 60g, dia 1		------	------	------	Sd	Pl	----	---	D	----	
23W1	J. Potts	Lowell Well and Pump Co.	--------	700	J	40	2	S; 60g		------	------	------	Sd	Pl	----	10	D	----	
23P1	G. Hetzler	--------do--------	--------	710	J	54	2	--------do--------		------	------	------	Sd	Pl	----	20	N	L	
23Q1	J. O. Johnson	Shoehy Well and Pump Co.	8-55	740	Dr	235	4	Oh		184	184	51	Ls	S	C	50	D	L½	Yield 30 gpm; L.
23Q2	Mr. Otto	--------do--------	1955	740	Dr	204	3	Oh		185	185	19	Ls	S	C	75(?)	D	----	
23Q3	O. Kohr	Hub Plumbing Co.	5-11-55	740	J	86	2	S; 4ft, 60g, dia 1		------	------	------	Sd	Pl	C	60	D	J½	
23Q4	A. DeKoski	--------do--------	4-23-46	720	J	78	2	--------do--------		------	------	------	Sd	Pl	----	---	D	----	
23Q5	M. Stife	Shoehy Well and Pump Co.	2- 1-57	710	Dr	168	3	Oh		150	150	18	Ls	S	C	20	D	----	Little dd reported pumping 30 gpm.
23Q6	--------do--------	--------do--------	1955	710	Dr	179	4	Oh		165(?)	165(?)	14(?)	Ls	S	C	20	D	----	
23Q7	S. Briggs	Lowell Well and Pump Co.	--------	740	J	134	2	S; 60g		------	------	------	Sd	Pl	C	60	D	L	
23R1	J. Cernohorsky	Shoehy Well and Pump Co.	9-56	750	Dr	250	4	Oh		203	203	47	Ls	S	C	50	D	J1	Yield 15 gpm; L.
23R2	T. H. Taylor	--------do--------	3-56	750	Dr	228	4	Oh		198	198	30	Ls	S	C	55	D	J1	Yield 15 gpm; see log well 23R1.
24H1	R. Bowman	Hub Plumbing Co.	11- 7-50	760	J	82	2	S; 4ft, 60g, dia 1		------	------	------	Sd	Pl	----	---	D	----	
24J1	F. Sammetinger	--------do--------	6- 6-52	760	J	85	2	--------do--------		------	------	------	Sd	Pl	----	65	D	----	
24J2	L. Cooper	--------do--------	6-12-51	760	J	96	2	S; 3.5ft, 60g, dia 1		------	------	------	Sd	Pl	----	---	D	----	
24R1	C. Bennett	--------do--------	6-15-54	740	J	88	2	S; 4ft, 60g, dia 1		------	------	------	Sd	Pl	----	50	D	----	
24R2	--------do--------	--------do--------	12- 6-48	730	J	89	2	--------do--------		------	------	------	Sd	Pl	----	---	I	----	Ca.
24R3	J. Kalomba	Lowell Well and Pump Co.	1-24-57	740	J	72	2	S; 60g		------	------	------	Sd	Pl	----	58	D	L	
25B1	L. Wakefield	--------do--------	1955	750	Dr	230	3	Oh		204	204	28	Ls(?)	S	C	70	O	----	Observation well Lake 7; water level measured 60.17 ft below Lsd, 3-12-57.
25B2	--------do--------	Hub Plumbing Co.	4-14-54	730	J	73	2	S; 4ft, 60g, dia 1		------	------	------	Sd	Pl	C(?)	---	D	----	
25D3	N. Stracke	--------do--------	--------	750	J	85	2	--------do--------		------	------	------	Sd	Pl	C	50	D	J	Ca, L.
26A1	J. Hay	J. R. Stinnett	7- 5-55	740	Dr	210	4	Oh		194	194	16	Ls(?)	S	C	60	D	----	Little dd reported after 3 hr pumping 12 gpm; limestone overlain by 34 ft heaving sand.
26B1	J. Selnwerth	Wroe Well Drilling	1-15-57	725	J	86	2	S; 4ft, 80g		------	80	6	Sd	Pl	C	42	D	----	Yield 10 gpm; L.
26B2	J. G. Kubal	Shoehy Well and Pump Co.	2-55	740	Dr	220	4	Oh		185	185	35	Ls	S	C	40	D	J1	Yield about 30 gpm; L.
26B3	M. Kretz	Lowell Well and Pump Co.	--------	735	J	57	2	S; 60g		------	------	------	Sd	Pl	C	42	D	L	
26C1	H. W. Ahern	Hub Plumbing Co.	8- 2-47	695	J	60	2	S; 4ft, 60g, dia 1		------	------	------	Sd	Pl	C	---	D	----	
26F1	C. Flock	Shoehy Well and Pump Co.	--------	710	Dr	152	3	Oh		148	148	6	Ls	S	C	17	D	J	Yield 13 gpm; water has slight odor hydrogen sulfide gas; L.
26F2	G. Fleming	Hub Plumbing Co.	6- 2-52	700	J	42	2	S; 3.5ft, 60g, dia 1		------	------	------	Sd	Pl	C	5	D	----	
26F3	F. Dolsing	Shoehy Well and Pump Co.	1955	710	Dr	149	4	Oh		138(?)	138(?)	11(?)	Ls	S	C	60(?)	D	----	Ca.
26F4	Mr. Kloso	--------do--------	1955	710	Dr	151	4	Oh		140(?)	140(?)	11(?)	Ls	S	C	8(?)	D	----	
26G1	Mr. Caulfield	H. Robinson	7- 2-56	735	Dr	215	3	Oh		184	189	20	Ls	S	C	57	D	J1	Dd 3 ft after 3 hr pumping 10 gpm; L.
26L1	J. Owen	Wroe Well Drilling	3-22-57	715	Dr	161	3	Oh		154	154	7	Ls	S	C	37	D	J½	Little dd reported after 1 hr pumping 10 gpm; L.
26L2	A. Bunge	Shoehy Well and Pump Co.	7-55	715	Dr	156	3	Oh		144	144	12	Ls	S	C	10	D	J½	Yield about 30 gpm; see log well 26L1.
26L3	Mr. Aumond	--------do--------	1955	720	Dr	187	4	Oh		170(?)	170(?)	17(?)	Ls	S	C	35	D	----	
26N1	L. Strickland	Lowell Well and Pump Co.	5-11-56	710	J	88	2	S; 4ft, 60g		------	30	58	Sd,G	Pl	C	18	D	J½	L.
26N2	Mr. Frye	H. F. Ruffilz	--------	700	J	90	2	S; 60g		------	------	------	Sd	Pl	C	0	D	----	

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
34/9W-26N3	O. Kirste	Shoehy Well and Pump Co.	1955	700	Dr	226	4	Oh	155(?)	175	51	Ls	S	C	25	D	----	Limestone overlain by shale; water in shale had slight odor hydrogen sulfide gas.
26N4	Mr. Segrest	Lowell Well and Pump Co.	1955	710	Dr	164	3	Oh	153	153	11	Ls	S	C	22	D	----	
26P1	C. Roeder	Hub Plumbing Co.	5-10-49	710	J	96	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
26Q1	Dr. Misch	Shoehy Well and Pump Co.	1955	710	Dr	187	4	Oh	150(?)	150(?)	37(?)	Ls	S	C	---	D	----	
26Q2	Mr. Vallos	-------do--------	1955	720	Dr	182	4	Oh	165(?)	165(?)	17(?)	Ls	S	C	50(?)	D	----	
26Q3	R. Robinson	R. Robinson	7- 8-54	720	J	65	2	S; 4.5ft, 60g	------	32	33	Sd	Pl	C(?)	32	D	J½	Yield 7 gpm; L.
26Q4	E. Morbat	Hub Plumbing Co.	7-26-55	720	J	97	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	60	D	J½	
26R1	J. Caesar	-------do--------	1957	725	J	92	2	--------do---------	------	84	8	Sd	Pl	C	---	D	----	L.
26R2	W. Elfling	-------do--------	4-27-48	720	J	93	2	--------do---------	------	-----	------	Sd	Pl	C	---	D	----	
26R3	Mr. Campbell	Shoehy Well and Pump Co.	1955	720	Dr	177	3	Oh	163(?)	163(?)	14(?)	Ls	S	C	30(?)	D	----	
26R4	J. Wilkie	Hub Plumbing Co.	10-23-48	720	Dr	45	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	---	N	----	
27C1	H. O'Brien	-------do--------	2-15-55	720	J	62	2	--------do---------	------	-----	------	Sd	Pl	----	35	D	----	
27F1	S. G. Drolin	-------do--------	10-31-52	710	J	103	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	26	D	----	
27F2	P. H. Lindoman	-------do--------	11-19-48	710	J	72	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	L	
27F3	T. Craig	-------do--------	1- 6-52	710	J	88	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	20	D	J	
27L1	Conference Ground	Shoehy Well and Pump Co.	1955	720	Dr	173	4	Oh	160(?)	160(?)	13(?)	Ls	S	C	18(?)	P	----	
27P1	L. Wislocki	-------do--------	1955	710	Dr	159	4	Oh	146(?)	146(?)	13(?)	Ls	S	C	20(?)	D	----	
27Q1	Gospel Light House	Hub Plumbing Co.	9- 2-55	700	J	50	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	40	D	J	
28A1	R. King	Shoehy Well and Pump Co.	9-52	745	Dr	191	5	Oh	175	175	16	Ls(?)	S	C	70	D	----	Dd 10 ft pumping 25 gpm; L.
28C1	S. Krebs	Triangle Drilling Co.	6-27-57	745	Dr	186	4	Oh	165	165	21	Ls(?)	S	C	46	D	----	Yield 6 gpm; L.
28D1	F. F. Burgor	Wroe Well Drilling	--------	760	J	80	2	S; 4ft, 60g, dia 1½	------	69	11	Sd	Pl	C(?)	---	D	----	L.
28D2	D. R. Holley	Lowell Well and Pump Co.	--------	760	J	133	2	S; 60g	------	-----	------	Sd	Pl	C(?)	---	D	J½	
28D3	C. Myers	Triangle Drilling Co.	5-28-57	755	Dr	232	4	Oh	173	173	59	Ls(?)	S	C	62	D	----	Little dd reported after 2 hr pumping 7 gpm; L.
28D4	L. Slankard	-------do--------	5-13-57	750	J	56	2	S; 3ft, 60g, dia 1	------	50	6	Sd	Pl	C	31	D	----	Yield 7 gpm; L.
28D5	W. Yablonosky	Peterson Bros.	4- 3-58	755	Dr	174	4	Oh	170	170	4	Ls	S	C	60	D	----	Dd 20 ft after 6 hrs pumping 10 gpm; L.
28E1	Mr. Haefker	Shoehy Well and Pump Co.	1955	740	Dr	185	3	Oh	160(?)	160(?)	25	Ls	S	C	52(?)	D	----	
28H1	Mr. Mager	-------do--------	1955	730	Dr	176	4	Oh	160(?)	160(?)	16(?)	Ls	S	C	31(?)	D	----	
28N1	Mr. Hallman	-------do--------	1955	740	Dr	254	4	Oh	180(?)	180(?)	74(?)	Ls	S	C	110(?)	D	----	
28N2	Mr. Gogg	-------do--------	1955	740	Dr	219	3	Oh	190(?)	190(?)	29(?)	Ls	S	C	65(?)	D	----	
29A1	Mager Standard Station	-------do--------	1955	765	Dr	243	3	Oh	185(?)	185(?)	58(?)	Ls	S	C	85(?)	D	----	Ca.
29F1	Mr. Borgstein	-------do--------	1955	725	Dr	224	4	Oh	190(?)	190(?)	34(?)	Ls	S	C	25(?)	D	----	
29J1	Mr. Saborniak	-------do--------	1955	740	Dr	207	3	Oh	185(?)	185(?)	22(?)	Ls	S	C	80(?)	D	----	
29J2	C. Harron	Lowell Well and Pump Co.	9-10-56	730	J	52	2	S; 60g	------	-----	------	Sd	Pl	----	40	D,S	J½	
29R1	Mr. Duval	-------do--------	4-22-55	740	J	107	2	--------do---------	------	-----	------	Sd	Pl	----	54	N	----	
30D1	E. Reichert	Wohling Well Works	1952	725	Dr	198	4	Oh	167	167	31	Ls(?)	S	C	30	D	----	Temperature 52°F.
30D2	A. Niemeyer	-------do--------	1949	725	Dr	220	4	Oh	172	172	48	Ls(?)	S	C	30	D	J	Ca.
31R1	E. Myers Farm	Shoehy Well and Pump Co.	12-26-56	670	Dr	128	4	Oh	71	71	57	Ls	S	C	---	S	----	Flows; yield 8 gpm; Ca, L.
32E1	A. Luebker	----------	Before 1920	670	Dr	300	10-8	Oh	90	90	210	Ls	S	C	---	D	----	Flows 30 gpm, water level measured 22 ft above lsd, 8-20-54; originally drilled as oil well to 1,400 ft; plugged at 300 ft; temperature 51.5°F.

34/9W-32E2	---------do---------	----------	----------	690	---	------	----	----------	-------	------	-------	D	Pl	----	---	S	----	Spring issuing from sandy zone in till; yield 7 gpm measured 10-26-56; Ca.
32H1	D. Hales	Lowell Well and Pump Co.	---------	740	J	71	2	S; 60g	-------	------	-------	Sd	Pl	C(?)	---	D	J	
33D1	A. Bush	---------do---------	---------	740	J	67	2	---------do---------	-------	------	-------	Sd	Pl	C(?)	---	D	J	
34B1	Dr. Misch	Sheehy Well and Pump Co.	7-56	700	Dr	169	4	Oh	152	152	17	Ls	S	C	15	D	J½	Yield 50 gpm; Ca, L.
34C1	F. Wagner	Lowell Well and Pump Co.	---------	710	J	40	2	S; 60g	-------	------	-------	Sd	Pl	C(?)	23	D	L½	
34C2	M. Kortauer	Hub Plumbing Co.	8-24-55	710	J	49	2	S; 4ft, 60g, dia 1	-------	------	-------	Sd	Pl	C(?)	35	D	----	
34C3	P. Schinkel	--------do---------	5- 1-47	720	J	40	2	S; 80g	-------	------	-------	Sd	Pl	----	---	D	----	Screen changed three times.
34C4	--------do---------	--------do---------	8-29-50	720	J	37	2	S; 60g	-------	------	-------	Sd	Pl	----	---	D	----	
34C5	--------do---------	--------do---------	8-30-50	720	J	37	2	---------do---------	-------	------	-------	Sd	Pl	----	---	P	----	
34D1	B. Halstrom	--------do---------	9-28-49	720	J	45	2	S; 4ft, 80g, dia 1	-------	------	-------	Sd	Pl	----	---	D	----	
34G1	Mr. Hoffman	--------do---------	10-20-53	700	J	33	2	---------do---------	-------	------	-------	Sd	Pl	----	---	D	----	
34J1	A. N. Krier	--------do---------	3-28-47	700	J	65	2	---------do---------	-------	------	-------	Sd	Pl	----	---	D	----	
35A1	F. Halo	R. Robinson	3-16-56	730	Dr	214	3	Oh	150	160	54	Ls	S	C	37	D	L	Dd 4 ft after 3 hr pumping 10 gpm; L.
35A2	F. Hoderowicz	--------do---------	7-18-55	720	Dr	205	4	Oh	146	152	53	Ls	S	C	37	D	J1	Dd 4 ft after 3 hr pumping 10 gpm; L.
35A3	Mr. McLoid	Sheehy Well and Pump Co.	1955	730	Dr	106	3	Oh	145	145	21	Ls	S	C	27(?)	D	----	
35C1	C. Vogt	R. Robinson	7- 1-55	720	Dr	219	4	Oh	176	170	43	Ls	S	C	27	D	J	Dd 4 ft after 4 hr pumping 13 gpm; L.
35D1	E. Warner	H. F. Hutfilz	9-25-37	720	J	67	2	S; 60g	-------	------	-------	Sd	Pl	----	---	D	----	
35G1	R. Surprise	R. Robinson	6-30-54	710	Dr	220	3	Oh	152	152	68	Ls	S	C	30	D	J½	Dd 7 ft after 2 hr pumping 10 gpm; L.
35G2	B. Cordroy	--------do---------	2- 7-56	690	Dr	170	4	Oh	140	140	30	Ls	S	C	43	D	----	Dd 12 ft after 3 hr pumping 50 gpm; L.
35G3	Mr. Ashcraft	Fitzgerald Well and Pump Co.	7- 8-55	690	J	68	2	S; 5ft, 60g	-------	------	-------	Sd,G	Pl	C	1	D	----	
35H1	H. E. Sides	Hub Plumbing Co.	6-23-55	730	J	104	2	S; 4ft, 60g, dia 1	-------	------	-------	Sd	Pl	----	60	D	----	Ca.
35J1	F. Neal	Fitzgerald Well and Pump Co.	8- 3-55	720	J	53	2	S; 5ft, 60g	-------	------	-------	Sd	Pl	C	10	D	J½	Yield 13 gpm.
35J2	Mr. Ballost	--------do---------	7-11-55	730	J	56	2	S; 2.5ft, 60g, dia 1	-------	------	-------	Sd	Pl	C	1	D	----	Yield about 10 gpm; L.
35L1	Surprise Park	H. F. Hutfilz	7- 8-37	720	J	39	2	S; 3.5ft, 80g	-------	------	-------	Sd	Pl	----	---	D	----	
35M1	A. Downey	--------do---------	---------	700	J	35	2	S; 80g	-------	------	-------	Sd	Pl	----	---	D	----	
35Q1	H. Dickol	Lowell Well and Pump Co.	---------	710	J	42	2	S; 60g	-------	------	-------	Sd	Pl	----	---	D	L	
35R1	R. Nixon	--------do---------	10-23-56	720	J	60	2	S; 60g	-------	------	-------	Sd	Pl	----	18	D	J	Ca.
34/10W-1C1	W. Schanson	Wehling Well Works	1950	700	Dr	340	5	Oh	130	130	210	Ls(?)	S	C	32	D	J½	Ca.
1C2	A. Jonson	--------do---------	1950	700	Dr	180	5	Oh	119	118	61	Ls(?)	S	C	24	D	----	Ca.
12J1	E. Piopko	--------do---------	1950	720	Dr	184	5	Oh	155	155	29	Ls(?)	S	C	37	D	L	Ca.
13H1	H. Brands	--------do---------	1948	720	Dr	190	5	Oh	156	156	34	Ls(?)	S	C	40	D,S	J	Ca.
23A1	E. Krudup	--------do---------	9-55	725	Dr	188	4	Oh	157	157	31	Ls(?)	S	C	36	---	----	
25D1	E. Bell	Peterson Bros.	11- 8-56	750	Dr	203	4	Oh	177	177	26	Ls	S	C	70	D	----	Dd 10 ft after 1 hr pumping 23 gpm; Ca, L.
36A1	G. Willy	Hub Plumbing Co.	3-31-52	700	J	33	2	S; 80g	-------	------	-------	Sd	Pl	----	15	D	----	
36E1	W. Huseman	Wehling Well Works	10-55	730	Dr	208	6	Oh	140	140	68	Ls(?)	S	C	45	---	----	Yield 25 gpm.
36L1	J. Learman	Lowell Well and Pump Co.	---------	725	J	60	2	S; 80g	-------	------	-------	Sd	Pl	----	---	D	----	Ca.
36M1	A. Bunte	Wehling Well Works	3-55	730	Dr	205	5	Oh	142	142	-------	Ls(?)	S	C	46	D	----	Ca.
36M2	--------do---------	Hub Plumbing Co.	4-13-47	730	J	73	2	S; 3.5ft, 80g, dia 1	-------	------	-------	Sd	Pl	----	---	D	----	Well originally 42 ft deep; deepened 5-14-48.
35/7W-5F1	W. Gruppe	Porter County Well Service	10-13-55	630	J	29	2	S; 4ft, 60g	-------	18	14	Sd	Pl	C	12	D	J½	Yield 20 gpm; L.
6A1	Hobart Greenhouse	Hobart Greenhouse	---------	625	Dr	18	2	S	-------	------	-------	Sd	Pl	----	---	D	----	
7N1	G. McGrann	Nelson Well and Pump Service	8-31-54	635	J	49	2	S; 5ft, 60g, dia 1¼	-------	------	-------	Sd	Pl	----	---	D	----	
7R1	J. Berndt	Porter County Well Service	7- 7-55	650	J	67	2	S; 4ft, 60g	-------	------	-------	Sd	Pl	C	29	D	L½	Yield 9 gpm; Ca, L.
8D1	Mr. Brown	Fitzgerald Well and Pump Co.	6-15-55	635	J	47	3	S; 5ft, 60g, dia 2	-------	32	20	Sd	Pl	C	18	D	J1	Yield 23 gpm; fine sand overlain by 32 ft top soil and blue clay.
8M1	Mr. Glueck	--------do---------	Summer 1955	630	J	84	3	---------do---------	-------	63	21	Sd	Pl	C	35	D	J1	Yield 23 gpm; fine sand overlain by 63 ft top soil and blue clay.
8M2	--------do---------	--------do---------	Summer 1955	630	J	66	2	S; 3ft, 60g, dia 1	-------	65	1	Sd,G	Pl	C	30	D	J½	Yield 12 gpm.
8N1	J. J. Butler	Porter County Well Service	3-10-56	650	J	54	3	S; 6ft, 60g	-------	46	8	Sd	Pl	C	33	D	J1	Yield 50 gpm; coarse sand overlain by 46 ft blue clay.
8N2	--------do---------	--------do---------	11-19-55	650	J	48	3	---------do---------	-------	36	24	Sd	Pl	C	30	D	----	Yield 50 gpm; medium sand overlain by 36 ft blue clay.
9C1	P. S. Baier	--------do---------	6- 2-56	635	J	44	2	S; 4ft, 60g	-------	40	4	G	Pl	C	15	D	J½	L.
17D1	G. Pavel	J. Eich and Son	7-31-50	655	J	73	2	S; 4ft, 60g, dia 1	-------	35	38	Sd,G	Pl	C	34	D	L	Yield 13 gpm; Ca, L.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
35/7W-17M1	E. Myers	Porter County Well Service	7-23-56	665	J	49	2	S; 4ft, 60g	-------	38	11	Sd,G	Pl	U	38	D	J½	Yield 15 gpm; L.
17P1	Mr. Sims	Hub Plumbing Co.	6- 7-55	680	J	86	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	60	D	----	
18A1	J. Macimovitch	Nelson Well and Pump Service	8-12-55	650	J	74	2	S; 3.5ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J ?	
18A2	P. Macimovitch	Fitzgerald Well and Pump Co.	8- 8-56	650	J	73	2	S; 3ft, 60g	-------	36	44	Sd	Pl	C	6	D	J½	Yield 13 gpm; Ca, L.
18E1	C. J. Kramer	Hub Plumbing Co.	11- 6-46	650	J	48	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J	
18E2	M. Angerman	Nelson Well and Pump Service	7-19-53	660	J	58	2	S; 3.5ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J	
18E3	S. Wobbs	-------do--------	9-11-53	660	J	38	2	S; 3.5ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J	
18E4	G. T. Kors	-------do--------	7-59	660	J	46	2	S; 3.5ft, 60g, dia 1	-------	33	13	Sd,G	Pl	C	30	D	----	Yield 13 gpm; L.
18F5	P. Vale	Westville Well Co.	7-28-59	650	J	37	2	S; 3ft, 60g, dia 1	-------	34	3	Sd,G	Pl	C	23	D	----	L.
20F1	S. Williams	Hub Plumbing Co.	7-31-53	710	J	118	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	75	D	L	
20J1	H. Harper	-------do--------	12-28-51	690	J	76	2	--------do---------	-------	-----	-------	Sd	Pl	----	60	D	----	
20J2	J. Wesley	-------do--------	8-24-50	690	J	74	2	S; 3ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
20J3	-------do--------	-------do--------	9-13-48	690	J	63	2	--------do---------	-------	-----	-------	Sd	Pl	----	---	D	J	
20J4	-------do--------	-------do--------	11-22-49	690	J	63	2	S; 3.5ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
20K1	G. Masak	Lowell Well and Pump Co.	--------	700	J	77	2	S; 60g	-------	-----	-------	Sd	Pl	----	30	D	----	
21A1	Mr. Wood	Fitzgerald Well and Pump Co.	8-16-56	655	J	41	2	S; 3ft, 60g	-------	37	5	Sd	Pl	C	14	D	----	
21A2	A. Andorn	Porter County Well Service	5- 2-56	650	J	18	2	S; 3.5ft, 60g, dia 1	-------	13	5	Sd	Pl	C	12	D	L½	Yield 8 gpm; medium sand overlain by 15 ft blue clay.
21C1	W. Baensler	-------do--------	5- 7-56	675	J	61	2	S; 4ft, 60g	-------	43	18	G,Sd	Pl	C	27	D	J½	Yield 15 gpm; L.
21F1	E. Buchfuehrer	-------do--------	10-30-56	665	J	50	2	--------do---------	-------	34	16	Sd,G	Pl	C	23	D	J½	Yield 18 gpm; Ca, L.
21L1	Indiana State Highway Department	W. Foley	8-57	678	Dr	200	---	Oh	179	179	21	Ls(?)	D(?)	C	65	P	----	Ca, L.
35/8W-2E1	B. Reinhart	J. Eich and Son	8-11-59	645	J	66	2	S; 3.5ft, 60g, dia 1	-------	46	21	Sd,G	Pl	C	44	D	----	Yield 12 gpm; L.
2Q1	Mr. Bosnak	Nelson Well and Pump Service	4-12-50	620	J	32	2	--------do---------	-------	-----	-------	Sd	Pl	----	---	D	J	
3G1	E. Halfman	Hub Plumbing Co.	9-20-54	640	J	52	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
3M1	M. Hopkins	-------do--------	11- 1-56	635	J	49	2	--------do---------	-------	30	19	Sd	Pl	C	15	D	----	L.
4R1	T. Bell	Nelson Well and Pump Service	10-27-54	630	J	52	2	S; 3.5ft, 80g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J	
5R1	R. Potter	Hub Plumbing Co.	7- 7-49	640	J	33	2	S; 60g	-------	-----	-------	Sd	Pl	----	---	D	----	
5L1	R. Stout	J. Eich and Son	8- 7-59	632	J	62	2	S; 3.5ft, 60g, dia 1	-------	30	33	Sd,G	Pl	C	22	D	J	Yield 11 gpm; Ca, L.
5L2	B. Golkowski	Westville Well Co.	7-23-59	635	J	27	2	S; 2ft, 40sl	-------	22	5	G,Sd	Pl	C	12	D	J½	Ca, L.
8A1	G. Fiebolkom	Porter County Well Service	5-28-56	620	J	46	3	S; 3ft, 60g, dia 1¼	-------	31	19	Sd	Pl	C	15	D	J½	Yield 45 gpm; coarse sand overlain by 31 ft blue clay.
8D1	Blockhouse Inc.	Westbury Well and Pump Service	--------	620	Dr	69	4	S	-------	-----	-------	Sd	Pl	----	---	I	J	Have two 2-inch wells 40 ft deep.
8K1	Gary Country Club	Nelson Well and Pump Service	7- 1-54	625	Dr	63	4	S; 10ft, 7sl, dia 2	-------	-----	-------	Sd	Pl	----	7	---	T15	For swimming pool.
8L1	R. Deputy	-------do--------	6-16-54	620	J	50	2	S; 3.5ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J	
9C1	H. R. Englehart	-------do--------	2-12-49	625	J	46	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
9D1	J. Dubois	J. Eich And Son	6- 4-59	630	J	48	2	S; 5ft, 60g, dia 1	-------	27	21	Sd	Pl	C	12	D	L	Yield 15 gpm; Ca, L.
9J1	Palace Theater	Gary Well and Pump Co.	--------	630	Dr	152	---	Oh	140	140	12	Ls(?)	D(?)	C	---	P	J	Water has hydrogen sulfide gas.
9Q1	H. Liggett	Nelson Well and Pump Service	4-26-54	630	J	28	2	S; 3.5ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	----	
10N1	A. J. Howard	-------do--------	11-17-53	630	J	40	2	--------do---------	-------	-----	-------	Sd	Pl	----	---	D	J	
10N2	J. Adams	-------do--------	10-14-53	630	J	35	2	--------do---------	-------	-----	-------	Sd	Pl	----	9	D	J	
10N3	7-Up Bottling Co.	J. Eich and Son	--------	635	J	72	3	S	-------	32	40	Sd	Pl	C(?)	---	I	T	L.
11H1	H. E. Kirk	Nelson Well and Pump Service	6-24-53	630	J	42	2	S; 3.5ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	---	D	J	
13D1	D. Langbehn	Hub Plumbing Co.	5- 3-54	640	J	35	2	S; 4ft, 60g, dia 1	-------	-----	-------	Sd	Pl	----	15	D	----	

35/8W-13E1	G. Churchilla	Nelson Well and Pump Service	1-10-55	680	J	46	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----		
13H1	W. Chalap	-------do---------	2-25-54	655	J	37	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
13H2	D. Kleine	-------do---------	7-24-53	660	J	36	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
13L1	J. Lavalle	--------do--------	8-20-55	660	J	65	2	---------do----------	------	-----	------	Sd	Pl	C(?)	---	D	J		
13L2	Mr. Markanock	J. Eich and Son	7-21-59	660	J	68	2	S; 5ft, 60g, dia 1	------	54	14	Sd	Pl	C	23	D	L½	Yield 12 gpm; L.	
13N1	J. M. Rostovski	Gary Well and Pump Co.	7-20-59	660	J	68	2	S; 4ft, 60g, dia 1	------	50	16	Sd	Pl	C	40	D	J	Yield 12 gpm; Ca, L.	
14E1	D. Lovall	Nelson Well and Pump Service	4- 7-54	640	J	42	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----		
14E2	V. McColly	--------do---------	6-11-56	640	J	42	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	----		
14H1	W. B. Cottrill	--------do---------	6-11-55	660	J	50	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
15E1	R. Cook	--------do---------	7- 0-56	650	J	52	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
15E2	W. Cook	--------do---------	2-30-53	650	J	32	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	----		
15E3	F. Keilman	--------do---------	7-14-54	650	J	30	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
15E4	Church of Christ	--------do---------	11- 3-53	650	J	29	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
15E5	K. Dziurdzy	--------do---------	7-11-53	650	J	32	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
15E6	Little League Ball Park	--------do---------	3-31-54	650	J	35	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
15E7	C. A. Wachter	J. Eich and Son	7-17-59	650	J	48	2	S; 5ft, 60g	------	33	15	Sd	Pl	C	22	D	----	Yield 13 gpm; L.	
15F1	C. Bogan	Nelson Well and Pump Service	12- 3-55	680	J	50	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J¼		
15N1	N. Gaedtke	-------do---------	6-16-55	650	J	56	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
15P1	R. Fifield	Hub Plumbing Co.	7-24-52	655	J	50	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	20	D	L		
15P2	-------do---------	--------do---------	7-22-52	655	J	50	2	---------do----------	------	-----	------	Sd	Pl	C(?)	21	D	J		
15P3	-------do---------	--------do---------	7- 1-52	655	J	47	2	---------do----------	------	-----	------	Sd	Pl	C(?)	20	D	J		
15P4	B. Broadstone	Nelson Well and Pump Service	6-27-53	650	J	56	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	---	D	J½		
16H1	Chesapeake and Ohio Railroad Co.	C. H. Miller	1- 8-49	650	Dr	78	4	S; 8ft, 10sl	98	65	13	Sd	Pl	C	30	N	L	Yield 10 gpm; Ca. L.	
16H2	R. Bohnne	Nelson Well and Pump Service	4- 5-55	640	J	35	2	S; 3.5ft, 80g, dia 1	------	-----	------	Sd	Pl	----	---	D	J		
16J1	Dr. Monfort	J. Eich and Son	7-28-59	630	J	47	2	S; 5ft, 60g, dia 1	------	26	22	Sd	Pl	C	13	P	J½	Yield 13 gpm; Ca, L.	
17D1	S. Adams	Hub Plumbing Co.	9-30-56	640	J	37	2	S; 4ft, 60g, dia 1	------	21	16	Sd	Pl	C	15	---	----	L.	
17P1	L. Pinkston	Wroe Well Drilling	7-21-56	660	J	102	2	S; 3.5ft, 80g, dia 1	------	-----	------	Sd	Pl	----	---	D	½	L.	
18K1	Mr. Phillips	--------do---------	--------	660	J	50	2	S; 3.5ft, 60g, dia 1	------	40	10	Sd	Pl	----	---	D	J	Ca, L.	
18L1	F. Desmarais	Hub Plumbing Co.	9-27-56	660	J	48	2	S; 4ft, 60g, dia 1	------	35	13	Sd	Pl	C	20	D	----	Ca, L.	
19H1	H. DeVries	-------do---------	1- 5-50	670	J	40	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
19K1	L. Wirtz	--------do---------	7-18-52	685	J	67	2	---------do----------	------	-----	------	Sd	Pl	----	48	D	----		
20K1	R. Turkington	--------do---------	3- 1-48	695	J	79	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	----		
20K2	--------do---------	--------do---------	12- 9-47	695	J	75	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	----		
20K3	--------do---------	--------do---------	4-30-48	695	J	70	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	----		
20K4	--------do---------	--------do---------	3-22-48	690	J	67	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	----		
20K5	Mug Drive-In	--------do---------	4-14-50	685	J	66	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	J		
20L1	F. J. Rubery	Wroe Well Drilling	8- 9-57	690	Dr	192	4	Oh	172	172	20	Sh	D	C	56	D	----	Ca, L.	
20L2	J. Wilson	--------do---------	1958	690	J	105	2	S; 3ft, 60g	------	97	8	Sd	Pl	C	---	D	½	L.	
20L3	F. J. Zellers	--------do---------	7- 6-56	680	J	100	2	S; 4ft, 80g, dia 1	------	65	35	Sd	Pl	C	---	D	J½	L.	
20L4	F. Wichmann	Hub Plumbing Co.	11-21-55	690	J	91	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C	50	D	J½		
20L5	W. G. Dance	--------do---------	8- 8-49	685	J	72	2	S; 80g	------	-----	------	Sd	Pl	C(?)	---	D	----		
20L6	Mr. Schultz	Wroe Well Drilling	1958	685	J	92	2	S; 4ft, 60g	------	86	6	Sd	Pl	C	---	D	J½	Yield 15 gpm; Ca, L.	
20L7	E. J. Zellers	--------do---------	3-12-58	680	J	94	2	S; 7ft	------	80	14	Sd	Pl	C	54	D	J½	L.	
20M1	P. Smith	Hub Plumbing Co.	4-12-56	670	J	55	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	C	35	D	----		
20P1	Independence Hill Water Works	Westville Well Co.	3-52	690	Dr	92	6	S; 21ft, 14sl	------	65	30	Sd	Pl	C	42	P	T7½	Dd 13 ft after 8 hr pumping 55 gpm; L.	
20P2	-------do---------	-------do---------	5-51	690	Dr	80	6	S; 15ft, 10sl	------	59	21	Sd	Pl	C	---	P	T5	Sand overlain by 59 ft top soil and clay.	
21J1	J. Baran	Nelson Well and Pump Service	7- 8-55	670	J	60	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J		
22H1	F. Rakoczy	Hub Plumbing Co.	10-26-51	685	J	67	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	48	D	J½	Ca.	
22H2	J. Davidson	Nelson Well and Pump Service	9- 2-53	685	J	73	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J¼		
24E1	J. Neithel	Hub Plumbing Co.	11-13-46	690	J	62	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	I	----		
26J1	A. and M. Vernigor	--------do---------	4-14-53	685	J	40	2	S; 4ft, 80g, dia 1	------	-----	------	Sd	Pl	----	32	D	----		
26L1	M. Sweitzer	--------do---------	9- 8-50	710	J	89	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----		
29G1	K. McNair	--------do---------	6-13-49	705	J	78	2	---------do----------	------	-----	------	Sd	Pl	----	---	D	----		
29P1	James O. Parramore Hospital	Layne-Northern Co., Inc.	7-41	720	Dr	103	38	Gp; S; 20ft, 105sl, dia 14	------	78	20	Sd	Pl	C	54	P	T	Dd 33 ft pumping 300 gpm; Ca, L.	
29P2	-------do---------	-------do---------	7- 6-51	720	Dr	89	26	Gp; S; 20ft, 80sl, dia 12	------	72	17	Sd	Pl	C	57	P,O	T10	Dd 21 ft pumping 165 gpm; observation well Lake 2; water level measured 64 ft below lsd. 8-17-54; L.	
29P3	-------do---------	-------do---------	5- 6-40	720	Dr	133	----	----------	120	97	9	Sd	Pl	C	---	T	----	L.	
29P4	-------do---------	-------do---------	---------	720	Dr	145	----	----------	------	64	51	Sd	Pl	C	---	T	----	L.	
29P5	-------do---------	-------do---------	7-29-41	720	Dr	105	----	----------	------	80	25	Sd	Pl	C	---	T	----	L.	
30N1	C. Kociban	Hub Plumbing Co.	6- 2-55	720	J	89	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	65	D,S	----	Ca.	

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
35/8W-32D1	E. Wirtz	Hub Plumbing Co.	7-11-53	720	J	83	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	55	D	----	
32B2	H. Wirtz	-------do--------	7-10-46	720	J	93	2	--------do----------	------	-----	------	Sd	Pl	----	---	D	L	
32P1	Helix Corp.	-------do--------	3-19-52	690	J	112	2	-------------------	------	-----	------	Sh(?)	D(?)	----	---	D	J	Ca.
32Q1	J. Cardinale	-------do--------	5- 6-52	690	J	112	2	-------------------	------	-----	------	Sh(?)	D(?)	----	---	D	----	
36A1	P. Dextor	Nelson Well and Pump Service	5- 5-55	680	J	46	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J	
36Q1	E. Drolet	Hub Plumbing Co.	6-18-51	690	J	79	2	S; 60g	------	-----	------	Sd	Pl	----	30	D	J	
35/9W-1P1	W. Austgen	-------do--------	1-12-54	695	J	35	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
2D1	Keen Foundry Co.	Layne-Northern Co., Inc.	4-29-41	635	Dr	70	8	S; 12ft, 12sl	------	58	12	Sd	Pl	C	15	I	T	Dd 6 ft pumping 50 gpm; L.
2D2	-------do--------	-------do--------	10- 6-52	635	Dr	75	12	S; 20ft, dia 10	------	35	37	Sd	Pl	C	18	I	T7½	Dd 20 ft after 5 hr pumping 102 gpm; L.
2C1	Griffith Water Dept.	-------do--------	2- 5-54	635	Dr	82	38	Gp; S; 30ft, 55sl, dia 18	------	50	36	Sd	Pl	C	19	P	T	Dd 46 ft after 3.5 hr pumping 302 gpm; Ca, L.
2C2	-------do--------	-------do--------	10-16-53	635	Dr	85	6	-------------------	------	20(?)	65(?)	Sd,G	Pl	U	---	T	----	L.
2F1	Chesapeake and Ohio Railroad Co.	C. H. Miller	12- 7-51	640	Dr	148	4	Oh	131	131	17	Ls	S	C	---	P	L	Yield 21 gpm; Ca, L.
2J1	-------do--------	Layne-Northern Co., Inc.	12- 3-38	638	Dr	82	34	Gp; S; 20ft, 105sl, dia 12	------	38	44	Sd	Pl	C	15	O	----	Dd 23 ft pumping 330 gpm; observation well Lake 4; water level measured 17.02 ft below lsd, 1954; E,G,L.
3H1	Indiana Pipeline Co.	-------do--------	1-13-43	630	Dr	69	10	Gp; S; 12ft, dia 8	------	21	48	Sd	Pl	C	8	I	T	Dd 21 ft pumping 100 gpm; L.
3H2	Buckeye Pipeline Co.	-------do--------	5-22-45	630	Dr	40	30	Gp; S; 10ft, 80sl, dia 9½	------	21	25	Sd	Pl	C	8	I	T	Dd 10 ft pumping 140 gpm; see log well 3H1.
3H3	-------do--------	-------do--------	4-28-45	630	Dr	65	----	-------------------	------	21	44	Sd	Pl	C	---	T	----	L.
4Q1	Gatlin Ready Mix	Kramer Bros.	5-56	625	Dr	246	8	Oh	126	126	120	Ls	S	C	4	I	----	Yield 75 gpm; Ca, L.
5R1	Town of Hartsdale	J. P. Miller Artesian Well Co.	6- 1888	625	Dr	735	----	Oh	111	-----	------	Ls	S	C	0	De	----	L.
9D1	Indiana Livestock Market Association	Kramer Bros.	8-55	625	Dr	270	6	Oh	116	116	154	Ls	S	C	12	I	----	Yield 3 gpm; Ca, L.
9D2	Cooperative Plant Foods Inc.	J. P. Miller Artesian Well Co.	12-44	625	Dr	252	8	Oh	104	104	148	Ls	S	C	90	I	T	Yield 35 gpm; water has hydrogen sulfide gas; L.
9D3	Indiana Farm Bureau Co-op	Shoehy Well and Pump Co.	1955	625	Dr	265	6	Oh	180(?)	180(?)	85(?)	Ls	S	C	46(?)	I	----	Yield 40 gpm; water has hydrogen sulfide gas.
9K1	Pennsylvania Railroad Co.	Kramer Bros.	11-52	630	Dr	212	6	Oh	109	109	103	Ls	S	C	3	I	T	L.
13D1	L. Cherno	Nelson Well and Pump Service	9-22-54	640	J	40	2	S; 3ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J	
13D2	C. Burns	Hub Plumbing Co.	1- 6-56	650	J	35	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	10	D	----	Ca.
14A1	V. Knight	-------do--------	3-12-56	640	J	34	2	--------do----------	------	-----	------	Sd	Pl	----	10	D	----	Ca.
14P1	B. E. Petrus	Shoehy Well and Pump Co.	1-54	660	Dr	162	4	Oh	145	145	17	Ls	S	C	50	D,S	----	Ca.
15D1	Town of Schererville	Layne-Northern Co., Inc.	1925(?)	645	Dr	290	10	Oh	------	-----	------	Ls	S	C	14	P	T30	Dd 3 ft pumping 500 gpm; Ca.
15M1	Mr. Bagamelor	Hub Plumbing Co.	8-20-47	660	J	69	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
16A1	Town of Schererville	Layne-Northern Co., Inc.	10-15-52	660	Dr	324	10-12	Oh	73(?)	126	198	Ls	S	C	33	P	T20	Dd 70 ft after 4 hr pumping 323 gpm; L.
17R1	K. Ogden	Shoehy Well and Pump Co.	1955	660	Dr	140	3	Oh	118(?)	130	10	Ls	S	C	77(?)	D	----	Limestone overlain by shale; Ca.
18A1	V. J. Underwood	Hub Plumbing Co.	4-12-49	630	J	87	2	S; 60g	------	-----	------	Sd	Pl	----	---	D	----	
18N1	Schilling Bros.	Wohling Well Works	8-55	650	Dr	122	4	Oh	98	98	24	Ls(?)	S	C	15	D	----	Little dd reported after 3 hr pumping 20 gpm; temperature 52°F.
18N2	-------do--------	Triangle Drilling Co.	1958	650	Dr	143	4	Oh	97	97	46	Ls(?)	S	C	15	D	----	Yield 9 gpm; L.
18N3	Mitchell Builders	-------do--------	10-12-57	650	Dr	123	4	Oh	94	94	29	Ls(?)	S	C	12	D	----	Dd 2 ft after 1 hr pumping 12 gpm; L.
18N4	Schilling Bros.	-------do--------	--------	650	Dr	133	4	Oh	96	96	27	Ls(?)	S	C	16	D	----	Dd 2 ft pumping 9 gpm; see log well 18N5.

