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DIVISION OF WATER RESOURCES

BULLETIN NO. 13

GROUND-WATER RESOURCES OF NORTHWESTERN INDIANA

Preliminary Report: LaPorte County

Prepared by the

GEOLOGICAL SURVEY

UNITED STATES DEPARTMENT OF THE INTERIOR

In cooperation with the

DIVISION OF WATER RESOURCES

INDIANA DEPARTMENT OF CONSERVATION

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Donald E. Foltz, Director

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Charles H. Bechert, Director

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BY

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GEOLOGISTS, U. S. GEOLOGICAL SURVEY

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ABSTRACT

La Porte County in northwestern Indiana has an area of about 611 square miles. Glaciofluvial sand and gravel of Pleistocene age are the chief source of ground water in the county for domestic and stock, industrial, and public supplies. Wells in this source generally are less than 200 feet deep and yield from 5 to 2,000 gpm (gallons per minute). The underlying bedrock is not used as a source of ground water except in a few places. However, the bedrock of Devonian or Devonian and Mississippian(?) age is a potential source of water of uncertain quality. Field chemical analyses show that the water from the unconsolidated rocks is moderately hard to very hard, and the hardness is generally greater than 200 ppm and less than 500 ppm. In much of the county the concentration of iron exceeds the maximum concentration recommended in the U. S. Public Health Service drinking-water standards for iron and manganese together.

This preliminary report contains tabulated records of about 900 wells and test holes and 5 springs giving information about well construction, water level, condition of occurrence, and characteristics of water-bearing material; selected logs for about 400 wells and test holes giving driller's description of material penetrated and authors' interpretation of their geologic age; results for about 200 field chemical analyses giving hardness of water and the bicarbonate, carbonate, chloride, iron, and sulfate content; and water levels in 7 observation wells indicating the magnitude of short-term and long-term water-level fluctuations in the 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 La Porte County shows the location of each well, test hole, and spring listed in this report. Additional maps show the availability of ground water in the county and the distribution of the hardness of water in the unconsolidated rocks of Pleistocene age.