35/9W-18N5	Mitchell Builders	-------do--------	11-25-56	650	Dr	143	4	Oh		93	93	50	Ls(?)	S	C	12	D	----	Dd 2 ft pumping 9 gpm; L.
18N6	Schilling Bros.	-------do--------	1958	650	Dr	143	4	Oh		101	101	42	Ls(?)	S	C	15	D	----	Yield 9 gpm; see log well 18N5.
18N7	Mr. Hutchinson	-------do--------	9-12-57	650	Dr	143	4	Oh		98	98	45	Ls(?)	S	C	17	D	----	Yield 12 gpm; see log well 18N3.
18N8	Schilling Bros.	-------do--------	12-18-57	650	Dr	138	4	Oh		97	97	41	Ls(?)	S	C	15	D	----	Yield 12 gpm; see log well 18N3.
18N9	-------do--------	-------do--------	10-21-58	650	Dr	138	4	Oh		97	97	41	Ls(?)	S	C	16	D	----	Yield 9 gpm; see log well 18N5.
18N10	Dr. Theobald	-------do--------	1958	655	Dr	153	4	Oh		108	108	45	Ls(?)	S	C	20	D	J¼	Little dd reported after 1 hr pumping 9 gpm; Ca, L.
18R1	J. Sallak	-------do--------	--------	670	Dr	137	4	Oh		131	131	6	Ls(?)	S	C	---	D	----	L.
18C1	C. Cooper	Hub Plumbing Co.	7-25-52	640	J	48	2	S; 4ft, 60g, dia 1	------	------	------	------	Sd	Pl	C	---	D	J	Flowed.
19C2	A. Balog	-------do--------	8-24-48	660	J	85	2	--------do---------	------	------	------	------	Sd	Pl	----	---	D	----	
19D1	W. L. Kollor	Triangle Drilling Co.	Summer 1958	650	Dr	138	4	Oh		94	94	44	Ls(?)	S	C	14	---	----	Little dd reported after 1 hr pumping 9 gpm; Ca. L.
20C1	H. J. Kulik	Fitzgerald Well and Pump Service	4-17-56	670	J	58	2	S; 3ft, 60g, dia 1	------	48	18	Sd	Pl	C	9	D	----	Yield 13 gpm; L.
20F1	D. Clark	Triangle Drilling Co.	1- 2-57	665	J	70	2	S; 2.5ft, 60g, dia 1¼	------	65	5	Sd	Pl	C	26	D	J	Little dd reported after 1 hr pumping 7 gpm; Ca, L.
20F2	Mitchell Builders	-------do--------	10-24-58	670	J	66	2	--------do---------	------	26	40	Sd	Pl	C(?)	---	D	J	Sand overlain by 26 ft clay.
20L1	E. Hampton	Hub Plumbing Co.	2-22-52	670	J	75	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	35	D	J	
20N1	F. Bukowski	-------do--------	2-12-53	700	J	82	2	--------do---------	------	------	------	Sd	Pl	----	50	D	----	
20P1	R. R. Gerry	Triangle Drilling Co.	7-20-50	690	Dr	145	4	Oh		141	141	4	Ls(?)	S	C	37	---	----	L.
20P2	G. Smith	-------do--------	1958	690	Dr	183	4	Oh		143	143	40	Ls(?)	S	C	34	---	J	L.
21D1	J. Sadlacek	-------do--------	1-25-57	670	Dr	53	4	S; 5ft. dia 3	------	44	9	Sd,G	Pl	C	26	I	----	Dd 9 ft after 1 hr pumping 5 gpm.
22D1	R. Rose	Hub Plumbing Co.	4-22-52	680	J	38	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	30	D	----	
22D2	G. Rose	-------do--------	5-14-53	670	J	42	2	--------do---------	------	------	------	Sd	Pl	----	30	D	----	
22D3	M. Roll	-------do--------	5-25-55	675	J	67	2	--------do---------	------	------	------	Sd	Pl	----	50	D	----	
22H1	Chaple Lawn	Sheehy Well and Pump Co.	1955	670	Dr	272	8	Oh		185(?)	185(?)	87(?)	Ls	S	C	---	P,Ir	----	
22Q1	R. Martz	Hub Plumbing Co.	8-25-53	690	J	80	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	40	D	----	
22R1	C. E. Homer	Sheehy Well and Pump Co.	12-56	680	Dr	95	4	S; 8ft, 80g		111	50	61	Sd	Pl	C	40	D	J	Well originally drilled to 173 ft but limestone had odor hydrogen sulfide gas;L.
23A1	A. Manor	Hub Plumbing Co.	4- 5-56	670	J	64	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	38	D	----	
23A2	Mr. Holmes	-------do--------	8-13-46	660	J	37	2	--------do---------	------	------	------	Sd	Pl	----	---	D,S	----	
23M1	O. Fifield	Nelson Well and Pump Service	4- 4-56	670	J	41	2	S; 5ft, 80g, dia 1	------	------	------	Sd	Pl	----	---	D	J1	
24P1	W. and T. Burge	----------	8- 2-49	690	Dr	1,250	8-5	----------		188	------	------	------	-----	----	---	---	----	Oil well; L.
24P2	Capuchin Clericate	Layne-Northern Co., Inc.	11-12-57	690	Dr	102	12	Gp; S; 10ft, 8s1, dia 6	------	79	23	Sd	Pl	C	52	P	----	Dd 10 ft pumping 50 gpm; Ca, L.
26D1	E. Park	Hub Plumbing Co.	8-17-55	670	J	87	2	S; 3.5ft, 80g, dia 1	------	------	------	Sd	Pl	----	50	D	----	
26G1	J. Klocek	-------do--------	5-12-55	700	J	77	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	----	50	D	----	
26G2	S. Balcerak	-------do--------	8-12-55	700	J	83	2	--------do---------	------	------	------	Sd	Pl	----	50	D	----	
26G3	R. Mienert	-------do--------	11-15-55	700	J	81	2	--------do---------	------	------	------	Sd	Pl	----	55	D	J½	
26H1	L. Charters	-------do--------	10- 7-54	710	J	95	2	--------do---------	------	------	------	Sd	Pl	C	52	D	J½	
26K2	J. E. Cody	-------do--------	11- 7-56	720	J	88	2	--------do---------	------	73	13	Sd	Pl	C	55	---	----	L.
26K1	W. M. Churchill	-------do--------	4- 4-54	730	J	88	2	S; 3.5ft, 60g, dia 1	------	------	------	Sd	Pl	C(?)	---	D	J	
26K2	E. Lager	Wroe Well Drilling	7- 6-59	720	J	91	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	C	35	D	----	Dd 15 after 2 hr pumping 16 gpm; L.
26R1	C. Skaggs	Hub Plumbing Co.	1-29-53	730	J	85	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	60	D	----	
26R2	D. G. Clark	Sheehy Well and Pump Co.	2-54	705	Dr	180	4	Oh		------	------	------	Sh	D	C	75	D	----	Water has hydrogen sulfide gas.
27D1	W. Kubik	Hub Plumbing Co.	3-16-53	690	J	92	2	S; 4ft, 60g, dia 1	------	------	------	Sd	Pl	C	40	D	----	
27D2	B. Quback	-------do--------	1- 5-54	670	J	70	2	--------do---------	------	------	------	Sd	Pl	C	30	D	----	
27D3	M. Hughes	-------do--------	4-24-52	680	J	67	2	S; 3.5ft. 60g, dia 1	------	------	------	Sd	Pl	C	25	D	----	
27D4	F. B. Grish	Lowell Well and Pump Co.	--------	660	J	65	2	S; 60g	------	------	------	Sd	Pl	C	---	D	J½	
27D5	-------do--------	Triangle Drilling Co.	8-22-58	680	Dr	153	4	Oh		120	128	25	Ls(?)	S	C	16	D	----	Limestone overlain by shale; shale has hydrogen sulfide gas; Ca, L.
28C1	T. D. Robertson	Hub Plumbing Co.	8-17-48	680	J	60	2	S; 4ft, 80g, dia 1	------	------	------	Sd	Pl	----	---	D	----	
29A1	R. C. Rose	Wohling Well Works	8-55	695	Dr	220	5	Oh		145	145	78	Ls(?)	S	C	55	---	----	Temperature 52°F.
29C1	J. Cebulski	Mr. Schrodor	8-56	700	Dr	196	4	Oh		154	154	42	Ls	S	C	40	D	----	
29C2	Mr. Joergsma	Hub Plumbing Co.	8-50	700	J	87	2	S		------	------	------	Sd	Pl	----	---	D	----	
29C3	D. Serva	Wohling Well Works	1947	700	Dr	168	5	Oh		145	145	20	Ls(?)	S	C	44	---	----	Little dd reported after 3 hr pumping 12 gpm.
29C4	S. Siwiniski, Jr.	Triangle Drilling Co.	7- 8-59	695	Dr	178	4	Oh		137	137	41	Ls(?)	S	C	38	D	J	Dd 16 ft after 1.5 hr pumping 9 gpm; Ca. L.
29D1	K. Warstler	-------do--------	5- 6-57	710	Dr	107	4	Oh		157	157	40	Ls(?)	S	C	38	D	----	Dd 10 ft after 1 hr pumping 7 gpm; L.
29D2	R. Carter	-------do--------	11-18-57	710	Dr	153	4	Oh		------	------	------	Ls(?)	S	C	45	D	J	Dd 30 ft pumping 3 gpm; Ca.
29P1	R. H. Baker	-------do--------	12-15-56	730	Dr	229	4	Oh		156	156	73	Ls	S	C	65	---	----	Dd 20 ft pumping 8 gpm; L.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
35/9W-30A1	R. D. Smith	Triangle Drilling Co.	4-13-57	700	Dr	250	4	Oh	158	158	92	Ls	S	C	42	D	----	Dd 78 ft after 1 hr pumping 6 gpm; L.
30A2	C. Peters	--------do--------	--------	695	Dr	193	4	Oh	152	152	41	Ls	S	C	38	D	J	Dd 10 ft pumping 9 gpm; Ca, L.
30A3	S. Peters	J. R. Stinnett	9-30-55	695	Dr	200	4	Oh	148	148	52	Ls	S	C	50	D	----	Little dd reported after 3 hr pumping 15 gpm.
30B1	V. Jacobson	Shenhy Well and Pump Co.	1955	700	Dr	353	4	Oh	185(?)	185(?)	168(?)	Ls	S	C	80(?)	D	----	
30B2	R. Grodetz	Triangle Drilling Co.	10-11-58	705	Dr	320	4	Oh	158	158	162	Ls(?)	S	C	45	D	----	Dd 75 ft pumping 7 gpm; Ca, L.
32A1	R. Van Gilder	--------do--------	6-11-58	710	Dr	138	4	Oh	123	123	15	Ls	S	C	---	---	----	Flows; L.
32B1	Girl Scout Camp	--------do--------	--------	690	J	67	2	S; 3ft, 60g	------	-----	------	Sd	Pl	----	---	P	----	Yield 15 gpm; sand overlain by 31 ft clay.
32D1	J. L. Fox	--------do--------	7- 6-57	700	Dr	138	4	Oh	131	131	7	Ls(?)	S	C	---	D	----	Water has hydrogen sulfide gas; L.
32D2	R. W. Simpkins	--------do--------	8-26-57	700	Dr	143	4	Oh	133	133	10	Ls(?)	S	C	35	D	----	Little dd reported after 2 hr pumping 12 gpm; L.
33D1	Town of St. John	Strommel and Hill	9- 6-41	710	Dr	277	8	Oh	174	174	103	Ls(?)	S	C	50	P	T	Yield 180 gpm; L.
33D2	E. Huber	Hub Plumbing Co.	7-31-46	705	J	57	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
33M1	M. Harper	--------do--------	3-24-54	700	J	99	2	--------do----------	------	-----	------	Sd	Pl	----	30	D	J½	
34R1	A. Wozniowski	--------do--------	3-17-55	710	J	96	2	--------do----------	------	-----	------	Sd	Pl	----	50	D	J½	Ca.
35C1	D. Boggs	--------do--------	2- 1-52	715	J	83	2	--------do----------	------	-----	------	Sd	Pl	----	40	D	J	
35N1	C. Wojdyla	--------do--------	11- 5-56	710	J	88	2	--------do----------	------	80	6	Sd	Pl	C	40	D	----	L.
35/10W-1R1	Mr. Patterson	Wohling Well Works	5-55	625	Dr	142	5	Oh	139	139	3	Ls(?)	S	C	7	---	----	Dd 5 ft after 3 hr pumping 37 gpm; temperature 52°F.
1R2	Dyer Baptist Church	Triangle Drilling Co.	1958	625	J	34	2	S; 3ft, 60g	------	27	7	Sd	Pl	C	10	P	----	Yield 12 gpm; sand overlain by 27 ft clay; Ca.
1R3	M. Berezanich	J. R. Stinnett	8-18-55	625	Dr	182	4	Oh	139	139	43	Ls(?)	S	C	23	D	----	Little dd reported after 3 hr pumping 18 gpm.
13C1	Dyer Creamery	Kramer Bros.	Fall 1947	640	Dr	325	8	Oh	129	129	196	Ls	S	C	8	I	T	Dd 15 ft pumping 150 gpm; Ca, L.
13C2	Town of Dyer	----------	1915	640	Dr	274	8	Oh	------	-----	------	Ls	S	C	---	P	T25	Ca.
25C1	G. Smith	Lowell Well and Pump Co.	1955	695	Dr	225	3	Oh	127	127	98	Ls(?)	S	C	---	D	----	
25E1	C. Robinson	Triangle Drilling Co.	10-25-57	705	Dr	189	4	Oh	140	140	49	Ls(?)	S	C	42	---	J	Dd 43 ft after 1 hr pumping 12 gpm; Ca, L.
25E2	D. Aichers	--------do--------	11-13-58	705	Dr	191	4	Oh	138	138	53	Ls(?)	S	C	40	---	----	Dd 40 ft pumping 9 gpm; see log well 25E1.
25F1	E. L. Cook	Wohling Well Works	7-55	700	Dr	310	5	Oh	151	151	159	Ls(?)	S	C	46	---	----	Temperature 52°F.
25F2	R. Walters	Triangle Drilling Co.	9-18-58	705	Dr	203	4	Oh	140	140	63	Ls(?)	S	C	42	---	----	Dd 53 ft pumping 7 gpm; L.
25G1	R. Szanmack	Wohling Well Works	6-55	695	Dr	260	5	Oh	125	125	135	Ls(?)	S	C	46	---	----	Temperature 52°F.
25G2	F. Kasper	Shenhy Well and Pump Co.	1955	695	Dr	140	4	Oh	132(?)	132(?)	8(?)	Ls	S	C	45	---	----	
25K1	T. Hoernig	Hub Plumbing Co.	8-13-54	700	J	79	2	S; 46ft, 60g, dia 1	------	-----	------	Sd	Pl	C(?)	65	D	----	
25L1	E. Johnson	Triangle Drilling Co.	1-15-58	710	Dr	258	4	Oh	143	143	115	Ls(?)	S	C	43	N	J	Dd 77 ft pumping 3 gpm; L.
25L2	E. Czock	Wohling Well Works	1956	720	Dr	169	5	Oh	150	150	19	Ls(?)	S	C	60	---	----	
25L3	E. Schell	--------do--------	1-56	730	Dr	233	5	Oh	158	158	75	Ls(?)	S	C	72	---	----	Dd 8 ft after 3 hr pumping 15 gpm; Ca.
25M1	H. Sims	Triangle Drilling Co.	8- 6-56	730	Dr	170	4	Oh	156	156	14	Ls(?)	S	C	60	---	J½	Dd 11 ft pumping 7 gpm; Ca, L.
25N1	C. Dromor	Wohling Well Works	--------	735	Dr	250	5	Oh	150	150	100	Ls(?)	S	C	74	---	----	Temperature 52°F.
25P1	C. Ludwig	--------do--------	8-55	725	Dr	260	5	Oh	164	164	96	Ls(?)	S	C	57	---	----	Do.
25P2	E. Freeze	Hub Plumbing Co.	10-17-48	720	J	110	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
25Q1	F. J. Newton	--------do--------	9-12-53	720	J	104	2	--------do----------	------	-----	------	Sd	Pl	----	56	D	----	

35/10W-36A1	J. DeGoey	-------do--------	6-24-50	710	J	82	2	--------do----------	------	-----	------	Sd	Pl	----	---	D	J	
36C1	O. P. Clarke	Wroa Well Drilling	4- 7-58	720	Dr	190	4	Oh	161	161	29	Ls	S	C	50	---	----	L.
36P1	G. Foster	Hub Plumbing Co.	12- 9-48	700	J	70	2	S; 4ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	----	
36P2	J. Sparrow	-------do--------	8- 4-53	690	J	54	2	--------do----------	------	-----	------	Sd	Pl	----	0	D	Cy	Yield 15 gpm.
36P3	Mr. Strader	Triangle Drilling Co.	4- 4-58	700	J	65	2	S; 3ft, 60g, dia 1	------	40	25	Sd	Pl	C	28	D	----	Yield 8 gpm; sand overlain by 40 ft clay; Ca.
36R1	L. Roviaro	Hub Plumbing Co.	10-14-53	700	J	112	2	--------do----------	------	-----	------	Sd	Pl	----	40	D	J½	
36/7W-7E1	Indiana Toll Road Commission	Raymond Concrete Pile Co.	5-29-54	621	B	60	---	-------------------	------	24	23	Sd	Pl	U	24	T	----	L.
7E2	-------do--------	-------do--------	5-26-54	624	B	60	---	-------------------	------	25	27	Sd	Pl	U	25	T	----	L.
7G1	-------do--------	-------do--------	6- 7-54	609	B	55	---	-------------------	------	27	11	Sd	Pl	U	27	T	----	L.
7G2	-------do--------	-------do--------	6- 9-54	610	B	45	---	-------------------	------	27	11	Sd	Pl	U	27	T	----	See log well 7G1.
7G3	-------do--------	-------do--------	6- 1-54	609	B	70	---	-------------------	------	27	11	Sd	Pl	U	27	T	----	L.
7G4	-------do--------	-------do--------	6- 5-54	608	B	70	---	-------------------	------	26	37	Sd	Pl	U	26	T	----	L.
7G5	-------do--------	-------do--------	5- 6-54	610	B	40	---	-------------------	------	21	19	Sd	Pl	U	21	T	----	See log well 7G3.
8D1	-------do--------	-------do--------	6- 1-54	610	B	65	---	-------------------	------	8	24	Sd	Pl	U	8	T	----	See log well 8D2.
8D2	-------do--------	-------do--------	5-27-54	608	B	65	---	-------------------	------	0	26	Sd	Pl	U	6	T	----	L.
8B3	-------do--------	-------do--------	6- 3-54	611	B	65	---	-------------------	------	9	29	Sd	Pl	U	9	T	----	L.
8D4	-------do--------	-------do--------	5-28-54	607	B	50	---	-------------------	------	9	23	Sd	Pl	U	9	T	----	See log well 8D3.
8C1	-------do--------	-------do--------	6- 4-54	601	B	33	---	-------------------	------	1	23	Sd	Pl	----	1	T	----	L.
9A1	-------do--------	-------do--------	6-14-54	596	B	80	---	-------------------	------	15	22	Sd	Pl	----	15	T	----	L.
9A2	-------do--------	-------do--------	6-11-54	607	B	50	---	-------------------	------	-----	------	Sd	Pl	----	20	T	----	L.
9A3	Indiana State Highway Department	-------------------	5-14-58	592	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	See log well 9A5.
9A4	-------do--------	-------------------	5-14-58	599	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	Do.
9A5	-------do--------	-------------------	5-14-58	598	B	50	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	L.
9A6	-------do--------	-------------------	5-14-58	600	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	See log well 9A5.
9A7	-------do--------	-------------------	5-14-58	594	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	Do.
9A8	-------do--------	-------------------	5-14-58	592	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	Do.
9A9	-------do--------	-------------------	5-14-58	600	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	Gray sand from 0-30 ft.
9A10	-------do--------	-------------------	5-14-58	598	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	See log well 9A5.
9A11	-------do--------	-------------------	5-14-58	600	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	Gray sand from 0-30 ft.
9A12	-------do--------	-------------------	5-14-58	594	B	30	---	-------------------	------	-----	------	Sd	Pl	----	---	T	----	See log well 9A5.
9B1	-------do--------	Raymond Concrete Pile Co.	6-14-54	607	B	70	---	-------------------	------	19	51	Sd	Pl	U(?)	19	T	----	L.
9B2	-------do--------	-------do--------	6-15-54	598	B	65	---	-------------------	------	14	51	Sd	Pl	U	14	T	----	L.
9B3	-------do--------	-------do--------	6-16-54	596	B	60	---	-------------------	------	12	55	Sd	Pl	U	12	T	----	L.
9D1	Indiana Toll Road Commission	-------do--------	6-10-54	604	B	100	---	-------------------	------	1	62	Sd	Pl	U	1	T	----	L.
9D2	-------do--------	-------do--------	6-10-54	603	B	55	---	-------------------	------	1	54	Sd	Pl	U	1	T	----	See log well 9D4.
9D3	-------do--------	-------do--------	6- 8-54	603	B	60	---	-------------------	------	2	58	Sd	Pl	U	2	T	----	Do.
9D4	-------do--------	-------do--------	6- 3-54	603	B	75	---	-------------------	------	2	61	Sd	Pl	U	2	T	----	L.
9D5	-------do--------	-------do--------	6- 6-54	603	B	60	---	-------------------	------	2	58	Sd	Pl	U	2	T	----	See log well 9D4.
9D6	-------do--------	-------do--------	5-27-54	603	B	70	---	-------------------	------	-----	------	Sd	Pl	----	---	---	----	L.
9G1	-------do--------	-------do--------	6-16-54	593	B	60	---	-------------------	------	-----	------	------	Pl	----	26	T	----	L.
9Q1	Town of East Gary	Layne-Northern Co., Inc.	2-25-48	610	Dr	75	8-6	-------------------	------	35	40	Sd	Pl	C	27	T	----	L.
9Q2	J. Klesinger	Westville Well Co.	2- 1-50	610	J	77	2	S; 4.5ft	------	-----	------	Sd	Pl	----	---	D	----	
16A1	Town of East Gary	Layne-Northern Co., Inc.	3- 4-48	635	Dr	97	8-6	-------------------	------	-----	------	Sd	Pl	----	---	T	----	Water level in upper sand 15 ft below lsd; water level in lower sand 30 ft below lsd; L.
16B1	-------do--------	-------do--------	3-23-48	635	Dr	130	8-4	-------------------	------	-----	------	------	-----	----	17	T	----	L.
16B2	-------do--------	-------do--------	1-18-45	630	Dr	77	38	Gp; S; 30ft, 105sl, dia 12	------	-----	------	Sd	Pl	U,C	16	P	T	Dd 41 ft pumping 220 gpm; screen set from 37-47 ft and 57-77 ft with 10 ft of blank pipe from 47-57 ft;L
16B3	-------do--------	-------do--------	7-29-44	630	Dr	108	---	-------------------	------	-----	------	Sd	Pl	U	---	T	----	L.
16B4	-------do--------	-------do--------	3-30-48	630	Dr	93	8-6	-------------------	------	20	18	Sd	Pl	U	20	P	T	L.
16E1	-------do--------	-------do--------	11-25-33	610	Dr	62	6-4	-------------------	------	-----	------	Sd	Pl	U	---	T	----	L.
16E2	-------do--------	-------do--------	4-17-40	615	Dr	69	---	-------------------	------	22	47	Sd,G	Pl	U	22	T	----	L.
16E3	-------do--------	-------do--------	---------	615	Dr	95	---	-------------------	------	-----	------	Sd	Pl	C(?)	---	T	----	L.
16E4	-------do--------	-------do--------	---------	615	Dr	71	---	-------------------	------	22	48	Sd	Pl	U	22	T	----	
16E5	-------do--------	-------do--------	6-12-40	615	Dr	68	38	Gp; S; 10ft, 105sl, dia 18	------	58	10	Sd	Pl	C	16	P	T	Dd 42 ft pumping 84 gpm; L.
16G1	-------do--------	-------do--------	3-12-48	630	Dr	90	8-6	-------------------	------	13	43	Sd	Pl	U	13	T	----	L.
16G2	-------do--------	-------do--------	11-15-49	630	Dr	88	8-6	-------------------	------	18	38	Sd	Pl	U	18	T	----	L.
16K1	G. Reick	Porter County Well Service	0-55	635	J	49	2	S; 60g	------	30	19	Sd	Pl	C	24	D	----	Old well 21 ft deep; L.
16L1	Town of East Gary	Layne-Northern Co., Inc.	1- 3-50	600	Dr	150	8-6	-------------------	------	-----	------	------	-----	----	---	T	----	L.
16L2	-------do--------	-------do--------	8-10-44	600	Dr	100	---	-------------------	------	-----	------	Sd	Pl	U	---	T	----	L.
16M1	-------do--------	-------do--------	2- 8-36	600	Dr	44	38	Gp; S; 15ft, 80sl, dia 18	------	28	16	Sd	Pl	C	0	P	T	Dd 42 ft pumping 140 gpm; L.
16M2	-------do--------	-------do--------	1-25-38	600	Dr	53	38	--------do----------	------	5	46	Sd	Pl	C	0	P	T	Dd 43 ft pumping 125 gpm; L.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
36/7W-16N1	Town of East Gary	Layne-Northern Co., Inc.	7-27-44	600	Dr	78	---	----------	-------	35	13	Sd	Pl	C	5	T	----	L.
16P1	-------do--------	-------do--------	6-17-54	630	Dr	65	38	Gp; S; 15ft, 80sl, dia 18	-------	28	37	Sd	Pl	U	28	P	T	Dd 20 ft pumping 257 gpm; Ca, L.
16P2	-------do--------	-------do--------	10-26-53	630	Dr	80	---	----------	-------	34	41	Sd	Pl	U	34	T	----	See log well 16Q1.
16Q1	-------do--------	-------do--------	4- 7-50	635	Dr	68	38	Gp; S; 20ft, 105sl, dia 18	-------	21	47	Sd	Pl	U	21	P	T	Dd 19 ft pumping 340 gpm; L.
16Q2	-------do--------	-------do--------	5- 1-50	635	Dr	64	38	---------do----------	-------	21	43	Sd	Pl	U	21	P,O	T	Dd 18.5 ft pumping 310 gpm; see log well 16Q1; observation well Lake 1; water level measured 30 ft below lsd, 1-1-54.
16Q3	-------do--------	-------do--------	12- 4-49	635	Dr	74	8-6	----------	-------	24	41	Sd	Pl	U	24	T	----	See log 16Q1.
16Q4	-------do--------	-------do--------	12-14-49	635	Dr	77	8-6	----------	-------	20	43	Sd	Pl	U	20	T	----	Do.
16Q5	-------do--------	-------do--------	2-17-48	635	Dr	95	8-6-4	----------	-------	25	45	Sd	Pl	U	25	T	----	L.
16R1	-------do--------	-------do--------	3-19-54	635	Dr	70	6	----------	-------	24	46	Sd	Pl	U	24	T	----	L.
16R2	-------do--------	-------do--------	12-15-54	635	Dr	65	38	Gp; S; 20ft, 80sl, dia 18	-------	22	43	Sd	Pl	U	22	P	T	Dd 22 ft pumping 375 gpm; see log well 16R1.
17J1	-------do--------	-------do--------	1-29-36	600	Dr	50	---	----------	-------	10	10	Sd	Pl	C	1	T	----	Dd 32 ft pumping 35 gpm; L.
17J2	-------do--------	-------do--------	1-31-36	600	Dr	48	---	----------	-------	32	16	Sd,G	Pl	C	+2	T	----	Yield 45 gpm; L.
17J3	-------do--------	-------do--------	2- 6-36	600	Dr	47	---	----------	-------	23	24	Sd	Pl	C	---	T	----	L.
17J4	-------do--------	-------do--------	2- 7-36	600	Dr	52	---	----------	-------	36	16	Sd	Pl	C	0	T	----	L.
17J5	-------do--------	-------do--------	2- 3-36	600	Dr	50	---	----------	-------	47	3	Sd	Pl	C	1	T	----	L.
17K1	-------do--------	-------do--------	1-20-36	600	Dr	50	---	----------	-------	31	19	Sd	Pl	C	0	T	----	L.
17K2	-------do--------	-------do--------	1-14-36	600	Dr	50	---	----------	-------	33	17	Sd	Pl	C	+1	T	----	L.
17K3	-------do--------	-------do--------	1-16-36	600	Dr	58	---	----------	-------	40	10	Sd	Pl	C	+1	T	----	L.
17M1	-------do--------	-------do--------	11-20-33	610	Dr	138	---	----------	-------	-----	-----	-----	----	----	---	T	----	L.
17R1	-------do--------	-------do--------	1-25-36	600	Dr	52	---	----------	-------	43	8	Sd,G	Pl	C	2	T	----	L.
18E1	H. C. Stucker	Wroe Well Drilling	1- 6-58	595	Dr	218	4	Oh	167	167	51	Ls	S	C	---	D	----	Flows; water has hydrogen sulfide gas; L.
18E2	Indiana State Highway Department	----------	1-29-58	594	B	45	---	----------	-------	-----	------	-----	----	----	---	T	----	L.
18E3	-------do--------	----------	1-29-58	594	B	30	---	----------	-------	-----	------	-----	----	----	---	T	----	See log well 18E2.
18G1	Mr. Bentley	Wroe Well Drilling	8-10-59	595	Dr	151	4	Oh	145	145	6	Ls	S	C	0	D	J	Dd 18 ft after 48 hr pumping 7 gpm; Ca, L.
18L1	East Gary Concrete Works	Porter County Well Service	--------	600	J	72	2	----------	-------	-----	------	-----	----	----	---	T	----	L.
18Q1	Town of East Gary	Layne-Northern Co., Inc.	2-16-40	610	Dr	100	---	----------	-------	25	28	Sd	Pl	C	10	T	----	L.
19B1	-------do--------	-------do--------	8-11-44	630	Dr	101	---	----------	-------	-----	------	-----	----	----	---	T	----	L.
19E1	Town of New Chicago	-------do--------	10-22-51	620	Dr	295	8-4	Oh	198	-----	------	Sd	Pl	C	48	T	----	L.
19F1	-------do--------	-------do--------	9- 6-51	630	Dr	55	6	----------	-------	-----	------	Sd	Pl	C	47	T	----	L.
19F2	-------do--------	-------do--------	9-13-51	630	Dr	87	6	----------	-------	53	20	Sd	Pl	C	44	T	----	L.
19H1	-------do--------	-------do--------	9-21-51	640	Dr	100	---	----------	-------	49	44	Sd	Pl	C	32	T	----	L.
19M1	-------do--------	-------do--------	10-31-51	630	Dr	61	6	----------	-------	-----	------	-----	----	----	2	T	----	L.
20N1	-------do--------	-------do--------	1- 8-52	600	Dr	95	8-6	----------	-------	6	23	Sd	Pl	C	---	T	----	Flowed; L.
20P1	-------do--------	-------do--------	1- 8-52	600	Dr	95	8-6	----------	-------	8	21	Sd	Pl	C	---	T	----	Flowed; see log well 20N1.
20R1	C. Isakson	Porter County Well Service	7-54	620	J	41	2	S; 4ft, 60g	-------	12	29	Sd	Pl	U	12	P	J¾	Yield 18 gpm; Ca, L.
21A1	N. Cawney and Associates	-------do--------	1- 2-56	630	J	54	2	----------	-------	35	19	Sd	Pl	C	25	D	J¾	Yield 8 gpm; L
21B1	Town of East Gary	Layne-Northern Co., Inc.	10-22-53	635	Dr	82	6	----------	-------	34	48	Sd	Pl	U	34	T	----	L.
21B2	Town of New Chicago	-------do--------	1-21-52	640	Dr	68	6	S; 4ft dia 4	-------	27	41	Sd	Pl	U	27	T	----	Yield 10 gpm; L.
21B3	Town of East Gary	-------do--------	3-17-54	640	Dr	70	6	----------	-------	-----	------	Sd	Pl	U	---	T	----	See log well 21B2.
21B4	-------do--------	-------do--------	3-31-54	640	Dr	60	6	----------	-------	-----	------	Sd	Pl	U	---	T	----	Do.
21C1	Town of New Chicago	-------do--------	10- 6-54	630	Dr	64	26	Gp; S; 15ft, 80sl, dia 10	-------	30	34	Sd	Pl	U	30	P	T20	Dd 21 ft after 8 hr pumping 200 gpm; L.

36/7W-21C2	-------do--------	-------do--------	4- 9-53	630	Dr	68	8	----------	------	31	37	Sd	Pl	U	31	T	----	L.
21C3	-------do--------	-------do--------	9- 9-54	630	Dr	55	---	----------	------	29	26	Sd	Pl	U	29	T	----	See log well 21C2.
21C4	-------do--------	-------do--------	9-13-54	630	Dr	64	---	----------	------	30	34	Sd	Pl	U	30	T	----	L.
21C5	-------do--------	-------do--------	9-16-54	630	Dr	61	---	----------	------	30	31	Sd	Pl	U	30	T	----	See log well 21C4.
21C6	-------do--------	-------do--------	10-17-54	630	Dr	64	26	Gp; S; 15ft, 80sl, dia 8	------	30	34	Sd	Pl	U	30	P	T20	Dd 17.5 ft after 8 hr pumping 240 gpm; see log well 21C1.
21C7	-------do--------	-------do--------	9-21-54	630	Dr	61	---	----------	------	29	32	Sd	Pl	U	29	T	----	See log well 21C4.
21C8	-------do--------	-------do--------	10- 7-54	630	Dr	65	8	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 21C1
21C9	-------do--------	-------do--------	11- 2-54	630	Dr	59	28	Gp; S; 15ft, 80sl, dia 10	------	27	32	Sd	Pl	U	27	P	T20	Dd 11 ft after 8 hr pumping 207 gpm; see log well 21C10
21C10	-------do--------	-------do--------	--------	630	Dr	61	6	----------	------	27	32	Sd	Pl	U	27	T	----	L.
21C11	-------do--------	-------do--------	10-26-54	630	Dr	66	0	----------	------	31	35	Sd	Pl	U	31	T	----	L.
21C12	-------do--------	-------do--------	11-16-54	625	Dr	61	26	Gp; S; 15ft, 80sl, dia 10	------	28	33	Sd	Pl	U	28	P	T20	Dd 16 ft after 8 hr pumping 207 gpm; see log well 21C10.
21C13	-------do--------	-------do--------	10-28-54	625	Dr	58	0	----------	------	29	29	Sd	Pl	U	29	T	----	See log well 21C10.
21C14	-------do--------	-------do--------	2- 6-53	630	Dr	60	---	----------	------	29	31	Sd	Pl	U	28	T	----	L.
21C15	-------do--------	-------do--------	11- 1-54	630	Dr	67	6	----------	------	34	33	Sd	Pl	U	34	T	----	See log well 21C11.
21D1	Town of East Gary	-------do--------	--------	600	Dr	48	---	----------	------	-----	------	Sd	Pl	----	---	T	----	L.
21G1	Town of New Chicago	-------do--------	1-30-52	625	Dr	57	6	----------	------	30	7	Sd	Pl	C	17	T	----	L.
21H1	-------do--------	-------do--------	2- 4-52	620	Dr	95	0	----------	------	31	27	Sd	Pl	C	---	T	----	L.
28P1	W. Kanost	J. Eich and Son	8- 8-59	624	J	28	2	S; 3.5ft, 60g, dia 1	------	7	22	Sd	Pl	U	7	D	J¼	Yield 13 gpm; L.
29A1	F. LaBona	Porter County Well Service	1949	610	J	60	2	S; 4ft, 80g	------	44	6	Sd	Pl	C	18	D	J¼	Fine sand overlain by 44 ft blue clay.
29B1	O. D. Colt	Nelson Well and Pump Service	11-17-55	615	J	32	2	S; 3.5ft, 60g, dia 1	------	-----	------	Sd	Pl	----	---	D	J	
29B2	A. Lonney	Porter County Well Service	5-19-54	610	J	39	2	S; 4ft, 80g	------	24	15	Sd	Pl	----	16	D	----	Yield 18 gpm; yellow sand overlain by 24 ft blue clay.
29N1	Owens Brickyard	----------	--------	620	Dr	180	---	Oh	------	157	3	Ls(?)	S	----	---	De	----	Loverott (1899, p 14); L.
32F1	Mr. Henderson	----------	--------	620	Du	---	---	----------	------	-----	------	D	Pl	----	---	I	C	
36/8W-2F1	Indiana Toll Road Commission	Sprague and Henwood	6-25-54	597	B	136	---	----------	------	1	37	Sd	Pl	U	---	T	----	L.
2F2	-------do--------	-------do--------	6-25-54	596	B	117	---	----------	------	1	37	Sd	Pl	U	1	T	----	See log well 2F1.
2K1	-------do--------	-------do--------	6-25-54	609	B	110	---	----------	------	-----	------	Sd,G	Pl	U	---	T	----	See log well 2K2.
2K2	-------do--------	-------do--------	6-25-54	606	B	181	---	----------	179	-----	------	Sd	Pl	U	---	T	----	L.
2K3	-------do--------	-------do--------	6-25-54	606	B	61	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 2K2.
2K4	-------do--------	-------do--------	6-25-54	604	B	55	---	----------	------	4	38	Sd	Pl	U	4	T	----	L.
2K5	-------do--------	-------do--------	--------	604	B	57	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 2K2.
2L1	-------do--------	-------do--------	6-25-54	606	B	142	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
2L2	-------do--------	-------do--------	6-25-54	599	B	76	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
2L3	-------do--------	-------do--------	6-25-54	606	B	82	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 2L1.
2Q1	-------do--------	-------do--------	6-25-54	604	B	141	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
2Q2	-------do--------	-------do--------	6-25-54	604	B	57	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 2Q1.
2Q3	-------do--------	-------do--------	6-25-54	604	B	55	---	----------	------	-----	------	Sd	Pl	U	---	T	----	Do.
2Q4	-------do--------	-------do--------	6-25-54	604	B	136	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
2Q5	-------do--------	-------do--------	6-25-54	603	B	142	---	----------	------	3	35	Sd	Pl	U	3	T	----	See log well 2Q1
2Q6	-------do--------	-------do--------	6-25-54	602	B	52	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
2Q7	-------do--------	-------do--------	6-25-54	602	B	142	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 2Q1.
2Q8	-------do--------	-------do--------	6-25-54	601	B	52	---	----------	------	1	40	Sd,G	Pl	U	1	T	----	L.
2Q9	-------do--------	-------do--------	6-25-54	602	B	55	---	----------	------	-----	------	Sd,G	Pl	U	---	T	----	See log well 2Q1.
3E1	-------do--------	-------do--------	1- 7-55	596	B	124	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 3E2.
3E2	-------do--------	-------do--------	1- 7-55	596	B	142	---	----------	131	-----	------	Sd	Pl	U	---	T	----	L.
3E3	-------do--------	-------do--------	1- 7-55	598	B	80	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 3E2.
3E4	-------do--------	-------do--------	1- 7-55	601	B	132	---	----------	------	-----	------	Sd	Pl	U	---	T	----	Do.
3E5	-------do--------	-------do--------	1- 7-55	603	B	70	---	----------	------	-----	------	Sd	Pl	U	---	T	----	Do.
3E6	-------do--------	-------do--------	1- 7-55	599	B	56	---	----------	------	-----	------	Sd	Pl	U	---	T	----	Do.
3E7	-------do--------	-------do--------	1- 7-55	600	B	136	---	----------	------	13	35	Sd	Pl	U	13	T	----	Do.
3E8	-------do--------	-------do--------	1- 7-55	600	B	50	---	----------	------	-----	------	Sd,G	Pl	U	---	T	----	Do.
3E9	-------do--------	-------do--------	1- 7-55	600	B	140	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
3F1	-------do--------	-------do--------	1- 7-55	601	B	56	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 3F5.
3F2	-------do--------	-------do--------	1- 7-55	602	B	62	---	----------	------	-----	------	Sd,G	Pl	U	---	T	----	L.
3F3	-------do--------	-------do--------	1- 7-55	601	B	130	---	----------	135	-----	------	Sd,G	Pl	U	---	T	----	L.
3F4	-------do--------	-------do--------	1- 7-55	601	B	56	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 3F5.
3F5	-------do--------	-------do--------	1- 7-55	602	B	136	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
3F6	-------do--------	-------do--------	1- 7-55	600	B	130	---	----------	------	-----	------	Sd,G	Pl	U	---	T	----	See log well 3F5.
3F7	-------do--------	-------do--------	1- 7-55	601	B	61	---	----------	------	-----	------	Sd,G	Pl	U	---	T	----	Do.
3F8	-------do--------	-------do--------	1- 7-55	600	B	136	---	----------	------	-----	------	Sd	Pl	U	---	T	----	Do.
3F9	-------do--------	-------do--------	1- 7-55	602	B	62	---	----------	------	15	37	Sd,G	Pl	U	15	T	----	Do.
3G1	-------do--------	-------do--------	--------	600	B	131	---	----------	------	-----	------	Sd	Pl	U	---	T	----	L.
3G2	-------do--------	-------do--------	--------	602	B	132	---	----------	------	-----	------	Sd,G	Pl	U	---	T	----	See log well 3G1.
3G3	-------do--------	-------do--------	--------	597	B	130	---	----------	129	-----	------	Sd,G	Pl	U	---	T	----	L.
3G4	-------do--------	-------do--------	--------	598	B	56	---	----------	------	-----	------	Sd	Pl	U	---	T	----	See log well 3G1.
3G5	-------do--------	-------do--------	--------	602	B	131	---	----------	------	-----	------	Sd	Pl	U	---	T	----	Do.
3G6	-------do--------	-------do--------	--------	599	B	56	---	----------	------	-----	------	Sd	Pl	U	---	T	----	Do.
3G7	-------do--------	-------do--------	--------	596	B	129	---	----------	126	-----	------	Sd	Pl	U	---	T	----	See log well 3G3.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
3G/8W-3G8	Indiana Toll Road Commission	Sprague and Henwood	--------	599	B	56	---	----------	------	----	------	Sd,G	Pl	U	---	T	----	See log well 3G1.
3H1	-------do--------	-------do--------	--------	596	B	52	---	----------	------	----	------	Sd,G	Pl	U	---	T	----	L.
3N1	Palace Building Co.	J. P. Miller Artesian Well Co.	6-39	600	Dr	643	10	Oh	126	126	514	Ls	S	C	28	N	----	Water has hydrogen sulfide gas; Ca, L.
3N2	-------do--------	Kelly Well Co.	1925	600	Dr	30	24	S; 20ft	------	18	12	Sd	Pl	C(?)	16(?)	N	----	Dd 7 ft pumping 7 gpm; L.
4D1	Gary-Hobart Water Co.	----------	1900	590	Dr	121	---	----------	121	----	------	Sd	Pl	----	---	T	----	L.
4C1	Indiana Toll Road Commission	Sprague and Henwood	--------	585	B	112	---	----------	------	6	30	G,Sd	Pl	U	6	T	----	See log well 4C4.
4C2	-------do--------	-------do--------	--------	585	B	117	---	----------	------	----	------	G,Sd	Pl	U	---	T	----	Do.
4C3	-------do--------	-------do--------	--------	589	B	116	---	----------	------	----	------	Sd,G	Pl	U	---	T	----	L.
4C4	-------do--------	-------do--------	--------	585	B	117	---	----------	------	----	------	Sd,G	Pl	U	---	T	----	L.
4C5	-------do--------	-------do--------	--------	599	B	127	---	----------	------	----	------	Sd	Pl	U	---	T	----	L.
4D1	-------do--------	-------do--------	--------	590	B	116	---	----------	------	1	39	Sd	Pl	U	1	T	----	L.
4F1	Palace Theatre	J. P. Miller Artesian Well Co.	--------	600	Dr	630	10	Oh	126	126	510	Ls(?)	S	C	250	A	----	Dd 200 ft pumping about 90 gpm
4G1	Gary-Hobart Water Co.	----------	1906	600	Dr	126	---	----------	126	----	------	------	----	----	---	T	----	L.
4H1	Indiana Toll Road Commission	Sprague and Henwood	1- 7-55	599	B	121	---	----------	------	----	------	Sd	Pl	U	---	T	----	L.
4H2	-------do--------	-------do--------	1- 7-55	599	B	62	---	----------	------	10	38	Sd	Pl	U	10	T	----	See log well 4H1.
4H3	-------do--------	-------do--------	1- 7-55	599	B	62	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 4H1.
4K1	Gary-Hobart Water Co.	----------	1906	600	Dr	127	---	----------	127	----	------	------	----	---	---	T	----	L.
4K2	-------do--------	----------	1906	600	Dr	118	---	----------	118	----	------	------	----	---	---	T	----	L.
6A1	Stiener Paper Mill	Layne-Northern Co., Inc.	5-19-50	590	Dr	75	6	----------	------	6	30	Sd	Pl	U	6	T	----	L.
6B1	-------do--------	-------do--------	5-20-50	590	Dr	68	---	----------	------	7	35	Sd	Pl	U	7	T	----	See log well 6A1.
6C1	Indiana Toll Road Commission	Sprague and Henwood	4-18-55	576	B	35	---	----------	------	7	25	Sd	Pl	U	7	T	----	See log well 6C5.
6C2	-------do--------	-------do--------	4-18-55	592	B	87	---	----------	------	10	35	Sd	Pl	U	10	T	----	L.
6C3	-------do--------	-------do--------	4-19-55	591	B	39	---	----------	------	9	20	Sd	Pl	U	9	T	----	See log well 6C5.
6C4	-------do--------	-------do--------	4-14-55	585	B	27	---	----------	------	2	25	Sd	Pl	U	2	T	----	See log well 6C5.
6C5	-------do--------	-------do--------	4-13-55	593	B	62	---	----------	------	6	37	Sd	Pl	U	6	T	----	L.
6C6	-------do--------	-------do--------	4-21-55	584	B	58	---	----------	------	2	30	Sd	Pl	----	---	T	----	Flowed; see log well 6C5.
6D1	-------do--------	-------do--------	4-22-55	592	B	28	---	----------	------	8	18	Sd	Pl	U	8	T	----	
6D2	-------do--------	-------do--------	4-55	576	B	60	---	----------	------	14	20	Sd	Pl	----	6	T	----	L.
6D3	-------do--------	-------do--------	4-25-55	589	B	42	---	----------	------	19	20	Sd	Pl	----	6	T	----	L.
6D4	-------do--------	-------do--------	4-55	576	B	50	---	----------	------	7	26	Sd,G	Pl	U	7	T	----	L.
6H1	Stiener Paper Mill	Layne-Northern Co., Inc.	6- 1-50	590	Dr	36	---	----------	------	5	31	Sd	Pl	U	5	T	----	L.
9A1	Indiana Theatre	Gray Well Co.	1938	600	Dr	554	12-8	Oh	37	37	400	Do	S	C	---	T	----	Yield 220 gpm; 2 gpm per ft of dd; water has hydrogen sulfide gas.
9E1	Dixie Dairy Co.	Layne-Northern Co., Inc.	4-29-35	600	Dr	27	12	S; 10ft, 105sl, dia 10	------	8	19	Sd	Pl	U	8	I	L	Dd 16 ft pumping 60 gpm; Ca.
9E2	-------do--------	-------do--------	5-29-35	600	Dr	28	12	--------do---------	------	6	20	Sd	Pl	U	8	I	----	
9E3	-------do--------	-------do--------	5-16-34	600	Dr	42	---	----------	------	10	26	Sd	Pl	U	10	N	----	L.
9H1	Roosevelt Theatre	Gray Well Co.	1938	600	Dr	550	12-8	Oh	112	158	392	Do	S	C	---	---	----	Water has hydrogen sulfide gas; L.
10D1	Barnes Ice and Fuel Co.	Layne-Northern Co., Inc.	11- 3-55	600	Dr	88	8	----------	------	----	------	------	----	----	---	T	----	No water reported; L.
11B1	Indiana Toll Road Commission	Sprague and Henwood	--------	602	B	131	---	----------	------	----	------	Sd	Pl	----	---	T	----	L.
11B2	-------do--------	-------do--------	--------	604	B	67	---	----------	------	----	------	Sd	Pl	----	---	T	----	See log well 11B3.
11B3	-------do--------	-------do--------	--------	602	B	68	---	----------	------	----	------	Sd	Pl	----	---	T	----	L.