INTRODUCTION

Purpose and Scope

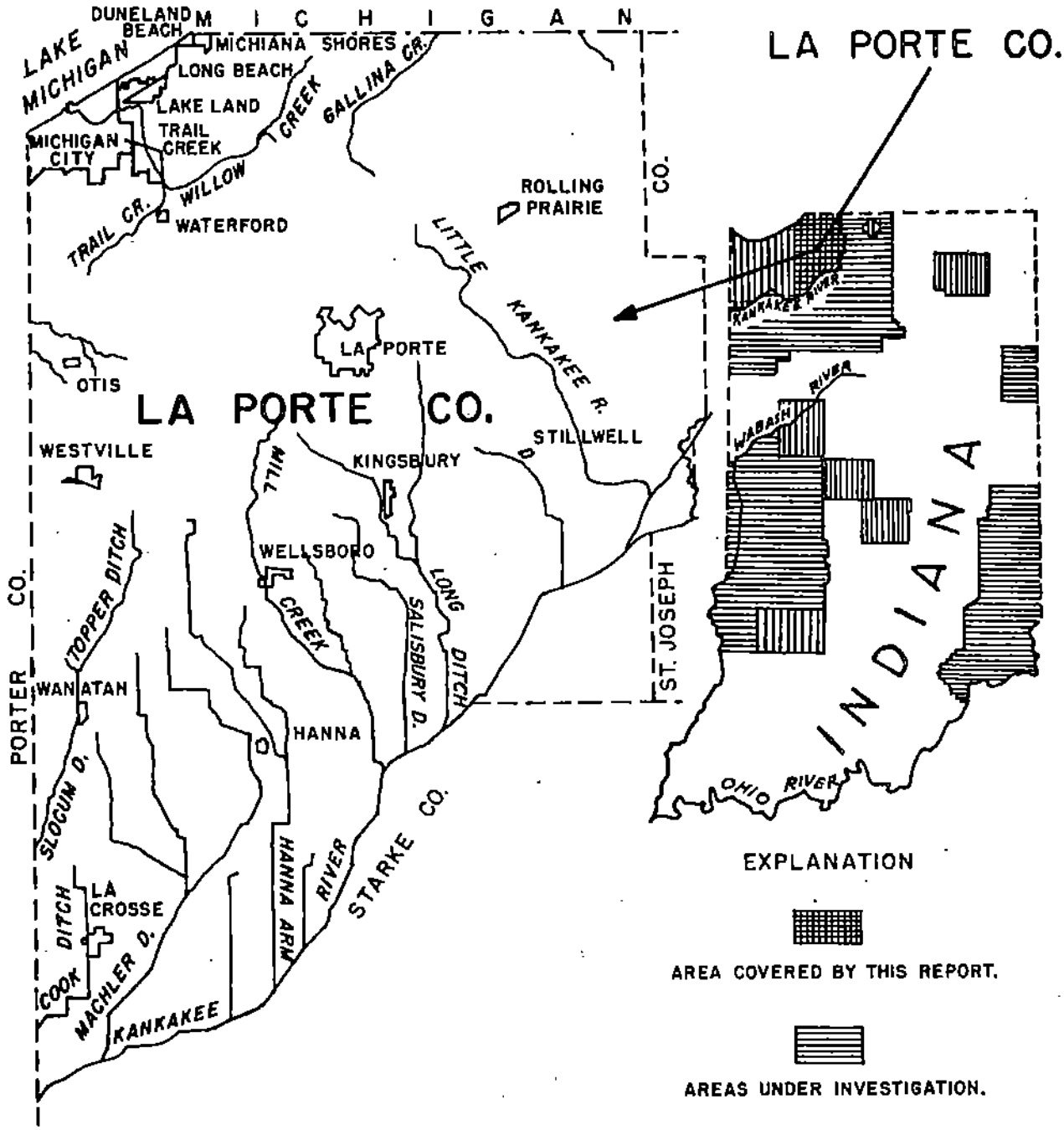
An investigation of the ground-water resources and geology of ten counties in northwestern Indiana has been in progress since June 1954. This investigation is being made by the U. S. Geological Survey in cooperation with the Division of Water Resources, Indiana Department of Conservation, as a part of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

This report is the third 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 of Indiana.

Location and Areal Extent

La Porte County is in the northwestern part of Indiana (fig. 1). The county approximates an elongated rectangle with irregularly shaped boundaries and includes about 611 square miles. It is bounded on the north by Lake Michigan and the State of Michigan, on the south by Starke County, on the west by Porter County, and on the east by St. Joseph County.



SEE PAGE 181 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, test holes, and springs in this report. The number that is assigned each well, test hole, or spring indicates its location according to the official rectangular public-land survey. For example, in the number for well 36/2W-23L1 the numbers preceding the hyphen indicates that the well is in T. 36 N., R. 2 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, test holes, and springs are numbered consecutively. Therefore, well 23L1 is the first well listed in NE¼SW¼ sec. 23, T. 36 N., R. 2 W.

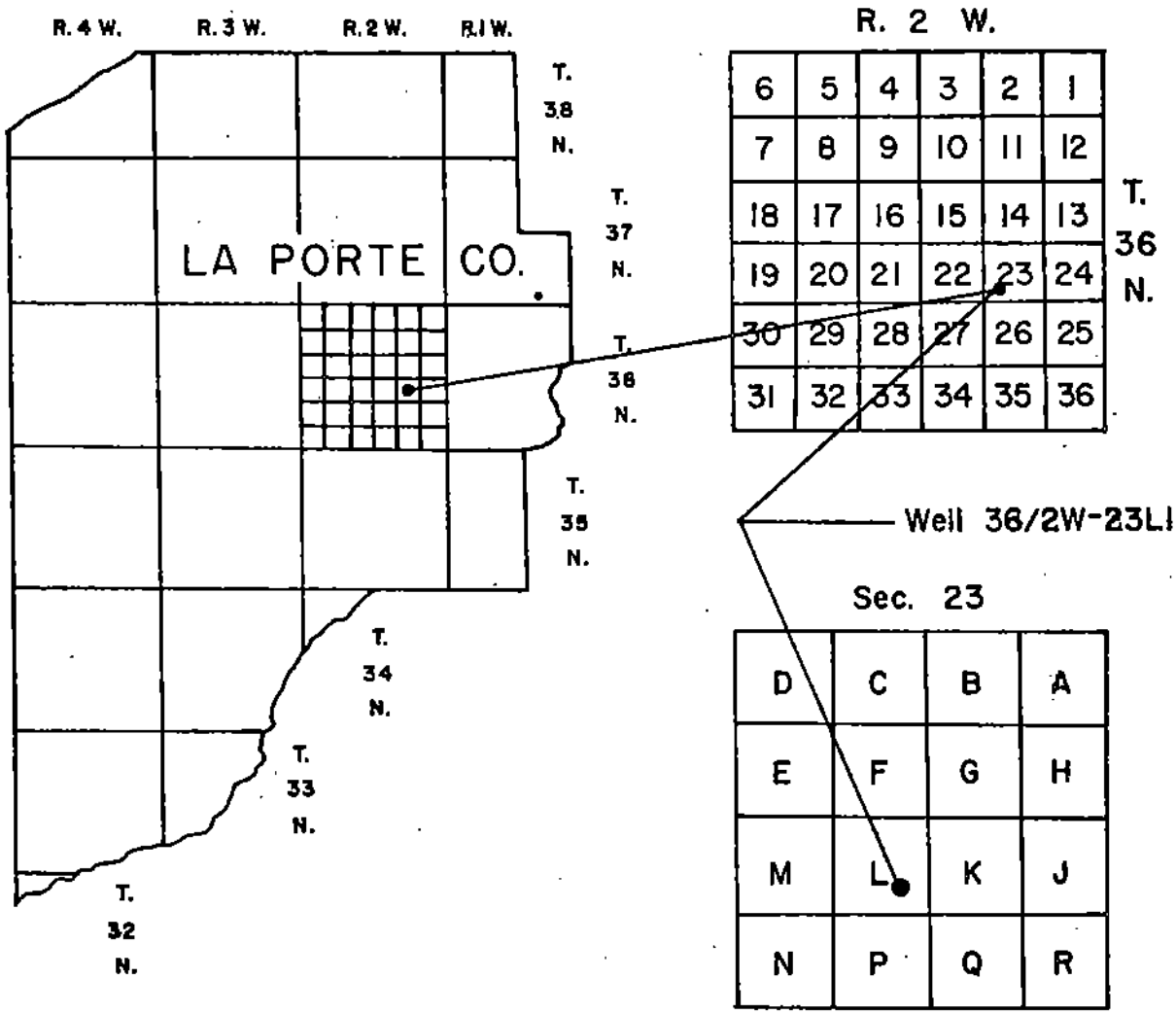


FIGURE 2.--Sketch showing well-numbering system.

Acknowledgments

The authors thank all persons who contributed time, information, and assistance during the collection, tabulation, and processing of data for this report. W. J. Steen of the Indiana Department of Conservation assisted in the processing of data in the field. G. F. Westinghouse of the Topographic Division of the Geological Survey provided elevations determined by the Topographic Division for unpublished topographic quadrangle maps of the county. Well drillers, whose names are listed in the table of well records, furnished much of the information summarized in tables 2 and 3.

The authors thank 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; and Indiana State Board of Health.

DATA COLLECTION AND PROCESSING

The well data were collected principally from drillers, water-works superintendents, and owners. 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, test holes drilled for purposes other than water supply, and springs. Most of these locations are shown to the nearest 10 acres. The basic data for the wells, test holes, and springs are summarized in table 2. In addition, selected driller's logs of wells and test holes are given in table 3.

Samples of water were collected at the time the well and spring 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 by a visual method. The iron concentration was determined by matching the color of the treated sample to that of a liquid-color standard having a definite iron concentration in parts per million. 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 Geological Survey.