36/8W-11D4	-------do--------	--------do--------	--------	606	B	72	---	----------	------	----	------	Sd	Pl	----	---	T	----	See log well 11B1.
11G1	-------do--------	--------do--------	8-54	629	B	147	---	----------	------	----	------	Sd	Pl	U	---	T	----	L.
11G2	-------do--------	--------do--------	6-25-54	618	D	62	---	----------	------	15	34	Sd,G	Pl	U	15	T	----	L.
11G3	-------do--------	--------do--------	6-54	606	B	122	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 11G4.
11G4	-------do--------	--------do--------	6-54	607	B	170	---	----------	154	----	------	Sd	Pl	U	---	T	----	L.
11G5	-------do--------	--------do--------	6-54	607	B	50	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 11G4.
11H1	-------do--------	--------do--------	6-25-54	607	B	52	---	----------	------	3	33	Sd	Pl	U	3	T	----	See log well 11H3.
11H2	-------do--------	--------do--------	6-54	607	D	51	---	----------	------	----	------	Sd	Pl	U	---	T	----	Do.
11H3	-------do--------	--------do--------	6-54	607	B	102	---	----------	------	----	------	Sd,G	Pl	U	---	T	----	L.
12G1	-------do--------	Raymond Concrete Pile Co.	6- 5-54	635	B	70	---	----------	------	32	34	Sd	Pl	U	32	T	----	L.
12G2	-------do--------	--------do--------	6- 6-54	624	B	60	---	----------	------	23	29	Sd	Pl	U	23	T	----	L.
12G3	-------do--------	--------do--------	6- 5-54	615	B	62	---	----------	------	15	30	Sd	Pl	U	15	T	----	See log well 12G5.
12G4	-------do--------	--------do--------	0-11-55	620	B	55	---	----------	------	20	29	Sd,G	Pl	U	20	T	----	Do.
12G5	-------do--------	--------do--------	6- 8-54	618	B	55	---	----------	------	16	28	Sd,G	Pl	U	16	T	----	L.
12G6	-------do--------	--------do--------	6-15-54	633	B	65	---	----------	------	33	24	Sd,G	Pl	U	33	T	----	L.
12G7	-------do--------	--------do--------	6-10-54	645	B	75	---	----------	------	44	30	Sd,G	Pl	U	44	T	----	L.
12H1	-------do--------	--------do--------	5-29-54	622	B	60	---	----------	------	25	21	Sd	Pl	U	25	T	----	L.
12H2	-------do--------	--------do--------	5-29-54	628	B	40	---	----------	------	27	13	Sd	Pl	U	27	T	----	
12K1	-------do--------	--------do--------	6- 3-54	612	B	55	---	----------	------	12	29	Sd,G	Pl	U	12	T	----	L.
12K2	-------do--------	--------do--------	6- 2-54	611	B	49	---	----------	------	11	27	Sd	Pl	U	11	T	----	L.
12M1	-------do--------	--------do--------	--------	651	D	52	---	----------	------	----	------	Sd	Pl	U	---	T	----	Fine to medium brown sand 0-52 ft.
13H1	Indiana State Highway Department	----------	1-29-58	603	B	30	---	----------	------	----	------	------	----	----	---	T	----	L.
13H2	-------do--------	----------	1-29-58	594	B	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 13H1.
13J1	-------do--------	Indiana State Highway Department	--------	603	D	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 13J6.
13J2	-------do--------	--------do--------	--------	597	D	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
13J3	-------do--------	--------do--------	--------	594	B	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
13J4	-------do--------	--------do--------	--------	596	D	30	---	----------	------	----	------	------	----	----	---	T	----	Do
13J5	-------do--------	--------do--------	--------	596	B	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
13J6	-------do--------	--------do--------	--------	595	D	30	---	----------	------	----	------	------	----	----	---	T	----	L.
13K1	-------do--------	--------do--------	--------	592	B	30	---	----------	------	----	------	------	----	----	---	T	----	L.
13K2	-------do--------	--------do--------	--------	593	D	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 13K1.
13K3	-------do--------	--------do--------	--------	593	B	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
13K4	-------do--------	--------do--------	--------	600	D	30	---	----------	------	----	------	------	----	----	---	T	----	L.
13K5	-------do--------	--------do--------	--------	600	D	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 13K4.
13K6	-------do--------	--------do--------	--------	600	B	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
13K7	-------do--------	--------do--------	--------	594	D	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 13K1.
13K8	-------do--------	--------do--------	--------	596	D	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
13K9	-------do--------	--------do--------	--------	596	B	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
13L1	-------do--------	----------	12- 1-57	594	B	30	---	----------	------	----	------	------	----	----	---	T	----	L.
13L2	-------do--------	----------	12- 1-57	594	D	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 13L1.
13L3	-------do--------	----------	12- 1-57	596	B	25	---	----------	------	----	------	------	----	----	---	T	----	Do.
13L4	-------do--------	----------	12- 1-57	599	B	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 13L1.
14N1	-------do--------	Indiana State Highway Department	--------	592	D	35	---	----------	------	----	------	------	----	----	---	T	----	L.
14P1	-------do--------	--------do--------	--------	592	B	35	---	----------	------	----	------	------	----	----	---	T	----	See log well 14N1.
14P2	-------do--------	--------do--------	--------	592	B	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
14P3	-------do--------	--------do--------	--------	591	D	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
15N1	-------do--------	----------	1-10-55	599	B	47	---	----------	------	----	------	------	----	----	---	T	----	L.
15N2	-------do--------	----------	1-10-55	599	D	47	---	----------	------	----	------	------	----	----	---	T	----	See log well 15N1.
15P1	-------do--------	Indiana State Highway Department	--------	588	B	30	---	----------	------	----	------	------	----	----	---	T	----	L.
15P2	-------do--------	--------do--------	--------	592	B	30	---	----------	------	----	------	------	----	----	---	T	----	See log well 15P2.
15P3	-------do--------	--------do--------	--------	592	D	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
15Q1	-------do--------	--------do--------	--------	597	D	30	---	----------	------	----	------	------	----	----	---	T	----	Do.
15Q2	-------do--------	--------do--------	--------	594	B	30	---	----------	------	----	------	------	----	----	---	T	----	L.
16M1	-------do--------	----------	4-25-55	594	D	45	---	----------	------	----	------	------	----	----	---	T	----	See log well 16M1.
16M2	-------do--------	----------	4-25-55	594	B	45	---	----------	------	----	------	------	----	----	---	T	----	Do.
16M3	-------do--------	----------	4-25-55	594	B	45	---	----------	------	----	------	------	----	----	---	T	----	Do.
16M4	-------do--------	----------	4-25-55	594	D	45	---	----------	------	----	------	------	----	----	---	T	----	L.
16P1	-------do--------	----------	1- 6-55	595	B	45	---	----------	------	----	------	------	----	----	---	T	----	See log well 16P1.
16P2	-------do--------	----------	1- 6-55	595	D	45	---	----------	------	----	------	------	----	----	---	T	----	Do
16P3	-------do--------	----------	1- 6-55	595	D	45	---	----------	------	----	------	------	----	----	---	T	----	L.
16P4	-------do--------	----------	1- 6-55	590	B	29	---	----------	------	----	------	------	----	----	---	T	----	See log well 16P4.
16P5	-------do--------	----------	1- 6-55	596	D	28	---	----------	------	----	------	------	----	----	---	T	----	Do.
16P6	-------do--------	----------	1- 6-55	590	D	23	---	----------	------	----	------	------	----	----	---	T	----	Do.
16P7	-------do--------	----------	1- 6-55	596	B	29	---	----------	------	----	------	------	----	----	---	T	----	L.
16Q1	-------do--------	----------	1- 6-55	596	B	29	---	----------	------	----	------	------	----	----	---	T	----	L.
16Q2	-------do--------	----------	1- 6-55	592	B	17	---	----------	------	----	------	------	----	----	---	T	----	See log well 16Q1.
16Q3	-------do--------	----------	1- 0-55	596	D	29	---	----------	------	----	------	------	----	----	---	T	----	L.
16Q4	-------do--------	----------	1- 6-55	595	D	45	---	----------	------	----	------	------	----	----	---	T	----	

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
36/8W-16Q5	Indiana State Highway Department	----------	1- 6-55	595	D	45	---	----------	-------	----	------	-----	----	----	---	T	----	See log well 16Q4.
16R1	-------do--------	----------	1-10-55	599	B	47	---	----------	-------	----	------	-----	----	----	---	T	----	L.
16R2	-------do--------	----------	1-10-55	598	B	47	---	----------	-------	----	------	-----	----	----	---	T	----	See log well 16R1.
16R3	-------do--------	----------	1-10-55	599	B	47	---	----------	-------	----	------	-----	----	----	---	T	----	Do.
17J1	-------do--------	----------	4-25-55	594	D	44	---	----------	-------	----	------	-----	----	----	---	T	----	L.
17J2	-------do--------	----------	4-25-55	592	B	45	---	----------	-------	----	------	-----	----	----	---	T	----	See log well 17J1.
17J3	-------do--------	----------	4-25-55	593	D	45	---	----------	-------	----	------	-----	----	----	---	T	----	See log well 17J1.
21B1	-------do--------	----------	1- 6-55	596	B	29	---	----------	-------	----	------	-----	----	----	---	T	----	L.
21B2	-------do--------	----------	1- 6-55	594	B	29	---	----------	-------	----	------	-----	----	----	---	T	----	See log well 21B1.
21B3	-------do--------	----------	1- 6-55	596	D	29	---	----------	-------	----	------	-----	----	----	---	T	----	Do.
21B4	-------do--------	----------	1- 6-55	595	B	29	---	----------	-------	----	------	-----	----	----	---	T	----	Do.
21B5	-------do--------	----------	1- 6-55	596	D	29	---	----------	-------	----	------	-----	----	----	---	T	----	Do.
21B6	-------do--------	----------	1- 6-55	590	D	29	---	----------	-------	----	------	-----	----	----	---	T	----	See log well 21C5.
21C1	-------do--------	----------	1- 6-55	596	D	29	---	----------	-------	----	------	-----	----	----	---	T	----	Do.
21C2	-------do--------	----------	1- 6-55	591	D	23	---	----------	-------	----	------	-----	----	----	---	T	----	Do.
21C3	-------do--------	----------	1- 6-55	596	D	29	---	----------	-------	----	------	-----	----	----	---	T	----	Do.
21C4	-------do--------	----------	1- 6-55	592	D	30	---	----------	-------	----	------	-----	----	----	---	T	----	L.
21C5	-------do--------	----------	1- 6-55	596	B	29	---	----------	-------	----	------	-----	----	----	---	T	----	L.
23R1	Henry Evans School	Layne-Northern Co., Inc.	3-23-54	640	Dr	35	6	----------	-------	19	16	Sd,G	Pl	U	19	T	----	L.
23R2	Robart Township School	-------do--------	8- 7-54	640	Dr	36	26	Gp; S: 5ft, dia 8	-------	19	17	Sd	Pl	U	19	P	T	Dd 12 ft pumping 40 gpm; see log well 23R1.
24R1	Town of New Chicago	-------do--------	11- 5-51	630	Dr	20	6	----------	-------	9	11	Sd	Pl	C	5	T	----	L.
25M1	R. Price	Sheehy Well and Pump Co.	1955	640	Dr	203	4	Oh	170(?)	170(?)	33(?)	Ls	S(?)	C	90(?)	D	----	
25N2	-------do--------	Porter County Well Service	5-24-55	640	J	146	2	----------	146(?)	----	------	-----	----	----	---	T	----	No water reported; L.
25N3	-------do--------	-------do--------	5-13-55	640	J	116	2	----------	-------	----	------	-----	----	----	---	T	----	Do.
28D1	G. J. Fordyce	-------do--------	11-18-55	640	J	28	2	S; 4ft, 60g	-------	23	5	Sd	Pl	U	23	D	----	Yield 15 gpm; yellow sand from 0-28 ft.
27A1	A. B. Cooper	Nelson Well and Pump Service	6-16-53	630	J	28	2	S; 3.5ft, 80g, dia 1	-------	----	------	Sd	Pl	----	---	D	J	
28C1	E. Klimek	-------do--------	7-11-53	620	J	46	2	--------do----------	-------	----	------	Sd	Pl	----	---	D	J	
29D1	D. Lobdell	-------do--------	7- 8-53	620	J	35	2	--------do----------	-------	----	------	Sd	Pl	----	---	D	----	
29G1	H. St. Myres	Slicker Well and Pump Service	8-28-59	630	J	27	2	S; 3ft, 60g, dia 1	-------	20	7	Sd	Pl	C	9	D	J½	Yield 10 gpm; Ca, L.
31G1	Walsh and Kelly Asphalt Paving	Westerbury Well and Pump Service	--------	635	J	57	2	S	-------	----	------	Sd	Pl	----	---	I	----	
32J1	B. Olis	J. Eich and Son	8-12-59	660	J	75	2	S; 5ft, 60g, dia 1	-------	54	23	Sd,G	Pl	C	47	D	----	Yield 12 gpm; L.
32K1	J. Januszitis	-------do--------	7- 2-59	670	J	67	2	S; 4ft, 60g, dia 1	-------	58	9	Sd,G	Pl	C	53	D	----	Yield 13 gpm; Ca, L.
32K2	G. Kalmar	-------do--------	7- 1-59	665	J	72	2	S; 5ft, 60g, dia 1	-------	61	11	G,Sd	Pl	C	59	D	----	Yield 12 gpm; Ca, L.
33A1	C. Buckle	Nelson Well and Pump Service	8-54	645	J	68	3	S; 5ft, 80g, dia 1½	-------	----	------	Sd	Pl	----	---	A	J½	
33E1	R. Targott	J. Eich and Son	7-20-59	650	J	62	2	S; 3.5ft, 60g,dia 1	-------	56	7	Sd,G	Pl	C	44	D	----	Yield 10 gpm; Ca, L.
35A1	T. Boltz	Hub Plumbing Co.	9-24-49	645	J	96	2	S; 4ft, 80g, dia 1	-------	----	------	Sd	Pl	----	---	D	----	
35L1	St. Sava Picnic Grounds	Porter County Well Service	9- 7-56	650	J	87	4	S; 10ft. 10sl	-------	59	28	Sd	Pl	C	38	P	J1½	Yield 40 gpm; Ca, L.
36/8W-1A1	Indiana Toll Road Commission	Sprague and Henwood	4-27-55	588	B	82	---	----------	-------	4	32	Sd	Pl	U	4	T	----	L.
1A2	-------do--------	-------do--------	4-23-55	590	B	20	---	----------	-------	6	14	Sd	Pl	U	6	T	----	See log well 1A1.
1D1	-------do--------	-------do--------	5-27-55	585	B	25	---	----------	-------	1	24	Sd	Pl	U	1	T	----	L.
1B2	-------do--------	-------do--------	5-27-55	588	D	25	---	----------	-------	4	21	Sd	Pl	U	4	T	----	See log well 1B1.
1B3	-------do--------	-------do--------	4-25-55	588	B	21	---	----------	-------	5	16	Sd	Pl	U	5	T	----	Do.
1B4	-------do--------	-------do--------	4-25-55	591	B	21	---	----------	-------	8	13	Sd	Pl	U	8	T	----	Do.
1D1	-------do--------	-------do--------	8- 4-59	590	B	46	---	----------	-------	6	39	Sd	Pl	U	6	T	----	L.
2A1	-------do--------	-------do--------	6-15-54	589	B	47	---	----------	-------	6	30	Sd,G	Pl	U	6	T	----	See log well 2A4.
2A2	-------do--------	-------do--------	8- 6-54	592	B	48	---	----------	-------	8	30	Sd	Pl	U	8	T	----	Do.

36/9W-2A3	---------do---------	---------do---------	7-30-54	589	B	45	---	----------	-------	6	29	Sd		Pl	U	6	T	----	Do.
2A4	---------do---------	---------do---------	8- 3-59	588	B	91	---	----------	-------	4	31	Sd		Pl	U	4	T	----	L.
2D1	---------do---------	---------do---------	6-54	587	B	87	---	----------	-------	----	-------	Sd		Pl	U	---	T	----	L.
2B2	---------do---------	---------do---------	6-14-54	590	B	50	---	----------	-------	8	30	Sd		Pl	U	8	T	----	See log well 2B1.
2B3	---------do---------	---------do---------	6-54	590	B	49	---	----------	-------	----	-------	Sd		Pl	U	---	T	----	Do.
2D4	---------do---------	---------do---------	6-54	583	B	40	---	----------	-------	7	22	Sd		Pl	-----	---	T	----	Flowed; L.
2C1	---------do---------	---------do---------	7-28-54	587	B	45	---	----------	-------	2	33	Sd		Pl	U	2	T	----	See log well 2C3.
2C2	---------do---------	---------do---------	7-26-54	587	B	40	---	----------	-------	1	29	Sd		Pl	U	1	T	----	See log well 2C4.
2C3	---------do---------	---------do---------	7-26-54	592	D	49	---	----------	-------	6	32	Sd		Pl	U	6	T	----	L.
2C4	---------do---------	---------do---------	7-54	589	B	86	---	----------		81	-------	Sd		Pl	U	---	T	----	L.
2D1	---------do---------	---------do---------	6-18-54	591	B	141	---	----------		131	6	Sd		Pl	U	6	T	---	L.
3H1	Shell Oil Co.	Gary Well and Pump Co.	1953	595	Dr	310	6-4	Oh		140	140	170	Ls	S	C	37	I	T	
8J1	Purdue University	Layne-Northern Co., Inc.	2-13-53	605	Dr	60	6	----------	-------	----	-------	Sd		Pl	----	---	T	----	L.
10J1	Red Top Trucking Co.	Wehling Well Works	9-29-56	605	Dr	605	12	Oh		138	138	467	Ls(?)	S	C	37	I,P	----	Dd 199 ft after 8 hr pumping 10 gpm.
11D1	H. Clark	Triangle Drilling Co.	8-12-57	595	Dr	282	4	Oh		131	131	151	Ls,Sh	S	C	25	D	----	Dd 95 ft after 2 hr pumping 4 gpm; Ca, L.
13M1	St. Anne Church	Layne-Northern Co., Inc.	10-19-50	605	Dr	22	26	Gp; S; 9ft, dia 8	-------	6	16	Sd		Pl	U	6	P	----	Dd 8 ft pumping 30 gpm.
14H1	Superior Homes	---------do---------	10-12-48	605	Dr	21	26	Gp; S; 10ft, 20sl, dia 8	-------	2	19	Sd		Pl	U	2	P	----	Dd 16 ft pumping 18 gpm; see log well 14H2.
14H2	---------do---------	---------do---------	8-25-48	605	Dr	30	6	----------	-------	----	-------	Sd,G		Pl	U	---	T	----	L.
14K1	R. Augustyn	Triangle Drilling Co.	6-13-57	605	Dr	178	4	Oh		153	153	25	Ls(?)	S	C	36	D	----	Dd 40 ft after 2 hr pumping 6 gpm; L.
14K2	J. Alloway	---------do---------	9-24-57	605	Dr	200	4	Oh		153	153	47	Ls(?)	S	C	37	D	J	Dd 3 ft pumping 12 gpm; L.
14P1	W. Peters	J. R. Stinnett	11-27-54	600	Dr	210	4	Oh		142	142	68	Ls(?)	S	C	23	D	----	Dd 34 ft after 3 hr pumping 15 gpm; Ca, L.
19G1	City of Munster	Layne-Northern Co., Inc.	11- 3-33	610	Dr	100	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
19K1	---------do---------	---------do---------	10-28-33	620	Dr	94	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
19K2	---------do---------	---------do---------	12- 4-33	620	Dr	136	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
19M1	---------do---------	---------do---------	11- 7-33	620	Dr	107	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
19Q1	---------do---------	Kramer Bros.	---------	615	Dr	352	---	Oh		142	142	210	Ls(?)	S	C	---	N	----	Yield 200 gpm.
20E1	---------do---------	Layne-Northern Co., Inc.	12-21-33	610	Dr	40	---	----------	-------	----	-------	-----		----	----	---	T	----	Clay overlain by 10 ft soil and sand.
20L1	---------do---------	---------do---------	---------	615	Dr	111	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
20M1	---------do---------	---------do---------	5- 3-54	625	Dr	117	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
20N1	---------do---------	---------do---------	6-24-34	610	Dr	103	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
20N2	---------do---------	---------do---------	12-19-33	610	Dr	114	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
20N3	---------do---------	---------do---------	1- 9-34	610	Dr	104	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
20N4	---------do---------	---------do---------	10-21-33	610	Dr	114	---	----------	-------	96	6	G		Pl	C	---	T	----	L.
20N5	---------do---------	---------do---------	1-17-34	610	Dr	110	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
24C1	J. Seberger	Kramer Bros.	1940	600	Dr	1,300	12-10	Oh		123	----	-------	Ss,Ls	O	C	165	I	T20	Dd 41 ft after 4 hr pumping 70 gpm; L.
24C2	---------do---------	Layne-Northern Co., Inc.	1- 5-46	600	Dr	420	8-6½	Oh		124	124	286	Ls	S	C	33	I	----	Dd 142 ft pumping 7 gpm; L.
24L1	Randham Trailer Court	Mr. Comar	---------	600	Dr	304	4	Oh	-------	----	-------	Ls(?)		S	C	---	P	S	
27H1	Town of Highland	Layne-Northern Co., Inc.	6- 7-40	610	Dr	91	---	----------	-------	64	23	Sd		Pl	C	---	T	----	L.
27Q1	---------do---------	---------do---------	8-21-40	615	Dr	80	---	----------	-------	57	12	Sd		Pl	C	---	T	----	L.
28B1	---------do---------	---------do---------	8-15-35	615	Dr	39	72	Gp; S; 10ft, 80sl, dia 10	-------	28	14	Sd		Pl	C	---	O	----	Water level 13 ft, 5-22-40; observation well Lake 5; water level measured 8.02 ft below lsd, 6-28-56; dd 25.5 ft pumping 80 gpm; L.
28D2	---------do---------	---------do---------	6- 3-32	615	Dr	50	50	S; 20ft, 55sl, dia 11	-------	19	31	Sd		Pl	C	6	N	----	Dd 14 ft pumping 80 gpm; sand packed around screen; see log well 28D1.
29E1	City of Munster	---------do---------	4-10-34	615	Dr	102	---	----------	-------	----	-------	-----		----	----	---	T	----	L.
29E2	---------do---------	---------do---------	5-14-54	615	Dr	103	---	----------	-------	----	-------	-----		----	----	---	T	----	See log well 29E1.
31D1	National Brick Co.	---------	---------	615	Du	42	---	----------	-------	39	3	G		Pl	----	---	---	----	L.
32D1	C. S. Schumacher	Triangle Drilling Co.	6-22-58	615	J	70	2	S; 3ft, 80g, dia 1	-------	27	43	Sd		Pl	U	27(?)	D	----	Yield 18 gpm; sand from 0-70 ft.
35L1	Town of Griffith	Layne-Northern Co., Inc.	12- 9-44	630	Dr	85	38	Gp; S; 20ft, dia 12	-------	55	30	Sd		Pl	C	15	P	T	Dd 21 ft after 1 hr pumping 325 gpm; Ca, L.
35L2	---------do---------	---------do---------	6-29-40	630	Dr	84	38	Gp; S; 20ft, 105sl, dia 18	-------	60	24	Sd		Pl	C	14	P	T	Dd 30 ft pumping 275 gpm; L.
35L3	---------do---------	---------do---------	4-21-40	630	Dr	85	---	----------	-------	62	23	Sd		Pl	C	14	T	----	See log well 35L2.
35L4	---------do---------	---------do---------	6-14-44	630	Dr	100	---	----------	-------	55	35	Sd		Pl	C	14	T	----	L.
35M1	---------do---------	---------do---------	4-24-40	625	Dr	78	---	----------	-------	32	18	Sd		Pl	C	12	T	----	L.
35N1	Mapon Consolidated Manufacturing Co.	---------do---------	10-26-33	630	Dr	60	---	----------	-------	----	-------	Sd		Pl	----	13	N	----	L.
35N2	---------do---------	---------do---------	6- 2-39	630	Dr	60	42	Gp; S; 20ft, 105sl, dia 18	-------	40	20	Sd		Pl	C	11	I	T	Dd 21 ft after 2.5 hr pumping 250 gpm; L.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
36/9W-35N3	Mapes Consolidated Manufacturing Co.	Layne-Northern Co., Inc.	5- 1-43	630	Dr	71	42	Gp; S; 20ft, dia 16	------	38	33	Sd	Pl	C	14	I	T	Dd 24 ft after 0.5 hr pumping 200 gpm; L.
35N4	-------do--------	--------do--------	3- 7-46	630	Dr	80	38	Gp; S; 20ft, 105sl. dia 18	------	50	32	Sd	Pl	C	16	I	T15	Dd 32 ft after 7.5 hr pumping 275 gpm; L.
35N5	--------do--------	--------do--------	1-15-46	630	Dr	80	---	----------	------	34	46	Sd	Pl	C	---	T	----	
35N6	-------do--------	--------do--------	9- 2-33	630	Dr	115	12	S; 20ft, 55sl, dia 10	------	----	------	Sd	Pl	C	25	I	----	Dd 35 ft pumping 600 gpm.
35N7	--------do--------	--------do--------	5- 1-43	630	Dr	70	42	Gp; S; 20ft, dia 18	------	----	------	Sd	Pl	C	14	I	----	Dd 22 ft pumping 250 gpm.
35N8	--------do--------	--------do--------	2-16-34	630	Dr	78	30	S; 20ft 60sl, dia 12	------	----	------	Sd	Pl	C	7	I	----	Dd 24 ft pumping 250 gpm.
35N9	-------do--------	--------do--------	2- 9-59	630	Dr	84	---	----------	------	52	32	Sd	Pl	C	21	T	----	L.
35N10	-------do--------	--------do--------	12-23-58	630	Dr	84	---	----------	------	52	32	Sd	Pl	C	19	T	----	See log well 35N9.
35P1	Town of Griffith	Mr. Houck	1919	635	Dr	332	8	Oh	100(?)	100(?)	232(?)	Ls(?)	S	C	---	Do	----	
36/10W-12D1	Goldblatt Bros. Inc.	J. Koster and Co.	6-30-26	603	Dr	260	4½	Oh	110	110	150	Ls(?)	S	C	56	Do	----	L.
24D1	R. C. Croner	Triangle Drilling Co.	2- 8-57	617	Dr	183	4	Oh	109	109	74	Ls(?)	S	C	34	D	J	Dd 8 ft after 2 hr pumping 12 gpm; Ca, L.
24E1	Town of Munster	Layne-Northern Co., Inc.	11-10-33	625	Dr	80	---	----------	------	----	------	-----	----	----	---	T	----	L.
24G1	-------do--------	Kramer Bros.	1926	620	Dr	400	8	Oh	125	125	275	Ls	S	C	---	P	----	Yield 8 gpm; L.
25Q1	U. S. Government	Wehling Well Works	5-24-56	615	Dr	485	18-12	Oh	54	54	431	Ls	S	C	14	P	----	Dd 65 ft after 24 hr pumping 60 gpm; water bearing zones in rock encountered from 155-180 ft, from 298-299 ft, from 377-393 ft, and 2-6 inch openings from 435-440 ft; L.
36J1	-------do--------	--------do--------	8-10-50	615	Dr	505	18-12	Oh	155	155	410	Ls	S	C	25	P	----	Dd 93 ft after 24 hr pumping 20 gpm; L.
36K1	--------do--------	Corps of Engineers	1956	615	D	50	---	----------	------	----	------	-----	----	----	11	T	----	L.
36K2	--------do--------	--------do--------	1956	615	D	50	---	----------	------	----	------	-----	----	----	16	T	----	L.
37/8W-21G1	Gary-Hobart Water Co.	----------	1906	580	Dr	113	---	----------	113	40	8	Sd	Pl	----	---	T	----	Crib shaft in Lake Michigan; L.
21Q1	--------do--------	----------	1906	580	Dr	112	---	----------	112	40	13	Sd,G	Pl	----	---	T	----	L.
28B1	--------do--------	----------	1906	580	Dr	110	---	----------	110	40	12	Sd,G	Pl	----	---	T	----	L.
28K1	--------do--------	----------	1906	580	Dr	109	---	----------	109	37	19	Sd,G	Pl	----	---	T	----	L.
28K2	--------do--------	----------	1906	580	Dr	110	---	----------	110	20	31	Sd,G	Pl	----	---	T	----	See log well 28K1.
28N1	U. S. Steel Corp.	Raymond Concrete Pile Co.	3-16-56	590	Dr	70	---	----------	------	24	43	Sd	Pl	----	13	T	----	L.
28Q1	Gary-Hobart Water Co.	----------	1906	580	Dr	110	---	----------	110	11	33	Sd	Pl	----	---	T	----	L.
29K1	U. S. Steel Corp.	Raymond Concrete Pile Co.	3-56	590	Dr	70	---	----------	------	----	------	-----	----	----	16	T	----	L.
31H1	American Bridge Division, U. S. Steel Corp.	----------	--------	595	Du	30	600	----------	------	----	------	Sd	Pl	U	---	O,I	----	Sand 0-30 ft; observation well Lake 9; water level measured 7.40 below lsd, 3-14-57.
31R1	Indiana Toll Road Commission	Sprague and Henwood	6- 5-54	593	D	57	---	----------	------	22	24	Sd	Pl	----	9	T	----	See log well 31R3.
31R2	-------do--------	--------do--------	6- 5-54	594	D	114	---	----------	------	17	27	Sd	Pl	----	13	T	----	Do.
31R3	-------do--------	--------do--------	4-55	593	D	116	---	----------	------	----	-------	Sd	Pl	----	---	T	----	L.
31R4	-------do--------	--------do--------	4-22-55	587	B	29	---	----------	------	8	23	Sd	Pl	----	2	T	----	L.
32N1	-------do--------	--------do--------	6-54	584	D	47	---	----------	------	----	------	Sd	Pl	----	---	T	----	See log well 32N5.
32N2	-------do--------	--------do--------	6-54	585	B	112	---	----------	------	----	------	Sd	Pl	----	---	T	----	Do.
32N3	-------do--------	--------do--------	6- 5-54	594	D	59	---	----------	------	26	23	Sd,G	Pl	C	9	T	----	L.
32N4	-------do--------	--------do--------	6- 7-54	593	D	57	---	----------	------	17	30	Sd	Pl	C	7	T	----	See log well 32N5.
32N5	-------do--------	--------do--------	6-54	588	D	117	---	----------	------	----	------	Sd	Pl	C	---	T	----	L.
32P1	-------do--------	--------do--------	6-54	588	D	50	---	----------	------	----	------	Sd	Pl	C	---	T	----	L.
32P2	-------do--------	--------do--------	6-18-54	587	D	50	---	----------	------	9	30	Sd	Pl	C	5	T	----	See log well 32P1.
32Q1	-------do--------	--------do--------	8-54	584	D	108	---	----------	------	17	20	Sd	Pl	C	8	T	----	L.

37/8W-32Q2	--------do--------	--------do--------	6-54	584	B	47	---	----------	------	17	20	Sd	Pl	C	8	T	----	See log well 32Q1.
32Q3	--------do--------	--------do--------	6-54	584	D	48	---	----------	------	18	20	Sd	Pl	C	6	T	----	See log well 32Q1.
32R1	--------do--------	--------do--------	6- 4-54	588	B	52	---	----------	------	2	30	Sd,G	Pl	U	2	T	----	L.
32R2	--------do--------	--------do--------	6- 4-54	587	B	50	---	----------	------	3	32	Sd	Pl	C	1	T	----	L.
32R3	--------do--------	--------do--------	6- 4-54	588	B	50	---	----------	------	5	32	Sd	Pl	C	1	T	----	See log well 32R2.
33H1	Gary-Hobart Water Co.	----------	1906	595	Dr	114	---	----------	------	----	------	Sd,G	Pl	U	---	T	----	L.
33G1	--------do--------	----------	1906	595	Dr	125	---	----------	125	----	------	Sd	Pl	U	---	T	----	L.
33G2	--------do--------	----------	1906	595	Dr	128	---	----------	128	----	------	Sd	Pl	U	---	T	----	L.
33K1	--------do--------	----------	1906	595	Dr	121	---	----------	121	----	------	Sd	Pl	U	---	T	----	L.
33N1	Indiana Toll Road Commission	Sprague and Henwood	--------	586	B	110	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 33N3.
33N2	--------do--------	--------do--------	--------	587	B	118	---	----------	------	----	------	Sd,G	Pl	U	---	T	----	Do.
33N3	--------do--------	--------do--------	--------	586	B	128	---	----------	122	----	------	Sd	----	U	---	T	----	L.
33Q1	Gary-Hobart Water Co.	----------	1906	595	Dr	121	---	----------	121	----	------	Sd	Pl	U	---	T	----	L.
34C1	U. S. Steel Corp.	Raymond Concrete Pile Co.	1950	595	B	139	---	----------	139	13	46	Sd	Pl	U	13	T	----	L.
34G1	--------do--------	--------do--------	1956	590	B	127	---	----------	127	2	47	Sd	Pl	U	1	T	----	L.
34M1	--------do--------	--------do--------	1956	595	B	150	---	----------	150	15	47	Sd	Pl	U	15	T	----	L.
34J1	--------do--------	--------do--------	1956	595	B	154	---	----------	152	19	40	Sd	Pl	U	19	T	----	L.
34K1	--------do--------	--------do--------	1955	590	B	127	---	----------	127	3	44	Sd	Pl	U	3	T	----	L.
34K2	--------do--------	--------do--------	1956	590	B	132	---	----------	132	9	42	Sd	Pl	U	9	T	----	L.
35J1	--------do--------	--------do--------	1955	600	B	60	---	----------	------	----	------	Sd	Pl	----	11	T	----	
37/9W-7Q1	Standard Oil Co.	--------do--------	1944	585	B	77	---	----------	------	3	21	Sd	Pl	C	+1	T	----	L.
7R1	--------do--------	--------do--------	--------	585	B	89	---	----------	------	9	18	Sd	Pl	----	0	T	----	L.
8Q1	--------do--------	Layne-Northern Co., Inc.	9-37	590	Dr	1,238	14-8	Oh	84	----	------	Ls,Sh	O,S	D	158	O	----	Dd 151 ft pumping 45 gpm; observation well Lake 8; water level measured 49.42 ft below lsd, 3-14-57; water-bearing zones from 96-555 ft and 724-1,238 ft; L.
9R1	Waylite Co.	J. P. Miller Artesian Well Co.	7-48	585	Dr	335	---	Oh	148	148	187	Do	S	C	72	---	2	Dd 87 ft pumping 11 gpm; water has hydrogen sulfide gas; L.
14D1	Inland Steel Co.	----------	--------	595	Dr	1,685	12-5	Oh	156	1,421	204	Ls,Sh	O(?)	C	228	Do	----	Water level 140 ft before casing set; L.
15G1	--------do--------	----------	--------	595	Dr	650	---	Oh	------	----	------	Ls	S	C	---	T	----	
15M1	--------do--------	----------	--------	595	Dr	466	12	Oh	------	----	------	Ls	S	C	---	N	----	Temperature 53°F.
15K1	--------do--------	----------	--------	595	Dr	450	8	Oh	------	----	------	Ls	S	C	---	N	----	
15L1	--------do--------	----------	--------	595	Dr	575	8	Oh	------	----	------	Ls	S	C	---	N	----	Yield 33 gpm; temperature 55°F.
15L2	--------do--------	----------	--------	595	Dr	450	---	Oh	------	----	------	Ls	S	C	---	N	----	
15M1	--------do--------	----------	--------	595	Dr	550	8	Oh	------	----	------	Ls	S	C	---	O	----	Observation well Lake 10; water level measured 28.33 ft below lsd, 4-28-57.
15N1	--------do--------	----------	--------	595	Dr	640	8	Oh	------	----	------	Ls	S	C	---	N	----	Yield 30 gpm; temperature 55°F.
15N2	--------do--------	----------	--------	595	Dr	475	8	Oh	------	----	------	Ls	S	C	---	N	----	Yield 30 gpm.
16J1	--------do--------	----------	--------	595	Dr	475	8	Oh	------	----	------	Ls	S	C	---	N	----	
16K1	Youngstown Sheet and Tube Co.	Gray Well Co.	1928	592	Dr	1,683	16-8	----------	110	1,470	213	Ss	O,C	C	---	N	----	Cased to 1,515 ft; water level 129 ft, 3-10-27; 148 ft, 3-26-31; 143 ft, 6-12-35; L.
16R1	Inland Steel Co.	----------	--------	595	Dr	360	10	Oh	------	----	------	Ls	S	C	---	Do	----	Yield 50 gpm; temperature 53°F.
17D1	Whiting Ice and Coal Co.	Layne-Northern Co., Inc.	4- 5-33	585	Dr	24	12	S; 10ft, 105sl, dia 10	------	4	20	Sd,G	Pl	C	4	I	T	Dd 15 ft pumping 110 gpm; L.
17D2	--------do--------	--------do--------	4-10-33	585	Dr	24	12	--------do----------	------	4	20	Sd,G	Pl	C	4	I	T	Dd 15 ft pumping 110 gpm; see log well 17D1.
19M1	Indiana Toll Road Commission	Case Foundation Co.	7-31-54	582	B	55	---	----------	------	7	15	Sd	Pl	U	0	T	----	L.
19N1	--------do--------	--------do--------	7-31-54	583	B	59	---	----------	------	3	20	Sd	Pl	U	3	T	----	See log well 19N2.
19N2	--------do--------	--------do--------	7-30-54	583	B	61	---	----------	------	3	20	Sd	Pl	U	3	T	----	L.
19N3	--------do--------	--------do--------	7-28-54	582	B	27	---	----------	------	3	19	Sd	Pl	U	3	T	----	See log well 19N2.
19N4	--------do--------	--------do--------	--------	582	B	27	---	----------	------	4	20	Sd	Pl	U	4	T	----	Do.
19N5	--------do--------	--------do--------	7-28-54	582	B	25	---	----------	------	3	20	Sd	Pl	U	3	T	----	Do.
19N6	--------do--------	--------do--------	7-29-54	582	B	23	---	----------	------	2	21	Sd	Pl	U	2	T	----	Do.
21E1	U. S. Gypsum Co.	----------	--------	585	B	97	---	----------	95	----	------	Sd	Pl	U	---	T	----	L.
21E2	--------do--------	----------	--------	585	B	98	---	----------	96	----	------	Sd	Pl	U	---	T	----	See log well 21E1.
21E3	--------do--------	----------	--------	585	B	99	---	----------	------	1	25	Sd	Pl	U	1	T	----	L.
23R1	Universal Atlas Cement Co.	----------	1955	595	D	105	---	----------	------	10	35	Sd	Pl	U	10	T	----	L.
23R2	--------do--------	----------	1955	595	B	99	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 23R1.
24N1	--------do--------	----------	1955	595	B	147	---	----------	147(?)	----	------	Sd	Pl	U	---	T	----	L.
24N2	--------do--------	----------	1955	590	B	141	---	----------	141(?)	5	34	Sd	Pl	U	5	T	----	See log well 24N1.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
37/9W-24N3	Universal Atlas Cement Co.	----------	1955	590	D	95	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 24N1.
24N4	------do------	----------	1955	590	B	62	---	----------	------	5	35	Sd	Pl	U	5	T	----	Do.
24P1	Northern Indiana Public Service Co.	----------	--------	590	B	136	---	----------	124	30	18	Sd	Pl	U	0	T	----	L.
25C1	------do------	Layne-Northern Co., Inc.	8-30-56	590	Dr	38	8	S; 10ft, 10sl	------	21	17	Sd	Pl	---	5	P	----	Dd 30 ft after 6 hr pumping 25 gpm; water has hydrogen sulfide gas; Ca, L.
26A1	Universal Atlas Cement Co.	----------	1955	595	B	143	---	----------	143	----	------	Sd	Pl	U	---	T	----	L.
26B1	------do------	----------	1955	590	B	100	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 26A1.
28D1	Harbison Walker Co.	S. D. Geiger Co.	--------	590	Dr	1,830	12-8	Oh	154	1,620	200	Sd	C,O	C	---	I	T50	Dd 52 ft after 1.5 hr pumping 300 gpm; L.
28C1	Linde Air Products Co.	Layne-Northern Co., Inc.	8-24-40	590	Dr	32	---	----------	------	----	------	Sd	Pl	U	---	T	----	L.
28D1	------do------	------do------	8-24-40	585	Dr	32	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 28C1.
29R1	Republic Iron and Steel Co.	C. Rinehart	1916	585	Dr	1,550	---	Oh	175	----	------	-----	----	---	---	---	----	L.
30D1	Indiana Toll Road Commission	Case Foundation Co.	7-30-54	584	B	61	---	----------	------	3	20	Sd	Pl	U	3	T	----	L.
30D2	------do------	------do------	7-31-54	583	D	60	---	----------	------	3	20	Sd	Pl	U	3	T	----	See log well 30D1.
30D3	------do------	------do------	7-30-54	587	B	37	---	----------	------	3	21	Sd	Pl	U	3	T	----	Do.
30F1	------do------	------do------	7-12-54	585	B	65	---	----------	------	4	21	Sd	Pl	U	4	T	----	See log well 30F3.
30F2	------do------	------do------	7-12-54	585	D	35	---	----------	------	3	21	Sd	Pl	U	3	T	----	Do.
30F3	------do------	------do------	7-13-54	584	B	65	---	----------	------	4	17	Sd	Pl	U	4	T	----	L.
30F4	------do------	------do------	7-14-54	585	D	64	---	----------	------	4	20	Sd	Pl	U	4	T	----	See log well 30F3.
30F5	------do------	------do------	7-15-54	585	D	34	---	----------	------	4	19	Sd	Pl	U	4	T	----	L.
30F6	------do------	------do------	7-54	585	D	65	---	----------	------	----	------	Sd	Pl	U	---	T	----	See log well 30F5.
30F7	------do------	------do------	7-10-54	585	D	35	---	----------	------	3	20	Sd	Pl	U	3	T	----	See log well 30F3.
30K1	------do------	Sprague and Henwood	7- 6-54	587	D	42	---	----------	------	5	23	Sd	Pl	U	5	T	----	See log well 30K3.
30K2	------do------	------do------	7-14-54	587	D	70	---	----------	------	4	23	Sd	Pl	U	4	T	----	Do.
30K3	------do------	------do------	6- 8-54	586	B	70	---	----------	------	2	22	Sd	Pl	U	2	T	----	L.
30K4	------do------	------do------	7- 6-54	586	D	72	---	----------	------	3	23	Sd	Pl	U	3	T	----	See log well 30K3.
30K5	------do------	------do------	7- 6-54	587	D	67	---	----------	------	4	25	Sd	Pl	U	4	T	----	Water level 2 ft, 1-10-55; see log well 30K3.
30K6	------do------	------do------	7- 8-54	585	D	66	---	----------	------	4	22	Sd	Pl	U	4	T	----	See log well 30K3.
30K7	------do------	------do------	7-54	586	D	35	---	----------	------	----	------	Sd	Pl	U	---	T	----	Do.
30K8	------do------	------do------	7-10-54	587	B	70	---	----------	------	4	24	Sd	Pl	U	4	T	----	Do.
30K9	------do------	------do------	7- 6-54	586	D	37	---	----------	------	4	22	Sd	Pl	U	4	T	----	Do.
30L1	------do------	------do------	7-12-54	586	D	75	---	----------	------	4	22	Sd	Pl	U	4	T	----	See log well 30L10.
30L2	------do------	------do------	7-13-54	585	D	70	---	----------	------	2	21	Sd	Pl	U	2	T	----	Do
30L3	------do------	------do------	7-54	586	D	38	---	----------	------	----	------	Sd	Pl	U	---	T	----	Do.
30L4	------do------	------do------	7- 9-54	587	D	36	---	----------	------	4	22	Sd	Pl	U	4	T	----	L.
30L5	------do------	------do------	7- 9-54	585	B	74	---	----------	------	2	41	Sd	Pl	U	2	T	----	L.
30L6	------do------	------do------	7- 9-54	586	B	36	---	----------	------	4	22	Sd	Pl	U	4	T	----	See log well 30L4.
30L7	------do------	------do------	7- 8-54	586	D	37	---	----------	------	3	21	Sd	Pl	U	3	T	----	See log well 30L10.
30L8	------do------	------do------	7- 6-54	587	B	37	---	----------	------	4	22	Sd	Pl	U	4	T	----	Do
30L9	------do------	------do------	7- 8-54	585	B	37	---	----------	------	3	22	Sd	Pl	U	3	T	----	L.
30L10	------do------	------do------	7- 7-54	587	D	110	---	----------	97	4	22	Sd	Pl	U	4	T	----	Limestone has solution channels; L.
30Q1	------do------	------do------	7-12-54	584	B	35	---	----------	------	1	24	Sd	Pl	U	1	T	----	L.
30R1	------do------	------do------	7- 2-54	585	D	72	---	----------	------	4	21	Sd	Pl	U	4	T	----	See log well 30R6.
30R2	------do------	------do------	7- 2-54	589	B	37	---	----------	------	3	22	Sd	Pl	U	3	T	----	Do.
30R3	------do------	------do------	1-10-55	585	D	67	---	----------	------	2	23	Sd	Pl	U	2	T	----	Do.
30R4	------do------	------do------	7- 2-54	585	D	72	---	----------	------	3	28	Sd	Pl	U	3	T	----	Do.
30R5	------do------	------do------	7- 2-54	587	B	37	---	----------	------	6	21	Sd	Pl	U	6	T	----	Do.
30R6	------do------	------do------	7- 2-54	585	D	72	---	----------	------	4	21	Sd	Pl	U	4	T	----	L.

37/9W-30R7	--------do--------	--------do--------	6-29-54	584	B	72	---	----------	-------	4	19	Sd	Pl	U	4	T	----	See log well 30R6.
30R8	--------do--------	--------do--------	7- 2-54	584	B	70	---	----------	-------	3	21	Sd	Pl	U	3	T	----	Do.
31A1	--------do--------	--------do--------	7- 1-54	585	B	80	---	----------	-------	5	18	Sd	Pl	U	5	T	----	L.
31A2	--------do--------	--------do--------	7- 1-54	584	B	70	---	----------	-------	4	20	Sd	Pl	U	4	T	----	See log well 31A6.
31A3	--------do--------	--------do--------	6-29-54	586	D	70	---	----------	-------	3	20	Sd	Pl	U	3	T	----	See log well 31A1.
31A4	--------do--------	--------do--------	1-10-55	587	D	72	---	----------	-------	6	19	Sd	Pl	U	6	T	----	Do.
31A5	--------do--------	--------do--------	6-29-54	588	D	37	---	----------	-------	6	20	Sd	Pl	U	6	T	----	Do.
31A6	--------do--------	--------do--------	6-28-54	586	D	71	---	----------	-------	3	20	Sd	Pl	U	3	T	----	L.
31A7	--------do--------	--------do--------	7- 6-54	588	B	72	---	----------	-------	5	21	Sd	Pl	U	5	T	----	See log well 31A6.
31A8	--------do--------	--------do--------	6-29-54	584	D	32	---	----------	-------	2	20	Sd	Pl	U	2	T	----	See log well 31A1.
31H1	--------do--------	--------do--------	7-21-54	585	D	69	---	----------	-------	10	13	Sd	Pl	U	10	T	----	Water level 1 ft below lsd, 1-10-55; L.
32E1	--------do--------	--------do--------	7-19-54	587	D	65	---	----------	-------	5	20	Sd	Pl	U	5	T	----	L.
32E2	--------do--------	--------do--------	7-14-54	585	B	34	---	----------	-------	3	20	Sd	Pl	U	3	T	----	See log well 32E1.
32E3	--------do--------	--------do--------	7-16-54	583	D	67	---	----------	-------	2	18	Sd	Pl	U	2	T	----	Do.
32E4	--------do--------	--------do--------	7-54	583	D	135	---	----------	124	----	-------	Sd	Pl	----	----	T	----	Flowed; L.
32E5	--------do--------	--------do--------	7-54	582	B	70	---	----------	-------	----	-------	------	----	----	---	T	----	Flowed; see log well 32E4.
32E6	--------do--------	--------do--------	7-54	582	D	69	---	----------	-------	----	-------	------	----	----	---	T	----	Do.
32E7	--------do--------	--------do--------	7-54	582	D	70	---	----------	-------	----	-------	------	----	----	---	T	----	Do.
32M1	Superheater Co.	S. B. Gleger	6-46	595	Dr	1,825	19-8	Oh	130	----	-------	Do,Ss	S,O,C	C	---	I	T	Water level 171 ft below lsd, 9-26-46; casing set from 0-305 ft, 583-773 ft, 1,330-1,530 ft; dd 305 ft after 20 hr pumping about 380 gpm; Ca, L.
32L1	Indiana Toll Road Commission	Sprague and Henwood	6-25-54	587	B	37	---	----------	-------	6	19	Sd	Pl	U	6	T	----	See log well 32L2.
32L2	--------do--------	--------do--------	6-25-54	587	D	37	---	----------	-------	5	19	Sd	Pl	U	5	T	----	L.
32M1	--------do--------	--------do--------	7-54	582	B	70	---	----------	-------	12	7	Sd	Pl	----	---	T	----	Flowed; L.
32M2	--------do--------	--------do--------	7-54	582	D	69	---	----------	-------	13	7	Sd	Pl	----	---	T	----	Flowed; see log well 32M1.
32M3	--------do--------	--------do--------	7-54	582	D	70	---	----------	-------	10	8	Sd	Pl	----	---	T	----	Do.
32M4	--------do--------	--------do--------	7-54	582	D	72	---	----------	-------	7	11	Sd	Pl	----	---	T	----	Do.
32M5	--------do--------	--------do--------	7-14-54	583	B	70	---	----------	-------	1	18	Sd	Pl	U	1	T	----	L.
32M6	--------do--------	--------do--------	7-14-54	583	B	32	---	----------	-------	1	19	Sd	Pl	U	1	T	----	See log well 32M5.
32M7	--------do--------	--------do--------	7-13-54	584	D	72	---	----------	-------	3	18	Sd	Pl	U	3	T	----	Do.
32M8	--------do--------	--------do--------	7-12-54	586	B	72	---	----------	-------	3	20	Sd	Pl	U	3	T	----	Do.
32P1	--------do--------	--------do--------	7- 2-54	588	D	72	---	----------	-------	6	19	Sd	Pl	U	6	T	----	See log well 32P2.
32P2	--------do--------	--------do--------	6-25-54	588	D	75	---	----------	-------	4	19	Sd	Pl	U	4	T	----	L.
32Q1	--------do--------	--------do--------	6-30-54	589	D	72	---	----------	-------	6	22	Sd	Pl	U	6	T	----	See log well 32Q2.
32Q2	--------do--------	--------do--------	6-24-54	588	B	71	---	----------	-------	5	19	Sd	Pl	U	5	T	----	L.
33J1	Grasselli Chemical Co.	Gray Well Co.	1915	587	Dr	1,840	12-8¼	Oh	150	----	-------	Do,Ss	S,O,C	C	---	---	----	Casing set from 0-150 ft and 485-885 ft; L.
33N1	Indiana Toll Road Commission	Sprague and Henwood	6-25-54	586	B	82	---	----------	-------	2	23	Sd	Pl	U	2	T	----	
33N2	--------do--------	--------do--------	6-54	589	D	35	---	----------	-------	----	-------	Sd	Pl	U	---	T	----	L.
33P1	--------do--------	--------do--------	6-25-54	586	D	37	---	----------	-------	1	25	Sd	Pl	U	1	T	----	See log well 33P4.
33P2	--------do--------	--------do--------	6-54	590	D	89	---	----------	-------	----	-------	Sd	Pl	U	---	T	----	Do.
33P3	--------do--------	--------do--------	6-54	587	D	92	---	----------	-------	----	-------	Sd	Pl	U	---	T	----	Do.
33P4	--------do--------	--------do--------	6-54	588	D	92	---	----------	-------	----	-------	Sd	Pl	U	---	T	----	L.
33Q1	--------do--------	--------do--------	--------	590	B	101	---	----------	-------	----	-------	Sd	Pl	U	---	T	----	L.
33Q2	--------do--------	--------do--------	--------	587	D	83	---	----------	-------	----	-------	Sd	Pl	U	---	T	----	See log well 33Q1.
33Q3	--------do--------	--------do--------	--------	588	B	42	---	----------	-------	----	-------	Sd	Pl	U	---	T	----	Do.
34N1	--------do--------	--------do--------	--------	582	D	91	---	----------	-------	2	22	Sd	Pl	U	---	T	----	Flowed; L.
34R1	--------do--------	--------do--------	6-19-54	589	D	102	---	----------	-------	4	29	Sd	Pl	U	4	T	----	L.
35N1	--------do--------	--------do--------	6-23-54	590	B	47	---	----------	-------	7	27	Sd	Pl	U	7	T	----	L.
35P1	--------do--------	--------do--------	6-16-54	588	B	47	---	----------	-------	16	17	Sd	Pl	U	16	T	----	See log well 35P2.
35P2	--------do--------	--------do--------	3-29-54	592	D	45	---	----------	-------	0	29	Sd	Pl	U	6	T	----	L.
36E1	Gary Airport	Joe Eich and Son	--------	590	J	40	4	----------	-------	----	-------	Sd	Pl	U	---	I	----	Yield 8 gpm; L.
37/10W-1B1	Pennsylvania Railroad Co.	Raymond Concrete Pile Co.	9-27-51	585	B	60	2½	----------	-------	3	23	Sd,G	Pl	U	3	T	----	L.
1D2	--------do--------	--------do--------	9-27-51	585	B	40	2½	----------	-------	4	22	Sd,G	Pl	U	4	T	----	See log well 1D1.
1C1	Indiana Toll Road Commission	----------	7-26-54	587	B	27	---	----------	-------	6	19	Sd	Pl	U	6	T	----	See log well 1C2.
1C2	--------do--------	----------	7-26-54	588	D	28	---	----------	-------	7	19	Sd	Pl	U	7	T	----	L.
1C3	--------do--------	----------	6-25-54	588	B	27	---	----------	-------	5	20	Sd	Pl	U	5	T	----	See log well 1C2.
1F1	--------do--------	Case Foundation Co.	6-24-54	587	D	101	---	----------	101	4	21	Sd	Pl	U	4	T	----	See log well 1F2.
1F2	--------do--------	--------do--------	6-21-54	586	D	100	---	----------	100	3	22	SJ	Pl	U	3	T	----	L.
1F3	--------do--------	--------do--------	6-22-54	587	D	76	---	----------	-------	4	22	Sd	Pl	U	4	T	----	See log well 1F2.
1F4	--------do--------	--------do--------	6-24-54	585	D	80	---	----------	-------	3	21	Sd	Pl	U	3	T	----	Do.
1G1	Maize Products Co.	----------	--------	585	Dr	73	---	----------	-------	----	-------	Sd	Pl	----	---	T	----	L.
1L1	Indiana Toll Road Commission	Case Foundation Co.	6-16-54	588	B	30	---	----------	-------	7	19	Sd	Pl	----	5	T	----	See log well 1L2.
1L2	--------do--------	--------do--------	6-16-54	591	D	34	---	----------	-------	10	22	Sd	Pl	----	9	T	----	L.
1P1	--------do--------	--------do--------	6-15-54	589	B	31	---	----------	-------	7	20	Sd	Pl	----	7	T	----	L.
12C1	--------do--------	--------do--------	7-15-54	587	B	82	---	----------	-------	3	21	Sd	Pl	U	3	T	----	See log well 12C2.
12C2	--------do--------	--------do--------	7-19-54	584	B	106	---	----------	98	1	24	Sd	Pl	U	1	T	----	L.