Observation wells were established prior to and during 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 collected

from these wells. The observation wells were chosen so as to obtain water-level information from artesian and water-table aquifers consisting of unconsolidated rocks. Whenever possible, the wells were established at sites where the factors affecting the water levels in the aquifer were due chiefly to natural causes.

GENERAL GEOLOGY AND SOURCES OF GROUND WATER

The oldest known consolidated rocks underlying La Porte County are of Ordovician age. These rocks consist of dolomitic limestone and shale and are overlain by dolomitic limestone, shale, and dolomite of Middle Silurian age. The rocks of Ordovician and Silurian age are not used as a source of water supply in the county because they generally lie more than 400 to 500 feet below the surface, and the water they contain is highly mineralized, having generally more than 5,000 ppm (parts per million) dissolved solids.

The rocks of Middle Silurian age are overlain by dolomitic limestone of Middle Devonian age. These rocks underlie blue-black bituminous shale of Devonian age (Logan, 1932) or Devonian and Mississippian age (Patton, 1956). This shale is listed as Devonian age in table 3. Few water wells have been drilled into the rocks of Devonian and Devonian and Mississippian(?) age. Although these limestones and shales are not extensively used as a source of water in La Porte County, they are a potential source of water of uncertain quality and quantity. Locally the rocks of Devonian and Mississippian(?) age grade upward into shale of Mississippian age.

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, pl. 6; Wayne, 1958) such as the Valparaiso moraine which trends northeast-southwest across the northern one-third of the county, the former beaches and lake bottoms of glacial Lake Chicago in the extreme northwestern part, and the glaciofluvial plain in the southern part.

The unconsolidated rocks of Pleistocene age range in thickness from about 20 to more than 325 feet. The rocks consist of glaciofluvial sand and gravel, clayey till, and glaciolacustrine clay, silt, and sand. Glaciofluvial sand and gravel underlies most of the county and locally is more than 170 feet thick. The sand and gravel is the chief source of ground water for domestic and stock, industrial, and public supplies. Wells are generally less than 200 feet deep in this aquifer and yield from 5 to 2,000 gpm.

The unconsolidated rocks of Pleistocene age are overlain locally by thin alluvium, eolian sand, and organically rich sand, silt, and clay of Recent age. The deposits of Recent age are too thin to be a source of groundwater.

Plate 2 shows the availability of ground water in the unconsolidated rocks underlying the county. Plate 3 shows the distribution of hardness of water from the sand and gravel of Pleistocene age. The water is hard to very hard. The hardness is generally greater than 200 ppm and less than 500 ppm. However, in several sizeable areas in the northern part of the county the hardness of water is less than 200 ppm. In much of the county the iron content exceeds maximum concentration recommended in the U. S. Public Health Service drinking-water standards for iron and manganese together. In the northeastern part there are several areas where this standard is not exceeded by the iron concentration.

CONFINED AND UNCONFINED CONDITIONS

Ground water occurs in the consolidated and unconsolidated rocks of La Porte 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.

TYPES OF WELLS

Drilled, driven, and jetted wells are the principal types of water wells used in La Porte 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. Where 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, p. 6, 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. Where 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 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.

Oil or gas explorations generally are drilled by the cable-tool or rotary 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.

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 (0.001) 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	>0.08	>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	-------	-------

SUMMARY

Preliminary evaluation of the basic data shows that adequate quantities of ground water are available for domestic, stock, and locally for public and industrial supplies from sand and gravel of Pleistocene age. The rocks of Devonian or Devonian and Mississippian(?) age, underlying the glacial deposits, are used only as a minor source of water and are a potential source of water of uncertain quality and quantity. The Pre-Devonian bedrock is not used as a source in the county.

The quality of water from the rocks of Pleistocene age varies. The hardness of water is generally greater than 200 ppm and less than 500 ppm. However, in several sizeable areas in the northern part of the county the hardness of water is less than 200 ppm. Locally the iron content exceeds the maximum concentration recommended in the U. S. Public Health Service drinking-water standards for iron and manganese together.