Table 2.--Records of wells and test holes in Lake County, Indiana--Continued

Well No.	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	Depth to bedrock (feet)	Water-bearing zone					Water level (feet)	Use	Type of pump and horsepower	Remarks
										Depth to top (feet)	Thickness (feet)	Character	Geologic age	Conditions of occurrence				
37/10W-12C3	Indiana Toll Road Commission	Case Foundation Co.	7-15-54	587	D	79	---	----------	79(?)	2	17	Sd	Pl	U	2	T	----	See log well 12C2.
12C4	-------do--------	-------do--------	7-19-54	584	D	78	---	----------	79(?)	1	22	Sd	Pl	U	1	T	----	Do.
12C5	-------do--------	-------do--------	7-15-54	584	B	75	---	----------	------	3	21	Sd	Pl	U	3	T	----	Do.
12C6	-------do--------	-------do--------	7-14-54	586	D	80	---	----------	------	3	22	Sd	Pl	U	3	T	----	Do.
12C7	-------do--------	-------do--------	6-15-55	586	B	38	---	----------	------	3	22	Sd	Pl	U	3	T	----	Do.
12F1	-------do--------	-------do--------	6-15-54	583	B	26	---	----------	------	6	16	Sd	Pl	C(?)	1	T	----	L.
12G1	-------do--------	-------do--------	8-29-54	582	D	26	---	----------	------	---	------	-----	----	----	---	T	----	L.
12J1	-------do--------	-------do--------	6-29-54	582	B	26	---	----------	------	3	22	Sd	Pl	U	---	T	----	L.
12K1	-------do--------	-------do--------	6-28-54	582	B	20	---	----------	------	2	20	Sd	Pl	U	---	T	----	L
12L1	-------do--------	-------do--------	6-15-54	583	B	62	---	----------	------	5	15	Sd	Pl	U	---	T	----	See log well 12L3.
12L2	-------do--------	-------do--------	6-18-55	583	B	59	---	----------	------	5	11	Sd	Pl	U	---	T	----	Do.
12L3	-------do--------	-------do--------	6-22-54	583	B	65	---	----------	------	5	16	Sd	Pl	U	---	T	----	L.
12L4	-------do--------	-------do--------	6-14-54	586	D	28	---	----------	------	5	19	Sd	Pl	U	5	T	----	L.
12N1	-------do--------	-------do--------	6-25-54	582	D	26	---	----------	------	4	20	Sd	Pl	U	---	T	----	L.
12N2	-------do--------	-------do--------	6-28-54	582	D	26	---	----------	------	2	17	Sd	Pl	U	---	T	----	See log well 12N1.
12P1	-------do--------	-------do--------	6-23-54	583	D	24	---	----------	------	2	20	Sd	Pl	U	---	T	----	See log well 12P2.
12P2	-------do--------	-------do--------	6-25-54	583	D	27	---	----------	------	3	16	Sd	Pl	U	---	T	----	L.
13C1	-------do--------	-------do--------	6-24-54	582	D	26	---	----------	------	4	16	Sd	Pl	U	---	T	----	L.
13G1	-------do--------	-------do--------	7- 2-54	588	D	28	---	----------	------	3	19	Sd	Pl	U	3	T	----	See log well 13G5.
13G2	-------do--------	-------do--------	7-12-54	588	B	71	---	----------	------	2	22	Sd	Pl	U	2	T	----	Do.
13G3	-------do--------	-------do--------	7-13-54	587	B	75	---	----------	------	2	22	Sd	Pl	U	2	T	----	Do.
13G4	-------do--------	-------do--------	7-12-54	588	B	72	---	----------	------	2	23	Sd	Pl	U	2	T	----	Do.
13G5	-------do--------	-------do--------	7-13-54	586	B	76	---	----------	------	3	21	Sd	Pl	U	3	T	----	L.
13G6	-------do--------	-------do--------	7-12-54	587	B	69	---	----------	------	2	23	Sd	Pl	U	2	T	----	See log well 13G5.
13G7	-------do--------	-------do--------	7-15-54	586	B	70	---	----------	------	3	22	Sd	Pl	U	3	T	----	Do.
13G8	-------do--------	-------do--------	7- 9-54	585	D	71	---	----------	------	4	21	Sd	Pl	U	4	T	----	Do.
13G9	-------do--------	-------do--------	--------	585	D	79	---	----------	70	---	------	-----	----	----	---	T	----	Limestone at 76 ft.
13K1	-------do--------	-------do--------	7- 9-54	583	D	61	---	----------	------	1	22	Sd	Pl	U	---	T	----	See log well 13K3.
13K2	-------do--------	-------do--------	7- 9-54	580	D	62	---	----------	------	---	------	Sd	Pl	----	---	T	----	Do.
13K3	-------do--------	-------do--------	7- 7-54	584	B	64	---	----------	------	8	16	Sd	Pl	----	5	T	----	L.
13K4	-------do--------	-------do--------	7- 8-54	584	D	60	---	----------	------	1	22	Sd	Pl	U	1	T	----	See log well 13K3.
13Q1	-------do--------	-------do--------	7- 8-54	584	D	61	---	----------	------	1	23	Sd,G	Pl	U	1	T	----	See log well 13Q3.
13Q2	-------do--------	-------do--------	7- 6-54	584	B	64	---	----------	------	1	23	Sd	Pl	U	1	T	----	Do.
13Q3	-------do--------	-------do--------	6-30-54	585	B	69	---	----------	------	3	21	Sd	Pl	U	3	T	----	L.
13Q4	-------do--------	-------do--------	7- 7-54	585	B	60	---	----------	------	2	21	Sd	Pl	U	2	T	----	See log well 13Q3.
13Q5	-------do--------	-------do--------	6-30-54	584	B	62	---	----------	------	3	21	Sd	Pl	U	3	T	----	Do.
13Q6	-------do--------	-------do--------	7- 2-54	585	B	58	---	----------	------	4	20	Sd	Pl	U	4	T	----	Do.
24B1	-------do--------	-------do--------	7- 2-54	585	D	62	---	----------	------	2	22	Sd	Pl	U	2	T	----	L.
24B2	-------do--------	-------do--------	7- 6-54	585	D	60	---	----------	------	3	21	Sd	Pl	U	3	T	----	See log well 24B1.
24H1	-------do--------	-------do--------	7- 8-54	584	D	28	---	----------	------	2	17	Sd	Pl	U	2	T	----	L.
24J1	-------do--------	-------do--------	7-27-54	580	D	60	---	----------	------	11	13	Sd	Pl	----	7	T	----	L.
24J2	-------do--------	-------do--------	7-29-54	583	B	54	---	----------	------	3	20	Sd	Pl	U	3	T	----	See log well 24J1.
24J3	-------do--------	-------do--------	7-31-54	582	D	52	---	----------	------	7	13	Sd	Pl	U	---	T	----	Do.
24J4	-------do--------	-------do--------	7-28-54	583	B	50	---	----------	------	7	16	Sd	Pl	U	7	T	----	Do.
24J5	-------do--------	-------do--------	7-54	583	B	41	---	----------	------	---	------	Sd	Pl	U	---	T	----	Do.
36J1	American Legion Post No. 168	Kramer Bros.	Summer 1946	590	Dr	300	4	Oh	130	130	170	Ls	S	C	30	N	----	Yield 3 gpm; L.
36L1	Indiana Toll Road Commission	----------	7-22-54	585	D	26	---	----------	------	4	20	Sd	Pl	U	4	T	----	L.
36N1	-------do--------	----------	3-16-55	586	B	52	---	----------	------	10	15	Sd	Pl	U	10	T	----	See log well 36M3.
36N2	-------do--------	----------	3-16-55	584	D	52	---	----------	------	11	11	Sd	Pl	U	11	T	----	Do.
36N3	-------do--------	----------	7-21-54	584	B	80	---	----------	------	---	------	-----	----	----	4	T	----	L.
36P1	-------do--------	----------	7-22-54	585	B	26	---	----------	------	4	20	Sd	Pl	U	4	T	----	L.
36P2	-------do--------	----------	7-26-54	584	B	80	---	----------	------	4	20	Sd,G	Pl	U	4	T	----	See log well 36P2.
36P3	-------do--------	----------	7-21-54	585	B	90	---	----------	------	4	20	Sd,G	Pl	U	4	T	----	L.
			7-23-54	586	B	26	---	----------	------	4	20	Sd	Pl	U	4	T	----	See log well 36P2.

Table 3.--Selected logs of wells and test holes in Lake County, Indiana

Well 32/7W-6N1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, red	18	18	
Clay, gray	5	23	
Sand, gray	22	55	
Clay, blue	6	61	
Shale	4	65	Hard clay?.
Sand and clay; with shale	3	68	
Silurian system:			
Middle Silurian series:			
Limestone	11	79	Dolomite or dolomitic limestone.

Well 32/8W-1A1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Drift	53	53	
Silurian system:			
Middle Silurian series:			
Lime	577	630	Dolomite or dolomitic limestone.
Ordovician system:			
Upper Ordovician series?:			
Shale, green	15	645	
Shale, gray	5	650	
Lime, white	70	720	
Shale, gray	32	752	
Slate, blue, and shale; with traces of oil	108	860	
Middle Ordovician series:			
Limestone, hard	55	915	

Well 32/8W-18J1

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy, black	4	4	
Sand and gravel; with fossils	26	30	
Clay, blue	26	56	
Gravel with some rock and limestone fragments	17	73	
Silurian system:			
Middle Silurian series:			
Limestone	488	561	Dolomite or dolomitic limestone.
Shale, gray	119	680	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/8W-18J1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Upper Ordovician series?:			
Limestone and shale	5	685	
Sand	27	712	
Shale, dark-gray	144	856	
Middle Ordovician series:			
Limestone	279	1,135	

Well 32/8W-28N1

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand and yellow clay; mixed	10	10	
Sand	20	30	
Clay, blue	15	45	
Devonian system:			
Upper Devonian series:			
Shale	9	54	
Silurian system:			
Middle Silurian series:			
Limestone, hard, white	1	55	Dolomite or dolomitic limestone.

Well 32/8W-28P3

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Drift	49	49	
Devonian system:			
Upper Devonian series:			
Shale	6	55	
Silurian system:			
Middle Silurian series:			
Rock	16	71	Dolomite or dolomitic limestone.

Well 32/8W-33D1

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	40	40	
Clay and shale	4	44	
Silurian system:			
Middle Silurian series:			
Rock, white	2	46	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/8W-33E2

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil, sandy, black----------	10	10	
Sand----------	20	30	
Clay, blue----------	20	50	
Devonian system:			
Upper Devonian series:			
Shale----------	16	66	
Middle Devonian series?:			
Rock, brown----------	2	68	Dolomitic limestone?.
Silurian system:			
Middle Silurian series:			
Limestone, hard, white----------	6	74	Dolomite or dolomitic limestone.
Limestone, white----------	2	76	Do.

Well 32/8W-33F2

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand----------	30	30	
Clay, blue, and shale----------	10	40	
Silurian system:			
Middle Silurian series:			
Rock, white----------	23	63	Dolomite or dolomitic limestone.

Well 32/8W-33F4

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Drift----------	30	30	
Devonian system:			
Upper Devonian series:			
Shale----------	8	38	
Silurian system:			
Middle Silurian series:			
Rock----------	6	44	Dolomite or dolomitic limestone.

Well 32/9W-5A1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay and sand----------	25	25	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/9W-5A1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Shale and lime	107	132	Dolomite or dolomitic limestone.
Lime	248	380	Do.
Lime, sandy	90	470	Do.
Lime	100	570	Do.
Ordovician system:			
Upper Ordovician series:			
Lime with shale breaks	75	645	
Shale and lime	75	720	
Shale, sandy, and lime	100	820	
Shale	55	875	
Middle Ordovician series:			
Lime	340	1,215	
Sand and lime	15	1,230	
Lime	16	1,246	
Sand	109	1,355	
Ordovician and Cambrian system:			
Lower Ordovician and Upper Cambrian series; undifferentiated:			
Lime	85	1,440	
Lime and sand	30	1,470	
Lime	50	1,520	
Lime, sandy	30	1,550	
Lime and sand	40	1,590	
Lime	40	1,630	
Chert	43	1,673	
Lime	107	1,780	
Sand and lime	55	1,835	
Lime and sand	25	1,860	
Lime	65	1,925	
Lime and sand	200	2,125	
Lime, sand, and shale	45	2,170	
Sand and shale	20	2,190	
Shale and sand	40	2,230	
Shale and lime	70	2,300	
Lime and shale	70	2,370	
Shale and lime	68	2,438	

Well 32/9W-21L1

Type of record: Driller's log. Altitude: 631 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Clay, gray	1	3	
Sand, coarse	17	20	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/9W-21L2

Type of record: Driller's log. Altitude: 632 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	3	3	
Clay, black	1	4	
Sand, coarse	15	19	

Well 32/9W-28C2

Type of record: Driller's log. Altitude: 628 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand and black clay	2	2	
Sand and small gravel	1	3	
Sand, coarse	11	14	

Well 32/9W-30B1

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Drift	33	33	
Silurian system:			
Middle Silurian series:			
Lime, dark-gray	23	56	
Lime, firm, light-gray	4	60	
Lime, coarse, light-gray	100	160	
Lime, light-gray	305	465	
Lime, blue-gray	50	515	
Lime, gray to brown	60	575	
Ordovician system:			
Upper Ordovician series?:			
Shale and lime; mixed, gray	35	610	
Shale, muddy, gray	30	640	
Shale, gray, and some lime	36	676	
Lime, light-gray	4	680	
Shale, dark-gray	30	710	
Shale, hard, gray	10	720	
Shale, brown	20	740	
Shale, fine, light-gray	20	760	
Shale, coarse, light-gray	80	840	
Shale and lime, brown	5	845	
Middle Ordovician series:			
Lime, brown	35	880	
Lime, grayish-brown	10	890	
Lime, grayish-brown, some iron	20	910	
Lime, fine, light-gray	15	925	
Lime, coarse, brown	15	940	
Lime, fine, brown	40	980	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/9W-30B1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Middle Ordovician series:			
Sand, fine, gray	20	1,000	
Sand, fine, hard, gray	70	1,070	
Lime, coarse, gray	10	1,080	
Lime, fine, gray	60	1,140	
Lime, fine, hard, light-gray	10	1,150	
Lime, coarse, gray	30	1,180	
Sandstone	6	1,186	
Sandstone, white	7	1,193	
Sandstone, light-brown	57	1,250	
Sandstone, dark-brown	20	1,270	
Sandstone, light-brown	30	1,300	
Sandstone, soft, flaky, brown	15	1,315	

Well 32/9W-33L1

Type of record: Sample study by unknown person. Altitude: 630 feet.

Quaternary system:			
Recent and Pleistocene series:			
Drift	63	63	
Silurian system:			
Middle Silurian series:			
Dolomite, granularly crystalline, light-gray; much medium and dark-gray dense chert	7	70	
Dolomite, same as above, and white finely divided silica with trace of frosted sand and chert	25	95	
Dolomite, same as above, with trace of crystalline quartz and finely divided silica	9	104	
Dolomite, finely crystalline, light-gray, almost white	31	135	
Dolomite, silty, dove colored; with trace of gray shale and milky quartz from 135 to 150 feet	40	175	
Dolomite, silty, same as above, and white finely crystalline dolomite	10	185	
Dolomite, finely crystalline, white	10	195	
Dolomite and silty dolomite; same as above	20	215	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/9W-33L1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Dolomite, granularly crystalline, light-gray, and little silty dolomite, same as above; much dense gray porcelain chert----	60	275	
Dolomite, granularly crystalline, silty, gray; with little gray translucent chert from 285 to 310 feet----------	35	310	
Dolomite, crystalline, light-gray and dove-colored, and silty dolomite; little translucent chert----------	15	325	
Dolomite, crystalline, light-gray; chert, same as above----	12	337	
Dolomite, light gray to almost white, trace of silty dolomite and light-gray chert-----	43	380	
Dolomite, granularly crystalline, light-gray----------	60	440	
Dolomite, porous, white, with trace of calcite----------	15	455	
Dolomite, granularly crystalline, porous, light-gray----------	70	525	
Dolomite, granularly crystalline, white----------	52	577	
Dolomite, granularly crystalline, light-gray----------	13	590	
Dolomite, same as above, and silty dolomite; dolomite slightly greenish with trace of green shale----------	19	609	
Silt, dark gray-green, cemented with dolomite; trace of frosted sandstone from 615 feet----------	34	643	
Silt, same as above, and greenish-gray shale----------	32	675	
Ordovician system:			
Upper Ordovician series:			
Dolomite, crystalline, gray-----	25	700	
Dolomite, silty, gray and dolomite, same as above----------	28	728	
Dolomite, highly crystalline, medium-gray----------	11	739	
Dolomite, same as above, with little gray shale, silty dolomite, and trace of calcite----	6	745	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/9W-33L1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Upper Ordovician series:			
Dolomite, crystalline, white, with little gray shale, white and gray dolomitic silt, and dense chert	8	753	
Dolomite, crystalline, dark-gray with trace of gray shale	12	765	
Shale, gray	20	785	
Shale, in part calcareous, and gray dolomitic silt	40	825	
Shale, calcareous, gray, little gray dolomite and calcite from 835 feet	28	853	
Middle Ordovician series:			
Dolomite, highly crystalline, tan, with pyrite	179	1,032	
Dolomite, granularly crystalline, gray, with porcelain chert to 1,070 feet, light-gray translucent chert 1,070 to 1,115 feet, and trace of calcite 1,115 to 1,122 feet and 1,218 to 1,222 feet	190	1,222	
Dolomite, same as above, and white and yellow, rounded, frosted, medium-grained sand	14	1,236	
Sand, same as above, chiefly fine-grained from 1,283½ to 1,314 feet, little coarse-grained 1,314 to 1,324 feet	88	1,324	
Lower Ordovician series:			
Sandstone, same as above, and white crystalline dolomite; lots of white slightly translucent and porcelain chert, some oolitic, and trace of light-green shale 1,334 to 1,347 feet	23	1,347	
Dolomite, highly crystalline, white, sand and trace of green shale; lots of white porcelain chert in part very white to 1,385 feet much white translucent chert 1,377 to 1,450 feet	103	1,450	
Dolomite, same as above, with white porcelain chert	60	1,510	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 32/9W-33L1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Lower Ordovician series:			
Dolomite, crystalline, light-gray to almost white, with porcelain chert, in part translucent from 1,515 to 1,523 feet	13	1,523	
Dolomite, white; with dense white chert, trace of frosted sand, and trace of calcite from 1,536 to 1,550 feet and 1,630 to 1,640 feet	142	1,665	

Well 32/9W-33R2

Type of record: Driller's log. Altitude: 632 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, sandy, black	1	1	
Sand, yellow	1	2	
Sand, yellow, and clay	1	3	
Sand, coarse, yellow	13	16	

Well 32/10W-1N1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	12	12	
Sand	3	15	
Clay, blue	62	77	
Silurian system:			
Middle Silurian series:			
Limestone	26	103	Dolomite or dolomitic limestone.

Well 32/10W-13C1

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

Quaternary system:			
Recent and Pleistocene series:			
Drift	80	80	
Devonian system:			
Upper Devonian series:			
Shale	2	82	
Silurian system:			
Middle Silurian series:			
Rock	6	88	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 33/7W-7N1

Type of record: Driller's log from memory. Altitude: 690 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	12	12	
Sand, yellow	10	22	
Clay, blue, and sand	28	50	
Sand, medium, white	15	65	
Sand, white	32	97	

Well 33/8W-7B1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	22	22	
Clay, blue, and gravel; mixed	36	58	
Gravel and sand	8	66	
Sand	6	72	

Well 33/9W-1N1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	18	18	
Clay, blue	12	30	
Gravel and sand	8	38	
Sand	9	47	

Well 33/9W-7G1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Sand, fine	60	90	
Clay, blue	45	135	
Silurian system:			
Middle Silurian series:			
Limestone	15	150	Dolomite or dolomitic limestone.

Well 33/9W-7K1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	60	60	
Sand, fine	35	95	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 33/9W-7K1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	39	134	
Rock	1	135	Boulder.
Sand, fine	3	138	
Silurian system:			
Middle Silurian series:			
Shale and limestone	23	161	Dolomite or dolomitic limestone.

Well 33/9W-8M1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	17	17	
Sand	4	21	
Clay	34	55	
Sand	46	101	
Clay, blue	47	148	
Silurian system:			
Middle Silurian series:			
Limestone	15	163	Dolomite or dolomitic limestone.

Well 33/9W-8M2

Type of record: Driller's log. Altitude: 715 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	40	40	
Sand, fine, light-colored	53	93	
Clay, blue	55	148	
Silurian system:			
Middle Silurian series:			
Limestone, white	17	165	Dolomite or dolomitic limestone.

Well 33/9W-12D1

Type of record: Driller's log. Altitude: 690 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	18	18	
Clay, blue	8	26	
Sand and gravel	12	38	
Sand	8	46	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 33/9W-12G1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	18	18	
Sand and gravel	14	32	
Clay, blue	13	45	
Sand and gravel	12	57	
Sand	4	61	

Well 33/9W-12H2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue, and gravel	15	36	
Sand	10	46	

Well 33/9W-12H3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	27	48	
Sand	7	55	

Well 33/9W-16E1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	65	65	
Sand	6	71	
Clay	25	96	
Sand	25	121	
Clay	47	168	
Silurian system:			
Middle Silurian series:			
Rock	535	703	Dolomite or dolomitic limestone.

Well 33/9W-24B1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Sand, yellow	18	28	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 33/9W-24B1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue----------	13	41	
Clay, blue, sand, and gravel----	29	70	
Sand----------	12	82	

Well 33/9W-25F1

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

Quaternary system:			
Recent and Pleistocene series:			
Dirt, black----------	2	2	
Clay, yellow----------	16	18	
Clay, blue, and gravel; mixed---	22	40	
Gravel, coarse ----------	2	42	
Sand----------	8	50	

Well 33/9W-26A1

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

Quaternary system:			
Recent and Pleistocene series:			
Drift----------	73	73	
Silurian system:			
Middle Silurian series:			
Limestone, gray----------	525	598	Dolomite or dolomitic limestone.
Ordovician system:			
Upper Ordovician series:			
Shale, red----------	9	607	
Slate, green-gray----------	33	640	
Limestone, shelly----------	65	705	Fossiliferous.
Limestone----------	30	735	Saline water reported from 715 to 735 feet.
Limestone, dark-gray----------	60	795	
Shale----------	55	850	
Middle Ordovician series:			
Limestone, dark-gray----------	20	870	
Limestone, hard, white----------	20	890	
Limestone, gray----------	135	1,025	

Well 33/9W-29G1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow----------	18	18	
Clay, gray, and gravel; mixed---	50	68	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 33/9W-29G1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, gray	22	90	
Clay, blue	58	148	
Gravel and sand	1	149	
Silurian system:			
Middle Silurian series:			
Limestone, white	1	150	Dolomite or dolomitic limestone.

Well 33/9W-30E1

Type of record: Driller's log. Altitude: 690 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Sand, fine	61	82	
Clay, blue	52	134	
Silurian system:			
Middle Silurian series:			
Limestone	16	150	Dolomite or dolomitic limestone.

Well 33/10W-25M1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand	60	60	
Clay	6	66	
Sand	14	80	
Clay, blue	43	123	
Silurian system:			
Middle Silurian series:			
Limestone	2	125	Dolomite or dolomitic limestone.

Well 34/7W-6R1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	9	30	
Sand	15	45	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/7W-8N1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, red	42	42	
Sand, fine, gray	21	63	
Clay, gray	27	90	
Sand, fine, gray	30	120	
Clay, blue	45	165	
Devonian system:			
Upper Devonian series:			
Shale	4	169	
Silurian system:			
Middle Silurian series:			
Limestone	13	182	Dolomite or dolomitic limestone.

Well 34/7W-20D1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	52	73	
Sand	16	89	

Well 34/7W-20D2

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	5	5	
Clay, yellow	32	37	
Clay, blue	33	70	
Clay and shale	5	75	
Clay, shale, and sand	2	77	
Clay	6	83	
Shale	4	87	
Sand	3	90	
Gravel	6	96	

Well 34/7W-28E1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	30	30	
Sand	5	35	
Sand, gravel, and clay	12	47	
Clay, blue	23	70	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/7W-28E1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand and soap stone (shale)-----	10	80	
Sand and gravel-----------	5	85	
Sand-----------	15	100	

Well 34/7W-29J1

Type of record: Driller's log. Altitude: 715 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay-----------	35	35	
Gravel-----------	10	45	
Sand and gravel-----------	10	55	
Sand-----------	5	60	
Sand-----------	21	81	

Well 34/8W-4N2

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil-----------	1	1	
Clay, sandy, brown-----------	12	13	
Clay, sandy, gray-----------	12	25	
Sand, medium-----------	15	40	
Sand, fine-----------	14	54	
Sand, medium-----------	46	100	
Clay-----------	4	104	

Well 34/8W-5A1

Type of record: Driller's log. Altitude: 690 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil-----------	1	1	
Clay, sandy, brown-----------	7	8	
Clay, sandy, gray-----------	23	31	
Sand, fine, muddy-----------	21	52	
Sand, brown-----------	27	79	
Clay, gray-----------	4	83	

Well 34/8W-5F1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil-----------	5	5	
Clay, blue-----------	25	30	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-5F1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, coarse	5	35	
Sand and shale	5	40	
Sand, fine	5	45	
Sand	9	54	

Well 34/8W-5G1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, sandy, brown	13	14	
Clay, gray	15	29	
Sand, fine, muddy	11	40	
Sand, fine	4	44	
Sand, medium	29	73	
Clay, gray	3	76	

Well 34/8W-5J1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay	22	23	
Clay, gravelly	4	27	
Clay, very soft	7	34	
Gravel, black, with sand and clay	4	38	
Sand, fine to medium	12	50	
Sand	23	73	
Clay	3	76	
Sand	10	86	
Clay	14	100	

Well 34/8W-5K1

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

Quaternary system:			
Recent and Pleistocene series:			
Soil	2	2	
Clay, hard	30	32	
Clay, sandy	20	52	
Sand, muddy	8	60	
Sand, medium	45	105	Clay at 105 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-5K2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill	1	1	
Clay, hard, gritty	11	12	
Clay, tough	19	31	
Sand and gravel	3	34	
Sand, fine, muddy	28	62	
Sand, fine	36	98	
Clay, hard, gritty	40	138	
Devonian system:			
Upper Devonian series:			
Shale, black	1	139	

Well 34/8W-5K4

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill and soil	1	1	
Clay	36	37	
Clay and gravel	1	38	
Sand, fine	59	97	
Clay, tough	28	125	
Clay, soft, gritty	12	137	
Devonian system:			
Upper Devonian series:			
Shale, black	1	138	

Well 34/8W-5K5

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil	2	2	
Clay, hard	30	32	
Sand	1	33	
Sand, muddy	12	45	
Sand, fine	5	50	
Sand	54	104	Not as fine; clay.
Clay	1	105	

Well 34/8W-5R1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, gray	35	35	
Sand, fine, gray	23	58	
Sand, medium, gray	45	103	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-5R2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay	34	35	
Clay, soft, sandy	20	55	
Sand, fine to medium	45	100	
Sand, fine, with broken shale	1	101	
Clay	2	103	

Well 34/8W-6E3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	21	42	
Sand, muddy	28	70	
Sand	16	86	

Well 34/8W-6G2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Clay, blue	11	21	
Clay and sand	44	65	
Sand	10	75	

Well 34/8W-6G3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Clay, blue	20	30	
Sand, muddy	30	60	
Sand	15	75	

Well 34/8W-6G4

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, brown	31	31	
Clay, blue, and gravel	21	52	
Sand, white, and gravel	11	63	
Sand, white	7	70	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-6H1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, brown and blue	31	31	
Clay, blue, and gravel	21	52	
Gravel and sand	16	68	

Well 34/8W-7C2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	21	42	
Clay and sand	18	60	
Sand	15	75	

Well 34/8W-7L2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue	30	60	
Clay and sand	35	95	
Sand	9	104	

Well 34/8W-8C1

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

Quaternary system:			
Recent and Pleistocene series:			
Soil and clay	15	15	
Sand	100	115	
Clay, blue	25	140	
Devonian system:			
Upper Devonian series:			
Shale	112	252	
Silurian system:			
Middle Silurian series:			
Limestone	545	797	Dolomite or dolomitic limestone.
Ordovician system:			
Upper Ordovician series:			
Shale, bluish-green	122	919	
Middle Ordovician series:			
Limestone	556	1,475	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-8C1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician and Cambrian system: undifferentiated:			
Sandstone?----------	1,625	3,100	Alternating brown and white.

Well 34/8W-9D2

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Clay, sandy, brown----------	24	25	
Clay, sandy, gray----------	23	48	
Sand, fine, muddy----------	12	60	
Sand, medium, brown----------	41	101	
Clay, gray----------	2	103	

Well 34/8W-9F2

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Clay, sandy, brown----------	12	13	
Clay, sandy, gray----------	7	20	
Sand, medium, brown----------	35	55	
Sand, fine, muddy----------	20	75	
Sand, medium, brown----------	30	105	
Clay, gray----------	4	109	

Well 34/8W-11L1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow----------	18	18	
Clay, gray----------	10	28	
Sand, fine, muddy----------	5	33	
Clay, gray----------	6	39	
Sand, fine, muddy----------	6	45	
Sand, medium and coarse----------	13	58	
Clay, hard, gray----------	14	72	
Clay, soft, sandy----------	6	78	
Sand, fine and medium----------	14	92	Clay at 92 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-16P1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	60	60	
Sand, fine, dirty	30	90	
Sand, medium	10	100	
Clay, blue	40	140	
Sand, very fine	20	160	
Devonian system:			
Upper Devonian series:			
Shale, green	15	175	
Silurian system:			
Middle Silurian series:			
Limestone	101	276	Dolomite or dolomitic limestone.

Well 34/8W-17H4

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	9	30	
Clay and sand	20	50	
Sand	17	67	

Well 34/8W-17R2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, brown and blue	36	36	
Clay, blue, and gravel	39	75	
Sand, white	15	90	

Well 34/8W-18L1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	25	25	
Clay, blue	10	35	
Clay, sandy	40	75	
Sand	9	84	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-18P1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue	20	50	
Sand, muddy	10	60	
Sand, very fine	11	71	

Well 34/8W-18P2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue	20	50	
Mud and sand	10	60	
Sand, very fine	35	95	
Sand	6	101	

Well 34/8W-18R5

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	10	10	
Clay, blue	10	20	
Glacial drift	20	40	
Sand, coarse, and small gravel	17	57	
Sand, coarse	10	67	

Well 34/8W-19P3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	21	42	
Clay and sand	31	73	
Sand	13	86	

Well 34/8W-20L1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, gummy, black	10	10	
Clay, gritty, brown	7	17	
Clay, gritty, gray	6	23	
Clay, gravelly, gray	17	40	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-20L1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, sandy, gray	20	60	
Sand, fine, gray	7	67	
Sand, fine, gray	4	71	
Sand, fine, dark-gray	3	74	
Sand, medium, with little gravel	5	79	
Sand, fine, gray	3	82	
Sand, very fine, gray	3	85	Becoming muddy.

Well 34/8W-20M4

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, brown and blue	42	42	
Clay, blue, and sand; mixed	4	46	
Sand, white	17	63	

Well 34/8W-21D3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	25	25	
Sand, brown	2	27	
Clay, hard, blue	7	34	
Sand, gray, and gravel	16	50	
Sand, gray	29	79	

Well 34/8W-21L2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue, and sand	30	60	
Sand, muddy	13	73	
Sand	12	85	

Well 34/8W-22N1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Sand, hard, and clay	9	49	
Sand	4	53	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/8W-30B1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Clay, blue	11	21	
Clay, blue, and sand	39	60	
Sand	7	67	

Well 34/9W-1R6

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Clay, blue	20	30	
Clay, blue	71	101	
Sand	6	107	

Well 34/9W-1R7

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue, and sand	10	31	
Sand, muddy	49	80	
Sand	8	88	

Well 34/9W-5D1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, blue	64	65	
Sand, fine, with some gravel	33	98	
Clay, blue	36	134	

Well 34/9W-5D2

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, blue, with gravel streaks	55	56	
Gravel and fine sand	47	103	
Clay, blue	1	104	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-5D3

Type of record: Driller's log. Altitude: 690 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	31	31	
Sand and gravel	4	35	
Sand	32	67	
Sand and gravel	2	69	
Sand	15	84	
Clay	32	116	
Silurian system:			
Middle Silurian series:			
Rock	52	168	Dolomite or dolomitic limestone.

Well 34/9W-5E1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	4	4	
Clay, yellow	16	20	
Clay, blue	35	55	
Sand and clay	10	65	
Sand, coarse, loose	30	95	
Sand, fine	30	125	Clay at 125 feet.

Well 34/9W-5R2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	19	19	
Sand	4	23	
Sand, clay, and gravel	72	95	
Silurian system:			
Middle Silurian series:			
Rock	29	124	Dolomite or dolomitic limestone.

Well 34/9W-9A2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	33	33	
Gravel	7	40	
Sand	76	116	
Clay	39	155	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-9A2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Rock----------	28	183	Dolomite or dolomitic limestone.

Well 34/9W-9H1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	40	40	
Sand----------	66	106	
Clay----------	27	133	
Devonian system:			
Upper Devonian series:			
Shale----------	20	153	
Silurian system:			
Middle Silurian series:			
Rock----------	35	188	Dolomite or dolomitic limestone.

Well 34/9W-11A3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	60	60	
Sand----------	5	65	
Clay----------	1	66	
Quicksand----------	4	70	
Clay----------	35	105	
Sand and gravel----------	10	115	
Sand, coarse----------	57	172	
Silurian system:			
Middle Silurian series:			
Limestone----------	33	205	Dolomite or dolomitic limestone.

Well 34/9W-11M2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow----------	21	21	
Clay, blue----------	21	42	
Clay and sand----------	21	63	
Sand, muddy----------	7	70	
Sand----------	22	92	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-12F1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	4	4	
Clay, gray	16	20	
Sand, yellow	4	24	
Clay, gray	13	37	
Sand	31	68	

Well 34/9W-12P3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	33	33	
Sand	2	35	
Clay	27	62	
Sand	52	114	
Clay	36	150	
Glacial drift	26	176	
Silurian system:			
Middle Silurian series:			
Rock	57	233	Dolomite or dolomitic limestone.

Well 34/9W-13B1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	20	20	
Clay, blue	20	40	
Sand, fine	65	105	
Drift	80	185	
Devonian system:			
Upper Devonian series:			
Shale, green	8	193	Water-bearing.
Shale, black	8	201	Do.
Middle Devonian series?:			
Limestone, brown	6	207	Dolomite or dolomitic limestone.
Silurian system:			
Middle Silurian series:			
Limestone	31	238	Do.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-13G4

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, hard, yellow	21	21	
Clay, blue	11	32	
Clay, sandy, blue	21	53	
Gravel and gray sand	2	55	
Clay, soft, blue	2	57	
Sand, gray	2	59	
Sand, soft, gray	2	61	
Sand, fine, gray	11	72	
Sand, coarse, gray	6	78	

Well 34/9W-14E2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	58	58	
Sand	60	118	
Silurian system:			
Middle Silurian series:			
Rock	20	138	Dolomite or dolomitic limestone.

Well 34/9W-15H1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	60	60	
Gravel, sandy	8	68	
Clay, gray	12	80	
Sand, fine	43	123	
Clay, blue	44	167	
Silurian system:			
Middle Silurian series:			
Limestone	11	178	Dolomite or dolomitic limestone.

Well 34/9W-16R1

Type of record: Driller's log from memory. Altitude: 725 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, brown	35	35	
Clay, blue, sand, and gravel; mixed	55	90	
Sand, white	28	118	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-17G1

Type of record: Driller's log. Altitude: 725 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	42	42	
Sand	84	126	
Clay	27	153	
Silurian system:			
Middle Silurian series:			
Rock	32	185	Dolomite or dolomitic limestone.

Well 34/9W-19A1

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

Quaternary system:			
Recent and Pleistocene series:			
Peat	6	6	
Marl	6	12	
Clay, blue	32	44	
Sand	8	52	
Clay, slimy, blue	34	86	
Gravel, coarse	2	88	
Silurian system:			
Middle Silurian series:			
Limestone	8	96	Dolomite or dolomitic limestone.

Well 34/9W-20A1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Sand and clay	20	60	
Sand	25	85	
Sand, coarse	33	118	
Clay	52	170	
Shale and clay	4	174	
Silurian system:			
Middle Silurian series:			
Limestone	20	194	Dolomite or dolomitic limestone.

Well 34/9W-20Q1

Type of record: Driller's log. Altitude: 755 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	38	38	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-20Q1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Gravel	7	45	
Sand	60	105	
Clay	81	186	
Silurian system:			
Middle Silurian series:			
Rock	67	253	Dolomite or dolomitic limestone.

Well 34/9W-20Q2

Type of record: Driller's log. Altitude: 755 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	33	33	
Sand and gravel	21	54	
Sand	51	105	
Clay	13	118	
Sand	24	142	
Clay	46	188	
Silurian system:			
Middle Silurian series:			
Rock	55	243	Dolomite or dolomitic limestone.

Well 34/9W-20R5

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	33	33	
Gravel	2	35	
Sand	68	103	
Clay	10	113	
Sand	29	142	
Clay	47	189	
Silurian system:			
Middle Silurian series:			
Rock	54	243	Dolomite or dolomitic limestone.

Well 34/9W-21C2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue	20	50	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well-34/9W-21C2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay and sand	13	63	
Sand	8	71	

Well 34/9W-21F1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	21	42	
Clay, sand, and gravel	13	55	
Sand	16	71	

Well 34/9W-21J1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	20	20	
Quicksand	166	186	
Silurian system:			
Middle Silurian series:			
Limestone, soft to medium-hard, blue-gray to gray	119	305	Dolomite or dolomitic limestone.

Well 34/9W-22D1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	20	20	
Clay, blue, and gravel	25	45	
Gravel, sand, and clay; mixed	75	120	
Sand	7	127	

Well 34/9W-22Q1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, red	35	35	
Clay, gravelly, gray	35	70	
Sand and clay	50	120	In layers.
Clay, blue	20	140	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-22Q1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Limestone	8	148	Dolomite or dolomitic limestone.

Well 34/9W-23E3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	20	20	
Clay, blue	42	62	
Clay, sandy	11	73	
Sand	37	110	
Clay, silty	15	125	
Gravel	5	130	
Silurian system:			
Middle Silurian series:			
Limestone	17	147	Dolomite or dolomitic limestone.

Well 34/9W-23F1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Sand and clay	20	60	
Clay	12	72	
Sand, medium	23	95	

Well 34/9W-23F4

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	65	65	
Sand	15	80	
Sand, fine	40	120	
Clay	74	194	
Devonian system:			
Upper Devonian series:			
Shale	4	198	
Silurian system:			
Middle Silurian series:			
Limestone	49	247	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-23G5

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	50	50	
Clay and sand	20	70	
Sand, fine	80	150	
Clay	50	200	
Devonian system:			
Upper Devonian series:			
Shale	3	203	
Silurian system:			
Middle Silurian series:			
Limestone	32	235	Dolomite or dolomitic limestone.

Well 34/9W-23G11

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	39	60	
Clay and sand	15	75	
Sand	11	86	

Well 34/9W-23L1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue	20	50	
Sand and gravel	10	60	
Sand	11	71	

Well 34/9W-23L2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	15	15	
Clay, blue	25	40	
Sand, fine	35	75	
Sand, medium to fine	30	105	
Sand, very fine	15	120	
Sand, coarse	20	140	
Clay, soft, blue	5	145	
Clay, firm, blue	5	150	
Clay, soft, blue	47	197	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-23L2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Limestone----------	21	218	Dolomite or dolomitic limestone.

Well 34/9W-23Q1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow----------	20	20	
Clay, blue----------	40	60	
Sand, fine----------	30	90	
Sand, medium----------	20	110	
Sand, very fine, or silt--------	25	135	
Clay, blue----------	40	175	
Gravel, coarse----------	9	184	
Silurian system:			
Middle Silurian series:			
Limestone----------	51	235	Dolomite or dolomitic limestone.

Well 34/9W-23R1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow----------	10	10	
Clay, blue----------	50	60	
Sand, fine, dirty----------	15	75	
Sand, medium----------	35	110	
Clay, blue----------	20	130	
Sand, medium----------	73	203	
Silurian system:			
Middle Silurian series:			
Limestone----------	47	250	Dolomite or dolomitic limestone.

Well 34/9W-25B3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow----------	10	10	
Clay, blue----------	42	52	
Clay, blue, and sand----------	13	65	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-26B1

Type of record: Driller's log. Altitude: 725 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	5	5	
Clay, blue	35	40	
Sand, fine	5	45	
Clay	35	80	
Sand, fine	1	81	
Sand	5	86	

Well 34/9W-26B2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	20	20	
Clay, blue	40	60	
Sand, fine	20	80	
Sand, medium	30	110	
Sand, fine	15	125	
Clay, blue	40	165	
Sand, very fine	20	185	
Silurian system:			
Middle Silurian series:			
Limestone	35	220	Dolomite or dolomitic limestone.

Well 34/9W-26F1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	35	35	
Sand	55	90	
Clay, blue	56	146	
Silurian system:			
Middle Silurian series:			
Rock	6	152	Dolomite or dolomitic limestone.

Well 34/9W-26G1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	45	45	
Sand and clay	10	55	
Sand	15	70	
Sand, medium	60	130	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-26G1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	54	184	
Devonian system:			
Upper Devonian series:			
Shale	5	189	
Silurian system:			
Middle Silurian series:			
Limestone	26	215	Dolomite or dolomitic limestone.

Well 34/9W-26L1

Type of record: Driller's log. Altitude: 715 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Clay	38	40	
Sand	5	45	
Gravel	5	50	
Sand, coarse	14	64	
Sand, fine	6	70	
Shale?	2	72	
Sand	33	105	
Clay, blue	49	154	
Silurian system:			
Middle Silurian series:			
Limestone	7	161	Dolomite or dolomitic limestone.

Well 34/9W-26N1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Sand and gravel	46	76	
Sand	12	88	

Well 34/9W-26Q3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	32	32	
Sand and gravel	16	48	
Sand, coarse	6	54	
Sand, medium	11	65	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-26R1

Type of record: Driller's log. Altitude: 725 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, blue	9	30	
Clay and sand	54	84	
Sand	8	92	

Well 34/9W-28A1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	70	70	
Sand	10	80	
Clay	20	100	
Sand	22	122	
Clay	53	175	
Silurian system:			
Middle Silurian series:			
Rock	16	191	Dolomite or dolomitic limestone.

Well 34/9W-28C1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	32	32	
Sand	60	92	
Clay	5	97	
Sand	31	128	
Clay	37	165	
Silurian system:			
Middle Silurian series:			
Rock	21	186	Dolomite or dolomitic limestone.

Well 34/9W-28D1

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

Quaternary system:			
Recent and Pleistocene series:			
Record missing	------	64	
Clay, white	2	66	
Shale	3	69	Clay or shaly gravel.
Sand	11	80	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-28D3

Type of record: Driller's log. Altitude: 755 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay----------	40	40	
Sand----------	61	101	
Clay----------	42	143	
Glacial drift----------	30	173	
Silurian system:			
Middle Silurian series:			
Rock----------	59	232	Dolomite or dolomitic limestone.

Well 34/9W-28D4

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	30	30	
Gravel----------	2	32	
Sand----------	8	40	
Clay and gravel----------	10	50	
Sand----------	6	56	

Well 34/9W-28D5

Type of record: Driller's log. Altitude: 755 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, red and gray----------	50	50	
Sand, fine, gray----------	52	102	
Clay, blue----------	7	109	
Sand, fine----------	41	150	
Clay, blue----------	20	170	
Silurian system:			
Middle Silurian series:			
Limestone----------	4	174	Dolomite or dolomitic limestone.

Well 34/9W-31R1

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

Quaternary system:			
Recent and Pleistocene series:			
Peat----------	16	16	
Clay----------	22	38	
Sand, fine to medium, and gravel----------	33	71	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-31R1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Limestone, white----------	57	128	Dolomite.

Well 34/9W-34B1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	60	60	
Sand, medium----------	80	140	
Clay, blue----------	12	152	
Silurian system:			
Middle Silurian series:			
Limestone----------	17	169	Dolomite or dolomitic limestone.

Well 34/9W-35A1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	41	41	
Sand and gravel----------	19	60	
Sand, medium----------	50	110	
Clay, blue----------	40	150	
Devonian system:			
Upper Devonian series:			
Shale----------	10	160	
Silurian system:			
Middle Silurian series:			
Limestone----------	54	214	Dolomite or dolomitic limestone.

Well 34/9W-35A2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	48	48	
Sand----------	62	110	
Clay----------	36	146	
Devonian system:			
Upper Devonian series:			
Shale----------	6	152	Water-bearing.
Silurian system:			
Middle Silurian series:			
Limestone----------	53	205	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-35C1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	42	42	
Sand and clay	18	60	
Sand, medium	10	70	
Sand and gravel	20	90	
Sand, medium	30	120	
Clay	54	174	
Shale and clay	2	176	
Silurian system:			
Middle Silurian series:			
Limestone	43	219	Dolomite or dolomitic limestone.

Well 34/9W-35G1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Clay and sand	8	48	
Clay	102	150	
Shale and clay	2	152	
Silurian system:			
Middle Silurian series:			
Limestone	68	220	Dolomite or dolomitic limestone.

Well 34/9W-35G2

Type of record: Driller's log. Altitude: 690 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Sand and clay	20	60	
Sand, clay, and gravel	15	75	
Clay	65	140	
Silurian system:			
Middle Silurian series:			
Limestone	30	170	Dolomite or dolomitic limestone.

Well 34/9W-35J2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	4	4	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 34/9W-35J2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	25	
Clay, blue	22	47	
Sand, fine	9	56	

Well 34/10W-25D1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow, and sand	60	60	
Clay, blue, and sand	20	80	
Sand	68	148	
Clay, blue	25	173	
Sand, red	4	177	
Silurian system:			
Middle Silurian series:			
Limestone	26	203	Dolomite or dolomitic limestone.

Well 35/7W-5F1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	18	18	
Sand, coarse, gray	14	32	
Clay, blue	3	35	

Well 35/7W-7R1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	31	31	
Sand, very fine, or silt	19	50	
Sand	17	67	Coarser.

Well 35/7W-9C1

Type of record: Driller's log from memory. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	19	19	
Sand, yellow	3	22	
Clay, blue	12	34	
Clay, blue, and gravel; mixed	6	40	
Gravel, fine to medium	4	44	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/7W-17D1

Type of record: Driller's log. Altitude: 655 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, soft, blue	2	23	
Gravel and sand	1	24	
Clay, soft, blue	6	30	
Gravel and sand	2	32	
Clay, soft, blue	3	35	
Gravel	2	37	
Sand, fine, gray	23	60	
Sand, coarse, gray	13	73	

Well 35/7W-17M1

Type of record: Driller's log from memory. Altitude: 665 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	35	35	
Sand and gravel; dirty	7	42	
Sand and gravel	7	49	

Well 35/7W-18A2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, brown	21	21	
Clay, blue	15	36	
Sand, white	44	80	

Well 35/7W-18E4

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay, gray	3	24	
Sand, yellow, and clay	4	28	
Sand, gray, and clay	4	32	
Clay	1	33	
Sand	9	42	
Sand and gravel	4	46	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/7W-18E5

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, brown	18	18	
Clay, gray	16	34	
Sand, gray, and medium gravel	3	37	

Well 35/7W-21C1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	34	34	
Sand	3	37	
Clay, blue	6	43	
Gravel and sand	18	61	

Well 35/7W-21F1

Type of record: Driller's log. Altitude: 665 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	34	34	
Sand, coarse	3	37	
Gravel, fine to medium	7	44	
Sand, coarse	6	50	

Well 35/7W-21L1

Type of record: Driller's log. Altitude: 678 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	32	32	
Clay, sandy, blue	10	42	
Sand and stone	4	46	
Clay, sandy, blue	14	60	
Sand	119	179	
Devonian system:			
Middle Devonian? series:			
Stone, soft, gray	21	200	Dolomitic limestone?.