RECORDS

The records of about 900 wells and test holes and 5 springs 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 or extrapolated from aerial photographs using the vertical control of the Topographic Division of the Geological Survey. 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 400 wells and test holes. This table gives the driller's description of the material encountered, pertinent remarks with regard to the material, and authors' interpretation of the geologic age of the material.

The results of 203 partial chemical analyses of water are given in table 4. Of this number 198 were determined in the field office of the Geological Survey, and 5 were determined by commercial or other governmental 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; over 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 7 observation wells of which 5 were established during the investigation and the rest prior to the investigation. The water levels in the observation wells were obtained either by recording gages installed on the well or by manual measurements made with an engineer's steel tape graduated to a hundredth of a foot. The water levels are in feet below land-surface datum except where otherwise noted. 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. 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 La Porte County, Indiana

Well: See text for description of well-numbering system.
Altitude: Altitude of land-surface datum from topographic maps, except as noted in text p. 8.
Type of well: B, bored; Dm, driven; Dr, drilled; Du, dug; J, jetted.
Finish: dia, diameter in inches; G, gauze size; Gp, gravel pack; Oe, open end; Oh, open hole; S, screen; sl, slot size.
Character: G, gravel; Ls, limestone; Sd, sand; Sh, shale; Ss sandstone.
Geologic age: D, Devonian; M, Mississippian; Pl, Pleistocene; S, Silurian.
Conditions of occurrence: C, confined; U, unconfined; see p. 7 for definition of terms.

Water level: In feet below land-surface datum on date of completion of well, except where otherwise noted.
Use: Ac, air conditioning; D, domestic; De, destroyed; I, industrial; Ir, irrigation; N, not used; O, observation; P, public supply; R, railroad; S, stock; T, test.
Type of pump and horsepower: 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; G, gamma-ray log available for inspection; gpm, gallons per minute; L, log of well included in table 3; lsd, land-surface datum; S, samples available for inspection; temp, temperature in degrees Fahrenheit.