Well 35/8W-2E1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	20	20	
Clay, soft, blue	5	25	
Sand, gray, and gravel	3	28	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/8W-2E1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	9	37	
Gravel	3	40	
Clay, soft, blue	4	44	
Gravel	1	45	
Clay, blue	1	46	
Sand, fine, gray, and gravel	11	57	
Gravel	3	60	
Sand, medium, gray	7	67	

Well 35/8W-3M1

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Clay, blue, with sand	20	30	
Sand	19	49	

Well 35/8W-5L1

Type of record: Driller's log. Altitude: 632 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	20	20	
Clay, soft, blue	8	28	
Sand, brown	2	30	
Sand, gray, and gravel	9	39	
Sand, fine, gray and black	17	56	
Sand, medium, gray	7	63	

Well 35/8W-5L2

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, brown	16	16	
Clay, gray	6	22	
Gravel, gray, and medium sand	5	27	

Well 35/8W-9D1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	16	16	
Clay, soft, blue	11	27	
Sand, fine, gray	3	30	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/8W-9D1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Gravel and sand	9	39	
Sand and clay	3	42	
Sand, gray	6	48	

Well 35/8W-10N1

Type of record: Driller's log from memory. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	3	3	
Gravel and sand	17	20	
Clay	12	32	
Sand with thin clay streamers	40	72	

Well 35/8W-13L2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	23	23	
Clay, soft, blue	4	27	
Clay, hard, blue	6	33	
Gravel	3	36	
Clay, blue	1	37	
Sand, gray	13	50	
Clay, gray	4	54	
Sand, gray	14	68	

Well 35/8W-13N1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	20	20	
Clay, blue	30	50	
Sand	16	66	

Well 35/8W-15E7

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow and blue	21	21	
Clay, blue	12	33	
Sand, gray	9	42	
Gravel	2	44	
Sand, gray	4	48	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/8W-16H1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil and sandy clay	36	36	
Sand, fine	5	41	
Clay, sandy	24	65	
Sand, fine	13	78	
Clay, sandy	2	80	
Clay, soft, blue	18	98	
Devonian system:			
Upper Devonian series:			
Chert, black	1	99	
Shale, black	21	120	

Well 35/8W-16J1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow and blue	21	21	
Sand, gray, and gravel	2	23	
Clay, blue	3	26	
Sand, gray, with gravel	13	39	
Sand, gray	9	48	

Well 35/8W-17B1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Clay and sand	11	21	
Sand	16	37	

Well 35/8W-17P1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	20	20	
Clay, red, and sand	5	25	
Sand, coarse	5	30	
Shale, sandy	5	35	Clay?.
Quicksand	3	38	
Sand	42	80	
Sand, shale, and small gravel	10	90	
Sand, coarse	6	96	
Sand	6	102	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/8W-18K1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	35	35	
Clay and gravel	5	40	
Sand	10	50	

Well 35/8W-18L1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	21	21	
Clay with sand	14	35	
Sand	13	48	

Well 35/8W-20L1

Type of record: Driller's log. Altitude: 690 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	30	30	
Sand, fine	5	35	
Clay, blue	28	63	
Quicksand and clay	2	65	
Sand	15	80	
Clay	5	85	
Clay and quicksand	5	90	
Sand	20	110	
Clay	20	130	
Sand	10	140	
Shale	10	150	
Sand	10	160	
Gravel	12	172	
Devonian system:			
Upper Devonian series:			
Shale	20	192	

Well 35/8W-20L2

Type of record: Driller's log. Altitude: 690 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	30	30	
Sand, fine	5	35	
Clay, blue	28	63	
Sand and clay	2	65	
Clay	32	97	
Shale and sand	4	101	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/8W-20L2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand----------	4	105	

Well 35/8W-20L3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	30	30	
Sand, fine----------	5	35	
Clay, blue----------	28	63	
Quicksand and clay----------	2	65	
Sand, fine----------	1	66	
Sand, coarse----------	1	67	Trace of shale.
Quicksand----------	13	80	
Clay and quicksand----------	5	85	
Quicksand with trace of shale---	5	90	
Sand, medium, white----------	3	93	
Sand with shale----------	1	94	
Sand, coarse, and shale----------	6	100	

Well 35/8W-20L6

Type of record: Driller's log. Altitude: 685 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	30	30	
Sand, fine----------	5	35	
Sand and clay; mixed----------	51	86	
Sand----------	6	92	

Well 35/8W-20L7

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

Quaternary system:			
Recent and Pleistocene series:			
Clay----------	30	30	
Sand, fine----------	5	35	
Clay, blue----------	28	63	
Clay----------	17	80	
Sand----------	14	94	

Well 35/8W-20P1

Type of record: Driller's log. Altitude: 690 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, brown----------	18	18	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/8W-20P1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	29	47	
Clay, blue, and gravel	16	63	
Clay, blue, and sand	2	65	
Sand	30	95	Blue clay and gravel at 95 feet.

Well 35/8W-29P1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Clay, blue	58	60	
Clay, sandy	18	78	
Sand, fine, brown	12	90	
Sand, medium, white	14	104	
Clay, sandy	4	108	

Well 35/8W-29P2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	12	12	
Clay, blue	60	72	
Sand, medium	17	89	Clay and boulders at 89 feet.

Well 35/8W-29P3

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	6	6	
Clay, blue	61	67	
Clay, hard, sandy, blue	11	78	
Hardpan, sandy	19	97	
Sand, medium	9	106	
Clay, sandy	14	120	
Devonian system:			
Upper Devonian series:			
Shale	13	133	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/8W-29P4

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	54	54	
Clay, blue	6	60	
Clay and sand	4	64	
Sand, fine	2	66	
Sand	49	115	
Clay and sand	10	125	
Clay	20	145	

Well 35/8W-29P5

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, black and top soil	2	2	
Clay, gray	78	80	
Sand, medium, muddy	5	85	
Sand, medium	5	90	Clean.
Sand, medium and coarse	15	105	Clay at 105 feet.

Well 35/9W-2B1

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill	3	3	
Sand	13	16	
Clay, sandy	4	20	
Clay	37	57	
Clay and gravel	1	58	
Sand, medium	12	70	

Well 35/9W-2B2

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	18	18	
Clay	7	35	
Sand, fine	17	52	
Sand, finer	20	72	
Sand, fine, and clay	3	75	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-2C1

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	6	6	
Sand, gray	15	21	
Clay, blue	15	36	
Sand and some gravel	4	40	
Sand and clay; in strips	10	50	
Sand, fine, gray	5	55	
Sand, medium	25	80	
Sand, fine	6	86	

Well 35/9W-2C2

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and muddy sand	10	10	
Sand, brown	10	20	
Sand, white	20	40	
Sand, fine, and some gravel	25	65	
Sand, fine	20	85	

Well 35/9W-2F1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	119	119	
Clay, blue	8	127	
Sand, fine	4	131	
Silurian system:			
Middle Silurian series:			
Rock (chert)	4	135	
Rock, lime	13	148	Dolomite or dolomitic limestone.

Well 35/9W-2J1

Type of record: Driller's log. Altitude: 638 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy, gray	8	8	
Sand, medium, and gravel	6	14	
Clay, hard	24	38	
Sand, fine to medium	3	41	
Sand, coarse, and gravel	5	46	
Sand, fine to medium	36	82	Clay at 82 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-3H1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	17	17	
Clay	4	21	
Sand, coarse	22	43	
Sand, fine	4	47	
Sand, medium	22	69	

Well 35/9W-3H3

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil, fill dirt, and cinders	2	2	
Sand, fine, brown	7	9	
Sand, fine, gray	8	17	
Clay, very hard	4	21	
Sand, gray	22	43	
Sand, fine, gray	19	62	
Sand, muddy, gray	3	65	

Well 35/9W-4Q1

Type of record: Driller's log. Altitude: 625 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	26	26	
Clay, gray	4	30	
Quicksand	60	90	
Gravel, fine to very coarse	25	115	Some sand.
Gravel, cemented	5	120	
Gravel, broken	6	126	
Silurian system:			
Middle Silurian? series:			
Limestone, brown, gray, and black; mixed	24	150	Dolomite or dolomitic limestone; with flint.
Limestone, medium-hard, gray	96	246	Dolomite or dolomitic limestone.

Well 35/9W-5R1

Type of record: Driller's log. Altitude: 625 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	33	33	
Sand and gravel	57	90	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-5R1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	4	94	
Hardpan	17	111	
Silurian system:			
Middle Silurian series:			
Limestone, shaly	229	340	Dolomite or dolomitic limestone.
Limestone, blue	220	560	Do.
Shale	65	625	
Limestone	98	723	Dolomite or dolomitic limestone.
Ordovician system?:			
Upper Ordovician series:			
Shale	12	735	

Well 35/9W-9D1

Type of record: Driller's log. Altitude: 625 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	30	30	
Clay	15	45	
Sand, fine	25	70	
Gravel	46	116	
Silurian system:			
Middle Silurian series:			
Lime, gray	154	270	Dolomite or dolomitic limestone.

Well 35/9W-9D2

Type of record: Driller's log. Altitude: 625 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy	20	20	
Sand and clay	23	43	
Sand	61	104	
Silurian system:			
Middle Silurian series:			
Lime, sandy, gray	35	139	Dolomite or dolomitic limestone.
Lime, blue	113	252	Do.

Well 35/9W-9K1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	14	14	
Clay, sandy, and quicksand	95	109	
Silurian system:			
Middle Silurian series:			
Lime, hard, cherty, brown	103	212	

Well 35/9W-16A1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	6	6	
Clay	18	24	
Clay and gravel	16	40	
Hardpan	10	50	
Sand, muddy	23	73	
Devonian system?:			
Upper Devonian series:			
Shale, sandy	45	118	
Shale, sticky	8	126	
Silurian system:			
Middle Silurian series:			
Lime	4	130	Dolomite or dolomitic limestone.
Lime, broken, and shale	51	181	Do.
Lime, hard	3	184	Do.
Lime, shaly	13	197	Do.
Lime, hard	5	202	Do.
Lime, shaly	43	245	Do.
Lime, dirty	15	260	Do.
Lime, clean	32	292	Do.
Lime, dirty	4	296	Do.
Lime	28	324	Do.

Well 35/9W-18N2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	65	65	
Sand	22	87	
Glacial drift	10	97	
Silurian system:			
Middle Silurian series:			
Rock	46	143	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-18N3

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	38	38	
Sand	30	68	
Clay	22	90	
Glacial drift	4	94	
Silurian system:			
Middle Silurian series:			
Rock	29	123	Dolomite or dolomitic limestone.

Well 35/9W-18N5

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	28	28	
Sand	45	73	
Gravel	20	93	
Silurian system:			
Middle Silurian series:			
Rock	50	143	Dolomite or dolomitic limestone.

Well 35/9W-18N10

Type of record: Driller's log. Altitude: 655 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	27	27	
Sand	43	70	
Clay	18	88	
Sand	8	96	
Glacial drift	12	108	
Silurian system:			
Middle Silurian series:			
Rock	45	153	Dolomite or dolomitic limestone.

Well 35/9W-18R1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	53	53	
Sand	23	76	
Sand and gravel	8	84	
Clay	16	100	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-18R1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Gravel	5	105	
Clay	20	125	
Gravel and shale	6	131	
Silurian system:			
Middle Silurian series:			
Rock	6	137	Dolomite or dolomitic limestone.

Well 35/9W-19D1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	38	38	
Gravel	20	58	
Sand	32	90	
Glacial drift	4	94	
Silurian system:			
Middle Silurian series:			
Rock	44	138	Dolomite or dolomitic limestone.

Well 35/9W-20C1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, brown	35	35	
Clay, blue	13	48	
Sand, medium to coarse, white	18	66	

Well 35/9W-20F1

Type of record: Driller's log. Altitude: 665 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	36	36	
Sand	8	44	
Clay	21	65	
Sand	5	70	

Well 35/9W-20P1

Type of record: Driller's log. Altitude: 690 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	60	60	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-20P1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	40	100	
Sand and gravel	26	126	
Gravel and shale	15	141	
Silurian system:			
Middle Silurian series:			
Rock	4	145	Dolomite or dolomitic limestone.

Well 35/9W-20P2

Type of record: Driller's log. Altitude: 690 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	56	56	
Sand	65	121	
Clay	14	135	
Glacial drift	8	143	
Silurian system:			
Middle Silurian series:			
Rock	40	183	Dolomite or dolomitic limestone.

Well 35/9W-22R1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	10	10	
Clay, blue	40	50	
Sand, very fine, dirty	10	60	
Sand, fine	25	85	
Sand, medium	13	98	
Sand, fine, pumice	13	111	Silt?.
Devonian system:			
Upper Devonian series:			
Shale, black	15	126	
Shale, green	21	147	
Silurian system:			
Middle Silurian series:			
Limestone	26	173	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-24P1

Type of record: Driller's log. Altitude: 690 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Drift	188	188	
Devonian system:			
Upper Devonian series:			
Shale, black	3	191	
Shale, broken lime	9	200	
Middle Devonian series:			
Lime, light-brown	45	245	Dolomitic limestone.
Silurian system:			
Middle Silurian series:			
Lime, white	20	265	Contained water; dolomite or dolomitic limestone.
Lime, gray and white	30	295	Do.
Lime, gray	45	340	Do.
Lime, blue-gray	35	375	Do.
Lime, fine, light-brown	20	395	Do.
Lime, white	55	450	Do.
Lime, light-brown	40	490	Do.
Lime, white	15	505	Do.
Lime, gray	55	560	Do.
Lime, blue-gray	40	600	Do.
Lime, gray	15	615	Do.
Shale, blue	55	670	
Shale, gray	35	705	
Sandstone, dark	5	710	
Sandstone, white	10	720	Contained water.
Sandstone, brown	10	730	
Sand	24	754	Contained water.
Ordovician system?:			
Upper Ordovician? series:			
Shale, blue	41	795	
Shale, blue-gray	90	885	
Middle Ordovician series:			
Lime, hard, brown	32	917	
Lime, coarse, gray-brown	20	937	
Lime, fine, hard, light-brown	10	947	
Sand, fine, hard	13	960	Limestone.
Lime, fine, light-brown	25	985	
Lime, coarse, light-gray	30	1,015	
Lime, fine, light-gray	65	1,080	
Lime, fine, hard, light-brown	40	1,120	
Lime, fine, gray	60	1,180	
Lime, coarse, light-brown	45	1,225	
Sandstone, coarse, brown	12	1,237	
Sandstone, white	13	1,250	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-24P2

Type of record: Driller's log. Altitude: 690 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	51	51	
Clay, sandy	9	60	
Sand, packed	7	67	
Clay	12	79	
Sand, very fine	23	102	Sandy clay at 102 feet.

Well 35/9W-26H2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue	33	63	
Clay and sand	10	73	
Sand	13	86	

Well 35/9W-26K2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, red	42	42	
Gravel, small, and sand	10	52	
Shale, black	28	80	Clay? or bed of broken shale fragments.
Sand	11	91	

Well 35/9W-27D5

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	53	53	
Sand	50	103	
Clay	17	120	
Devonian system:			
Upper Devonian series:			
Shale	8	128	
Silurian system:			
Middle Silurian series:			
Rock	25	153	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-29C4

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	35	35	
Gravel	3	38	
Clay	24	62	
Sand	75	137	
Silurian system:			
Middle Silurian series:			
Rock	41	178	Dolomite or dolomitic limestone.

Well 35/9W-29D1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	75	75	
Gravel	3	78	
Sand	14	92	
Gravel	8	100	
Sand	43	143	
Glacial drift	14	157	
Silurian system:			
Middle Silurian series:			
Rock	40	197	Dolomite or dolomitic limestone.

Well 35/9W-29P1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	35	35	
Sand	12	47	
Clay	30	77	
Sand	20	97	
Clay	23	120	
Sand	6	126	
Sand, gravel, shale, etc.	30	156	
Silurian system:			
Middle Silurian series:			
Limestone	73	229	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-30A1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	60	60	
Sand	30	90	
Clay	25	115	
Sand	19	134	
Gravel	14	148	
Glacial drift	10	158	
Silurian system:			
Middle Silurian series:			
Limestone	92	250	Dolomite or dolomitic limestone.

Well 35/9W-30A2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	45	45	
Sand	28	73	
Sand and some gravel	62	135	
Glacial drift	17	152	
Silurian system:			
Middle Silurian series:			
Rock	41	193	Dolomite or dolomitic limestone.

Well 35/9W-30B2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	43	43	
Sand	70	113	
Clay	24	137	
Glacial drift	21	158	
Silurian system:			
Middle Silurian series:			
Rock	162	320	Dolomite or dolomitic limestone.

Well 35/9W-32A1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Clay and sand	20	60	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-32A1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	30	90	
Quicksand	5	95	
Clay	28	123	
Silurian system:			
Middle Silurian series:			
Limestone	15	138	Dolomite or dolomitic limestone.

Well 35/9W-32D1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	40	40	
Gravel	5	45	
Sand	18	63	
Clay	17	80	
Sand	23	103	
Glacial drift	28	131	
Silurian system:			
Middle Silurian series:			
Rock	7	138	Dolomite or dolomitic limestone.

Well 35/9W-32D2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	50	50	
Sand	80	130	
Glacial drift	3	133	
Silurian system:			
Middle Silurian series:			
Rock	10	143	Dolomite or dolomitic limestone.

Well 35/9W-33D1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil and blue clay	90	90	
Sand, muddy	50	140	
Mud, tough, blue	32	172	
Sand and shellrock	2	174	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/9W-33D1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Rock, hard, flint	16	190	Dolomite or dolomitic limestone.
Stone, blue	60	250	Do.
Stone, white	27	277	Do.

Well 35/9W-35N1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow	30	30	
Clay, blue	20	50	
Clay with sand	30	80	
Sand	8	88	

Well 35/10W-13C1

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

Quaternary system:			
Recent and Pleistocene series:			
Fill	6	6	
Clay	12	18	
Sand, fine	47	65	
Clay	10	75	
Sand, fine	30	105	
Gravel, sandy	24	129	
Silurian system:			
Middle Silurian series:			
Limestone, soft, bluish-gray	11	140	Dolomite or dolomitic limestone.
Limestone, soft, gray	60	200	Do.
Lime, medium-hard, gray to white	125	325	Do.

Well 35/10W-25E1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	49	49	
Sand	69	118	
Clay	22	140	
Silurian system:			
Middle Silurian series:			
Rock	49	189	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/10W-25F2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	31	31	
Gravel	2	33	
Clay	25	58	
Sand	50	108	
Clay	29	137	
Gravel	3	140	
Silurian system:			
Middle Silurian series:			
Rock	63	203	Dolomite or dolomitic limestone.

Well 35/10W-25L1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	30	30	
Gravel	3	33	
Clay	30	63	
Gravel	2	65	
Clay	78	143	
Silurian system:			
Middle Silurian series:			
Rock	115	258	Dolomite or dolomitic limestone.

Well 35/10W-25M1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	66	66	
Sand	4	70	
Gravel and sand	8	78	
Sand	56	134	
Clay	22	156	
Silurian system:			
Middle Silurian series:			
Rock	14	170	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 35/10W-36C1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	120	120	
Sand	20	140	
Gravel	21	161	
Silurian system:			
Middle Silurian series:			
Limestone	29	190	Dolomite or dolomitic limestone.

Well 36/7W-7E1

Type of record: Driller's log. Altitude: 621 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	19	19	
Sand, fine to medium, brown, with trace of silt	3	22	
Sand, fine to medium, brown, with trace of silt and small gravel	12	34	
Sand, fine to medium, brown, with some small marine shells	4	38	
Sand, medium to coarse, brown, with trace of silt and small gravel	6	44	
Sand, fine to medium, silty, gray	3	47	
Clay, silty, gray, with small seams of fine sand	7	54	
Clay, silty, brown and gray, with some small gravel	6	60	

Well 36/7W-7E2

Type of record: Driller's log. Altitude: 624 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	23	23	
Sand, fine to medium, brown, with trace of silt	4	27	
Sand, medium, brown, with trace of silt	12	39	
Sand, medium to coarse, brown, with some medium gravel and silt	9	48	
Sand, fine to medium, silty, gray, and small gravel	4	52	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-7E2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, brown and gray, with trace of silt and small gravel------	8	60	

Well 36/7W-7G1

Type of record: Driller's log. Altitude: 609 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, loose, dark-brown---	12	12	
Gravel, fine, and coarse sand; with trace of gray medium-dense silt----------	5	17	
Sand, fine, dense, brown--------	5	22	
Sand, fine, with trace of brown dense silt----------	5	27	
Sand, fine, with trace of gray very dense silt----------	5	32	
Sand, fine, with some gray very dense silt----------	6	38	
Clay and silt; with trace of sand and dark gray-black stiff clay----------	5	43	
Clay, stiff, blue and brown, with some silt and sand-------	7	50	
Clay, stiff, gray, and some silt; trace of sand----------	5	55	

Well 36/7W-7G3

Type of record: Driller's log. Altitude: 609 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, loose, brown--------	6	6	
Sand, fine, medium-dense, brown-	6	12	
Sand, fine, medium-dense, gray--	4	16	
Sand, fine, and some gray very dense silt----------	18	34	
Sand, fine to medium, with trace of gray medium-dense silt-----	4	38	
Clay, tough, black, and silt; with trace of sand----------	2	40	
Sand and silt with organic matter; medium-dense, brown and green----------	3	43	
Sand, fine, and silt, with trace of gravel----------	11	54	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-7G3--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, stiff, dark-brown, and silt; trace of sand----------	3	57	
Sand, fine, and some gray dense silt----------	5	62	
Clay, stiff, blue, with trace of silt and sand----------	8	70	

Well 36/7W-7G4

Type of record: Driller's log. Altitude: 608 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, loose, brown--------	13	13	
Sand, fine, dense, brown, with trace of silt and fine gravel-	4	17	
Sand, fine to coarse, dense, gray----------	9	26	
Sand, fine, very dense, gray, with trace of silt----------	6	32	
Sand, fine to coarse, and fine gravel, with trace of gray medium-dense silt----------	5	37	
Sand, medium to coarse, some silt, and fine gravel---------	10	47	
Silt and sand; gray and black, medium-dense----------	6	53	
Sand, fine, and trace of gray very dense silt----------	10	63	
Clay, stiff, gray, with trace of silt and sand----------	7	70	

Well 36/7W-8B2

Type of record: Driller's log. Altitude: 608 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, loose, brown---------	6	6	
Sand, fine, medium-dense, brown-	3	9	
Sand, fine, medium-dense, brown and gray----------	3	12	
Sand, fine, loose, brown and gray----------	6	18	
Sand, fine to medium, medium-dense, brown and gray, with trace of gravel----------	4	22	
Sand, fine, very dense, brown and gray, with trace of silt--	5	27	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-8B2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, very dense, gray, and silt----------	5	32	
Clay, stiff, brown and gray, and silt; with trace of sand------	6	38	
Clay, tough, blue, and silt; with trace of sand and fine gravel----------	14	52	
Clay, tough, blue, with some silt and trace of sand--------	11	63	
Clay, very tough, blue, and silt; with trace of sand------	2	65	

Well 36/7W-8B3

Type of record: Driller's log. Altitude: 611 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, loose, dark-brown---	2	2	
Sand, fine, loose, brown--------	4	6	
Sand, fine, medium-dense, brown-	2	8	
Sand, fine, medium-dense, brown, with trace of silt----------	9	17	
Sand, fine, medium-dense, gray, with some silt----------	5	22	
Sand, fine, very dense, gray, with some silt----------	12	34	
Clay and silt; very tough, blue, with trace of sand----------	4	38	
Gravel, fine, and fine to coarse sand with some silt and trace of brown and blue clay--------	6	44	
Clay, stiff, blue, with some silt and trace of sand--------	5	49	
Silt and sand; dense, gray------	5	54	
Clay, tough, gray, with some silt and trace of sand--------	4	58	
Clay, stiff, gray, with some silt and trace of sand--------	6	64	
Silt, dense, gray, with some clay and trace of sand--------	1	65	

Well 36/7W-8C1

Type of record: Driller's log. Altitude: 601 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam, swampy, black----------	1	1	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-8C1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, medium to fine, brown-----	23	24	
Clay, stiff, silty, mixed brown and gray, with small gravel---	9	33	

Well 36/7W-9A1

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam, sandy, silty, brown-------	12	12	
Sand, fine to medium, silty, gray	2	14	
Sand, fine to medium, silty, dense, gray, with trace of organic material and small gravel----------	10	24	
Sand, fine to medium, silty, dense, gray----------	9	33	
Sand, fine, silty, dense, gray, with small to medium gravel---	4	37	
Silt, inorganic, gray----------	6	43	
Sand, fine to medium, silty, very dense, gray----------	6	49	
Silt, inorganic, gray----------	17	66	
Clay, stiff, silty, sandy, gray-blue----------	14	80	

Well 36/7W-9A2

Type of record: Driller's log. Altitude: 607 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, silty, brown----------	28	28	
Clay, silty, gray, with trace of sand----------	3	31	
Silt, stiff, clayey, gray, with trace of sand and small gravel	13	44	
Clay, fine to medium, silty, dense, gray----------	3	47	
Sand, fine to medium, silty, very dense, gray----------	3	50	

Well 36/7W-9A5

Type of record: Driller's log. Altitude: 598 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Loam, sandy----------	3	3	
Sand, gray----------	26	29	
Sand and clay----------	21	50	

Well 36/7W-9B1

Type of record: Driller's log. Altitude: 607 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, clay, silt, and fill------	22	22	
Sand, medium, brown, with trace of silt----------	7	29	
Sand, medium, gray, and decayed wood----------	1	30	
Sand, fine, gray, and trace of silt----------	8	38	
Sand, very fine, silty, gray----	4	42	
Sand, fine, gray, with trace of silt----------	5	47	
Sand, very fine, silty, gray----	5	52	
Sand, fine, gray, with trace of silt----------	6	58	
Sand, very fine, silty, gray----	10	68	
Sand, silty, gray----------	2	70	

Well 36/7W-9B2

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, medium, silty, brown, with trace of peat----------	6	6	
Sand, medium, brown, with trace of silt and small gravel------	6	12	
Sand, fine, brown, with trace of silt----------	6	18	
Sand, fine to medium, gray, and small to medium gravel; with trace of silt----------	9	27	
Sand, fine to medium, gray, with trace of silt----------	11	38	
Sand, very fine, silty, gray----	4	42	
Sand, fine, gray, with trace of silt----------	4	46	
Sand, very fine, silty, gray----	11	57	
Sand, silty, gray----------	4	61	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-9B2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, very fine, silty, gray----	4	65	

Well 36/7W-9B3

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, medium, silty, brown------	3	3	
Peat, silty, sandy, brown-------	5	8	
Sand, medium, silty, brown------	9	17	
Sand, medium, gray, and small to medium gravel; trace of silt----------	6	23	
Sand, fine, gray, with decayed wood----------	2	25	
Sand, fine, gray, with trace of silt----------	13	38	
Sand, very fine, silty, gray----	6	44	
Sand, fine, gray, with trace of silt----------	4	48	
Sand, very fine, silty, gray----	9	57	
Clay, stiff, silty, gray--------	3	60	

Well 36/7W-9D1

Type of record: Driller's log. Altitude: 604 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, medium to coarse, brown, with trace of silt----------	6	6	
Sand, fine, gray, with small layers of silt----------	3	9	
Sand, fine to medium, brown, with trace of silt----------	8	17	
Sand, fine to medium, gray, with trace of silt and small to medium gravel----------	11	28	
Sand, fine, silty, gray---------	9	37	
Sand, fine to medium, gray, with trace of silt----------	6	43	
Sand, fine, silty, gray---------	20	63	
Clay, stiff, silty, gray--------	5	68	
Sand, very fine, silty, gray----	5	73	
Clay, stiff, silty, gray--------	3	76	
Sand, fine, silty, gray---------	12	88	
Clay, stiff, silty, gray--------	12	100	

Well 36/7W-9D4

Type of record: Driller's log. Altitude: 603 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, medium-dense, brown, with trace of silt	3	3	
Sand, fine, medium-dense, brown-	5	8	
Sand, fine, medium-dense, brown, with trace of silt	4	12	
Sand, fine to medium, loose, brown, with trace of silt	4	16	
Sand, fine to coarse, dense, brown, with trace of silt and gravel	6	22	
Sand, fine, dense, brown	5	27	
Sand, fine, very dense, brown	5	32	
Silt and sand; fine, dense, gray	5	37	
Sand, fine, dense, gray and brown, with some silt	10	47	
Sand, fine, and silt; very dense, gray	5	52	
Sand, fine, dense, gray, with some silt	11	63	
Clay, stiff, blue, with trace of silt and sand	8	71	
Sand, fine, medium-dense, gray, with some silt	4	75	

Well 36/7W-9D6

Type of record: Driller's log. Altitude: 603 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, medium-dense, brown-	12	12	
Sand, fine, loose, brown	4	16	
Sand, fine, medium-dense, brown and gray, with trace of fine to medium gravel	5	21	
Sand, fine, very dense, gray and brown, with trace of silt and gravel	7	28	
Sand, fine, dense, gray, with some silt	19	47	
Sand, fine, and silt; dense, gray	6	53	
Clay, tough, blue, with some silt and trace of sand	4	57	
Clay, tough, blue, with trace of silt and sand	4	61	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-9D6--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, silt, and clay; very dense, gray, laminated--------	9	70	

Well 36/7W-9G1

Type of record: Driller's log. Altitude: 593 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Loam, silty, sandy, brown-------	11	11	
Sand, fine to medium, silty, brown and gray----------	7	18	
Sand, fine to medium, silty, gray, with some small gravel--	10	28	
Silt, inorganic, gray----------	32	60	

Well 36/7W-9Q1

Type of record: Driller's log. Altitude: 610 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, yellow----------	14	15	
Sand, fine, muddy, yellow-------	4	19	
Clay, sandy----------	6	25	
Clay, sandy, gray----------	10	35	
Sand, powdery, muddy----------	40	75	Silt?.

Well 36/7W-16A1

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand----------	15	15	
Sand, fine, yellow----------	9	24	
Sand, fine, gray----------	6	30	
Sand, very fine, gray----------	8	38	
Peat moss----------	10	48	
Sand, powdery, muddy----------	7	55	Silt?.
Clay, soupy, gray----------	10	65	
Clay, soft, gummy, gray---------	15	80	
Sand, dirty, with tree limbs----	1	81	
Sand, medium to fine, dark-gray-	2	83	
Clay, light-brown----------	14	97	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-16B1

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	23	23	
Sand, fine, light-gray	5	28	Clean.
Sand, fine, dark-gray	6	34	Do.
Clay, sandy, brown	4	38	
Sand, very fine, muddy, with tree limbs	3	41	
Sand, very fine, muddy	9	50	
Clay, soft, sticky, gray	11	61	
Sand, gravel, and boulders; dark-gray	4	65	
Clay, soft, sticky, gray	65	130	

Well 36/7W-16B2

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	20	20	
Sand, gray	26	46	Clean.
Clay	4	50	
Sand, with muddy strips	27	77	

Well 36/7W-16B3

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

Quaternary system:			
Recent and Pleistocene series:			
Soil	1	1	
Sand, brown	14	15	
Sand, gray	21	36	
Sand, gray	14	50	Clean.
Sand, coarse to fine, gray	10	60	Do.
Sand	14	74	Finer grained; clean.
Sand	5	79	Coarser grained; clean.
Sand, dark-gray	3	82	
Sand, very fine	26	108	Like powder.

Well 36/7W-16B4

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	34	34	
Sand, very fine, muddy	4	38	
Clay, sandy, gray	6	44	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-16B4--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, muddy, gray	2	46	
Clay, sandy, gray	21	67	
Gravel, coarse, and sandy clay	1	68	
Clay, sandy, gray	16	84	
Clay, gummy, gray	9	93	

Well 36/7W-16E1

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and sand	14	14	
Sand, medium	7	21	
Sand, fine, muddy	8	29	
Sand, fine, blue	2	31	
Clay	1	32	
Sand, fine, muddy	30	62	

Well 36/7W-16E2

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, medium	28	28	
Sand, muddy	30	58	
Sand, medium	2	60	
Sand, coarse, and gravel	9	69	Clay at 69 feet.

Well 36/7W-16E3

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	24	24	
Sand, fine	5	29	
Clay	6	35	
Sand, fine	5	40	
Sand, fine, muddy	18	58	
Sand, medium	11	69	
Sand, fine, muddy	6	75	
Clay	20	95	

Well 36/7W-16E5

Type of record: Driller's log. Altitude: 615 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	28	28	
Sand, fine, muddy	20	48	
Clay, silty	10	58	
Sand, fine	2	60	
Sand, medium	8	68	Clay at 68 feet.

Well 36/7W-16G1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, yellow	19	20	
Sand, muddy, yellow	13	33	
Sand, gray and yellow	7	40	
Sand, fine, gray	10	50	
Sand, very fine, gray	6	56	
Clay, gummy, gray	34	90	

Well 36/7W-16G2

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	10	10	
Sand, medium, red	20	30	
Sand, fine, red	2	32	
Sand, very fine, muddy, gray, with wood	2	34	
Sand, very fine, gray	8	42	
Sand, very fine, muddy, gray	9	51	
Sand, medium, gray, and fine gravel	5	56	
Clay, sandy, gray	30	86	

Well 36/7W-16K1

Type of record: Driller's log from memory. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	30	30	
Clay, blue	6	36	
Sand	19	55	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-16L1

Type of record: Driller's log. Altitude: 600 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Muck, sandy	1	1	
Sand, muddy, dark gray, with wood and vegetation	26	27	
Sand, very fine, muddy, gray, and clay	17	44	
Clay, sticky, gray	56	100	
Clay, gravelly, blue	2	102	
Clay, sticky, gray-blue	13	115	
Clay, gravelly, blue	22	137	
Gravel, small, blue, with shale	1	138	
Clay, gravelly, blue	2	140	
Clay, gravelly, with shale	10	150	

Well 36/7W-16L2

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, sandy	9	9	
Sand, brown	35	44	
Sand, fine, silty, gray	20	64	
Clay	36	100	

Well 36/7W-16M1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and clay	5	5	
Muck	23	28	
Sand, medium	16	44	

Well 36/7W-16M2

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	2	2	
Muck	3	5	
Sand	4	9	
Muck	20	29	
Sand, fine, muddy	6	35	
Sand, fine	5	40	
Sand, medium	11	51	
Clay	2	53	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-16N1

Type of record: Driller's log. Altitude: 600 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy	5	5	
Sand	10	15	
Clay, sandy	3	18	
Sand, silty	12	30	
Clay	5	35	
Sand	13	48	
Sand and clay strips	4	52	
Clay	26	78	

Well 36/7W-16P1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, yellow	5	6	
Sand, dirty, yellow	34	40	
Sand, yellow	10	50	
Sand, gray	10	60	
Sand, yellow	10	70	
Sand, gray	15	85	Blue clay at 85 feet.

Well 36/7W-16Q1

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, red	5	5	
Clay, sandy, red	5	10	
Sand, fine, muddy, red	28	38	
Sand, medium, dirty, red	11	49	
Sand, fine, gray	6	55	
Sand, medium, gray, with few pebbles	7	62	
Sand, fine, gray	6	68	
Sand, very fine, muddy, gray	6	74	
Clay, sticky, gray	12	86	

Well 36/7W-16Q5

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, sandy, yellow, and muddy sand	41	42	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-16Q5--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, dirty, red	5	47	
Sand, gray	3	50	
Sand, fine, gray	10	60	
Sand, medium, gray	10	70	
Clay, gray	25	95	

Well 36/7W-16R1

Type of record: Driller's log. Altitude: 635 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	40	40	
Sand, gray	30	70	Blue clay at 70 feet.

Well 36/7W-17J1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck	10	10	
Sand, fine	4	14	
Muck	26	40	
Sand, fine	5	45	
Sand, medium	5	50	Clay at 50 feet.

Well 36/7W-17J2

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	4	4	
Muck	28	32	
Sand, fine, dirty	6	38	
Sand, fine	4	42	
Sand, medium	3	45	
Gravel	3	48	Clay at 48 feet.

Well 36/7W-17J3

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	2	2	
Muck	6	8	
Sand	4	12	
Muck	11	23	
Sand	24	47	Clay at 47 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-17J4

Type of record: Driller's log. Altitude: 600 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil----------	4	4	
Muck----------	32	36	
Sand, very fine, muddy----------	11	47	
Sand, coarse, gray----------	5	52	

Well 36/7W-17J5

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil----------	3	3	
Clay and muck----------	3	6	
Muck----------	23	29	
Sand, very fine----------	6	35	
Muck----------	12	47	
Sand, medium, and gravel--------	3	50	Clay at 50 feet.

Well 36/7W-17K1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck and soil----------	4	4	
Muck----------	27	31	
Sand----------	4	35	
Sand, mucky----------	5	40	
Sand, fine----------	6	46	
Sand, medium----------	2	48	
Sand, fine----------	2	50	Clay at 50 feet.

Well 36/7W-17K2

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck, black----------	10	10	
Muck, gray----------	23	33	
Sand, fine, very muddy----------	5	38	
Sand, fine----------	5	43	
Sand, fine, muddy----------	3	46	
Sand, coarse----------	4	50	Soft clay at 50 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-17K3

Type of record: Driller's log. Altitude: 600 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil and muck	4	4	
Muck	6	10	
Muck, gray	21	31	
Clay, soft	9	40	
Sand, fine, with trace of gravel	10	50	
Clay, soft	8	58	

Well 36/7W-17M1

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, red	19	19	
Sand, fine, gray, and silt	4	23	
Clay, soft	1	24	
Sand, gray, and silt	19	43	
Clay	2	45	
Sand, fine, gray	16	61	
Clay	1	62	
Sand and silt	6	68	
Clay	4	72	
Sand, fine	5	77	
Sand, fine, and clay	13	90	
Clay	14	104	
Sand, fine	3	107	
Clay, soft	19	126	
Gravel and clay	4	130	
Clay, hard	8	138	

Well 36/7W-17R1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	4	4	
Muck, clayey	39	43	
Sand, fine	5	48	
Sand with some gravel	3	51	
Clay	1	52	

Well 36/7W-18E1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-18E1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	5	7	
Clay	33	40	
Sand	2	42	
Clay, hard	18	60	
Quicksand	20	80	
Sand and clay	10	90	
Clay	30	120	
Gravel	31	151	
Lime	1	152	Boulder?.
Gravel	9	161	
Gravel and sand	6	167	
Silurian system:			
Middle Silurian series:			
Lime	51	218	Dolomite or dolomitic limestone.

Well 36/7W-18E2

Type of record: Driller's log. Altitude: 594 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam and sand	6	6	
Sand, gray	16	22	
Clay, gray	23	45	

Well 36/7W-18G1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Quicksand	63	65	
Clay, blue	5	70	
Clay and sand	30	100	
Gravel, small, and sand	45	145	
Silurian system:			
Middle Silurian series:			
Limestone	6	151	Dolomite or dolomitic limestone.

Well 36/7W-18L1

Type of record: Driller's log from memory. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	8	8	
Clay, blue	22	30	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-18L1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Silt	42	72	

Well 36/7W-18Q1

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	19	19	
Clay	6	25	
Sand, fine, muddy	5	30	
Sand, fine	23	53	
Clay	47	100	

Well 36/7W-19B1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	22	22	
Clay, sandy	27	49	
Silt, fine	23	72	
Clay	29	101	

Well 36/7W-19E1

Type of record: Driller's log. Altitude: 620 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	16	16	
Sand, gray	5	21	
Clay, gray	33	54	
Quicksand	25	79	
Clay	16	95	
Quicksand	17	112	
Clay, blue	86	198	
Devonian system:			
Upper Devonian series:			
Shale	98	296	

Well 36/7W-19F1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	30	30	
Clay, blue	14	44	
Quicksand, gray	5	49	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-19F1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, soft, blue	5	54	
Quicksand, gray	1	55	

Well 36/7W-19F2

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	17	17	
Sand, gray	6	23	
Clay, blue	30	53	
Quicksand	20	73	
Clay, blue	14	87	

Well 36/7W-19H1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand, muddy	1	3	
Clay, yellow	5	8	
Clay, gray	41	49	
Quicksand, muddy	44	93	
Clay, blue	7	100	

Well 36/7W-19M1

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

Quaternary system:			
Recent and Pleistocene series:			
Muck	1	1	
Sand	1	2	
Muck	2	4	
Sand, fine	10	14	
Clay, gray	46	60	
Quicksand	1	61	

Well 36/7W-20N1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Marl, clayey, yellow	5	6	
Sand, muddy, yellow	23	29	
Clay, sandy, gray	41	70	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-20N1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay	12	82	
Clay, gray	13	95	

Well 36/7W-20R1

Type of record: Driller's log. Altitude: 620 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Dirt, black, and yellow clay	7	7	
Sand, yellow	14	21	
Sand, dirty, white	14	35	
Sand	6	41	

Well 36/7W-21A1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	28	28	
Clay, blue	7	35	
Sand, fine to coarse	19	54	

Well 36/7W-21B1

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	7	7	
Clay, sandy	13	20	
Sand, dirty, brown	20	40	
Sand	40	80	
Mud	2	82	

Well 36/7W-21B2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	7	7	
Clay, sandy, yellow	10	17	
Sand, muddy, yellow	11	28	
Sand, fine, yellow	12	40	
Sand, fine, gray	2	42	
Sand, fine, gray	8	50	
Sand, muddy, gray	18	68	

Well 36/7W-21C1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	4	4	
Clay, sandy	11	15	
Sand, muddy, brown	20	35	
Sand, brown	13	48	
Sand, gray	16	64	Clay at 64 feet.

Well 36/7W-21C2

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

Quaternary system:			
Recent and Pleistocene series:			
Sand	4	4	
Clay, sandy	26	30	
Sand	20	50	
Sand, muddy	8	58	
Sand, fine	8	66	
Sand, muddy	2	68	

Well 36/7W-21C4

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil and sand	4	4	
Clay, sandy	23	27	
Sand, brown	21	48	
Sand, gray	16	64	Clay at 64 feet.

Well 36/7W-21C10

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	10	10	
Sand, muddy	20	30	
Sand, medium, yellow	20	50	
Sand, medium, gray	9	59	
Clay	2	61	

Well 36/7W-21C11

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

Quaternary system:			
Recent and Pleistocene series:			
Sand	4	4	
Clay	4	8	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-21C11--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, muddy	32	40	
Sand, medium	18	58	
Sand, gray	8	66	

Well 36/7W-21C14

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil and sand	3	3	
Clay, sandy, or marl	12	15	
Sand, fine, red	30	45	
Sand, fine, gray	10	55	
Sand, very fine, dirty, gray	5	60	

Well 36/7W-21D1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	4	4	
Marl	2	6	
Muck	24	30	
Sand, fine, muddy	5	35	
Sand, fine	5	40	
Sand, fine, with some gravel	2	42	
Sand, medium	4	46	Seemed muddy.
Clay	2	48	

Well 36/7W-21G1

Type of record: Driller's log. Altitude: 625 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, sandy, yellow	3	4	
Sand, yellow	8	12	
Clay, sandy, gray	18	30	
Sand, fine, gray	7	37	
Clay, soft, sandy	20	57	

Well 36/7W-21H1

Type of record: Driller's log. Altitude: 620 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/7W-21H1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, sandy, yellow----------	9	10	
Clay, sandy, gray----------	21	31	
Sand, fine, muddy, gray----------	27	58	
Clay, gray----------	34	92	
Shale, hard, gray----------	3	95	Clay.

Well 36/7W-28P1

Type of record: Driller's log. Altitude: 624 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, yellow, and fine brown sand	20	20	
Sand, fine, gray----------	3	23	
Sand, medium, gray----------	6	29	

Well 36/7W-29N1

Type of record: Driller's log. Altitude: 620 feet.

Quaternary system:			
Recent and Pleistocene series:			
Silt, calcareous, yellow--------	10	10	
Silt, blue----------	50	60	
Till, hard, stone, blue----------	97	157	
Silurian system:			
Middle Silurian series:			
Rock, hard----------	3	160	Dolomite or dolomitic limestone.

Well 36/8W-2F1

Type of record: Driller's log. Altitude: 597 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and sandy loam----------	1	1	
Sand, fine to medium, brown-----	7	8	
Sand, fine to medium, gray------	24	32	
Sand, fine, gray, with trace of gray silt----------	6	38	
Clay, soft to very soft, gray---	50	88	
Clay, medium stiff, gray, with few shale pieces----------	25	113	
Clay, stiff to very stiff, gray-	10	123	
Clay, hard, silty to clayey silt	10	133	
Silt, very hard, clayey, gray, with shale pieces----------	3	136	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-2K2

Type of record: Driller's log. Altitude: 606 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	17	17	
Sand, fine to coarse, gray	21	38	
Sand, fine, gray	8	46	
Clay, stiff, soft, gray, with some shale fragments	50	96	
Clay, stiff, gray, with some small shale fragments	34	130	
Clay, hard, silty, gray	49	179	
Silurian system:			
Middle Silurian series:			
Limestone, fractured	2	181	Dolomite or dolomitic limestone.

Well 36/8W-2K4

Type of record: Driller's log. Altitude: 604 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	3	3	
Peat	1	4	
Sand, fine to medium, brown	9	13	
Sand, fine to medium, gray	25	38	
Sand, fine, gray, with trace of silt	4	42	
Clay, medium stiff, brown and gray	10	52	
Clay, soft, gray	3	55	

Well 36/8W-2L1

Type of record: Driller's log. Altitude: 606 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, medium-dense, loose, brown, unstratified	21	21	
Sand, fine to medium, dense to very dense, gray, with trace of fine gravel	20	41	
Sand, fine, gray, with trace of silt	7	48	
Clay, very soft, gray	25	73	
Clay, medium to soft, gray, with some shale fragments	9	82	
Clay, very soft, gray, with trace of shale pieces	14	96	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-2L1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, medium, gray, with shale fragments	22	118	
Clay, stiff, gray, with shale fragments	20	138	
Silt, very hard, gray	4	142	

Well 36/8W-2L2

Type of record: Driller's log. Altitude: 599 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, light-brown	13	13	
Sand, fine to medium, gray, stratified with layers of coarse sand and shell fragments	27	40	
Clay, gray and brown, with trace of rock	2	42	
Clay, soft, silty, gray, with trace of rock	24	66	
Clay, silty, gray, with trace of rock	10	76	

Well 36/8W-2Q1

Type of record: Driller's log. Altitude: 604 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam, sandy	1	1	
Sand, fine to medium, brown	13	14	
Sand, fine to medium, gray	19	33	
Sand, fine, silty, gray	9	42	
Clay, very stiff, brown and gray	6	48	
Clay, medium, gray	10	58	
Clay, soft, gray	28	86	
Clay, stiff, gray, with some silt and trace of shale pieces	29	115	
Silt, stiff, clayey, gray	4	119	
Clay, stiff, silty, brown and gray, with shale pieces	14	133	
Clay, hard, silty, gray, with many shale pieces	8	141	Plastic when wet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-2Q4

Type of record: Driller's log. Altitude: 604 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Loam, sandy	4	4	
Peat	1	5	
Sand, fine to medium, brown	17	22	
Sand, fine to medium, gray	15	37	
Sand, fine, gray	4	41	
Clay, stiff, brown to gray, with few gravel	5	46	
Clay, medium, silty, gray, with some gravel	5	51	
Clay, soft, gray	19	70	
Silt, clayey	1	71	
Clay, soft, gray, with some gravel	27	98	
Clay, stiff, silty, gray, with some gravel	29	127	
Clay, hard, silty, gray	9	136	

Well 36/8W-2Q6

Type of record: Driller's log. Altitude: 602 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil, organic, black	1	1	
Sand, fine to medium, gray	29	30	
Sand, organic matter, dark-gray, with peat	1	31	
Sand, medium to coarse, organic, with silt and gravel	7	38	
Clay, stiff, gray, with trace of silt and shale	10	48	
Clay, medium, gray	3	52	

Well 36/8W-2Q8

Type of record: Driller's log. Altitude: 601 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Loam, sandy, black	3	3	
Sand, fine to medium, brown and gray, with trace of shale pieces	16	19	
Sand, fine to medium, gray, with few small to medium gravel	9	28	
Sand, fine to coarse, gray, with some small to medium gravel	5	33	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-2Q8--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, silty, gray	8	41	Layer of decayed wood, 1-inch thick.
Clay, soft, gray, with decayed vegetable matter	6	47	
Clay, very stiff, brown and gray, with trace of shale pieces	5	52	

Well 36/8W-3E2

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Asphalt	1	1	
Spoil	3	4	
Sand, brown, with cinder pieces	10	14	
Sand, fine, medium-dense, brown, with shell fragments and trace of gravel	12	26	
Sand, fine, dense, gray, with shell, gravel fragments, and coarse sand	9	35	
Sand, fine to coarse, very dense gray, with gravel and shale fragments	9	44	
Clay, soft, gray, with shale pockets	7	51	
Clay, gray, with some shale and gravel	27	78	
Clay, medium to very stiff, gray, with shale	38	116	
Clay, hard, silty, gray	15	131	
Silurian system:			
Middle Silurian series:			
Limestone, with small cavities	11	142	Dolomite or dolomitic limestone.

Well 36/8W-3E9

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam, sandy	1	1	
Sand, fine to medium, brown	7	8	
Sand, fine to medium, gray	36	44	
Clay, soft, medium, silty, gray-	40	84	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-3E9--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, very stiff, silty, gray, with trace of coarse sand-----	29	113	
Clay, stiff, silty, gray, with trace of sand and fine gravel-	10	123	
Silt, hard, clayey, gray, with some fine gravel, coarse sand, and shale fragments-----	17	140	

Well 36/8W-3F2

Type of record: Driller's log. Altitude: 602 feet.

Quaternary system:			
Recent and Pleistocene series:			
Cinder fill with chunks of coal-	2	2	
Sand, fine to medium, brown-----	19	21	
Sand, fine to medium, stiff, brown, layer of coarse sand---	3	24	
Sand, fine to medium, stiff, gray, with coarse sand, fine gravel, and trace of shells---	26	50	
Clay, soft, gray, with trace of shale fragments----------	12	62	

Well 36/8W-3F3

Type of record: Driller's log. Altitude: 601 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and cinder fill--------	2	2	
Sand, fine to medium, brown-----	19	21	
Sand, fine to medium, gray, with lenses of coarse sand and fine gravel; trace of silt	27	48	
Clay, soft to very soft, gray---	15	63	
Clay, soft to medium, gray, with trace of shale fragments-	20	83	
Clay, medium, gray, layer of green-gray, gravelly, clayey, coarse sand----------	10	93	
Clay, stiff, gray, with trace of shale fragments----------	15	108	
Clay, medium, gray, with trace of shale pieces----------	14	122	
Silt, hard, clayey, gray, with coarse sand and gravel--------	13	135	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-3F3--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Limestone, light-tan----------	1	136	Dolomite or dolomitic limestone.