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
33/3W-10Q1	State of Indiana	Indiana-Michigan Water Development Co.	6-23-34	671	Dr	116	6	S; 13ft. 25sl	98	20	Sd,G	Pl	C	10	O	------	Observation well La Porte 2; water level measured 5.89 ft below lsd, 7-2-42; G, L.
18M1	M., J., and A. Clark	----------	10-23-53	668	Dr	164	8½	----------	---	---	Sd	Pl	----	---	---	------	Oil test; bedrock at 53 ft; L.
19L1	L. and M. Pick	----------	11- 8-53	666	Dr	137	---	----------	---	---	Sd	Pl	----	---	---	------	Oil test; bedrock at 97 ft; L.
33/4W- 5R1	N. P. Sheely	Layne-Northern Co., Inc.	3-57	680	Dr	35	6	S	5	22	Sd	Pl	U	5	---	------	Bedrock at 27 ft; L.
8A1	Chesapeake and Ohio Railway	W. Zehring	10-10-47	675	Dr	28	6	S; 7ft, 10sl	6	22	Sd	Pl	U	6	P	J1/3	Dd 3 ft pumping 15 gpm; bedrock at 56 ft; L.
8P1	Town of La Crosse	Layne-Northern Co., Inc.	11-10-40	675	Dr	28	---	----------	8	20	Sd	Pl	U	8	T	------	See log well 8A1.
9N1	Trustees, Dewey Township	---------do---------	8-21-40	675	Dr	55	---	----------	---	---	Sd	Pl	U	---	T	------	Bedrock at 28 ft; see log well 9N2.
9N2	-------do--------	---------do---------	1-14-41	675	Dr	250	10-6	Oh	145	105	Ls	D	C	17	N	------	Dd 3 ft pumping 10 gpm; bedrock at 20 ft; L.
14B1	S. Gorski	Westville Well Co.	1-24-56	671	J	28	2	S; 4½ft	---	---	Sd	Pl	U	---	D	J1/4	Ca.
14G1	-------do--------	----------	10-25-53	668	Dr	176	8½	----------	---	---	Sd	Pl	U	---	---	------	Oil test; bedrock at 50 ft; see log well 14M1.
14M1	L. and S. Zahn	----------	11-28-53	668	Dr	1,052	8½	----------	---	---	Sd	Pl	U	---	---	------	Oil test; L.
14N1	D. Zahn	----------	7-17-42	670	Dr	130	5½	----------	---	---	Sd	Pl	U	---	---	------	Oil test; bedrock at 34 ft; see log well 14M1.
15N1	A. and I. Stonecipher	----------	10-26-53	668	Dr	166	8½	----------	---	---	Sd	Pl	U	---	---	------	Oil test; bedrock at 30 ft; L.
18D1	J. Gorski	J. West	11-12-54	674	Dr	1,152	10-5½	----------	---	---	-----	---	----	---	---	------	Oil test; bedrock at 22 ft; L.
17C1	Town of La Crosse	Layne-Northern Co., Inc.	11-15-46	674	Dr	26	---	----------	7	19	Sd	Pl	U	7	T	------	Clean sand overlain by 10 ft dirty sand and gravel.
19G1	D. Knapp	---------do---------	3-22-57	673	Dr	38	34	Gp; S; 10ft, 80sl, dia 16	4	34	Sd,G	Pl	U	4	Ir	T	Dd 31 ft pumping 680 gpm; L.
19H1	K. Knapp	---------do---------	--------	670	Dr	-----	---	S	---	---	Sd	Pl	U	---	D,S	------	Ca.
19Q1	D. Knapp	---------do---------	12-17-56	670	Dr	45	8	----------	8	31	Sd,G	Pl	U	8	T	------	L.
20D1	T. Collins	----------	--------	671	J	21	2	S; 3ft, 60g, dia 1	---	---	Sd	Pl	U	5	S	------	
20D2	-------do--------	Westville Well Co.	1956	671	J	32	4	S; 10½ft, dia 3	6	26	Sd	Pl	U	---	---	------	For fire protection; sand from 0-32 ft; water level measured 6.31 ft below lsd, 9-4-57.
22A1	N. Miller	----------	11-18-53	670	Dr	1,134	8½	----------	---	---	Sd	Pl	U	---	---	------	Oil test; bedrock at 40 ft; L.
24D1	H. and D. Holinger	----------	11-15-53	670	Dr	185	---	----------	---	---	-----	---	----	---	---	------	Oil test; bedrock at 44 ft; L.
26M1	V. Sikora	----------	10-20-53	667	Dr	174	---	----------	---	---	Sd	Pl	----	---	---	------	Oil test; bedrock at 88 ft; L.
27D1	R. and M. Alt	----------	10-19-53	668	Dr	197	---	----------	---	---	Sd	Pl	----	---	---	------	Oil test; bedrock at 66 ft; L.
29N1	O. and P. Fritz	----------	10-17-53	665	Dr	179	---	----------	---	---	Sd	Pl	----	---	---	------	Oil test; bedrock at 55 ft; L.
34/3W-13C1	Pennsylvania Railroad	Layne-Northern Co., Inc.	5-18-39	680	Dr	101	---	----------	9	71	Sd,G	Pl	U	9	T	------	L.
13C2	-------do--------	---------do---------	6-12-39	680	Dr	74	---	----------	6	68	Sd,G	Pl	U	6	T	------	See log well 13C4.
13C3	-------do--------	---------do---------	9- 7-40	680	Dr	80	---	----------	---	---	Sd,G	Pl	U	---	T	------	Do.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
34/3W-13C4	Pennsylvania Railroad	Layne-Northern Co., Inc.	10- 3-40	680	Dr	76	8	----------	6	70	Sd,G	Pl	U	6	O	-------	Observation well La Porte 7; water level measured 7.4 ft below lsd, 7-12-56; L.
13D1	-------do--------	---------do---------	5-20-39	680	Dr	74	---	----------	5	66	Sd,G	Pl	U	5	T	-------	L.
13D2	-------do--------	---------do---------	6-17-39	680	Dr	60	---	----------	4	56	Sd,G	Pl	U	4	T	-------	See log well 13D1.
13H1	-------do--------	---------do---------	2-10-36	675	Dr	120	---	----------	28	28	Sd,G	Pl	U	28	T	-------	Bedrock at 113 ft; L.
34/4W- 4D1	Kaiser Aluminum and Chemical Corp.	---------do---------	2-23-56	733	Dr	82	8	----------	5	75	Sd	Pl	U	5	T	-------	See log well 4F1.
4D2	-------do--------	---------do---------	5-24-26	733	Dr	79	26	Gp; S; 20ft, 30sl, dia 10	2	78	Sd	Pl	U	2	I	T15	Dd 24.5 ft pumping 340 gpm; see log well 4F1; Ca.
4F1	Pennsylvania Railroad	---------do---------	1- 3-30	734	Dr	227	---	----------	8	77	Sd	Pl	U	6	T	-------	Bedrock, at 83 ft, yielded 5 gpm with 60 ft dd; L.
4F2	-------do--------	---------do---------	12- 3-36	734	Dr	84	30	Gp; S; 20ft, 105sl, dia 10	9	75	Sd	Pl	U	9	N	T	Dd 9 ft pumping 200 gpm; see log well 4F1.
7K1	Nickel Plate Railroad	---------do---------	7-24-54	722	Dr	70	12	----------	9	61	Sd	Pl	C	4	R	T10	See log well 7K2.
7K2	-------do--------	---------do---------	11-30-54	722	Dr	75	---	----------	9	63	Sd,G	Pl	----	---	T	-------	Bedrock at 72 ft; L.
20L1	M. Tidholm	T. Urynlak	1952	708	Dr	30	4	S; 10ft, 14sl	7	33	Sd,G	Pl	U	7	Ir	-------	
35/1W- 4Q1	H. Smith	Sriver Drilling Co.	--------	687	J	37	2	S; 3½ft, 10sl, dia 1½	---	---	G	Pl	----	6	---	-------	
16D1	Mr. Place	Shell Oil Co.	1941	689	Dr	248	---	----------	---	---	-----	--	----	---	---	-------	Oil test; bedrock at 150 ft; 88 ft shale underlain by 8 ft dolomite.
17R1	Indiana State Highway Department	Sriver Drilling Co.	5-17-56	690	Dr	40	4	S; 4½ft, 80g, dia 2	9	31	Sd,G	Pl	U	9	P	P	Ca, L.
35/2W- 1N1	U. S. Government	Layne-Northern Co., Inc.	1-13-41	689	Dr	68	8	S; 20ft, 12sl, dia 7½	48	27	Sd	Pl	C	5	---	-------	Dd 9 ft after 5 hr pumping 50 gpm; temp 52; L.
3A1	-------do--------	---------do---------	9-22-41	730	Dr	86	---	----------	20	66	Sd	Pl	U	20	---	-------	See log well 3A2.
3A2	-------do--------	---------do---------	11-12-41	730	Dr	84	34	Gp; S; 20ft, 105sl, dia 12	20	64	Sd	Pl	U	20	---	-------	Dd 35 ft after 7.5 hr pumping 870 gpm; temp 52; L.
3C1	-------do--------	---------do---------	5- 3-41	730	Dr	88	---	----------	18	50	Sd	Pl	U	18	---	-------	See log well 3C2.
3C2	-------do--------	---------do---------	5-29-41	730	Dr	88	34	Gp; S; 15ft, 105sl, dia 12	18	50	Sd	Pl	U	18	---	-------	Dd 26 ft pumping 850 gpm; L.
3D1	-------do--------	---------do---------	12- 7-40	736	Dr	63	10	S; 20ft, 12sl, dia 9	19	44	Sd	Pl	U	19	---	-------	Dd 4 ft after 5 hr pumping 100 gpm; Ca, L.
3K1	-------do--------	---------do---------	2-19-41	728	Dr	84	8	S; 20ft, 12sl, dia 7½	20	67	Sd	Pl	U	20	---	-------	Dd 3 ft after 5 hr pumping 55 gpm; temp 52; L.
4L1	-------do--------	---------do---------	2- 5-41	730	Dr	72	8	S; 20ft, 20sl, dia 7½	17	55	Sd	Pl	U	17	---	-------	Dd 4 ft after 5 hr pumping 55 gpm; temp 52; see log well 4M2.
4M1	-------do--------	---------do---------	5-23-41	730	Dr	75	---	----------	---	---	Sd	Pl	U	---	---	-------	See log well 4M2.
4M2	-------do--------	---------do---------	9-11-41	730	Dr	76	34	Gp; S; 25ft, 105sl, dia 12	16	57	Sd	Pl	U	16	---	-------	Dd 33.5 ft after 8 hr pumping 840 gpm; temp 52; L.
4M3	-------do--------	---------do---------	4- 4-45	730	Dr	76	---	----------	---	---	Sd	Pl	U	---	---	-------	L.
5D1	-------do--------	---------do---------	5-26-41	727	Dr	89	---	----------	14	70	Sd	Pl	U	14	---	-------	See log well 5D2.
5D2	-------do--------	---------do---------	6-25-41	727	Dr	87	34	Gp; S; 15ft, 105sl, dia 12	14	70	Sd	Pl	U	14	---	-------	Dd 35 ft after 8 hr pumping 880 gpm; temp 52; L.
5J1	-------do--------	---------do---------	2-10-41	732	Dr	64	8	S; 20ft, 20sl, dia 7½	18	47	Sd	Pl	U	18	---	-------	Dd 2.5 ft after 5 hr pumping 55 gpm; temp 52; see log well 5L1.
5L1	-------do--------	---------do---------	1-28-41	730	Dr	72	8	-------do---------	20	52	Sd	Pl	U	20	---	-------	Dd 2.5 ft after 5 hr pumping 55 gpm; temp 52; L.
7J1	-------do--------	---------do---------	9-19-41	730	Dr	97	---	----------	20	77	Sd	Pl	U	20	---	-------	See log well 7J2.
7J2	-------do--------	---------do---------	10-17-41	730	Dr	95	34	Gp; S; 20ft, dia 12	27	70	Sd	Pl	U	27	---	-------	Dd 24 ft pumping 880 gpm; L.
8G1	-------do--------	---------do---------	1-24-41	726	Dr	72	8	S; 20ft, 20sl, dia 7½	20	61	Sd	Pl	U	20	---	-------	Dd 2 ft after 5.5 hr pumping 55 gpm; temp 52; L.
10E1	-------do--------	---------do---------	1-30-41	720	Dr	88	8	S; 20ft, 12sl, dia 7½	19	77	Sd,G	Pl	U	19	---	-------	Dd 2 ft after 5 hr pumping 55 gpm; temp 52; L.