Well 36/8W-3F5

Type of record: Driller's log. Altitude: 602 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill----------	2	2	
Fill, sandy, brown, with some cinders----------	5	7	
Sand, fine to medium, brown-----	16	23	
Sand, fine to medium, stiff, gray----------	27	50	
Clay, medium to soft, gray, with trace of shale fragments------	37	87	
Clay, stiff to very stiff, gray, with trace of shale fragments-	21	108	
Clay, soft, gray, with trace of shale pieces----------	5	113	
Clay, stiff to very stiff, gray, with sand and fine gravel-----	14	127	
Clay, hard, silty, gray, with trace of sand and fine gravel-	9	136	

Well 36/8W-3G1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, fine to medium, brown-----	21	22	
Sand, fine to medium, gray, with layers of coarse sand and trace of shell fragments--	20	42	
Sand, fine, silty, gray---------	6	48	
Clay, soft to medium, gray, with trace of shale fragments------	37	85	
Gravel, fine to coarse, sandy, gray, with some small pebbles-	1	86	
Clay, medium-stiff, gray, with shale fragments----------	32	118	
Clay, very hard, very stiff, silty, gray, and some shale fragments----------	13	131	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-3G3

Type of record: Driller's log. Altitude: 597 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown-----	14	14	
Sand, fine to medium, brown, with seam of fine gravel and coarse sand----------	4	18	
Sand, fine to medium, stiff, gray, with coarse sand and fine gravel----------	26	44	
Clay, very soft, gray, with shale fragments----------	19	63	
Clay, soft, medium, gray, with shale fragments----------	15	78	
Clay, medium, gray, with shale fragments----------	10	88	
Clay, stiff to very stiff, gray, with shale fragments----------	29	117	
Clay, hard, silty, gray, with shale fragments----------	12	129	
Silurian system:			
Middle Silurian series:			
Limestone, fractured----------	1	130	Dolomite or dolomitic limestone.

Well 36/8W-3H1

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil, sandy, black----------	1	1	
Sand, fine to medium, brown-----	15	16	
Sand, fine to medium, gray, with lenses of coarse sand and gravel----------	16	32	
Sand, fine, gray----------	8	40	
Sand, fine to coarse, gray, with shale fragments and fine gravel----------	1	41	
Clay, medium to very soft, gray, with trace of shale fragments-	11	52	

Well 36/8W-3N1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand----------	43	43	
Mud, blue, with boulders and sand	83	126	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-3N1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Limestone	514	640	Dolomite or dolomitic limestone.
Ordovician system:			
Upper Ordovician series:			
Shale	3	643	

Well 36/8W-3N2

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	9	9	
Quicksand	7	16	
Quicksand and clay	2	18	
Sand, fine	7	25	
Sand, fine, and clay	5	30	

Well 36/8W-4B1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	42	42	
Clay, soft to stiff, gray	69	111	
Hardpan	10	121	Bedrock at 121 feet.

Well 36/8W-4C3

Type of record: Driller's log. Altitude: 589 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; slag and brown sand	4	4	
Sand, silty, organic, gray, with trace of shell fragments	22	26	
Sand, fine, gray, with some coarse sand and gravel	18	44	
Clay, soft to medium, gray, with trace of sandy small gravel	30	74	
Clay, medium to stiff, with trace of sand and fine gravel	35	109	
Clay, hard, silty, gray, with trace of sand and some gravel	7	116	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-4C4

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Peat and organic silty sand-----	8	8	
Sand, fine to medium, brown-----	15	23	
Sand, fine, silty, gray, with trace of shells and gravel----	16	39	
Clay, soft to medium, silty, gray, with some small gravel--	25	64	
Clay, stiff, silty, gray, with some gravel----------	43	107	
Sand, fine, hard, gray, and silty clay; few small gravel--	10	117	

Well 36/8W-4C5

Type of record: Driller's log. Altitude: 599 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; brown, fine to medium sand	17	17	
Sand, medium, organic, brown, with layers of peat and shell pieces----------	7	24	
Sand, fine to medium, brown, with trace of shell fragments-	17	41	
Sand, fine to medium, gray------	11	52	
Clay, medium, silty, gray-------	31	83	
Clay, stiff, silty, gray, with some sand and gravel----------	15	98	
Clay, soft to medium, silty-----	10	108	
Clay, stiff, gray, with some sand and fine gravel----------	11	119	
Clay, hard, silty, gray, with some sand and fine gravel-----	8	127	

Well 36/8W-4D1

Type of record: Driller's log. Altitude: 590 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil and fill----------	2	2	
Fill; very soft, muddy, organic, with sand, gravel, and slag---	14	16	
Sand, fine to medium, gray------	7	23	
Sand, fine, gray----------	17	40	
Clay, soft, medium, gray, with few gravel----------	13	53	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-4D1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, stiff, silty, gray, with trace of fine gravel and rock fragments	49	102	
Clay, hard, silty, gray, with trace of gravel	14	116	

Well 36/8W-4G1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	36	36	
Sand and gravel	11	47	
Clay, soft, gray	71	118	
Hardpan	8	126	Bedrock at 126 feet.

Well 36/8W-4H1

Type of record: Driller's log. Altitude: 599 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, fine to medium, brown	17	18	
Sand, fine to medium, gray, with scattered lenses of coarse sand, gravel, and shells	17	35	
Sand, fine, silty, gray	13	48	
Clay, soft to very soft, gray	10	58	
Clay, medium, gray, with trace of shale fragments	30	88	
Clay, stiff, gray, with trace of shale fragments	33	121	

Well 36/8W-4K1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	39	39	
Clay, soft to very stiff	48	87	
Sand and gravel	2	89	
Clay, tough, very stiff	11	100	
Hardpan	2	102	
Clay, very stiff	17	119	
Hardpan	8	127	Bedrock at 127 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-4K2

Type of record: Driller's log. Altitude: 600 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Muck	2	2	
Sand, fine	20	22	
Sand and gravel	4	26	
Sand, fine	13	39	
Clay, soft and stiff, gray	71	110	
Hardpan	8	118	Bedrock at 118 feet.

Well 36/8W-6A1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	9	9	
Sand, medium, gray	8	17	
Sand, fine, gray	5	22	
Sand, very fine, gray	14	36	
Clay	39	75	

Well 36/8W-6C2

Type of record: Driller's log. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, light-brown	18	18	
Sand, fine to medium, gray	27	45	
Clay, soft to medium-stiff, gray, with trace of rock fragments	37	82	
Clay, hard, gray, with trace of silt and rock fragments	5	87	

Well 36/8W-6C5

Type of record: Driller's log. Altitude: 593 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, brown	15	15	
Sand, fine to medium, brown, with trace of shell fragments	4	19	
Sand, fine to medium, gray, with trace of shell fragments	14	33	
Sand, fine, gray, with trace of silt and rock fragments	10	43	
Clay, soft, gray, with trace of rock fragments	13	56	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-6C5--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, stiff, gray, with trace of rock fragments----------	6	62	

Well 36/8W-6D2

Type of record: Driller's log. Altitude: 576 feet.

Water----------	6	6	
Quaternary system:			
Recent and Pleistocene series:			
Muck, organic, fibrous, and silty organic sand----------	8	14	
Sand, fine, gray, with trace of rock fragments, small gravel, and shells----------	20	34	
Clay, soft, medium, gray, with trace of rock fragments-------	20	54	
Clay, stiff, gray, with trace of rock fragments and small gravel----------	6	60	

Well 36/8W-6D3

Type of record: Driller's log. Altitude: 589 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; gypsum, brick, and sand; trace of organic material-----	12	12	
Silt, organic, with root matter and some mill waste----------	7	19	
Sand, fine, gray----------	20	39	
Clay, gray----------	3	42	

Well 36/8W-6D4

Type of record: Driller's log. Altitude: 576 feet.

Water----------	7	7	
Quaternary system:			
Recent and Pleistocene series:			
Silt, organic, and sand--------	10	17	
Sand, fine, brown----------	12	29	
Sand, medium to coarse, brown, and fine gravel----------	4	33	
Clay, soft, silty, gray--------	4	37	
Clay, medium, silty, gray-------	12	49	
Clay, stiff, silty, gray--------	7	56	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-6H1

Type of record: Driller's log. Altitude: 590 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	15	15	
Sand, medium, gray	6	21	
Sand, fine, gray	5	26	
Sand, very fine, gray	10	36	

Well 36/8W-9E3

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy, coarse	10	10	
Gravel, fine	4	14	
Sand, coarse	9	23	
Sand, fine	13	36	
Clay	6	42	

Well 36/8W-9H1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, very fine, dolomitic, gray	34	34	
Clay, very dolomitic, gray	78	112	
Devonian system:			
Middle Devonian? series:			
Dolomite, gray, brown, and black	11	123	
Dolomite, gray, brown, and black	10	133	
Silurian system:			
Middle Silurian series:			
Limestone, dolomitic, light-gray to brown and black	17	150	
Dolomite, gray	5	155	
Shale, dolomitic, blue-gray	3	158	
Dolomite, hard and soft layers, light-gray to white	124	282	
Dolomite, light-gray	18	300	
Dolomite, light-gray to white	20	320	
Dolomite, white	15	335	
Dolomite, hard and soft layers, white and light-gray	52	387	
Dolomite, hard and soft layers, white and light-gray	120	507	
Dolomite, light-gray to light-brown, with shale layers	43	550	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-10D1

Type of record: Driller's log. Altitude: 600 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill dirt	4	4	
Sand, fine	24	28	
Clay with little sand	12	40	
Clay, silty	48	88	

Well 36/8W-11B1

Type of record: Driller's log. Altitude: 602 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	22	22	
Sand, fine to coarse, gray	10	32	
Sand, fine, gray, with layers of peat and decayed wood	15	47	
Clay, soft, silty, organic, gray	16	63	
Clay, stiff, gray	49	112	
Clay, hard, very stiff, brown, with trace of gravel	19	131	

Well 36/8W-11B3

Type of record: Driller's log. Altitude: 602 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam, sandy, organic matter, black	2	2	
Sand, fine, gray	11	13	
Sand, fine to coarse, gray, stratified	24	37	
Sand, fine to medium, gray, with layers of brown peat	7	44	
Clay, soft, highly organic, gray, varved	10	54	
Sand, coarse, silty, clayey, gray, with fine gravel and shale fragments	12	66	

Well 36/8W-11G1

Type of record: Driller's log. Altitude: 629 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	31	31	
Sand, fine to medium, gray, with layers of coarse sand and trace of shells	28	59	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-11G1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, stiff to medium, silty, sandy, gray, with some shale fragments	81	140	
Clay, hard, silty, gray, with some shale fragments	7	147	

Well 36/8W-11G2

Type of record: Driller's log. Altitude: 618 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil, sandy	1	1	
Sand, fine to medium, brown	22	23	
Gravel, fine to medium, brown, and gray sand	26	49	
Clay, organic, black, with decayed vegetable matter	1	50	
Clay, blue, gray	4	54	
Clay, hard, brown and gray	8	62	

Well 36/8W-11G4

Type of record: Driller's log. Altitude: 607 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; fine to medium sand	2	2	
Peat	2	4	
Sand, fine to medium, brown	5	9	
Sand, fine to medium, gray	19	28	
Sand, fine, gray	7	35	
Silt, highly organic, dark-gray	2	37	
Clay, medium stiff, gray	56	93	
Clay, hard, stiff, silty, gray, with alternate silt layers	42	135	
Sand, coarse, very hard, clayey, with shale fragments	10	145	
Clay, hard, silty, with shale fragments	9	154	
Silurian system:			
Middle Silurian series:			
Limestone, broken	6	160	Dolomite or dolomitic limestone.
Limestone, hard	10	170	Do.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-11H3

Type of record: Driller's log. Altitude: 607 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; fine to medium, brown sand	3	3	
Peat	1	4	
Sand, fine to medium, brown, and coarse sand and gravel; stratified	19	23	
Sand, fine to medium, gray	11	34	
Organic matter	2	36	
Clay, soft to stiff, gray	58	94	
Clay, stiff, gray, with trace of shale fragments	8	102	

Well 36/8W-12G1

Type of record: Driller's log. Altitude: 635 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, loose, fine to medium, brown	36	36	
Sand, fine to medium, brown	5	41	
Sand, fine to medium, very dense, brown	25	66	
Clay, silty, gray and brown, with small gravel noted	4	70	

Well 36/8W-12G2

Type of record: Driller's log. Altitude: 624 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown, with some silt	27	27	
Sand, fine to medium, silty, brown	5	32	
Sand, fine to coarse, silty, gray, with some small gravel	20	52	
Clay, stiff, silty, gray, with some small gravel and trace of sand	8	60	

Well 36/8W-12G5

Type of record: Driller's log. Altitude: 618 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, medium to fine, brown	24	24	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-12G5--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, medium to fine, silty, gray, with small gravel	14	38	
Sand, medium to fine, silty, brown and gray, with small gravel	6	44	
Sand, loose, brown, with seams of gray silty peat	3	47	
Clay, stiff, silty, blue, with small gravel	4	51	
Clay, very stiff, silty, brown and gray, with small gravel	4	55	

Well 36/8W-12G6

Type of record: Driller's log. Altitude: 633 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, medium, brown, with some silt	32	32	
Sand, fine, silty, brown, with some small gravel	16	48	
Sand, fine to coarse, silty, gray, with small gravel	9	57	
Sand, fine, brown, with thin layers of black silt	2	59	
Clay, stiff, gray, with some sand and small rock fragments	6	65	

Well 36/8W-12G7

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, medium, brown, with some silt	42	42	
Sand, fine, brown, with some silt	14	56	
Sand, fine to coarse, brown, with little gravel	7	63	
Sand, fine, silty, gray, with small gravel and trace of clay	5	68	
Sand, fine, silty, gray and brown	6	74	
Clay, sandy, silty, blue, with small rock fragments	1	75	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-12H1

Type of record: Driller's log. Altitude: 622 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, loose, brown	10	10	
Sand, fine to medium, brown, with silt noted	10	20	
Sand, fine to medium, dense, brown	6	26	
Sand, medium to coarse, very dense, brown	10	36	
Sand, fine to medium, very dense, brown	4	40	
Sand, medium to coarse, very dense, brown	6	46	
Sand, fine to medium, brown, with small seams of gray clay and decomposed wood	4	50	
Clay, stiff, silty, brown and gray	10	60	

Well 36/8W-12K1

Type of record: Driller's log. Altitude: 612 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	26	26	
Sand, medium, gray, with small gravel and gray soft silty peat	2	28	
Sand, medium to fine, silty, gray, with small gravel	10	38	
Sand, medium to coarse, silty, brown and gray, with small gravel	3	41	
Peat, medium, sandy, gray	5	46	
Clay, stiff, silty, blue	9	55	

Well 36/8W-12K2

Type of record: Driller's log. Altitude: 611 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	32	32	
Sand, medium to fine, silty, gray	6	38	
Peat, soft, silty, gray	5	43	
Clay, stiff, silty, blue	5	48	
Clay, stiff, brown and gray, with small gravel noted	1	49	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-13H1

Type of record: Driller's log. Altitude: 593 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Muck	3	3	
Loam and sand	4	7	
Sand, gray	4	11	
Clay, gray	19	30	

Well 36/8W-13J6

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam and sand	7	7	
Sand, very fine, gray	19	26	
Clay, gray, and sand	24	50	

Well 36/8W-13K1

Type of record: Driller's log. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam and sand	7	7	
Sand, very fine, gray	18	25	
Clay, gray	5	30	

Well 36/8W-13K4

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	9	9	
Loam and sand	7	16	
Sand, very fine, gray	14	30	

Well 36/8W-13L1

Type of record: Driller's log. Altitude: 594 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay and loam	9	9	
Sand, gray	12	21	
Clay, hard, gray	9	30	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-13H1

Type of record: Driller's log. Altitude: 593 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Muck	3	3	
Loam and sand	4	7	
Sand, gray	4	11	
Clay, gray	19	30	

Well 36/8W-13J6

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam and sand	7	7	
Sand, very fine, gray	19	26	
Clay, gray, and sand	24	50	

Well 36/8W-13K1

Type of record: Driller's log. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam and sand	7	7	
Sand, very fine, gray	18	25	
Clay, gray	5	30	

Well 36/8W-13K4

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	9	9	
Loam and sand	7	16	
Sand, very fine, gray	14	30	

Well 36/8W-13L1

Type of record: Driller's log. Altitude: 594 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay and loam	9	9	
Sand, gray	12	21	
Clay, hard, gray	9	30	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-14N1

Type of record: Driller's log. Altitude: 592 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Muck and marl----------	9	9	
Sand, very fine, gray----------	10	19	
Clay, hard, gray----------	16	35	

Well 36/8W-15N1

Type of record: Driller's log. Altitude: 599 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand fill----------	10	10	
Muck----------	2	12	
Sand, gray----------	15	27	
Clay, gray----------	20	47	

Well 36/8W-15P1

Type of record: Driller's log. Altitude: 588 feet.

Quaternary system:			
Recent and Pleistocene series:			
Loam and muck----------	6	6	
Clay, soft, gray, and gravel----	24	30	Fine sand at 60 feet.

Well 36/8W-15P2

Type of record: Driller's log. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; sand, brown----------	4	4	
Loam----------	5	9	
Clay, soft, gray, with some gray fine sand----------	21	30	

Well 36/8W-16M1

Type of record: Driller's log. Altitude: 594 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; sand----------	6	6	
Muck----------	7	13	
Sand, silty, gray----------	9	22	
Clay, gray----------	23	45	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-16P1

Type of record: Driller's log. Altitude: 595 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; sand	7	7	
Muck	7	14	
Sand, silty, gray	7	21	
Clay, gray	24	45	

Well 36/8W-16P4

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand and loam	2	2	
Sand	6	8	
Sand and muck	2	10	
Sand	10	20	
Marl	4	24	
Clay, gray	5	29	

Well 36/8W-16Q1

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand and loam	2	2	
Sand	5	7	
Sand and muck	4	11	
Marl	9	20	
Clay and marl	4	24	
Clay, gray	5	29	

Well 36/8W-16Q2

Type of record: Driller's log. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck	5	5	
Muck and marl	2	7	
Marl	5	12	
Clay, gray	5	17	

Well 36/8W-16Q4

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; sand	6	6	
Muck	8	14	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-16Q4--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, silty, gray	7	21	
Clay, gray	24	45	

Well 36/8W-16R1

Type of record: Driller's log. Altitude: 599 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; sand	14	14	
Muck	4	18	
Sand, gray	11	29	
Clay, gray	18	47	

Well 36/8W-17J1

Type of record: Driller's log. Altitude: 594 feet.

Quaternary system:			
Recent and Pleistocene series:			
Gravel and sand	2	2	
Fill; sand	6	8	
Muck	6	14	
Sand, silty, gray	4	18	
Clay, gray	26	44	

Well 36/8W-21B1

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand and loam	2	2	
Sand	6	8	
Sand and muck	4	12	
Marl	8	20	
Clay and marl	2	22	
Clay, gray	7	29	

Well 36/8W-21C5

Type of record: Driller's log. Altitude: 596 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand and loam	2	2	
Sand	6	8	
Sand and muck	2	10	
Marl	10	20	
Clay and marl	3	23	
Clay, gray	6	29	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-23R1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	20	20	
Sand, gray, with some fine gravel	15	35	Blue clay at 35 feet.

Well 36/8W-24R1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	3	3	
Sand, brown	3	6	
Muck	3	9	
Sand, muddy, gray	4	13	
Sand, fine, gray	5	18	
Sand, coarse, and broken shale	2	20	Clay at 20 feet.

Well 36/8W-25M2

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	34	34	
Marl	9	43	
Clay, blue	15	58	
Marl	88	146	Bedrock? at 146 feet.

Well 36/8W-25M3

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, blue	41	41	
Marl and silt	75	116	

Well 36/8W-29G1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil and yellow soft sand	12	12	
Sand, firm, yellow-white	3	15	
Clay, soft, gray	5	20	
Sand, firm, gray	7	27	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-32J1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	20	20	
Sand, dark-gray	1	21	
Clay, soft, blue	6	27	
Sand, fine, black, and gravel	9	36	
Clay, soft, blue	14	50	
Clay, hard, blue	4	54	
Sand, gray, with gravel	14	68	
Sand, coarse, gray	9	77	

Well 36/8W-32K1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	27	21	
Sand, dark-brown	6	27	
Sand, black	6	33	
Gravel	3	36	
Clay, hard, blue	4	40	
Clay, soft, blue	18	58	
Sand, gray, with small gravel	4	62	
Sand, gray	5	67	

Well 36/8W-32K2

Type of record: Driller's log. Altitude: 665 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	21	21	
Sand, light-brown	7	28	
Sand, black, and gravel	4	32	
Gravel	2	34	
Clay, soft, blue	24	58	
Hardpan; blue clay and gravel	3	61	
Gravel, heavy	9	70	
Gravel, small, and sand	2	72	

Well 36/8W-33E1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	21	21	
Clay, soft, blue	6	27	
Sand, black, and gravel	3	30	
Clay, blue	20	50	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/8W-33E1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Hardpan; blue clay----------	6	56	
Sand and gravel----------	7	63	

Well 36/8W-35L1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay, blue----------	57	57	
Hardpan----------	2	59	Mostly clay.
Sand, fine----------	16	75	
Sand, medium----------	12	87	

Well 36/9W-1A1

Type of record: Driller's log. Altitude: 588 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil, root matter, and cinder fill----------	1	1	
Sand, fine to medium----------	35	36	
Clay, soft, medium-stiff, gray, with trace of rock fragments--	26	62	

Well 36/9W-1B1

Type of record: Driller's log. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, organic, dark-brown, and root matter----------	2	2	
Sand, fine, brown, with trace of organic matter----------	3	5	
Sand, fine, brown----------	5	10	
Sand, fine to medium, gray, stratified, with trace of coarse sand and shell fragments----------	15	25	

Well 36/9W-1D1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, fine, tan----------	11	12	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-1D1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, medium to fine, brown, faintly stratified, with trace of shell fragments	24	36	
Sand, medium to fine, gray, stratified, with trace of shell fragments	9	45	
Silt and clay; gray, with trace of coarse sand and limestone fragments	1	46	

Well 36/9W-2A4

Type of record: Driller's log. Altitude: 588 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, tan	2	2	
Sand, medium to fine, brown, with trace of shell fragments	8	10	
Sand, medium to fine, gray, stratified, with dark seams and trace of shells	25	35	
Clay, hard, stiff, gray, and silt; with trace of shale fragments	13	48	
Clay, medium, gray, and silt; trace of shale fragments	15	63	
Silt, very stiff, clayey, gray	10	73	
Silt, stiff, gray, and clay; with some coarse to fine sand and trace of fine gravelly shale fragments	10	83	
Silt, very hard, gray, and clay; with coarse to fine sand, little fine gravel, shale, and limestone fragments	8	91	

Well 36/9W-2B1

Type of record: Driller's log. Altitude: 587 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	1	1	
Sand, fine, tan	7	8	
Sand, fine, gray	24	32	
Clay, soft to medium, gray, with trace of shale and coarse sand	8	40	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-2B1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, medium to stiff, silty, gray, with trace of coarse sand	15	55	
Clay, soft to medium, gray, with trace of sand and fine gravel	18	73	
Clay, stiff, silty, gray, with trace of sand and gravel	5	78	
Clay, very hard, sandy, gray, with some gravel and shale fragments	9	87	

Well 36/9W-2B4

Type of record: Driller's log. Altitude: 583 feet.

Water	7	7	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, gray, stratified, with thin dark seams and traces of shell shale, and limestone fragments	22	29	
Clay, gray, and silt; with trace of coarse sand, fine gravel, shale, and limestone fragments	11	40	

Well 36/9W-2C3

Type of record: Driller's log. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; cinders, slag, sand	1	1	
Sand, medium to fine, brown, with trace of shell fragments	10	11	
Sand, medium to fine, gray, stratified, with trace of shell fragments and dark seams	27	38	
Clay, medium-gray, and silt; with trace of sand, fine gravel, shale, and limestone fragments	11	49	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-2C4

Type of record: Driller's log. Altitude: 589 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil and sand	2	2	
Sand, fine to medium, brown	6	8	
Sand, fine to medium, gray	21	29	
Clay, soft, gray, with trace of coarse sand and shell fragments	14	43	
Clay, medium-stiff, gray, with trace of sand and fine gravel	25	68	
Clay, very hard, silty, with trace of sand	13	81	
Silurian system:			
Middle Silurian series:			
Limestone with fissures	5	86	Show of oil; dolomite or dolomitic limestone.

Well 36/9W-2D1

Type of record: Driller's log. Altitude: 591 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, dark, organic, and gravel fill	4	4	
Sand, fine to medium, brown	5	9	
Sand, fine to medium, gray	25	34	
Clay, medium-stiff, gray, with trace of silt and rock fragments	25	59	
Clay, very soft	6	65	
Clay, medium-stiff, gray, with trace of rock fragments	25	90	
Clay, hard, silty, gray, with small gravel and coarse sand	41	131	
Silurian system:			
Middle Silurian series:			
Limestone, gray, and a sandstone rock	10	141	

Well 36/9W-8J1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand, with some red small gravel	7	9	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-8J1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, with some gray small gravel	6	15	
Clay, gray	45	60	

Well 36/9W-11D1

Type of record: Driller's log. Altitude: 595 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	33	33	
Clay	82	115	
Gravel	8	123	
Clay	4	127	
Glacial drift	4	131	
Silurian system:			
Middle Silurian series:			
Rock	110	241	Dolomite or dolomitic limestone.
Shale	11	252	
Rock	30	282	Dolomite or dolomitic limestone.

Well 36/9W-14H2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, yellow	3	3	
Sand, fine, gray	17	20	
Gravel, coarse, and sand	3	23	
Sand, fine, gray	2	25	
Clay	5	30	

Well 36/9W-14K1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	23	23	
Clay	62	85	
Gravel	18	103	
Clay	31	134	
Glacial drift	19	153	
Silurian system:			
Middle Silurian series:			
Rock	25	178	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-14K2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	28	28	
Clay	60	88	
Gravel	8	96	
Clay and gravel	44	140	
Sand	13	153	
Silurian system:			
Middle Silurian series:			
Rock	47	200	Dolomite or dolomitic limestone.

Well 36/9W-14P1

Type of record: Driller's log. Altitude: 600 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, sandy	105	105	
Clay	25	130	
Gravel	6	136	
Boulder or shell rock	2	138	
Gravel	4	142	
Silurian system:			
Middle Silurian series:			
Rock	68	210	Dolomite or dolomitic limestone.

Well 36/9W-19G1

Type of record: Driller's log. Altitude: 610 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil, black	1	1	
Clay, yellow	6	7	
Clay, soft, gray, with some gravel	41	48	
Clay, hard, gray	21	69	
Clay, gravelly	13	82	
Clay	9	91	
Clay, hard	9	100	

Well 36/9W-19K1

Type of record: Driller's log. Altitude: 620 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil, brown, and sand	5	5	
Sand, dirty, gray	6	11	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-19K1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue----------	47	58	
Clay, soft, sandy----------	29	87	
Clay, hard, with some gravel----	7	94	

Well 36/9W-19K2

Type of record: Driller's log. Altitude: 620 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, red----------	3	3	
Sand, gray----------	5	8	
Sand, fine----------	3	11	
Clay, soft----------	1	12	
Clay, sandy, mucky----------	17	29	
Clay, stiff, gray----------	29	58	
Clay, hard, brown----------	12	70	
Clay, gravelly, gray----------	25	95	
Mud, soft, slushy----------	7	102	
Mud and some gravel----------	3	105	
Clay, soft, smooth----------	5	110	
Clay, hard, black----------	9	119	
Clay, and gravel----------	5	124	
Clay, sandy----------	5	129	
Clay, hard, and gravel----------	5	134	
Clay, hard, with rock----------	2	136	

Well 36/9W-19M1

Type of record: Driller's log. Altitude: 620 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy----------	4	4	
Sand, fine----------	4	8	
Clay, soft----------	22	30	
Clay, hard----------	6	36	
Clay, gritty----------	9	45	
Clay, gravelly----------	7	52	
Clay, hard, gritty----------	3	55	
Gravel, soft, clayey----------	6	61	
Clay, hard, gritty----------	46	107	

Well 36/9W-20L1

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Record missing----------	8	8	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-20L1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, sandy, yellow	2	10	
Sand, mucky	5	15	
Clay	96	111	

Well 36/9W-20M1

Type of record: Driller's log. Altitude: 625 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	9	9	
Clay, blue	1	10	
Sand, fine, gray	5	15	
Clay, soft	30	45	
Clay, hard	46	91	
Sand	2	93	
Clay, gravelly	5	98	
Clay	19	117	

Well 36/9W-20N1

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and sand	2	2	
Sand	3	5	
Quicksand	4	9	
Clay, soft, gritty	35	44	
Clay, hard	20	64	
Clay, soft, gravelly	27	91	
Clay, mushy, gritty	4	95	
Record missing	2	97	
Clay, silty	1	98	
Sand and gravel; with some clay	3	101	
Clay, hard	2	103	

Well 36/9W-20N2

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and sand	12	12	
Clay	69	81	
Gravel	1	82	
Clay, hard	13	95	
Boulders and clay	3	98	
Clay, hard	16	114	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-20N3

Type of record: Driller's log. Altitude: 610 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil and sand	10	10	
Clay, soft	20	30	
Clay, tough, hard	35	65	
Boulders	4	69	
Clay	31	100	
Gravel, hard	4	104	

Well 36/9W-20N4

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and sand, yellow	6	6	
Quicksand, muddy	6	12	
Clay, soft, gray	30	42	
Clay, hard, gritty, gray	46	88	
Clay, soft, mucky	8	96	
Gravel, coarse	6	102	
Clay and gravel	1	103	
Sand, gray, and gravel	2	105	
Gravel, fine sand, and clay	3	108	
Clay	6	114	

Well 36/9W-20N5

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and sand	10	10	
Clay, soft	15	25	
Clay, tough	65	90	
Clay, gritty	9	99	
Clay, hard	11	110	

Well 36/9W-24C1

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Glacial drift	123	123	
Silurian system:			
Middle Silurian series:			
Limestone	447	570	Dolomite or dolomitic limestone.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-24C1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Upper Ordovician series:			
Shale	210	780	
Middle Ordovician series:			
Limestone	322	1,102	
Sandstone	48	1,150	
Lower Ordovician? series:			
Dolomite?	150	1,300	

Well 36/9W-24C2

Type of record: Driller's log. Altitude: 600 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	24	24	
Clay	67	91	
Sand	2	93	
Hardpan and boulders	31	124	
Silurian system:			
Middle Silurian series:			
Limestone	296	420	Dolomite or dolomitic limestone.

Well 36/9W-27H1

Type of record: Driller's log. Altitude: 610 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and muck	10	10	
Clay, blue	54	64	
Sand, fine	23	87	
Clay, sandy	4	91	

Well 36/9W-27Q1

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and muck	4	4	
Clay, blue	20	24	
Sand, fine	7	31	
Clay, sandy	26	57	
Sand, medium	12	69	
Clay, sandy	11	80	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-28B1

Type of record: Driller's log. Altitude: 615 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil and sand	6	6	
Clay	22	28	
Sand, medium	13	41	
Sand, fine	1	42	

Well 36/9W-29E1

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil and sand	6	6	
Clay, soft and tough, gritty	87	93	
Sand, fine	5	98	
Clay, very hard	4	102	

Well 36/9W-31D1

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	14	14	
Sand, gray	9	23	
Clay, blue	2	25	
Quicksand	5	30	
Clay, blue	2	32	
Quicksand	4	36	
Clay, gravelly	3	39	
Gravel and boulders	3	42	

Well 36/9W-35L1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand	17	17	
Clay, medium	19	36	
Sand, muddy	4	40	
Clay, hard	15	55	
Sand, fine	7	62	
Sand, medium	3	65	
Sand, fine	20	85	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-35L2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	13	13	
Clay, blue	20	33	
Sand, fine	20	53	
Clay, sandy	7	60	
Sand, medium	10	70	
Sand, fine	14	84	

Well 36/9W-35L4

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	17	17	
Clay	6	23	
Sand	2	25	
Clay	30	55	
Sand, fine	35	90	
Clay	10	100	

Well 36/9W-35M1

Type of record: Driller's log. Altitude: 625 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, medium	18	18	
Clay, blue	14	32	
Sand, medium	18	50	
Clay, sandy	28	78	

Well 36/9W-35N1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil, brown, and sand	7	7	
Sand, gray, and gravel	12	19	
Clay, gray	4	23	
Sand, dirty, gray	2	25	
Sand, coarse, gray	4	29	
Clay	1	30	
Sand	2	32	
Clay	2	34	
Sand	26	60	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/9W-35N2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	17	17	
Clay	14	31	
Gravel and clay	1	32	
Clay	3	35	
Clay, gravelly	5	40	
Sand, medium	20	60	Fine sand at 60 feet.

Well 36/9W-35N3

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

Quaternary system:			
Recent and Pleistocene series:			
Fill	4	4	
Sand, dirty	11	15	
Clay	13	28	
Sand	5	33	
Clay	5	38	
Sand	33	71	

Well 36/9W-35N4

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand, brown	16	18	
Clay and gravel	16	34	
Sand, fine	2	36	
Clay	3	39	
Sand	2	41	
Clay	1	42	
Clay and gravel	8	50	
Sand	32	82	

Well 36/9W-35N9

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand, muddy	17	19	
Clay, blue	33	52	
Sand, fine	29	81	
Sand, fine, muddy	3	84	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/10W-12D1

Type of record: Driller's log. Altitude: 603 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	5	5	
Gravel	14	19	
Sand and gravel; mixed	50	69	
Clay mixed with little sand	20	89	
Gravel	21	110	
Silurian system:			
Middle Silurian series:			
Rock	150	260	Dolomite or dolomitic limestone.

Well 36/10W-24B1

Type of record: Driller's log. Altitude: 617 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	28	28	
Clay	24	52	
Sand	2	54	
Clay	29	83	
Sand and gravel	11	94	
Glacial drift	15	109	
Silurian system:			
Middle Silurian series:			
Rock	74	183	Dolomite or dolomitic limestone.

Well 36/10W-24E1

Type of record: Driller's log. Altitude: 625 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Soil and sand, red	5	5	
Sand, fine	2	7	
Muck, black	3	10	
Clay, soft, gray	21	31	
Clay, hard	9	40	
Clay, soft	21	61	
Sand, fine, mucky, black	6	67	
Clay, gravelly	4	71	
Clay, soft, gritty	9	80	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/10W-24G1

Type of record: Driller's log. Altitude: 620 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	40	40	
Clay	85	125	
Silurian system:			
Middle Silurian series:			
Lime, soft	65	190	
Lime, soft, white	210	400	

Well 36/10W-25Q1

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	4	4	
Clay, blue	18	22	
Gravel, sandy	8	30	
Gravel and rock	18	48	
Gravel, cemented	6	54	
Silurian system:			
Middle Silurian series:			
Limestone	339	393	
Limestone, hard	51	444	
Rock, soft, blue	3	447	
Limestone, hard	38	485	

Well 36/10W-36J1

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Glacial drift	145	145	
Gravel	10	155	
Silurian system:			
Middle Silurian series:			
Limestone	405	560	
Limestone and shale	5	565	

Well 36/10W-36K1

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and black sandy clay	4	4	
Clay, sandy, brown and gray	6	10	
Clay, sandy, gray, with small angular stones	2	12	
Clay, gray	3	15	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 36/10W-36K1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, gray, with small angular stones	4	19	
Sand, silty, gray	2	21	
Sand, silty, brown	7	28	
Clay, sandy, gray	4	32	
Silt, sandy, gray, with trace of clay	4	36	
Sand, silty, brown	5	41	
Sand, silty, gray	4	45	
Clay, sandy, gray, with small angular stones	5	50	

Well 36/10W-36K2

Type of record: Driller's log. Altitude: 615 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and black sandy clay	1	1	
Clay, brown and gray, with stones	5	6	
Clay, brown	5	11	
Clay, sandy, gray	2	13	
Clay, gray	12	25	
Clay, gray, with layers of silt	6	31	
Silt, sandy, gray	2	33	
Silt, gray, with clay	3	36	
Silt, sandy, gray	3	39	
Silt, gray	1	40	
Sand, silty, gray	5	45	
Clay, sandy, gray, with angular stones	5	50	

Well 37/8W-21G1

Type of record: Driller's log. Altitude: 580 feet.

Water	40	40	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	8	48	
Clay, soft, stiff, gray, with some gravel	55	103	
Hardpan	10	113	Bedrock at 113 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/8W-21Q1

Type of record: Driller's log. Altitude: 580 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Water	40	40	
Quaternary system:			
Recent and Pleistocene series:			
Sand and gravel	13	53	
Clay, soft to stiff, gray	52	105	
Hardpan	7	112	Bedrock at 112 feet.

Well 37/8W-28B1

Type of record: Driller's log. Altitude: 580 feet.

Water	40	40	
Quaternary system:			
Recent and Pleistocene series:			
Sand and gravel	12	52	
Clay, soft to stiff, gray	39	91	
Hardpan	19	110	Bedrock at 110 feet.

Well 37/8W-28K1

Type of record: Driller's log. Altitude: 580 feet.

Water	37	37	
Quaternary system:			
Recent and Pleistocene series:			
Sand and gravel	19	56	
Clay, soft to hard, gray	48	104	
Hardpan	5	109	Bedrock at 109 feet.

Well 37/8W-28N1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; slag and cinders	24	24	
Sand, fine, light-gray	43	67	
Clay, plastic, gray, with pebbles	3	70	

Well 37/8W-28Q1

Type of record: Driller's log. Altitude: 580 feet.

Water	11	11	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	31	42	
Gravel, small	2	44	
Clay, soft to hard	55	99	
Hardpan	11	110	Bedrock at 110 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/8W-29K1

Type of record: Driller's log. Altitude: 590 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; slag, cinders, and sand---	38	38	
Sand, fine, gray, with trace of organic matter and shells-----	25	63	
Clay, plastic, gray, with trace of fine pebbles----------	7	70	

Well 37/8W-31R3

Type of record: Driller's log. Altitude: 593 feet.

Quaternary system:			
Recent and Pleistocene series:			
Cinders and slag----------	1	1	
Fill; cinders, slag, wood, peat, and rock fragments------	13	14	
Sand, fine, dense to very dense, brown, with shale and shell fragments----------	22	36	
Sand, fine, dense, gray, with shale and shell fragments-----	8	44	
Clay, soft, gray, with trace of shale and gravel fragments----	24	68	
Clay, stiff, gray, with medium-stiff brown and green streaks and trace of sand and fine gravel----------	37	105	
Clay, hard, silty, gray, with trace of sand and fine gravel-	11	116	Plastic when wet.

Well 37/8W-31R4

Type of record: Driller's log. Altitude: 587 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; slag, cinders, and sand---	4	4	
Peat and sand----------	2	6	
Sand, fine, gray, with pockets of organic matter----------	10	16	
Sand, fine, gray----------	13	29	

Well 37/8W-32N3

Type of record: Driller's log. Altitude: 594 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/8W-32N3--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; sand, cinders, concrete, and coal; very loose	22	23	
Silt, organic	3	26	
Sand, medium, gray	5	31	
Sand, fine to medium, gray, with trace of silt	15	46	
Sand, coarse, and fine gravel	3	49	
Clay, soft to medium, gray, with few sand, fine gravel, and shale fragments	10	59	

Well 37/8W-32N5

Type of record: Driller's log. Altitude: 588 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck and fill	5	5	
Fill; sand, gravel, and concrete	17	22	
Sand, fine to medium, gray, stratified, with trace of shell fragments	19	41	
Clay, soft, gray, with few small gravel	16	57	
Clay, stiff, gray, with trace of small gravel	25	82	
Clay, soft, gray, with trace of small gravel	6	88	
Clay, stiff, gray, with trace of small gravel and some rock fragments	16	104	
Clay, hard, silty, gray, with trace of small gravel and rock fragments	13	117	

Well 37/8W-32P1

Type of record: Driller's log. Altitude: 586 feet.

Quaternary system:			
Recent and Pleistocene series:			
Silt, organic, black	3	3	
Silt, organic, black, and sand	2	5	
Sand, fine, gray, and organic silt	7	12	
Sand, medium to fine, gray, with trace of shell fragments and silt	28	40	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/8W-32P1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, gray, and silt, with some coarse to fine sand----------	10	50	

Well 37/8W-32Q1

Type of record: Driller's log. Altitude: 584 feet.

Water----------	8	8	
Quaternary system:			
Recent and Pleistocene series:			
Silt, clayey, red-brown---------	9	17	
Peat----------	1	18	
Sand, fine to medium, gray------	18	36	
Sand, coarse, and medium gravel-	1	37	
Clay, soft to medium, gray, with trace of medium sand-----	22	59	
Clay, stiff, gray, with trace of small gravel and occasional silt pockets----------	40	99	
Clay, hard, gray, and large rock fragments; some small to large gravel and few layers of shale hardpan----------	9	108	

Well 37/8W-32R1

Type of record: Driller's log. Altitude: 588 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill, silty, organic----------	1	1	
Sand, medium, brown and green, with trace of shells----------	7	8	
Sand, fine to coarse, gray, stratified, with trace of shells----------	15	23	
Sand, fine to medium, gray, with trace of silt----------	10	33	
Sand, gray, and gravel; stratified----------	8	41	
Clay, gray----------	11	52	

Well 37/8W-32R2

Type of record: Driller's log. Altitude: 587 feet.

Water----------	1	1	
Quaternary system:			
Recent and Pleistocene series:			
Silt, clayey, red-brown---------	3	4	

Well 37/8W-32R2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Organic matter	1	5	
Sand, fine to medium, gray, stratified	7	12	
Peat, sandy	3	15	
Sand, medium to coarse, gray	5	20	
Sand, fine, gray, with trace of gravel	16	36	
Sand and gravel	1	37	
Clay, soft, gray, with trace of medium sand and gravel	13	50	

Well 37/8W-33B1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	56	56	
Sand, coarse, and gravel	4	60	
Clay, soft to stiff, gray	54	114	Hardpan at 114 feet.

Well 37/8W-33G1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	49	49	
Clay, soft to stiff, gray	36	85	
Clay, soft, gray	12	97	
Clay, tough, gray	13	110	
Hardpan	15	125	Bedrock at 125 feet.

Well 37/8W-33G2

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	55	55	
Clay, soft to stiff	60	115	
Hardpan	13	128	Bedrock at 128 feet.

Well 37/8W-33K1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	49	49	
Clay, soft to stiff	31	80	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/8W-33K1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, stiff, with sand	10	90	
Clay, very stiff	22	112	
Hardpan	9	121	Bedrock at 121 feet.

Well 37/8W-33N3

Type of record: Driller's log. Altitude: 586 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill	8	8	
Silt, organic, dark-gray	6	14	
Sand, fine to medium, gray	10	24	
Sand, fine, gray, with trace of shell fragments	16	40	
Clay, soft to medium, gray, with trace of sand and small gravel	34	74	
Clay, stiff, gray, with trace of sand, fine gravel, and rock fragments	32	106	
Clay, very hard, silty, gray, with some coarse sand and fine gravel	16	122	
Silurian system:			
Middle Silurian series:			
Limestone, hard	6	128	Dolomite or dolomitic limestone.

Well 37/8W-33Q1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	38	38	
Clay, soft to medium-stiff, gray	28	66	
Clay, stiff, with shale and pea gravel	3	69	
Clay, very stiff	44	113	
Hardpan	8	121	Bedrock at 121 feet.

Well 37/8W-34C1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; slag and sand	3	3	
Sand, fine, brown	19	22	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/8W-34C1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, silty, gray	39	61	
Clay, silty, gray, with sand and gravel	76	137	
Rock, broken, and clay seams	2	139	Bedrock? at 139 feet.

Well 37/8W-34G1

Type of record: Driller's log. Altitude: 590 feet.

Concrete	2	2	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	6	8	
Sand, fine, gray	41	49	
Clay, sandy, silty, gray, and small gravel	6	54	
Clay, stiff, silty, gray, with small gravel	73	127	Dolomite or dolomitic limestone at 127 feet.

Well 37/8W-34H1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill and coal	1	1	
Sand, fine, brown	32	33	
Sand, fine to medium, gray	29	62	
Clay, silty, gray	88	150	Dolomite or dolomitic limestone at 150 feet.

Well 37/8W-34J1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill and coal	2	2	
Sand, fine, brown	12	14	
Sand, fine, brown, with trace of silt	23	37	
Sand, fine, gray	22	59	
Silt, inorganic, sandy, gray	4	63	
Clay, silty, gray, with sand and gravel	89	152	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/8W-34J1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Rock, broken----------	2	154	Dolomite or dolomitic limestone.

Well 37/8W-34K1

Type of record: Driller's log. Altitude: 590 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Concrete----------	2	2	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown-----	2	4	
Sand, fine to medium, gray, with some silt----------	43	47	
Clay, silty, gray, with fine sand and small gravel---------	51	98	
Silt, inorganic, gray----------	6	104	
Clay, stiff, silty, gray, with trace of sand----------	23	127	Dolomite or dolomitic limestone at 127 feet.

Well 37/8W-34K2

Type of record: Driller's log. Altitude: 590 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; slag----------	3	3	
Sand, fine, brown----------	19	22	
Sand, fine, gray, with trace of silt----------	29	51	
Clay, silty, gray, with trace of silt, sand, and gravel-----	81	132	Dolomite or dolomitic limestone at 132 feet.

Well 37/9W-7Q1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, black, and peat----------	3	3	
Sand, fine, silty, gray, with trace of fine gravel----------	9	12	
Sand, very fine, silty, gray, with trace of shells----------	12	24	
Clay, medium, blue----------	43	67	
Clay, hard, sandy, blue----------	10	77	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-7R1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill	9	9	
Sand, fine, silty, dirty, yellow	4	13	
Sand, fine, silty, yellow	7	20	
Sand, very fine, silty, gray	7	27	
Clay, medium, blue	41	68	
Clay, hard, silty, blue	21	89	

Well 37/9W-8Q1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill and soil	15	15	
Sand, fine	10	25	
Clay	69	94	
Devonian system:			
Upper Devonian series:			
Shale	2	96	
Silurian system:			
Middle Silurian series:			
Limestone, white	107	203	Dolomite or dolomitic limestone.
Limestone, brown	11	214	Do.
Limestone, white	341	555	Do.
Ordovician system:			
Upper Ordovician series:			
Shale and limestone, blue	169	724	
Middle Ordovician series:			
Limestone	302	1,026	
Sandstone, white	199	1,225	
Sandstone and shale	13	1,238	

Well 37/9W-9R1

Type of record: Sample study of bedrock by M. P. Myer, Illinois Geological Survey. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill	32	32	
Sand and mud	48	80	
Mud and gravel	68	148	
Silurian system:			
Middle Silurian series:			
Dolomite, very fine-grained, porous, light-brown	5	153	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-9R1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Dolomite, coarse, silty, light-gray, and mottled gray very fine dolomite; trace of clay, green sandy clay	2	155	
Dolomite, fine, porous, light-gray and mottled gray; trace of sandy clay; green at base	80	235	
Dolomite, very fine, light-buff to light-gray	20	255	
Dolomite, fine, porous, white	80	335	

Well 37/9W-14D1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	45	45	
Clay	111	156	
Silurian system:			
Middle Silurian series:			
Limestone	469	625	Dolomite or dolomitic limestone.
Ordovician system:			
Upper Ordovician series:			
Shale	145	770	
Middle Ordovician series:			
Limestone	335	1,105	
Sandstone	220	1,305	
Lower Ordovician? series:			
Limestone	110	1,415	
Sandstone, shale, and limestone	71	1,486	
Shale, sandy, and limestone	102	1,588	
Limestone, sandy	77	1,665	
Sandstone	20	1,685	

Well 37/9W-16K1

Type of record: Sample study; unconsolidated material by L. E. Workman, bedrock by F. T. Thwaites; formerly of Illinois Geological Survey. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Record missing	40	40	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-16K1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, slightly dolomitic, well sorted, buff, containing besides quartz grains much chert and igneous rock fragments; a few chert and dolomitic pebbles	5	45	
Clay, dolomitic, powdered, gray, containing scattered sand grains and Sporangites	15	60	
Gravel, clayey, fine, with pebbles averaging 1/8" diameter, composed of about 40% brown Sporangites shale, 35% greenish-gray dolomitic silty shale and siltstone, 20% buff weathered dolomite, and 5% igneous rock and very fine sandstone	30	90	
Till, dolomitic, gray, containing a few small pebbles of shale and some sand	10	100	
Till, dolomitic, gray, pebbly with shale and dolomite	10	110	
Silurian system:			
Middle Silurian series:			
Dolomite, light-gray to white	380	490	
Dolomite, very light-pinkish-gray, with green spots	30	520	
Dolomite, white, some light-pink; with white chert	40	560	
Dolomite, gray	10	570	
Ordovician system:			
Upper Ordovician series:			
Dolomite, shaly, blue	10	580	
Dolomite, light-gray	20	600	
Dolomite, light-gray and blue	10	610	
Shale, dolomitic, blue	10	620	
Dolomite, mottled gray and blue-	10	630	
Shale, dolomitic, blue	110	740	
Middle Ordovician series:			
Dolomite, gray	230	970	
Dolomite, gray, with blue spots-	30	1,000	
Dolomite, gray	50	1,050	
Dolomite, very sandy, gray	15	1,065	
Sandstone, fine to medium, white	55	1,120	
Sandstone, medium to coarse, white	10	1,130	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-16K1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Middle Ordovician series:			
Sandstone, medium to fine, white	30	1,160	
Conglomerate, pebbles of white chert in white, medium to fine, sandstone; green shale--	40	1,200	
Ordovician and Cambrian system; undifferentiated:			
Dolomite, gray----------	70	1,270	
Dolomite, light-gray and some light-pink----------	10	1,280	
Dolomite, light-gray----------	100	1,380	
Dolomite, very sandy, light-gray	10	1,390	
Dolomite, light-gray----------	80	1,470	
Sandstone, fine, very dolomitic, glauconitic, hard, gray-------	130	1,600	
Sandstone, coarse, dolomitic, light-gray----------	20	1,620	
Sandstone, medium, white--------	63	1,683	

Well 37/9W-17D1

Type of record: Driller's log. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill----------	4	4	
Sand, coarse, and gravel--------	17	21	
Sand, fine----------	3	24	

Well 37/9W-19M1

Type of record: Driller's log. Altitude: 582 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck and water----------	7	7	
Sand, fine, gray----------	15	22	
Clay, soft, gray----------	15	37	
Peat----------	1	38	
Clay, soft, gray----------	16	54	
Clay, gray----------	1	55	Rocks 1-3 inches.

Well 37/9W-19N2

Type of record: Driller's log. Altitude: 583 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, coarse, brown----------	4	5	
Sand, fine, brownish-gray-------	5	10	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-19N2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, medium-dense, gray--	13	23	
Clay, soft, gray----------	26	49	
Clay, tough to very hard, with small gravel and shale--------	12	61	

Well 37/9W-21E1

Type of record: Driller's log. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand----------	36	36	
Clay, blue----------	46	82	
Hardpan----------	3	85	
Quicksand----------	3	88	
Hardpan----------	7	95	
Silurian system:			
Middle Silurian series:			
Limestone----------	2	97	Dolomite or dolomitic limestone.

Well 37/9W-21E3

Type of record: Driller's log. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand----------	3	3	
Sand, medium to fine, with coarse gravel----------	10	13	
Sand, fine, with clay----------	4	17	
Sand, fine, gray----------	4	21	
Quicksand----------	5	26	
Clay, blue, with some pebbles---	4	30	
Clay, blue, with some pebbles and sand----------	3	33	
Clay, stiff, blue----------	7	40	
Clay, sandy, blue----------	19	59	

Well 37/9W-23R1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; slag and cinders----------	10	10	
Sand, fine, brown and gray------	35	45	
Clay, silty, gray, with shaly gravel----------	28	73	
Clay, soft----------	10	83	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-23R1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, stiff, silty----------	22	105	

Well 37/9W-24N1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; slag and cinders----------	32	32	
Sand, fine----------	17	49	
Clay, silty, gray----------	45	94	
Clay, stiff, silty----------	18	112	
Clay, very stiff, silty, with scattered gravel----------	35	147	Bedrock? at 147 feet.

Well 37/9W-24P1

Type of record: Driller's log. Altitude: 590 feet.

Water----------	20	20	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, silty, gray---------	18	38	
Clay, silty, gray----------	52	90	
Clay, hard, silty----------	34	124	
Silurian system:			
Middle Silurian series:			
Limestone, gray----------	12	136	Dolomite or dolomitic limestone.

Well 37/9W-25C1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, cemented----------	21	21	Slag.
Sand, fine----------	17	38	Clay at 38 feet.

Well 37/9W-26A1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; slag and cinders----------	4	4	
Sand, fine to coarse, brown-----	8	12	
Sand, fine, brown and gray------	28	40	
Clay, silty, gray, with sand and shaly gravel----------	52	92	
Clay, very stiff, silty, with scattered gravel----------	51	143	Bedrock at 143 feet.

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-28B1

Type of record: Driller's log. Altitude: 590 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	20	20	
Quicksand, gray	20	40	
Clay	114	154	
Silurian system:			
Middle Silurian series:			
Lime, gray	486	640	Dolomite or dolomitic limestone.
Ordovician system:			
Upper Ordovician series:			
Shale, gray	130	770	
Middle Ordovician series:			
Lime, gray	330	1,100	
Sandstone	245	1,345	
Ordovician and Cambrian system; undifferentiated:			
Rock, red, with layers of sandstone	185	1,530	
Lime	20	1,550	
Sandstone	10	1,560	
Lime, with quartz	10	1,570	
Lime, with breaks	50	1,620	
Sandstone	200	1,820	
Shale, gray	10	1,830	

Well 37/9W-28C1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	3	3	
Gravel	4	7	
Sand, fine	10	17	
Sand, extra fine	15	32	

Well 37/9W-29R1

Type of record: Sample study; bedrock by F. T. Thwaites, formerly of Illinois Geological Survey. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Drift	175	175	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-29R1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Silurian system:			
Middle Silurian series:			
Dolomite, gray----------	420	595	Flint at 520 feet; possibly includes some dolomitic limestone of Devonian age.
Ordovician system:			
Upper Ordovician series:			
Shale, clayey, limey, gray------	170	765	
Middle Ordovician series:			
Limestone, magnesian, gray to brownish, with pyrite and calcite----------	335	1,100	
Sandstone, fine to medium, limey, gray----------	85	1,185	
Ordovician and Cambrian system; undifferentiated:			
Limestone, magnesian, gray------	315	1,500	
Sandstone, medium, limey, gray, with green specks----------	50	1,550	

Well 37/9W-30D1

Type of record: Driller's log. Altitude: 584 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, coarse, loose, brown------	4	5	
Sand, fine, brownish-gray-------	5	10	
Sand, fine, gray----------	13	23	
Clay, soft, gray----------	26	49	
Clay, tough to very hard, gray, with small gravel and shale---	12	61	

Well 37/9W-30F3

Type of record: Driller's log. Altitude: 584 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, fine, tan----------	2	3	
Sand, fine to medium, gray, with trace of shale----------	18	21	
Clay, stiff, gray, and silt; with trace of sand, shale fragments, and orange clay----	12	33	
Clay, medium, gray----------	10	43	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-30F3--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, very stiff, gray, and silt; with trace of fine to coarse sand, fine gravel, and shale fragments----------	10	53	
Silt, very hard, gray, and clay; with fine to coarse sand and trace of gray shale----------	10	63	
Silt, clayey----------	2	65	

Well 37/9W-30F5

Type of record: Driller's log. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and sand----------	1	1	
Sand, fine to medium, brown-----	5	6	
Sand, fine, gray, stratified, with trace of shale and wood--	17	23	
Clay, stiff, gray, and silt; with trace of shale fragments-	11	34	

Well 37/9W-30K3

Type of record: Driller's log. Altitude: 586 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and cinder fill--------	2	2	
Sand, medium to fine, tan-------	6	8	
Sand, medium to fine, gray, stratified, with dark lenses and many shells----------	16	24	
Clay, stiff, gray, with trace of sand, shale, limestone, orange clay, and fine gravel--	34	58	
Clay, very stiff, gray, and silt; with some sand and fine gravel, shale, and limestone--	6	64	
Silt, gray, and clay; with some coarse to fine sand, and trace of gravel, shale, and limestone----------	6	70	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-30L4

Type of record: Driller's log. Altitude: 587 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil and cinder waste-------	1	1	
Sand, fine to medium, brown-----	7	8	
Sand, fine to medium, gray, with trace of shale fragments, seam of foliated organic matter, and silty sand----------	18	26	
Clay, medium-stiff, gray, with trace of rock fragments, small pockets of gray and brown silt, and trace of black clay----------	10	36	

Well 37/9W-30L5

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, fine, tan----------	24	25	
Sand, fine, gray, with trace of silt----------	18	43	
Clay, gray, with trace of silt and gravel----------	10	53	
Clay, stiff, gray, with trace of gravel and sand----------	7	60	
Clay, very stiff, gray, with trace of shale and gravel fragments----------	5	65	
Clay, hard, gray, with trace of gravel, sand, and silt-----	9	74	

Well 37/9W-30L9

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil and fill with sand and cinders----------	3	3	
Sand, fine, brown----------	3	6	
Sand, fine, gray, with thin black layers and trace of shells and silt----------	19	25	
Clay, gray, with trace of orange clay, sand, fine gravel, and shale----------	12	37	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-30L10

Type of record: Driller's log. Altitude: 587 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, fine, tan	7	8	
Sand, fine, gray, with trace of silt	18	26	
Clay, sandy, gray, with trace of gravel	5	31	
Clay, stiff, gray, with some silt and trace of gravel	12	43	
Clay, very stiff, gray, with trace of shale fragments	21	64	
Clay, hard, gray, with trace of gravel fragments, silt, and some sand	33	97	
Silurian system:			
Middle Silurian series:			
Limestone	16	113	Dolomite or dolomitic limestone.

Well 37/9W-30Q1

Type of record: Driller's log. Altitude: 584 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown	3	3	
Sand, fine to medium, gray	22	25	
Clay, medium to very stiff, gray, with trace of rock fragments	10	35	

Well 37/9W-30R6

Type of record: Driller's log. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, fine to medium, brown	5	6	
Sand, fine, gray, with trace of gravel and shells	19	25	
Clay, medium stiff, gray, with trace of rock fragments	13	38	
Clay, medium, gray, with trace of rock fragments	10	48	
Clay, stiff, silty, gray, with trace of rock fragments	10	58	
Clay, hard, silty, gray, with fine to coarse rock fragments	14	72	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-31A1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Organic matter, sandy----------	2	2	
Sand, fine to medium, brown-----	4	6	
Sand, fine to medium, dense, gray----------	17	23	
Clay, stiff, silty, gray, with trace of rock fragments-------	34	57	
Clay, very stiff, silty, gray, with rock fragments----------	7	64	
Clay, hard, silty, gray, with trace of rock fragments-------	16	80	

Well 37/9W-31A6

Type of record: Driller's log. Altitude: 586 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil and cinder fill-------	1	1	
Sand, fine, tan----------	5	6	
Sand, fine to medium, gray stratified, with layers of black sand having many shell fragments----------	17	23	
Clay, stiff, silty, gray, with trace of sand, fine gravel, and shale fragments----------	25	48	
Clay, very stiff, silty, gray, with some sand, gravel, shale, and limestone fragments-------	10	58	
Clay, hard, silty, gray, with some sand, fine gravel, shale, and limestone fragments-------	13	71	

Well 37/9W-31H1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil, sandy, black, and cinder waste----------	2	2	
Sand, fine to medium, brown-----	6	8	
Sand, fine to medium, gray, with thin layers of dark organic matter----------	15	23	
Clay, medium to very stiff, gray, with trace of rock fragments and silt pockets--------	36	59	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-31H1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Silt, very hard, sandy, gray----	3	62	
Clay, hard, gray, with fine to coarse gravel----------	7	69	

Well 37/9W-32E1

Type of record: Driller's log. Altitude: 587 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil, sandy, black----------	2	2	
Sand, fine to medium, brown, with some shell fragments and thin layers of black organic matter----------	7	9	
Sand, fine to medium, gray, with thin layers of black organic matter and trace of fine shell fragments-------	16	25	
Clay, medium-stiff, gray, with trace of rock fragments-------	30	55	
Granite boulder----------	1	56	
Clay, hard, stiff, gray, with trace of rock fragments-------	3	59	
Silt, hard, clayey, gray, with trace of rock fragments-------	3	62	
Clay, hard, silty, gray, with trace of rock fragments-------	3	65	

Well 37/9W-32E4

Type of record: Driller's log. Altitude: 583 feet.

Water----------	1	1	
Quaternary system:			
Recent and Pleistocene series:			
Silt, organic, black, with mill and refinery waste----------	6	7	
Silt, organic, sandy, brown, black, and gray, with trace of shells----------	11	18	
Sand, gray----------	1	19	
Clay, stiff, gray, with layers of silt and clay and trace of rock fragments----------	36	55	
Clay, hard, very stiff, gray, with trace of rock and seams of fine gravel----------	23	78	
Gravel, fine, and coarse sand---	1	79	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-32E4--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, hard, gray, with trace of rock	14	93	
Clay, very stiff, gray, with layers of gravel, sand, and silt	9	102	
Clay, hard, gray, with fine to coarse rock fragments and some silt	22	124	
Silurian system:			
Middle Silurian series:			
Limestone	11	135	Dolomite or dolomitic limestone.

Well 37/9W-32H1

Type of record: Driller's log. Altitude: 595 feet.

Quaternary system:			
Recent and Pleistocene series:			
Drift	130	130	
Silurian system:			
Middle Silurian series:			
Dolomite, chert, and sand grains	5	135	
Dolomite, soft, argillaceous, gray	45	180	
Dolomite, dense, light-buff, with chert fragments	40	220	
Dolomite, argillaceous, light-gray	25	245	
Dolomite, gray and light-brown	45	290	
Dolomite, soft, brittle, buff, with rounded quartz grains and some mottled dolomite, light-gray in lower 15 feet	145	435	
Dolomite, buff to light-gray, with spots of pyrite and medium-gray dolomite	50	485	
Dolomite, buff to light-brown	35	520	
Dolomite, light-buff, with white chert fragments and some glauconite	50	570	
Dolomite, light-to medium-brownish-gray, with white chert fragments	24	594	
Dolomite, dark-gray, and dark-gray shale	11	605	
Dolomite, buff to light-brown, argillaceous at base	35	640	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-32H1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Upper Ordovician series:			
Shale, gray to dark-gray, and gray, soft, fossiliferous, dolomitic shale, slightly calcareous	124	764	
Middle Ordovician series:			
Dolomite, dense to finely crystalline, light-brown	241	1,005	
Dolomite, argillaceous, brownish-gray	20	1,025	
Dolomite, light-brown	65	1,090	
Sandstone, white, with rounded to sub-rounded grains and some pyrite	100	1,190	
Dolomite, dense to finely crystalline, buff, with some green sandy shale	125	1,315	White chert and pink dolomite from 1,265 to 1,270 feet.
Cambrian system:			
Upper Cambrian series:			
Dolomite, buff, with abundant rounded quartz grains	15	1,330	
Dolomite, crystalline in lower part, buff to medium-gray, with trace of chert and secondary quartz	130	1,460	
Dolomite, grayish-brown to brown	25	1,485	
Dolomite, sandy, glauconitic, grayish-brown	10	1,495	
Sandstone, glauconitic, gray, with subangular grains and light-gray sandy, glauconitic dolomite	105	1,600	
Dolomite, sandy in part, slightly glauconitic, light-grayish-brown	20	1,620	
Sandstone, slightly glauconitic, buff to white, with some dolomite	200	1,820	
Sandstone, light-buff, and gray argillaceous dolomite	5	1,825	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-32L2

Type of record: Driller's log. Altitude: 587 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Silt----------	1	1	
Sand, fine, tan----------	7	8	
Sand, fine, gray----------	16	24	
Clay, stiff, gray, with trace of sand, shale pieces, and gravel----------	13	37	

Well 37/9W-32M1

Type of record: Driller's log. Altitude: 582 feet.

Water----------	1	1	
Quaternary system:			
Recent and Pleistocene series:			
Silt, organic, with refinery and mill waste----------	11	12	
Sand, fine to medium, gray, with trace of organic silt and sand layers with shell fragments----------	7	19	
Clay, soft to medium gray, with trace of rock fragments-------	9	28	
Silt, stiff, clayey----------	3	31	
Silt, gray----------	2	33	
Clay, stiff, silty, gray, with trace of rock fragments-------	5	38	
Clay, stiff, gray, with trace of rock fragments----------	14	52	
Clay, very stiff, gray, with trace of rock fragments-------	8	60	
Clay, hard, gray, with trace of rock fragments----------	10	70	

Well 37/9W-32M5

Type of record: Driller's log. Altitude: 583 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil----------	1	1	
Sand, fine, tan----------	3	4	
Sand, fine, gray, foliated, with trace of silt and shell fragments----------	15	19	
Clay, stiff to very stiff, gray, with trace of silt and rock fragments----------	39	58	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-32M5--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, hard, gray, with trace of silt, sand, gravel, and rock fragments	12	70	

Well 37/9W-32P2

Type of record: Driller's log. Altitude: 586 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil, silty	1	1	
Sand, fine, tan	7	8	
Sand, fine, gray, with trace of fine gravel and shale	4	12	
Sand, fine, gray, with some silt	11	23	
Clay, stiff to very stiff, gray, with trace of shale pieces and gravel	39	62	
Clay, hard, gray, with trace of sand and gravel	13	75	Mostly shale pieces.

Well 37/9W-32Q2

Type of record: Driller's log. Altitude: 588 feet.

Quaternary system:			
Recent and Pleistocene series:			
Silt, dark	1	1	
Sand, fine, loose, tan	7	8	
Sand, fine, dense, gray, with trace of coarse sand, fine gravel, and some silt	16	24	
Clay, very stiff, gray, with trace of sand, gravel, and small shale pieces	14	38	
Clay, stiff, silty, gray, with some coarse sand, trace of fine gravel, and shale and limestone fragments	21	59	
Clay, silty, gray, with some sand, medium to fine gravel, shale fragments, and occasional fine sand pocket	12	71	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-33J1

Type of record: Sample study; unconsolidated material by L. E. Workman, bedrock by F. T. Thwaites; formerly of Illinois Geological Survey. Altitude: 587 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand----------	40	40	No sample taken.
Clay, dolomitic, brownish-gray, weak, very finely powdered----	32	72	
Gravel, clean, medium, angular to subround pebbles of dark brown and greenish-gray Sporangites shale and dolomite with some granite, basalt, and jasper pebbles----------	29	101	
Clay, dolomitic, silty, sandy, brownish- and greenish-gray, with scattered small pebbles of shale and dolomite---------	49	150	
Silurian system:			
Middle Silurian series:			
Dolomite, gray----------	188	338	
Dolomite, white----------	63	401	
Dolomite, gray----------	26	427	
Dolomite, white----------	23	450	
Dolomite, gray----------	30	480	
Dolomite, dark gray----------	8	488	
Dolomite, gray----------	99	579	
Dolomite, dark gray----------	16	595	
Dolomite, gray, with thin layers of shale----------	9	604	
Dolomite, gray----------	31	635	
Dolomite with shale seams-------	5	640	
Ordovician system:			
Upper Ordovician series:			
Shale, dolomitic, blue-gray-----	135	775	
Middle Ordovician series:			
Dolomite, brownish-gray---------	195	970	
Dolomite, light-gray----------	40	1,010	
Dolomite, gray----------	56	1,066	
Dolomite, light-brown----------	8	1,074	
Dolomite, light-gray----------	42	1,116	
Sandstone, coarse, white--------	64	1,180	
Conglomerate, with chert pebbles	11	1,191	
Conglomerate, with dolomite layers----------	24	1,215	
Lower Ordovician series:			
Dolomite, white----------	26	1,241	
Dolomite, gray----------	14	1,256	
Dolomite, light-gray----------	5	1,261	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-33J1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Lower Ordovician series:			
Dolomite, red	7	1,268	
Dolomite, gray, with shale	7	1,275	
Cambrian system:			
Upper Cambrian series:			
Sandstone, dolomitic, medium white, with gray dolomite	16	1,291	
Dolomite, sandy, light-gray	22	1,313	
Dolomite, shaly, gray	4	1,317	
Dolomite, gray	15	1,332	
Dolomite, light-gray	18	1,350	
Dolomite, white	15	1,365	
Dolomite, light-gray	10	1,375	
Dolomite, light-brown	17	1,392	
Dolomite, gray	39	1,431	
Dolomite, light-gray	32	1,463	
Dolomite, brown	14	1,477	
Dolomite, gray	28	1,505	
Sandstone, medium, glauconitic, dolomitic, white	19	1,524	
Sandstone, medium, dolomitic, gray	7	1,531	
Sandstone, dolomitic, glauconitic, green	6	1,537	
Sandstone, very dolomitic, glauconitic, green	23	1,560	
Sandstone, very dolomitic, shaly, green	12	1,572	
Sandstone, very dolomitic, green-gray	28	1,600	
Sandstone, medium, very dolomitic, glauconitic, gray	36	1,636	
Sandstone, medium, white	12	1,648	
Sandstone, medium, dolomitic, white	6	1,654	
Sandstone, medium, white	183	1,837	
Dolomite, very sandy, glauconitic, gray	3	1,840	

Well 37/9W-33N2

Type of record: Driller's log. Altitude: 589 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill; cinders	1	1	
Sand, fine, brown	6	7	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-33N2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, gray, stratified, with trace of dark thin layers of coarse sand and shale----------	18	25	
Clay, silty, gray, with trace of coarse sand, fine gravel, shale, and rock fragments-----	10	35	

Well 37/9W-33P4

Type of record: Driller's log. Altitude: 588 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown, with trace of rock fragments--	13	13	
Sand, fine to medium, gray, with trace of fine gravel and lenses of coarse to medium sand and fine gravel----------	16	29	
Clay, medium, gray, with trace of rock fragments and lenses of silt----------	34	63	
Clay, stiff to very stiff, gray, varved, with fine to medium gravel and trace of rock fragments----------	17	80	
Clay, hard, silty, gray, with fine to coarse rock fragments-	12	92	

Well 37/9W-33Q1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brown, with trace of gravel----------	19	19	
Sand, fine to medium, gray------	11	30	
Clay, medium, gray, with trace of gravel----------	9	39	
Clay, stiff, gray, with trace of rock fragments and layer of black clay with shale fragments----------	3	42	
Clay, medium gray and brown, with silt and trace of gravel-	31	73	
Clay, stiff, gray, varved, with trace of gravel in lower part-	3	76	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-33Q1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Silt, stiff to hard, clayey, gray, with trace of fine to medium gravel	10	86	
Silt, clayey, or silty clay; gray with gravel	15	101	

Well 37/9W-34N1

Type of record: Driller's log. Altitude: 582 feet.

Water	2	2	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, brownish-gray to gray, with some reddish-brown and black silty sand, trace of shale fragments, and thin pockets of organic matter	22	24	
Clay, soft to medium, gray, and gray silt in alternating layers; trace of rock fragments	23	47	
Clay, very soft to soft, stiff, gray, with trace of rock fragments	29	76	
Clay, very hard, silty, gray, with some very hard gray sand and rock fragments	15	91	

Well 37/9W-34R1

Type of record: Driller's log. Altitude: 589 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine to medium, tan, with trace of organic matter	8	8	
Sand, fine to medium, brown, with trace of silt and rock fragments	15	23	
Sand, fine, gray, with trace of gravel and rock fragments	10	33	
Clay, medium, gray, with trace of silt and rock fragments	21	54	
Clay, stiff to very stiff, gray, with trace of rock fragments and silt	32	86	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/9W-34R1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, hard, silty, gray, with trace of gravel and rock fragments	16	102	

Well 37/9W-35N1

Type of record: Driller's log. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, tan	8	8	
Sand, fine to medium, gray	26	34	
Clay, stiff to very stiff, gray, with trace of sand, gravel, and shale fragments	13	47	

Well 37/9W-35P2

Type of record: Driller's log. Altitude: 592 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and cinder fill	1	1	
Sand, fine, tan	6	7	
Sand, medium to fine, brown, stratified, with dark seams and many shell fragments	7	14	
Sand, medium to fine, gray, stratified, with trace of shells and shale fragments	21	35	
Clay, gray, and silt; with some coarse to fine sand and trace of fine gravelly shale fragments	10	45	

Well 37/9W-36E1

Type of record: Driller's log from memory. Altitude: 590 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	40	40	
Clay, blue	60	100	
Gravel	5	105	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 27/10W-1B1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill	3	3	
Sand, medium to coarse, brown, and medium to large gravel	6	9	
Sand, fine to medium, brown, with trace of silt	4	13	
Sand, fine to medium, silty, gray, with trace of small gravel	13	26	
Clay, medium, silty, blue, with trace of fine sand	10	36	
Clay, stiff, silty, blue, with trace of fine sand and gravel	5	41	
Clay, medium stiff, blue	12	53	
Silt, hard, sandy, clayey, blue, with gravel noted	3	56	
Silt, very hard, sandy, clayey, blue, with gravel noted	4	60	

Well 37/10W-1C2

Type of record: Driller's log. Altitude: 588 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; coarse sand, gravel, and slag	6	6	
Sand	20	26	
Clay	2	28	

Well 37/10W-1F2

Type of record: Driller's log. Altitude: 586 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, gray, and gravel	1	1	
Sand, brown, with trace of gravel	3	4	
Sand, fine, loose, with trace of coarse sand	5	9	
Sand, fine, medium-dense, gray	16	25	
Clay, dense, blue	12	37	Moist.
Clay, dense, blue, with trace of gravel	14	51	Do.
Clay, silty	4	55	
Clay, blue, with gravel and silt	16	71	
Sand, fine, gray, with black shale and rock, 1 to 6 inches	18	89	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/10W-1F2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, blue, with trace of silt and much shale	5	94	
Clay, blue, with black small gravel and little shale	2	96	
Clay, blue, with black gravel and trace of shale	3	99	
Clay, sandy, blue, with rocks 1 to 4 inches	1	100	Bedrock at 100 feet.

Well 37/10W-1G1

Type of record: Driller's log. Altitude: 585 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	5	5	
Sand and gravel	5	10	
Sand, fine	17	27	
Clay, blue	23	50	
Sand, coarse	3	53	
Sand, fine	8	61	
Clay, blue	14	75	

Well 37/10W-1L2

Type of record: Driller's log. Altitude: 591 feet.

Quaternary system:			
Recent and Pleistocene series:			
Cinders and sand	1	1	
Fill; slag	8	9	
Muck	1	10	
Sand, gray, with trace of coarse sand and silt	22	32	
Clay, soft, blue	2	34	

Well 37/10W-1P1

Type of record: Driller's log. Altitude: 589 feet.

Quaternary system:			
Recent and Pleistocene series:			
Rubbish and cinders	8	8	
Sand, light-gray	19	27	
Clay, stiff, blue	4	31	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/10W-12C2

Type of record: Driller's log. Altitude: 584 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; brown coarse sand, gravel, and cinders	3	3	
Sand, fine, loose, gray, with trace of brown fine sand	16	19	
Sand, fine, medium-dense, gray	6	25	
Clay, soft, gray	21	46	
Clay, stiff, gray, and small gravel	10	56	
Clay, very hard, gray, with small black shaly gravel and 3/4-inch stones	22	78	
Record missing	20	98	
Silurian system:			
Middle Silurian series:			
Limestone	8	106	Dolomite or dolomitic limestone.

Well 37/10W-12F1

Type of record: Driller's log. Altitude: 583 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	1	1	
Cinders and muck	2	3	
Muck	3	6	
Sand, fine, gray	15	21	
Sand, silty	1	22	
Clay, blue	4	26	

Well 37/10W-12G1

Type of record: Driller's log. Altitude: 582 feet.

Water	3	3	
Quaternary system:			
Recent and Pleistocene series:			
Sand, dirty, gray	6	9	
Clay, soft, gray	13	22	
Clay, soft, gray, with trace of gravel	4	26	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/10W-12J1

Type of record: Driller's log. Altitude: 582 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Water	3	3	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, gray	22	25	
Clay, soft, gray	1	26	

Well 37/10W-12K1

Type of record: Driller's log. Altitude: 582 feet.

Water	2	2	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, gray	20	22	
Clay, soft, gray, with trace of gravel	4	26	

Well 37/10W-12L3

Type of record: Driller's log. Altitude: 583 feet.

Water	5	5	
Quaternary system:			
Recent and Pleistocene series:			
Sand, mucky	5	10	
Sand, fine, loose, gray	1	11	
Sand, fine, light-gray	10	21	
Clay, gray	25	46	Moist.
Clay, gray, with trace of gravel	14	60	Do.
Clay with gravel	5	65	

Well 37/10W-12L4

Type of record: Driller's log. Altitude: 586 feet.

Quaternary system:			
Recent and Pleistocene series:			
Cinders and sand	1	1	
Slag, blue-green	5	6	
Silt, organic	1	7	
Sand, silty, gray	17	24	
Clay, stiff, blue	4	28	

Well 37/10W-12N1

Type of record: Driller's log. Altitude: 582 feet.

Water	4	4	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, black	5	9	
Sand, fine, gray	15	24	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/10W-12N1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Clay, soft, gray----------	2	26	Moist.

Well 37/10W-12P2

Type of record: Driller's log. Altitude: 583 feet.

Water----------	3	3	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, gray----------	16	19	
Clay, soft, gray----------	3	22	
Clay, gray----------	5	27	Very moist.

Well 37/10W-13C1

Type of record: Driller's log. Altitude: 582 feet.

Water----------	4	4	
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine, gray----------	16	20	
Clay, soft, gray----------	6	26	

Well 37/10W-13G5

Type of record: Driller's log. Altitude: 586 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand, coarse, brown, silt, and blue slag----------	7	7	
Sand, silty, gray----------	4	11	
Sand, fine, gray with small gravel----------	9	20	
Sand, fine, gray, with trace of gravel----------	4	24	
Clay, gray, with trace of black gravel----------	25	49	
Clay, stiff, gray, with trace of shale and gravel----------	2	51	
Clay, soft, with trace of shale and black gravel----------	10	61	
Clay with trace of shale, black gravel, and stones----------	15	76	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/10W-13K3

Type of record: Driller's log. Altitude: 584 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Cinders and slag	6	6	
Clay, hard, blue, and silty sand	2	8	
Sand, fine, silty, gray, with trace of gravel	12	20	
Sand, fine, silty, gray, with trace of fine gravel	4	24	
Clay, soft, gray, with trace of gravel	5	29	
Clay, tough, gray, with trace of black small gravel	20	49	
Clay, soft, gray, with trace of black small gravel	5	54	
Clay, stiff, gray, with trace of black small gravel	10	64	

Well 37/10W-13Q3

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, silty, cinders, and slag	5	5	
Sand, fine, silty, gray	19	24	
Clay, soft, gray, with rocks and trace of gray sand	32	56	
Clay, stiff, gray, and fine sand	5	61	
Clay, tough, gray, with shaley gravel	8	69	

Well 37/10W-24B1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Cinders, gravel, and brown coarse sand	4	4	
Sand, coarse, mucky, black	4	8	
Sand, light-gray	16	24	
Clay, light-gray	5	29	
Clay, light-gray, with fine sand and small gravel	23	52	
Clay, tough, gray	2	54	
Clay, hard, gray, with trace of black gravel and shale	8	62	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 37/10W-24H1

Type of record: Driller's log. Altitude: 584 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; sand, gravel, blue slag, and cinders	4	4	
Sand, fine, silty, gray, with trace of black gravel	4	8	
Sand, fine, loose, gray	11	19	
Clay, medium-dense, gray, trace of small gravel	7	26	
Clay, soft, gray	2	28	

Well 37/10W-24J1

Type of record: Driller's log. Altitude: 580 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Cinders, slag, coarse sand, and gravel	7	7	
Muck and decayed weeds	4	11	
Sand, fine, gray	13	24	
Clay, soft, gray	25	49	
Clay, hard, gray, with small gravel	11	60	

Well 37/10W-36J1

Type of record: Driller's log. Altitude: 590 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	30	30	
Clay	100	130	
Silurian system:			
Middle Silurian series:			
Lime, brown	170	300	Dolomite or dolomitic limestone.

Well 38/10W-36L1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; sand and gravel, with some silt	9	9	
Sand, fine, loose, gray, with trace of fine gravel	5	14	
Sand, fine, medium-dense, gray	10	24	
Clay, soft, gray	2	26	

Table 3.--Selected logs of wells and test holes in Lake County--Continued

Well 38/10W-36M3

Type of record: Driller's log. Altitude: 584 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; cinders, sand, and gravel, with rubbish	4	4	
Sand, fine, silty, loose, gray, with some rubbish and black gravel	19	23	
Clay, soft, gray	9	32	
Clay, soft, gray, with black small gravel and shale	11	43	
Clay, tough, gray, with black small gravel and shale	6	49	
Clay, very hard, gray, with shale and black fine gravel	10	59	
Shale	1	60	
Clay, very hard, gray, with shale and black fine gravel	20	80	

Well 38/10W-36N1

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand	22	24	
Clay, sandy	2	26	

Well 38/10W-36P2

Type of record: Driller's log. Altitude: 585 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill; hard slag	1	1	
Fill; yellow coarse sand and gravel	8	9	
Sand, fine, loose, brown and gray, with gravel	5	14	
Sand, fine, loose, gray, with gravel	10	24	
Clay, soft, gray	15	39	
Clay, tough, gray, with fine gravel	10	49	
Clay, very hard, gray, with shale and black fine gravel	41	90	

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana
(Results in parts per million. Analyses by U. S. Geological Survey, except where noted.)

Well number: See text for description of well-numbering system.
Material: D, drift; Do, dolomite; G, gravel; Ls, limestone; Sd, sand; Sh, shale; Ss, sandstone.
Geologic age: C, Cambrian; D, Devonian; O, Ordovician; Pl, Pleistocene; S, Silurian.
Iron (Fe): U. S. Public Health Service drinking-water standards - 0.3 parts per million for iron and manganese together.
Sulfate (SO_4): U. S. Public Health Service drinking-water standards - 250 parts per million.
Chloride (Cl): U. S. Public Health Service drinking-water standards - 250 parts per million.
Remarks: DCC, analysis by Dearborn Chemical Co.; gpm, gallons per minute; ISBH, analysis by Indiana State Board of Health; min., minute; TDS, total dissolved solids; U, analyst unknown.

Well Number	Material	Geologic Age	Date of Collection	Temperature (°F)	Iron (Fe)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Hardness as $CaCO_3$ (calcium, magnesium)	Remarks
32/7W- 6N1	Ls	S	1- 5-59	48	1.3	0	532	65	72	456	
32/8W-33C1	Ls?	S?	--------	58	.1	34	220	-----	18	180	
33E2	Ls	S	3-24-56	---	---	24	295	-----	26	180	
33F4	Ls?	S	5-57	54	---	10	241	-----	26	164	
32/9W- 2Q1	Sd	Pl	8-57	---	1.0	0	163	-----	8	204	
2Q1	Sd	Pl	10-21-59	---	1.5	0	215	90	16	272	
4L2	Ls	S	10- 4-59	56	.1	19	293	51	14	160	
4N1	Sd	Pl	7-24-56	---	---	0	400	-----	6	424	
5J1	Sd	Pl	10-21-59	---	.1	0	322	115	64	420	
5N1	Sd	Pl	8-57	60	1.0	0	386	-----	10	432	
36E1	Ls?	S	4-11-57	54	---	22	285	-----	46	204	
36E1	Ls?	S	10-21-59	---	.5	0	405	13	28	188	
32/10W- 1N1	Ls	S	4-11-57	51	---	17	337	-----	---	276	

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana--Continued

32/10W-12R1	Sd	Pl	10-21-59	---	0.1	0	532	255	20	660
13C1	Ls?	S	10-21-59	---	2.0	0	415	170	16	504
33/7W- 7N1	Sd	Pl	10-20-59	---	1.0	0	312	88	20	316
9D1	Sd	Pl	10-20-59	52	1.5	0	434	43	20	376
17P1	Sd	Pl	10-20-59	---	2.0	0	434	50	12	356
28C1	Sd	Pl	10-20-59	---	2.0	0	508	190	12	530
33/8W- 7B1	Sd	Pl	4-23-57	54	1.5	7	425	-----	---	412
7K1	Sd	Pl	1- 7-59	---	5.0	0	576	220	12	640
9G1	Sd	Pl	10-20-59	---	1.5	0	493	40	6	404
12B1	Sd	Pl	10-20-59	---	1.5	0	498	110	20	504
18P1	Sd	Pl	10-20-59	---	3.0	0	493	145	16	504
21R1	Sd	Pl	10-20-59	---	1.0	0	102	130	164	432
23P1	Sd	Pl	1- 7-59	---	1.0	0	254	75	12	256
29D1	Sd	Pl	1- 7-59	---	.4	0	346	90	8	344
33/9W- 1J1	Sd	Pl	10-21-59	---	3.0	0	508	90	10	464
4E1	Ls?	S	10-21-59	---	.1	0	307	11	28	76
7G1	Ls	S	1- 8-59	---	.1	0	293	5	4	92
8M1	Ls	S	4-10-57	51	---	19	224	-----	2	112
8M1	Ls	S	10-21-59	---	.1	0	298	28	16	100
11L1	Sd	Pl	10-21-59	---	.5	0	249	96	8	260
12H2	Sd	Pl	--------	---	---	7	376	-----	6	524
18K2	Sd	Pl	1- 8-59	---	---	0	566	270	12	684
22B1	Sd	Pl	6-21-57	60	1.0	0	500	-----	8	404
25D1	Sd	Pl	6-21-57	56	3.0	5	244	-----	4	424
25F1	Sd,G	Pl	10-20-59	---	1.5	0	420	140	20	464
28D1	Sd	Pl	10-21-59	---	2.5	0	488	40	16	408
29G1	Ls	S	1- 8-59	---	.1	0	283	100	12	144
30E1	Ls	S	5-57	52	---	17	259	-----	22	164
30E1	Ls	S	10-21-59	54	.1	0	317	90	20	152

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana--Continued

Well Number	Material	Geologic Age	Date of Collection	Temperature (°F)	Iron (Fe)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Hardness as $CaCO_3$ (calcium, magnesium)	Remarks
33/9W-31N1	Ls?	S	10-21-59	---	0.3	0	420	65	10	348	
36M1	Sd	Pl	1- 7-59	---	.3	0	298	75	8	296	
33/10W- 1B1	Ls?	S	10-21-59	---	.1	0	312	69	32	140	
12B1	Ls?	S	10-21-59	53	.1	0	420	205	16	140	
13E1	Ls?	S	10-21-59	---	.3	0	351	325	16	396	
13L1	Sd	Pl	10-21-59	---	7.5	0	312	250	136	656	
25M1	Ls	S	4-10-57	51	---	17	203	-----	4	296	
25M1	Ls	S	10-21-59	---	.5	0	312	240	16	340	
34/7W- 6N1	Sd	Pl	10-16-59	---	3.0	19	346	95	14	372	
8N1	Ls	S	10-16-59	---	.1	38	425	13	20	20	
18P1	Sd	Pl	10-16-59	---	3.0	29	410	100	12	432	
20D2	Sd,G	Pl	1- 5-59	---	.7	0	634	75	8	528	
28E1	Sd,G	Pl	1- 5-59	54	3.0	0	581	100	12	500	
28H1	Sd	Pl	10-16-59	---	2.5	53	478	47	10	452	
29F1	Sd	Pl	10-16-59	---	3.0	29	371	180	8	528	
29J1	Sd,G	Pl	10-16-59	---	3.0	29	488	94	12	476	
31F1	Sd	Pl	10-16-59	---	1.0	24	395	12	10	332	
34/8W- 5A1	Sd	Pl	1- 8-59	---	.7	0	498	25	12	368	
6E3	Sd	Pl	10- 3-57	55	3.5	19	639	-----	20	900	
6G2	Sd	Pl	10- 3-57	56	1.0	0	605	-----	4	536	
6G4	Sd,G	Pl	10-15-59	---	.1	24	420	101	16	412	
7L2	Sd	Pl	10-15-59	55	5.0	0	727	425	20	960	
11L1	Sd	Pl	8- 1-40	---	1.2	0	588	-----	12	440	DCC.
17H4	Sd	Pl	10-15-59	---	1.0	53	405	27	12	404	
18P1	Sd	Pl	10- 3-57	55	3.0	10	547	-----	4	560	

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana--Continued

34/8W-18P2	Sd	Pl	10-15-59	---	2.5	0	634	95	12	552
18R5	Sd	Pl	10-15-59	---	2.5	38	571	98	12	552
19G2	Sd	Pl	10- 3-57	58	4.5	0	586	-----	8	736
19G3	Sd	Pl	10- 3-57	56	4.5	0	630	-----	8	720
20L1	Sd	Pl	10-16-59	53	1.0	24	264	18	8	240
20M4	Sd	Pl	7-31-57	68	4.0	17	527	-----	22	800
22N1	Sd	Pl	10-15-59	---	2.0	0	678	375	16	888
26C1	Sd	Pl	10-15-59	---	5.0	29	561	82	8	488
28N1	Sd	Pl	10-15-59	---	5.0	0	586	120	12	560
29D1	Sd	Pl	5-57	50	---	0	395	-----	24	488
30B1	Sd	Pl	10- 3-57	55	3.0	14	200	-----	12	376
30B1	Sd	Pl	10-15-59	---	3.0	38	537	205	12	656
34/9W- 4E1	Ls?	S	6-20-57	58	.2	31	417	-----	18	248
5R2	Ls?	S	11- 8-59	---	.3	0	576	225	8	572
8B1	Sd	Pl	7-25-56	---	---	0	512	-----	4	348
9A2	Ls?	S	1- 8-59	---	.5	0	581	190	8	556
9M1	Ls?	S	10-15-59	---	.3	0	581	205	12	584
11A3	Ls	S	1- 5-59	48	.5	14	551	220	8	388
11M2	Sd	Pl	10-15-59	---	1.5	24	556	220	16	672
12K1	Sh	D	10-15-59	---	1.5	0	693	310	12	672
12P4	Ls	S	1- 9-59	53	.3	0	532	-----	16	68
13B1	Ls	S	10-15-59	---	.5	48	410	11	36	100
13G4	Sd	Pl	10-15-59	---	3.0	0	693	430	16	888
13L1	Ls?	S	7-57	56	.2	29	412	-----	20	76
14E2	Ls?	S	1- 8-59	---	2.5	0	664	200	8	628
16E1	Sd	Pl	10-15-59	---	3.0	0	639	68	12	744
19A1	Ls	S	7-57	52	.2	0	461	-----	12	344
19A1	Ls	S	10-14-54	---	.1	0	473	110	8	316
20R5	Ls?	S	1- 8-59	56	.1	19	459	65	8	344
21C1	Sd	Pl	7-30-57	60	---	0	603	-----	8	2,000
21C1	Sd	Pl	7-57	60	6.0	26	520	-----	4	1,760
21D2	Ls	S	8-20-57	55	.1	22	259	-----	6	188
21F2	Sd	Pl	5-57	56	4.0	0	554	-----	2	982

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana--Continued

Well Number	Material	Geologic Age	Date of Collection	Temperature (°F)	Iron (Fe)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Hardness as $CaCO_3$ (calcium, magnesium)	Remarks
34/9W-21F3	Sd	Pl	8-20-57	64	4.0	0	598	-----	16	1,120	
21H2	Sd	Pl	8-57	60	2.5	0	466	-----	6	408	
23A1	Ls	S	5-57	57	.1	17	322	-----	14	40	
23E3	Ls	S	10- 3-57	53	.8	0	522	-----	4	484	
23E3	Ls	S	10-14-59	---	.5	0	556	100	12	484	
23G12	Sd	Pl	10- 3-57	59	2.0	0	698	-----	8	784	
24R2	Sd	Pl	7-24-56	---	---	0	493	-----	---	408	
25B3	Sd	Pl	10-14-59	---	2.5	0	639	190	20	588	
26F3	Ls	S	1- 5-59	45	.3	0	410	45	8	168	
29A1	Ls	S	7-25-56	---	---	0	390	-----	6	192	
30D2	Ls?	S	10-14-59	---	.3	24	425	95	12	296	
31R1	Ls	S	10-25-56	52	---	0	498	-----	12	256	
32E2	D	Pl	10-26-56	52	1.5	0	595	-----	8	908	
34B1	Ls	S	1- 5-59	56	.5	0	517	45	8	304	
35H1	Sd	Pl	10- 3-57	58	2.5	34	268	-----	16	364	
35R1	Sd	Pl	1- 9-59	---	3.0	19	542	195	12	612	
34/10W- 1C1	Ls?	S	10-14-59	---	2.0	0	493	84	16	340	
1C2	Ls?	S	--------	52	---	---	427	-----	2	252	
12J1	Ls?	S	10-14-59	---	.1	24	322	10	12	176	
13H1	Ls?	S	10-14-59	---	.1	29	342	50	12	200	
25D1	Ls	S	10-14-59	---	.8	0	332	80	12	172	
36L1	Sd	Pl	1- 9-59	45	1.0	0	566	25	4	424	
36M1	Ls?	S	--------	---	---	0	334	-----	2	244	
35/7W- 7R1	Sd	Pl	10-13-59	---	.5	24	561	27	12	472	
17D1	Sd,G	Pl	10-13-59	---	---	0	581	17	10	416	
18A2	Sd	Pl	10-13-59	---	1.0	29	537	47	28	480	

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana--Continued

35/7W-21F1	Sd,G	Pl	12-58	---	1.0	0	649	-----	---	540	
21F1	Sd,G	Pl	10-13-59	---	.5	0	664	48	12	488	
21L1	Ls?	D?	11-17-59	48	1.0	34	434	10	12	112	
35/8W- 5L1	Sd,G	Pl	10-13-59	---	1.5	0	551	67	6	392	
5L2	G,Sd	Pl	10-27-59	50	.5	43	410	65	12	328	
9D1	Sd	Pl	10-13-59	53	1.0	0	571	12	8	376	
13N1	Sd	Pl	10-14-59	---	1.0	0	547	78	18	468	
16H1	Sd	Pl	10-14-59	---	.5	48	571	14	12	440	
16J1	Sd	Pl	10-13-59	---	1.0	0	547	112	24	496	
18K1	Sd	Pl	1- 8-59	48	5.0	0	512	480	12	864	
18L1	Sd	Pl	10- 3-57	55	1.0	24	268	-----	12	348	
20L1	Sh	D	1- 6-59	56	1.0	0	503	5	8	260	
20L6	Sd	Pl	1- 6-59	54	1.0	0	483	10	12	328	
22H1	Sd	Pl	10-14-59	---	1.0	0	630	68	12	496	
29P1	Sd	Pl	6-20-44	56	.3	0	393	-----	24	305	ISBH.
30N1	Sd	Pl	11-14-59	---	3.0	38	605	160	8	616	
32P1	Sh?	D?	10-14-59	---	.1	14	473	9	8	216	
35/9W- 2C1	Sd	Pl	6- 3-54	---	2.4	---	---	18	6	360	ISBH.
2F1	Ls	S	10-14-59	55	1.0	0	498	64	12	300	
4Q1	Ls	S	4-26-57	55	1.5	29	303	-----	12	248	
4Q1	Ls	S	10-14-59	---	5.0	0	561	115	8	392	
9D1	Ls	S	4-26-57	54	.2	17	468	-----	14	264	
14A1	Sd	Pl	10-14-59	---	3.0	0	605	180	8	538	
14P1	Ls	S	5-16-57	56	.4	12	415	-----	28	144	
15D1	Ls	S	1-17-50	---	.6	0	468	-----	6	495	ISBH.
17R1	Ls	S	5-16-57	56	.1	17	500	-----	12	152	
18N10	Ls?	S	1- 8-59	53	.3	5	483	145	8	344	
19D1	Ls?	S	1- 8-59	54	1.2	0	532	185	16	464	
20F1	Sd	Pl	10-14-59	---	2.0	10	556	125	6	488	
24P2	Sd	Pl	1- 8-59	---	.1	24	689	185	12	8	Softened.
27D5	Ls?	S	1- 8-59	---	.3	0	537	205	12	312	
29C4	Ls?	S	10-14-59	---	1.0	0	571	165	8	488	

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana--Continued

Well Number	Material	Geologic Age	Date of Collection	Temperature (°F)	Iron (Fe)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Hardness as $CaCO_3$ (calcium, magnesium)	Remarks
35/9W-29D2	Ls?	S	1- 8-59	53	0.3	0	488	175	12	420	
30A2	Ls	S	1- 8-59	48	.3	0	586	50	8	428	
30B2	Ls?	S	1- 8-59	52	.3	0	493	125	12	376	
34R1	Sd	Pl	10-14-59	---	5.0	0	522	65	6	444	
35/10W- 1R2	Sd	Pl	10-14-59	---	7.5	0	420	315	12	612	
13C1	Ls	S	2- 5-49	---	---	---	208	135	10	504	U; TDS-646.
13C2	Ls	S	3-22-56	---	1.0	0	488	304	10	515	U.
25E1	Ls?	S	1- 9-59	---	.1	0	351	-----	8	180	
25L3	Ls?	S	---------	52	---	0	329	-----	4	180	
25M1	Ls?	S	---------	58	.2	19	283	-----	12	112	
36P3	Sd	Pl	10-14-59	---	1.0	0	610	18	12	456	
36/7W-16P1	Sd	Pl	10-13-59	---	1.0	24	190	10	952	488	
18G1	Ls	S	6-54	---	---	---	200	-----	9	230	ISBH.
20R1	Sd	Pl	10-13-59	---	3.0	0	400	110	16	384	
36/8W- 3N1	Ls	S	9-30-41	---	---	0	201	6	447	---	U; TDS-1060.
9E1	Sd	Pl	5-15-57	---	---	0	234	-----	22	328	
29G1	Sd	Pl	10-13-59	---	1.5	0	298	160	8	316	
32K1	Sd,G	Pl	10-12-59	---	1.0	0	337	17	8	224	
32K2	Sd,G	Pl	10-12-59	---	.3	14	307	14	10	220	
33E1	Sd,G	Pl	10-12-59	57	1.0	0	376	13	8	236	
35L1	Sd	Pl	12-57	---	1.0	0	307	-----	8	172	
36/9W-11D1	Ls,Sh	S	10-12-59	---	.3	0	288	17	48	64	
14P1	Ls?	S	1- 8-59	54	.3	0	283	15	8	56	

Table 4.--Field chemical analyses of water from wells in Lake County, Indiana--Continued

36/9W-35L1	Sd	Pl	12-20-50	---	1.2	---	---	-----	2	264	ISBH.
36/10W-24B1	Ls?	S	10-12-59	---	.1	14	283	13	28	80	
37/9W-25C1	Sd	Pl	5-15-57	55	---	24	37	-----	26	168	
32H1	Do,Ss	S,O,C	4- 4-49	53	1.2	20	317	111	125	82	DCC; TDS-636; taken after 1 min. pumping 510 gpm.
32H1	Do,Ss	S,O,C	4- 4-49	53	1.6	46	298	7	72	27	DCC; TDS-523; taken after 4 min. pumping 510 gpm.
32H1	Do,Ss	S,O,C	4- 4-49	55	1.2	41	162	7	70	14	DCC; TDS-433; taken after 9 min. pumping 510 gpm.
32H1	Do,Ss	S,O,C	4- 4-49	58	1.2	55	266	7	67	14	DCC; TDS-392; taken after 19 min. pumping 510 gpm.
32H1	Do,Ss	S,O,C	4- 4-49	61	1.2	20	305	176	142	109	DCC; TDS-609; taken after 39 min. pumping 510 gpm.
32H1	Do,Ss	S,O,C	4- 4-49	63	2.4	10	301	634	347	493	DCC; TDS-1280; taken after 59 min. pumping 510 gpm.
32H1	Do,Ss	S,O,C	4- 4-49	63	2.8	0	292	1,130	563	657	DCC; TDS-1950; taken after 89 min. pumping 510 gpm.
32H1	Do,Ss	S,O,C	4- 4-49	64	4.0	0	296	1,075	568	656	DCC; TDS-1920; taken after 117 min. pumping 510 gpm.

Table 5.--Water levels in observation wells in Lake County, Indiana
(In feet below land-surface datum. Water level: e, estimated; h, tape measurement)

Lake 1. (36/7W-16Q2). Town of East Gary. Corner of Vandenburg and 28th Sts. SW¼SE¼ sec. 16, T. 36 N., R. 7 W. Drilled public-supply water-table well in sand, diameter 38 inches, reported depth 64 feet. Land-surface datum is 635 feet above msl. Highest water level is 29 below lsd, Jan. 12, Sept. 2, 1954, June 3-July 1, 1956; lowest 32 below lsd, Jan. 6, Feb. 6-12, July 26, 1954. Records available: 1954-56. Affected by nearby pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1954		Feb. 4	31	Mar. 15	30	Sept. 19	30
		5	31	23	30	21	30
Jan. 1	30	6	32	26	30	23	30
3	30	7	32	28	30	25	30
4	31	8	32	30	30		
5	31	9	32	Apr. 8	30	1955	
6	32	10	32	10	30		
8	30	11	32	May 8	30	Jan. 25	48
10	30	12	32	30	30		
12	29	18	30	June 22	30	1956	
15	30	22	30	July 26	32		
17	30	28	30	Sept. 2	29	June 3	29
21	30	Mar. 7	30	5	30	12	29
23	30	9	30	9	30	22	29
29	30	11	30	15	30	July 1	29
Feb. 3	30	13	30	17	30		

Lake 2. (35/8W-29P2). Parramore Hospital. Crown Point. SE¼SW¼ sec. 29, T. 35 N., R. 8 W. Drilled public-supply artesian well in sand, diameter 26 inches, reported depth 89 feet. Land-surface datum is 720 feet above msl. Highest water level is 58 below lsd, Mar. 14-June 13, 1955, Mar. 13-May 8, 1958; lowest 76 below lsd, Oct. 17, 1956. Records available: 1954-58. Affected by nearby pumping.

1954		Dec. 13	62	Mar. 21	58	Sept. 5	61
		20	64	28	58	12	62
Aug. 17	64	27	62	Apr. 3	58	19	62
23	62			10	58	26	62
30	63	1955		18	58	Oct. 3	62
Sept. 7	60			25	58	10	63
13	60	Jan. 3	62	May 2	58	17	63
20	62	10	62	9	58	24	62
27	62	17	61	16	60	31	60
Oct. 4	64	24	62	23	59	Nov. 7	60
11	64	31	64	30	58	14	60
Nov. 1	60	Feb. 7	62	June 6	58	21	60
8	62	14	62	13	58	28	60
15	62	21	62	Aug. 7	62	Dec. 5	62
22	60	28	64	14	62	12	62
29	61	Mar. 7	64	21	61	19	60
Dec. 6	62	14	58	29	61	26	62

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 2--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1956		July 18	60	Apr. 29	60	Feb. 12	62
		23	70	May 18	60	Mar. 13	58
Jan. 2	60	Aug. 10	60.5	June 15	62	Apr. 10	58
9	60	Sept. 12	62	July 15	60	May 8	58
16	60	Oct. 10	60	Aug. 11	60	June 5	62
23	62	17	76	23	60	July 3	60
30	62	Nov. 8	60.5	Sept. 11	62	31	60
Feb. 6	60	12	62	17	62	Aug. 15	60
13	62			Oct. 13	60	Sept. 12	62
20	62	1957		Nov. 14	62	Oct. 10	62
27	62			Dec. 14	62	Nov. 7	62
Mar. 5	60	Jan. 5	62			Dec. 5	60
12	60	Feb. 10	62.5	1958			
19	61	Mar. 15	62				
26	61	Apr. 26	64	Jan. 12	60		

Lake 3. (32/8W-23M2). Town of Shelby. NW¼SW¼ sec. 28, T. 32 N., R. 8 W. Driven unused water-table well in sand, diameter 4 inches, reported depth 18 feet. Land-surface datum is 638 feet above msl. Highest water level is 0.05 below lsd, Mar. 28, 1955; lowest 5.70 below lsd, Sept. 27, Oct. 4, 1954. Records available: 1954-56.

1954		Jan. 31	3.40	Aug. 25	5.14	Dec. 1	4.26
		Feb. 7	2.50	Sept. 1	4.73	8	4.35
Aug. 30	4.90	14	3.85	8	5.16	15	4.50
Sept. 6	5.30	21	3.35	15	5.26	22	4.70
13	5.40	28	2.20	22	5.36	29	4.73
20	5.60	Mar. 7	1.40	29	5.32		
27	5.70	14	0.90	Oct. 6	4.14	1956	
Oct. 4	5.70	21	0.60	13	4.26		
11	4.40	28	0.05	20	4.29	Jan. 5	4.80
18	3.97	Apr. 4	1.48	27	4.39	12	4.90
		11	1.80	Nov. 3	3.90	19	4.98
1955		18	2.58	10	3.98	26	5.05
		May 25	3.42	17	4.07	Feb. 2	5.10
Jan. 24	3.40	Aug. 18	4.96	24	4.16		

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 4. (35/9W-2J1). Chesapeake and Ohio Railroad Co. Griffith. NE¼SE¼ sec. 2, T. 35 N., R. 9 W. Drilled unused artesian well in sand, diameter 34 inches, reported depth 82 feet. Land-surface datum is 638 feet above msl. Highest water level is 13.00 below lsd, May 20, 1957; lowest 19.05 below lsd, Oct. 17, 19, 1956. Recording gage installed July 19, 1956. Records available: 1956-1958. Affected by nearby pumping and by trains.

(Daily highest water level from recorder graph, 1956)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-----	18.14	e17.20	16.90	18.05	17.55
2	-----	18.17	-----	17.05	18.40	17.05
3	-----	18.15	-----	17.15	18.20	17.00
4	-----	17.70	-----	17.50	17.65	17.35
5	-----	17.37	-----	17.75	17.55	17.50
6	-----	17.27	-----	17.65	17.80	17.55
7	-----	17.54	-----	17.15	18.05	17.65
8	-----	17.96	-----	17.00	-----	17.45
9	-----	-----	-----	17.40	18.30	17.00
10	-----	17.81	-----	17.85	18.00	16.95
11	-----	17.82	-----	18.20	17.50	17.10
12	-----	17.22	-----	18.15	17.45	17.40
13	-----	17.18	-----	18.10	e17.55	17.60
14	-----	17.32	17.48	17.60	18.30	17.75
15	-----	e17.40	-----	17.45	18.70	17.50
16	-----	17.81	-----	17.80	18.60	17.00
17	-----	17.92	-----	18.70	-----	16.85
18	-----	17.71	-----	18.60	-----	17.20
19	-----	16.98	-----	18.75	-----	17.45
20	e17.36	16.85	-----	18.60	-----	17.60
21	17.37	16.98	17.31	18.35	-----	17.65
22	-----	17.07	-----	18.35	17.65	17.45
23	-----	17.23	-----	18.25	17.55	16.95
24	-----	17.35	-----	18.30	17.00	16.75
25	-----	17.35	-----	18.55	16.90	16.55
26	-----	16.66	-----	18.50	16.95	16.50
27	18.01	16.62	-----	18.25	17.25	16.70
28	18.07	17.33	17.80	17.90	17.45	16.90
29	17.63	17.52	17.55	17.85	17.75	17.00
30	17.43	17.59	17.00	17.85	17.70	16.55
31	17.79	17.54	-----	17.95	-----	16.45

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 4--Continued

(Daily highest water level from recorder graph, 1957)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	e16.40	16.75	16.20	-----	-----	13.60	-----	-----	15.25	16.15	-----	-----
2	e16.40	16.60	16.05	-----	13.65	13.75	-----	h14.70	14.80	16.45	-----	-----
3	16.80	16.25	15.75	-----	13.75	13.65	h14.61	-----	14.70	16.65	-----	-----
4	16.95	16.15	15.70	15.35	13.70	13.95	-----	-----	15.10	16.75	-----	-----
5	16.95	16.50	-----	15.25	13.40	-----	-----	-----	15.50	16.75	-----	-----
6	16.65	16.85	16.05	e15.05	13.35	h14.51	-----	-----	-----	16.60	-----	-----
7	16.60	17.00	15.95	-----	13.75	-----	-----	-----	15.65	16.60	-----	-----
8	16.95	16.90	15.95	-----	-----	-----	-----	e14.65	15.55	16.75	-----	-----
9	16.90	16.55	15.90	-----	14.30	-----	e14.75	14.95	15.50	16.85	-----	-----
10	17.15	16.20	e15.65	-----	-----	-----	15.00	-----	15.70	-----	-----	-----
11	17.25	16.10	-----	14.85	-----	-----	15.25	-----	15.90	17.00	-----	-----
12	16.95	16.20	-----	14.85	-----	-----	14.90	-----	15.95	16.90	-----	-----
13	-----	e16.25	-----	-----	-----	14.20	14.75	-----	16.00	16.80	-----	-----
14	e16.85	16.30	15.75	-----	-----	14.05	-----	-----	15.90	16.75	-----	-----
15	16.95	16.30	15.80	-----	-----	13.80	-----	14.85	15.70	16.90	-----	-----
16	17.05	16.10	15.75	-----	13.75	13.50	-----	14.85	15.60	16.80	-----	-----
17	-----	15.95	15.35	h14.85	13.70	13.45	-----	14.65	15.84	16.75	-----	-----
18	h17.29	15.85	15.25	-----	13.50	-----	13.80	14.50	16.05	16.80	-----	-----
19	-----	16.15	-----	-----	13.10	e13.95	13.85	14.40	16.20	16.50	-----	-----
20	-----	16.25	-----	-----	13.00	14.15	13.85	14.60	16.25	-----	-----	-----
21	-----	16.30	15.80	-----	13.10	14.30	13.60	14.90	16.15	-----	-----	-----
22	-----	16.35	15.75	-----	13.15	-----	13.50	15.05	15.95	-----	-----	-----
23	h17.17	16.20	e15.35	-----	13.35	-----	13.70	15.10	15.80	-----	-----	-----
24	-----	15.75	-----	h14.85	13.50	-----	13.85	14.85	16.00	-----	-----	-----
25	-----	15.65	-----	-----	13.40	-----	13.95	14.55	-----	-----	-----	-----
26	-----	15.85	-----	-----	13.35	-----	14.05	14.45	-----	-----	-----	-----
27	-----	16.05	-----	-----	13.40	14.40	14.25	14.85	16.35	-----	-----	-----
28	-----	16.15	15.65	-----	13.80	-----	14.25	15.15	16.30	-----	-----	-----
29	-----	-----	15.70	-----	14.00	-----	e14.00	15.20	16.10	-----	-----	-----
30	h16.92	-----	15.35	-----	13.90	-----	-----	15.35	16.00	-----	-----	-----
31	16.70	-----	e15.10	-----	13.60	-----	-----	15.40	-----	-----	-----	-----

(Daily highest water level from recorder graph, 1958)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-----	13.95	14.25	13.80	14.30	14.70	13.80	15.45	14.75	-----	-----	-----
2	-----	13.90	13.95	13.85	14.50	14.60	14.20	15.15	14.70	-----	-----	-----
3	-----	13.90	13.90	13.90	14.40	14.75	14.20	15.05	15.00	16.20	-----	-----
4	-----	-----	-----	13.85	14.30	14.95	13.90	15.00	15.45	16.15	-----	-----
5	-----	-----	-----	13.70	14.15	15.00	13.65	15.25	-----	16.10	-----	16.40
6	-----	-----	-----	13.70	14.20	15.05	13.55	15.35	15.60	16.10	16.55	16.10
7	-----	14.00	14.30	13.65	14.40	15.00	13.50	15.35	15.60	16.20	-----	16.00
8	-----	-----	14.05	-----	14.45	14.25	13.80	15.30	15.65	16.30	-----	16.00

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 4--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	-----	-----	13.80	-----	14.50	14.10	14.10	15.25	15.90	16.35	-----	-----
10	-----	-----	13.80	-----	14.45	14.05	14.25	15.20	16.05	16.30	-----	16.40
11	-----	-----	13.90	14.00	14.40	14.00	14.35	15.20	16.15	16.25	-----	16.30
12	-----	-----	13.90	14.00	14.35	14.00	14.35	15.25	16.15	16.10	-----	16.40
13	-----	-----	13.90	13.85	14.60	13.90	14.20	15.25	16.15	16.10	-----	16.50
14	-----h	14.85	13.95	13.80	14.80	13.60	14.10	-----	16.10	16.25	16.40	16.35
15	-----e	14.65	13.70	14.00	14.95	13.40	14.25	15.15	16.10	16.25	16.10	-----
16	-----	-----	13.50	14.25	15.05	13.30	-----	14.65	16.25	16.25	16.10	16.65
17	-----	-----	13.40	14.40	15.05	13.45	-----	14.25	16.05	16.40	16.15	16.60
18	-----	-----	13.65	14.45	15.00	13.55	14.75	14.15	-----	-----	-----	16.70
19	-----	-----	13.80	14.35	14.90	13.65	14.80	14.40	-----	-----	-----	16.65
20	-----	-----	13.90	14.15	15.00	13.80	14.70	14.55	-----	-----	-----	16.65
21	-----	15.05	13.85	14.05	15.25	13.70	14.60	14.65	15.65	-----	-----	16.55
22	-----	14.95	13.75	14.15	15.40	13.45	14.80	14.65	15.65	-----h	16.25	16.45
23	-----	14.80	13.55	14.30	15.50	13.40	15.00	14.55	15.85	-----	-----	16.55
24	-----	14.70	13.50	-----	15.40	13.60	15.15	14.50	15.85	16.45	-----	16.55
25	-----	-----	13.75	14.35	15.25	13.65	15.15	14.55	15.90	16.35	-----	16.15
26	-----	-----	13.85	14.25	15.15	13.70	15.30	14.80	16.00	16.25	-----	16.05
27	-----	-----	13.90	14.10	15.25	13.75	15.25	15.05	-----	16.25	-----	16.15
28	14.00	14.45	13.95	14.00	15.45	13.80	15.20	15.20	-----	-----h	15.85	16.25
29	14.05	-----	13.90	14.15	15.65	13.80	15.45	15.40	-----	-----	-----	16.30
30	14.05	-----	13.75	14.25	15.45	13.70	15.65	15.40	-----	-----	-----	16.55
31	14.05	-----	13.70	-----	15.15	-----	15.65	15.10	-----	16.55	-----	16.60

Lake 5. (36/9W-28B1). Town of Highland. NW¼NE¼ sec. 28, T. 36 N., R. 9 W. Drilled unused artesian well in sand, diameter 72 inches, reported depth 39 feet. Land-surface is 615 feet above msl. Highest water level is 4.95 below lsd, Jan. 4, 1958; lowest 10.30 below lsd, Aug. 11, 1956. Records available: 1956-58.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1956		Oct. 6	9.80	1957		Mar. 30	6.30
		12	9.70			Apr. 6	6.10
June 28	8.02	20	10.00	Jan. 5	8.30	13	6.00
July 19	8.20	26	9.70	12	8.40	20	5.80
28	8.50	Nov. 3	9.90	19	8.30	27	5.10
Aug. 4	8.80	9	9.10	25	8.20	May 4	5.30
11	10.30	17	9.00	Feb. 2	8.00	11	5.80
18	9.90	26	8.70	9	7.90	18	5.50
25	8.80	Dec. 1	8.60	16	7.80	25	5.30
Sept. 1	9.00	8	8.50	23	7.60	June 1	5.50
7	8.80	15	8.30	Mar. 2	7.20	8	6.30
15	8.90	22	8.40	9	8.00	15	6.20
22	8.90			16	7.70	22	7.10
28	10.00			23	6.40	27	7.00

Lake 5--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1957		Nov. 2	6.27	Feb. 22	5.93	July 5	5.76
		9	5.85	Mar. 1	5.67	12	6.52
July 6	7.20	16	6.11	8	5.28	19	6.78
13	8.00	23	5.14	15	5.22	26	8.22
20	6.70	30	5.15	22	5.15	Aug. 2	7.64
27	6.80	Dec. 7	5.15	29	5.18	9	7.85
Aug. 3	7.20	14	5.28	Apr. 5	5.40	16	7.66
10	7.50	21	5.17	12	5.44	23	7.58
17	7.00	28	4.98	19	5.94	30	7.48
24	7.70			26	5.76	Sept. 6	7.48
31	7.20	1958		May 3	6.38	13	7.97
Sept. 7	7.30			10	6.57	20	7.80
14	7.40	Jan. 4	4.95	17	7.84	27	7.77
21	7.40	11	5.14	24	7.48	Oct. 4	7.84
28	7.40	18	5.35	31	9.18	11	7.92
Oct. 5	7.90	25	5.37	June 7	7.64	18	8.18
12	8.08	Feb. 1	5.47	14	6.28		
19	7.85	8	5.52	21	5.73		
26	7.06	15	5.66	28	5.56		

Lake 6. (34/9W-5E1). Michigan-Wisconsin Pipeline Co. St. John. SW¼NW¼ sec. 5, T. 34 N., R. 9 W. Drilled unused artesian well in sand, diameter 6 inches, reported depth 125 feet. Land-surface datum is 710 feet above msl. Recording gage installed Aug. 20, 1956. Highest water level is 24.90e below lsd, Aug. 17, 1958; lowest 34.03 below lsd, Sept. 24, 1956. Records available: 1956-58. Affected by nearby pumping.

(Daily highest water level from recorder graph, 1956)

Aug. 17	33.52	Aug. 23	33.57	Sept. 4	33.68	Sept. 12	33.80
18	33.54	28	33.61	5	33.69	13	33.81
19	33.54	29	33.62	6	33.70	14	33.82
20	33.55	30	33.65	7	33.71	15	33.84
21	33.56	Sept. 2	33.66	8	33.72	25	33.76
22	33.57	3	33.67	11	33.78	26	33.76

(Daily highest water level from recorder graph, 1957)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-----	-----	-----	-----	-----	-----	-----	32.30	32.80	33.49	33.11	32.50
2	-----	-----	-----	-----	-----	-----	-----	32.31	32.97	33.58	33.08	32.49
3	-----	-----	-----	-----	-----	-----	-----	32.27	33.02	33.74	33.06	32.54
4	-----	-----	-----	-----	-----	-----	-----	32.27	33.00	-----	33.08	32.52
5	-----	-----	-----	-----	-----	-----	-----	32.37	33.00	-----	33.07	32.53
6	-----	-----	-----	-----	-----	-----	-----	-----	33.13	-----	33.10	32.45

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 6--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	-----	-----	-----	-----	30.72	-----	-----	-----	33.15	-----	33.10	32.40
8	-----	-----	-----	-----	30.86	-----	-----	-----	33.15	-----	33.08	32.42
9	-----	-----	-----	-----	30.99	31.15	-----	32.32	33.20	-----	33.07	32.40
10	-----	-----	-----	-----	31.07	31.16	-----	32.40	33.24	33.63	33.15	32.37
11	-----	-----	-----	-----	31.14	31.18	-----	32.51	33.22	33.56	33.15	32.37
12	-----	-----	33.48	-----	31.20	31.18	-----	32.58	33.14	33.50	33.17	32.85
13	-----	-----	33.52	-----	-----	30.92	-----	32.58	33.10	33.49	33.16	32.70
14	-----	-----	33.53	-----	-----	30.84	-----	32.54	-----	33.52	32.96	32.57
15	-----	-----	33.49	-----	-----	30.94	-----	32.57	-----	33.52	32.93	e32.50
16	-----	-----	33.49	-----	-----	31.09	-----	32.55	-----	33.61	32.92	-----
17	-----	-----	33.49	-----	-----	-----	30.20	32.55	-----	33.67	32.91	-----
18	-----	-----	e33.50	-----	30.39	-----	30.70	32.55	-----	33.58	32.80	-----
19	-----	-----	-----	-----	30.47	-----	31.05	32.61	33.32	33.46	32.78	32.22
20	-----	-----	-----	-----	30.47	-----	31.29	32.61	33.29	33.44	32.77	32.18
21	-----	-----	-----	-----	30.51	-----	31.46	32.65	33.26	33.48	32.76	32.18
22	-----	-----	32.72	-----	30.57	h31.30	31.61	32.71	33.30	33.55	32.77	32.16
23	-----	-----	32.72	-----	30.61	-----	31.69	-----	33.32	33.59	32.74	32.14
24	-----	-----	32.69	-----	30.62	-----	31.85	-----	33.36	33.55	32.71	32.22
25	-----	-----	32.66	-----	30.65	-----	31.94	-----	33.47	33.44	32.66	32.09
26	-----	-----	e32.63	-----	30.68	-----	32.02	-----	33.44	e33.28	32.61	32.06
27	-----	-----	e32.63	-----	30.71	-----	32.05	-----	33.41	-----	32.58	32.03
28	-----	-----	-----	-----	-----	-----	32.15	-----	33.38	-----	-----	32.00
29	-----	-----	-----	-----	-----	-----	32.23	-----	33.36	-----	-----	32.04
30	-----	-----	-----	-----	-----	-----	32.25	32.72	33.37	-----	32.53	31.96
31	-----	-----	-----	-----	-----	-----	32.22	32.73	-----	33.14	-----	31.93

(Daily highest water level from recorder graph, 1958)

1	31.94	31.48	31.47	31.92	31.65	32.21	31.55	31.42	30.48	31.10	31.52	32.16
2	31.93	31.47	31.56	31.86	31.62	32.21	31.64	31.42	30.51	31.15	31.54	32.18
3	-----	31.47	31.61	31.85	31.66	32.12	31.77	31.42	30.53	31.16	31.55	32.19
4	-----	31.53	31.66	31.82	31.61	32.07	31.86	31.51	30.56	31.17	31.57	32.20
5	-----	31.52	31.67	31.78	31.57	32.04	31.83	31.57	30.58	31.19	31.59	32.22
6	31.84	31.56	31.75	31.71	31.56	32.03	31.76	-----	30.61	31.21	31.75	32.24
7	31.78	31.59	31.76	31.66	31.58	32.09	31.72	h25.73	30.63	31.23	31.76	32.26
8	31.73	31.80	31.84	31.64	31.57	31.93	31.63	26.35	30.65	31.24	31.78	32.29
9	31.68	31.78	31.84	31.69	31.60	31.90	31.60	26.92	30.68	31.10	31.80	32.31
10	31.64	31.84	31.93	31.66	31.58	-----	31.54	27.21	30.70	31.11	31.82	e32.33
11	31.62	31.82	31.93	31.65	31.73	-----	31.52	27.52	30.72	31.12	31.84	e32.36
12	31.64	31.86	31.95	31.69	31.89	31.57	-----	27.76	30.74	31.14	31.85	32.37
13	31.64	31.82	31.93	31.66	31.86	-----	-----	27.94	30.75	31.17	31.88	32.38
14	31.74	31.83	31.93	31.63	31.81	-----	-----	28.07	30.79	e31.19	31.89	32.39
15	31.69	31.71	31.92	31.61	31.79	-----	31.37	-----	30.83	e31.21	31.91	32.41
16	31.70	31.71	31.92	-----	31.86	31.30	31.34	-----	30.85	e31.23	31.91	32.41
17	31.64	31.85	31.90	-----	31.83	31.41	31.34	e24.90	30.87	31.25	31.93	32.40
18	31.61	31.98	31.89	31.89	31.80	31.46	31.37	26.86	30.88	31.27	31.94	-----

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 6--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19	31.60	32.01	31.90	31.80	31.78	31.45	31.36	28.12	30.89	31.30e	31.96	32.21
20	31.67	32.02	31.87	31.80	31.98	31.43	-----	28.87	30.91	31.31	31.97	32.21
21	-----	32.01	31.88	31.73	31.92	31.44	-----	29.38	30.92	31.33	31.99	32.22
22	-----	31.83	31.87	31.73	31.90	31.49	-----	29.69	30.94	31.35	32.00	32.24
23	31.47	-----	31.90	31.73	31.89	31.44	-----	29.91	30.96	31.38	32.02	32.26
24	31.49	-----	31.90	31.66	31.88	31.42	-----	30.10	30.98	31.40e	32.04	32.28
25	31.45	-----	31.91	31.64	31.90	31.37e	31.39	30.19	31.00	31.41e	32.06	32.30
26	31.42	-----	31.93	31.66	31.94	31.38	31.43	30.27	31.02	31.43e	32.07	32.32
27	31.43	-----	31.93	31.65	31.98	31.41	31.44	30.32	31.03	31.44	32.09	32.33
28	31.43	31.28	31.91	31.66	32.00	31.42	31.44	30.37	31.05	31.46	32.12	32.35
29	31.46	-----	32.06	31.63	32.14	31.43	31.41	30.41	31.06	31.48	32.13	32.37
30	31.45	-----	32.02	31.61	32.23	31.48	31.41	30.43	31.08	31.49	32.14	32.39
31	31.45	-----	31.95	-----	32.28	-----	31.43	30.45	-----	31.51	-----	32.41

Lake 7. (34/9W-25B1). Lloyd Wakefield. Cedar Lake. NW¼NE¼ sec. 25, T. 34 N., R. 9 W. Drilled unused artesian well in limestone(?), diameter 3 inches, reported depth 230 feet. Land-surface datum is 750 feet above msl. Highest water level is 51.17 below lsd, Mar. 15, 1958; lowest 60.90 below lsd, Aug. 20, 1957. Records available: 1957-58.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1957		July 2	60.54	Mar. 29	58.07	Aug. 25	60.73
		9	60.75	Apr. 14	60.35	30	60.79
Mar. 12	60.14	16	60.66	21	60.19	Sept. 6	60.88
19	60.16	23	60.77	28	60.15	13	60.61
26	60.23	30	60.68	May 5	60.35	25	60.76
Apr. 2	60.45	Aug. 6	60.84	12	60.67	Oct. 6	60.52
9	60.56	13	60.83	19	60.55	13	60.81
16	60.50	20	60.90	27	60.59	20	60.62
23	60.35	27	60.83	June 3	60.68	27	60.61
30	60.37	Sept. 3	60.66	10	60.28	Nov. 3	60.43
May 7	60.46	10	60.65	18	60.22	10	60.39
14	60.07	17	60.76	27	60.44	17	60.63
21	59.80	24	60.64	July 3	60.55	24	60.53
28	60.33			12	60.43	Dec. 1	60.56
June 4	60.46	1958		21	60.63		
11	60.11			29	60.67		
18	60.38	Mar. 15	51.17	Aug. 8	60.83		
25	60.55	22	54.33	19	60.64		

Lake 8. (37/9W-8Q1). Standard Oil Co. Whiting. SW¼SE¼ sec. 8, T. 37 N., R. 9 W. Drilled unused artesian well in limestone and sandstone, diameter 14 to 8 inches, reported depth 1,238 feet. Land-surface datum is 590 feet above msl. Highest water level is 3.70 below lsd, Dec. 26, 1958; lowest 60.10 below lsd, May 9, 1957. Records available: 1957-58.

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 8--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1957		Aug. 23	55.40	Feb. 13	42.50	July 25	38.60
		29	56.40	20	46.30	31	36.60
Mar. 14	49.42	Sept. 5	55.75	27	50.60	Aug. 8	29.00
21	50.90	12	58.60	Mar. 6	51.20	14	27.50
28	52.53	20	58.20	13	58.20	21	29.90
Apr. 4	54.20	26	58.20	20	59.30	28	31.00
11	55.62	Oct. 3	4.11	27	58.90	Sept. 4	32.20
18	56.90	11	8.50	Apr. 2	51.90	11	33.30
25	58.10	17	13.70	8	47.40	17	34.50
May 2	59.14	Nov. 13	14.80	18	48.40	26	36.70
9	60.10	21	15.25	24	49.60	Oct. 6	39.00
16	27.50	28	15.75	May 2	47.10	9	39.70
23	31.40	Dec. 3	16.40	9	51.30	16	41.10
31	35.10	12	19.60	15	50.00	23	42.30
June 7	38.10	19	23.65	22	50.70	31	42.90
14	40.60	22	32.30	28	52.60	Nov. 6	43.80
20	42.80			June 2	53.00	13	44.70
27	44.70	1958		6	53.30	20	45.60
July 3	46.70			12	53.70	28	25.10
11	47.30	Jan. 10	32.40	19	54.20	Dec. 8	19.70
19	48.30	17	34.20	26	52.80	11	20.50
29	51.00	24	35.90	July 2	51.50	14	30.60
Aug. 2	51.72	31	37.70	11	42.70	26	3.70
12	52.89	Feb. 6	39.60	17	40.90		

Lake 9. (37/8W-31H1). American Bridge Division, U. S. Steel Corp. Gary. SE¼NE¼ sec. 31, T. 37 N., R. 8 W. Dug industrial water-table well in sand, diameter 50 feet, reported depth 30 feet. Land-surface datum is 595 feet above msl. Recording gage installed Mar. 13, 1957, removed Apr. 24, 1958. Highest water level is 7.1 below lsd, July 22, 1957; lowest 14.0 below lsd, Aug. 22, 1958, Records available: 1957-58.

(Daily highest water level from recorder graph)

1957		Mar. 25	7.60	Apr. 7	7.60	July 18	8.30
		26	7.60	8	7.50	19	8.10
Mar. 14	7.40	27	7.50	9	7.50	20	8.30
15	7.40	28	7.50	10	7.50	21	7.20
16	7.40	29	7.50	11	7.40	22	7.10
17	7.50	30	7.50	July 10	10.70	23	8.40
18	7.50	31	7.50	11	11.20	24	9.00
19	7.50	Apr. 1	7.60	12	12.00	25	9.20
20	7.50	2	7.50	13	9.80	26	e11.60
21	7.50	3	7.60	14	8.10	Aug. 2	11.40
22	7.60	4	7.50	15	7.80	3	11.20
23	7.60	5	7.40	16	8.40	4	8.90
24	7.50	6	7.50	17	8.10	5	8.40

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 9--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1957		May 16	h10.70	July 25	h12.40	Oct. 31	h12.00
		23	h11.00	Aug. 1	h11.60	Nov. 7	h9.94
Aug. 6	9.00	20	h11.30	8	h10.80	14	h12.00
7	9.70	June 6	h12.20	15	h12.10	21	h11.94
8	10.50	13	h11.80	22	h14.00	28	h10.98
1958		20	h12.60	29	h11.60	Dec. 5	h8.91
		27	h13.30	Oct. 3	h7.98	12	h12.94
		July 3	h13.50	10	h9.94	19	h10.00
May 2	h8.10	11	h12.60	17	h12.00	26	h11.94
9	h8.30	18	h10.20	24	h12.94		

Lake 10. (37/9W-15M1). Inland Steel Co. East Chicago. NW¼SW¼ sec. 15, T. 37 N., R. 9 W. Drilled unused artesian(?) well in limestone, diameter 8 inches, reported depth 550 feet. Land-surface datum is about 595 feet above msl. Highest water level is 24.43 below lsd, Dec. 4, 1958; lowest 30.25 below lsd, Nov. 21, 1957. Records available: 1957-58.

1957		Aug. 29	28.47	Jan. 23	29.28	July 10	25.85
		Sept. 5	28.20	30	28.91	17	25.90
Mar. 28	28.33	12	28.33	Feb. 6	28.75	24	25.02
Apr. 4	28.32	19	28.79	13	28.42	31	25.57
11	28.93	26	29.40	20	28.35	Aug. 7	25.49
18	28.93	Oct. 3	29.60	27	27.23	14	25.45
25	29.31	10	29.80	Mar. 6	28.20	21	25.41
May 2	29.35	17	29.67	13	28.29	28	25.38
9	28.92	24	29.79	20	28.52	Sept. 11	25.47
16	28.80	31	29.88	27	28.19	18	25.29
23	28.20	Nov. 7	29.88	Apr. 3	27.76	25	25.10
30	28.23	14	29.47	10	27.46	Oct. 2	25.42
June 6	27.74	21	30.25	17	27.30	9	24.92
13	27.50	28	29.94	24	27.00	16	25.10
20	27.60	Dec. 5	30.06	May 1	26.87	23	25.00
27	27.57	12	29.10	8	26.20	30	25.30
July 4	27.80	19	29.73	15	26.58	Nov. 6	24.98
11	28.38	26	29.85	22	26.24	13	25.00
18	28.44			29	26.30	20	25.08
25	28.56	1958		June 6	26.25	27	25.18
Aug. 1	28.38			12	26.09	Dec. 4	24.43
8	28.60	Jan. 2	30.00	19	25.86	11	24.77
15	28.20	9	29.69	26	25.86	18	24.44
22	28.62	16	29.54	July 3	25.88	24	24.49

Table 5.--Water levels in observation wells in Lake County, Indiana--Continued

Lake 11. (32/8W-28F1). Town of Shelby. SE¼NW¼ sec. 28, T. 32 N., R. 8 W. Driven unused water-table well in sand, diameter 4 inches, reported depth 18 feet. Land-surface datum is 642 feet above msl. Highest water level is 4.10 below lsd, May 24, 1957; lowest 9.50 below lsd, Jan. 11, 1957. Records available: 1956-58.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1956		Nov. 30	9.25	Aug. 9	5.75	Apr. 18	6.75
		Dec. 7	9.30	16	6.20	25	6.85
Mar. 16	6.80	14	9.30	23	6.40	May 3	6.95
23	6.90	21	9.45	30	6.55	9	7.00
30	7.10	28	9.40	Sept. 6	7.05	16	7.10
Apr. 6	7.15			13	7.30	23	7.25
13	7.25	1957		20	7.60	30	7.45
20	7.40			27	7.85	June 8	7.50
27	7.40	Jan. 4	9.45	Oct. 4	8.05	13	6.30
May 4	5.50	11	9.50	11	8.20	20	5.65
11	5.30	18	9.45	18	3.25	27	5.95
18	5.30	25	9.30	25	7.60	July 4	6.20
25	4.90	Feb. 1	9.20	Nov. 1	7.15	11	6.30
June 1	5.05	8	9.20	8	7.25	18	5.55
8	5.55	15	9.00	15	7.05	25	5.70
15	5.80	27	8.90	22	6.95	Aug. 1	6.00
22	6.00	Mar. 1	8.85	29	6.80	8	6.20
30	6.20	8	8.80	Dec. 6	6.60	15	6.40
July 6	6.60	15	8.80	13	6.55	22	6.55
13	6.80	22	8.70	20	6.35	29	6.80
20	6.95	29	8.60	27	5.80	Sept. 5	7.10
27	7.15	Apr. 5	8.40			12	7.40
Aug. 3	7.40	12	7.20	1958		19	7.55
10	7.60	19	6.95			26	7.70
17	7.80	26	5.65	Jan. 3	5.60	Oct. 3	7.95
24	8.05	May 3	4.30	10	5.80	10	8.05
31	8.15	10	4.55	17	6.10	17	8.20
Sept. 7	8.35	17	4.15	24	6.65	24	8.25
14	8.40	24	4.10	31	6.25	31	8.35
21	8.45	31	4.55	Feb. 7	6.40	Nov. 7	8.45
28	8.60	June 7	4.85	14	6.55	14	8.55
Oct. 5	8.76	14	5.00	21	6.90	21	8.49
12	8.80	21	4.40	28	6.85	28	8.45
19	8.90	28	4.30	Mar. 7	6.70	Dec. 5	8.35
25	9.00	July 5	4.55	14	6.55	12	8.30
Nov. 2	9.00	12	5.05	21	6.40	19	8.45
9	9.10	19	4.30	28	6.50	26	8.55
16	9.15	26	5.10	Apr. 4	6.25		
23	9.20	Aug. 2	5.50	11	6.35		

PUBLICATIONS OF COOPERATIVE GROUND-WATER PROGRAM

Report

Ground-water resources of the Indianapolis area, Marion County, Ind. C. L. McGuinness. Indiana Dept. Conserv., Div. Geology, 1943.

Bulletins

No. 1 Memorandum concerning a pumping test at Gas City, Ind. J. G. Ferris. Indiana Dept. Conserv., Div. Water Resources. 1945.

2 A preliminary report of the ground-water levels of the State based on records of twenty-six observation wells for which long time records are available. Anonymous. Indiana Dept. Conserv., Div. Water Resources. 1946 (Out of print).

3 Ground-water resources of St. Joseph County, Ind. Part 1, South Bend area. F. H. Klaer, Jr., and R. W. Stallman. Indiana Dept. Conserv., Div. Water Resources. 1948.

4 Ground-water resources of Boone County, Ind. E. A. Brown. Indiana Dept. Conserv., Div. Water Resources. 1949.

5 Ground-water resources of Noble County, Ind. R. W. Stallman and F. H. Klaer, Jr., Indiana Dept. Conserv., Div. Water Resources. 1950.

7 Water-level records of Indiana. Anonymous. Indiana Dept. Conserv., Div. Water Resources. 1956.

8 Ground-water resources of Tippecanoe County, Ind.: Appendix, Basic Data. J. S. Rosenshein and O. J. Cosner. Indiana Dept. Conserv., Div. Water Resources. 1956.

8 Ground-water resources of Tippecanoe County, Ind. J. S. Rosenshein. Indiana Dept. Conserv., Div. Water Resources. 1958 (1959).

INDEX

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

PREPARED BY THE
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 10, PLATE 1

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

BY J.S. ROSENSHEIN AND R.J. VIG
1960

EXPLANATION

- A1 — Water well or water-well test hole
- F1 — Observation well
- E2 — Spring
- P1 — Structure boring for bridge or foundation
- L1 — Oil or gas test well
- L1 — Test pit

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

DIAGRAM OF TOWNSHIP

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

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

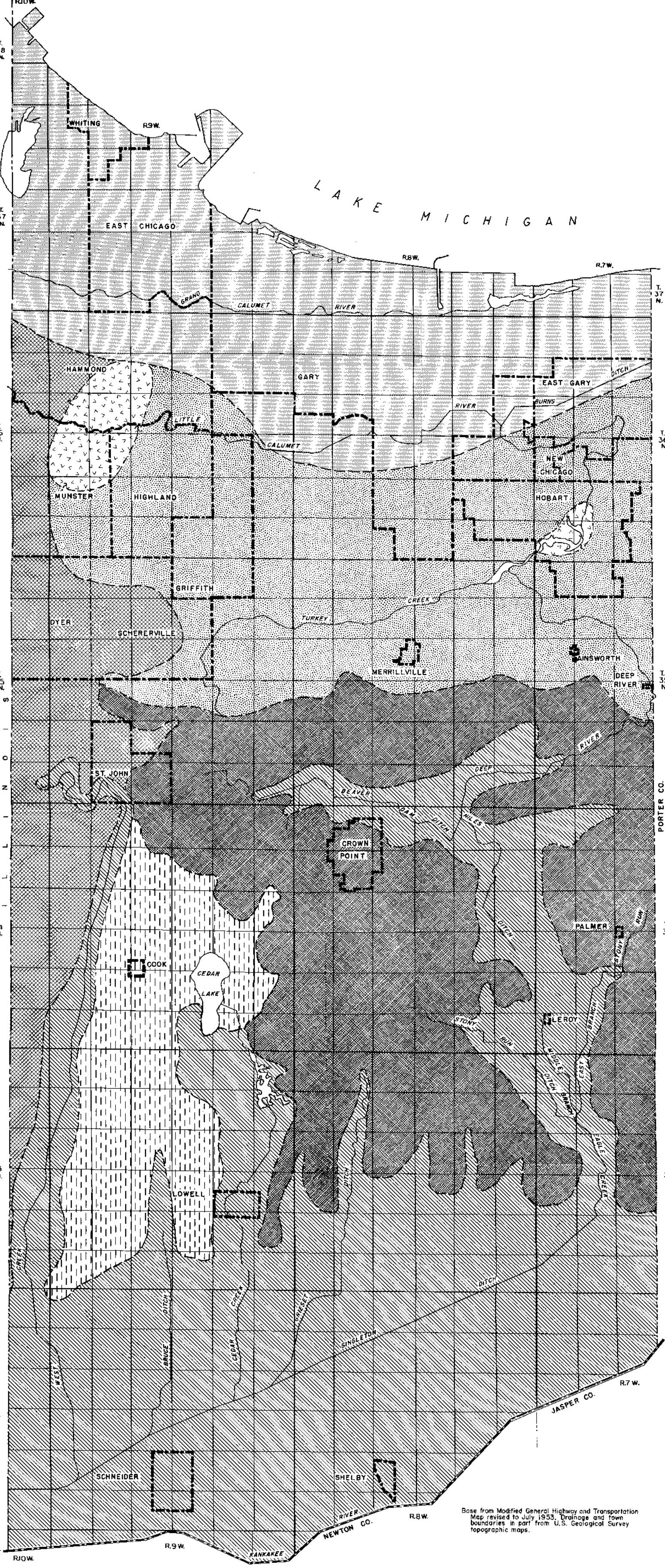
SECTION LETTER SYMBOLS IN WELL-NUMBERING SYSTEM.

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

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

PREPARED BY THE
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 10 PLATE 2



EXPLANATION

Production from bedrock and glaciofluviol sand. Well depths in bedrock generally less than 150 feet. Well depths in sand less than 50 feet. Yields from bedrock and sand generally adequate for domestic use. Larger yields possible from sand.

Production chiefly from bedrock. Well depths generally less than 325 feet. Shallower production possible from glaciofluvial sand and some gravel. Yields generally adequate to more than adequate for domestic use. Larger yields possible locally from bedrock and sand.

Production from bedrock and glaciofluvial sand. Well depths in bedrock generally more than 125 and less than 250 feet. Few wells deeper. Well depths in glaciofluvial sand generally more than 50 and less than 120 feet. Yields generally adequate to more than adequate for domestic use. Larger yields possible from bedrock and sand.

Production chiefly from glaciofluvial sand and some gravel. Well depths generally more than 50 and less than 110 feet. Yields adequate to more than adequate for domestic use. Larger yields possible.

Production chiefly from glaciofluvial sand and gravel. Well depths generally more than 30 and less than 80 feet. Yields adequate to more than adequate for domestic use. Larger yields possible.

T. 33 N. Some production from bedrock and shallow sand and some gravel. Yields from wells in bedrock generally inadequate for industrial use. Shallow sand potential source of larger yields from properly constructed wells; water in sand susceptible to contamination and pollution by sewage and industrial wastes.

T. 32 N. Potential production from bedrock overlain by clay. Yields adequate for domestic use. Little production possible from glaciofluvial sand.

Boundary approximate.

Boundary uncertain.

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

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 LAKE COUNTY, INDIANA SHOWING AVAILABILITY OF GROUND-WATER

0 1 2 3 4 5 6 MILES

0 5000 10000 15000 20000 FEET

BY J.S. ROSENSHEIN
1960

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

PREPARED BY THE
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 10. PLATE 3

LAKE MICHIGAN

WHITING
EAST CHICAGO
HAMMOND
GARY
EAST GARY
NEW CHICAGO
HOBART
MUNSTER
HIGHLAND
GRIFFITH
DYER
SCHERERVILLE
MERRILLVILLE
AINSWORTH
DEEP RIVER
ST. JOHN
CROWN POINT
COOK
CEDAR LAKE
PALMER
LEROY
LOWELL
SCHNEIDER
SHELBY

GRAND CALUMET RIVER
LITTLE CALUMET RIVER
BURNS DITCH
TURKEY CREEK
BEAVER DAM DITCH
NILES DEEP RIVER DITCH
STONY RUN
MIDDLE BRANCH EAST BRANCH EAGLE CREEK
BRUCE CREEK DITCH
WEST CREEK
CEDAR CREEK
GRIESET DITCH
SINGLETON DITCH

PORTER CO.
JASPER CO.
NEWTON CO.

R.10W.
R.9W.
R.8W.
R.7W.
T. 38 N.
T. 37 N.
T. 36 N.
T. 35 N.
T. 34 N.
T. 33 N.
T. 32 N.
T. 31 N.

EXPLANATION

Hardness less than 100 ppm; iron content less than 0.5 ppm; sulfate content less than 50 ppm.

Hardness less than 200 ppm; iron content less than 0.5 ppm; sulfate content less than 100 ppm.

Hardness 200 to 600 ppm; iron content less than 0.5 ppm with few local areas of higher concentration; sulfate content 50 to 250 ppm with few local areas of higher concentration.

Hardness 200 to 600 ppm; iron content 0.5 to 5 ppm; sulfate content 50 to 200 ppm.

Data not sufficient to show quality of water.

Boundary approximate.

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

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 LAKE COUNTY, INDIANA, SHOWING GENERALIZED QUALITY OF WATER IN ROCKS OF MIDDLE SILURIAN AGE

0 1 2 3 4 5 6 MILES

0 5000 10000 15000 20000 FEET

BY J. S. ROSENSHEIN
1960

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
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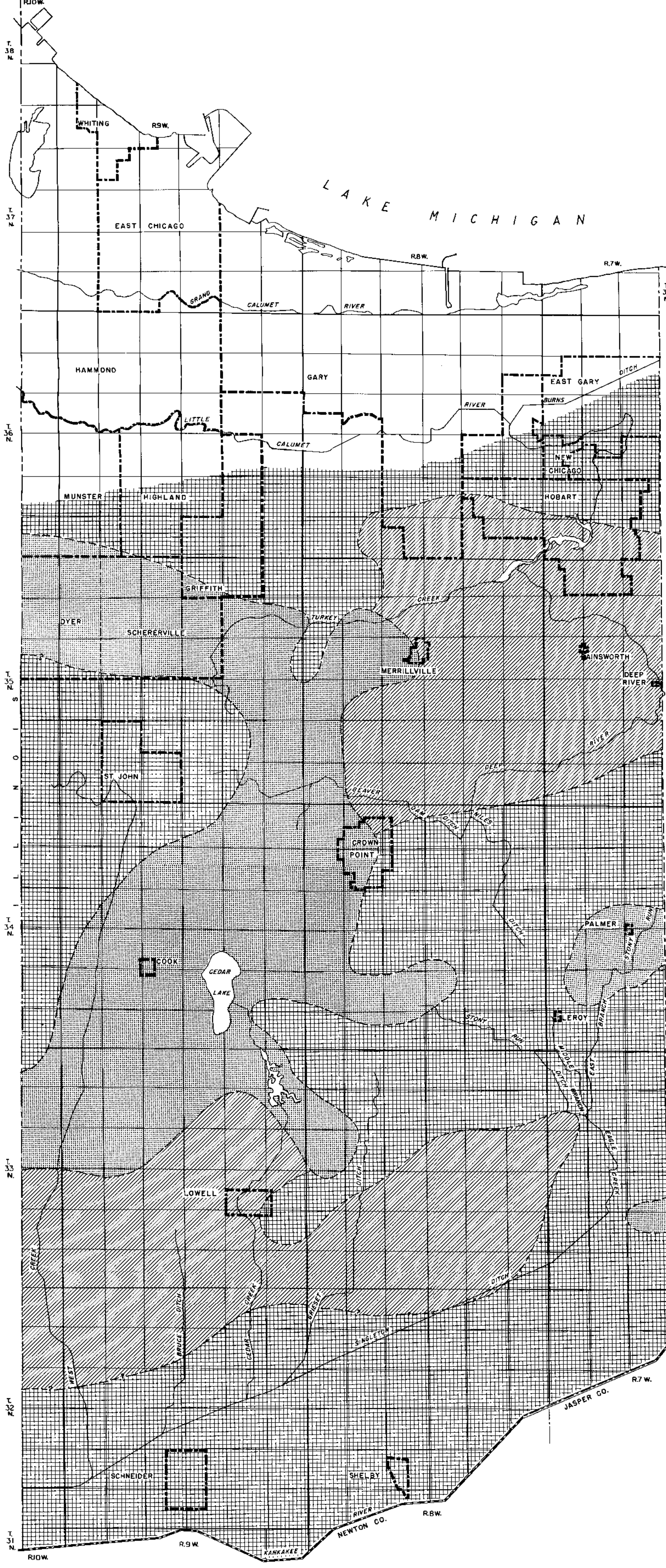
BULLETIN 10. PLATE 4



EXPLANATION

Hardness 200 to 500 ppm; iron content 1 to 8 ppm; sulfate content 10 to 200 ppm.

Hardness 200 to 500 ppm; iron content less than 1 ppm; sulfate content 10 to 100 ppm.

Hardness 500 to 1,100 ppm; iron content 1.5 to 7.5 ppm; sulfate content 100 to 450 ppm.

Data not sufficient to show quality of water.

Boundary approximate.

—?—?—?—

Boundary uncertain.

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

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 LAKE COUNTY, INDIANA, SHOWING GENERALIZED QUALITY OF WATER IN SAND AND GRAVEL DEPOSITS OF PLEISTOCENE AGE.

0 1 2 3 4 5 6 MILES

0 5000 10000 15000 20000 FEET

BY J. S. ROSENSHEIN
1960