35/2W-11D1	U. S. Government	Layne-Northern Co., Inc.	11-21-41	710	Dr	54	4	S; 7ft, 12sl, dia 3½	9	45	Sd	Pl	U	9	---	------	Dd 10 ft pumping 17 gpm; L.
11N1	-------do---------	---------do---------	1- 8-41	688	Dr	90	8	S; 20ft, 12sl dia 7½	---	---	Sd	Pl	C	4	O	------	Dd 12 ft after 5 hr pumping 50 gpm; observation well La Porte 4; water level measured 1.80 ft below lsd, 11-4-55; L.
12A1	-------do---------	---------do---------	5-16-41	685	Dr	104	---	----------	---	---	Sd	Pl	C,U	4	---	------	L.
12A2	-------do---------	---------do---------	7-14-41	685	Dr	50	34	Gp; S; 15ft, 105sl, dia 12	4	52	Sd,G	Pl	U	4	---	------	Dd 14 ft pumping 1,000 gpm; see log well 12A1.
12A3	-------do---------	---------do---------	5-13-41	685	Dr	104	---	----------	---	---	Sd	Pl	C,U	5	---	------	L.
12H1	-------do---------	---------do---------	5- 9-41	680	Dr	95	---	----------	5	59	Sd	Pl	U	5	---	------	L.
12H2	-------do---------	---------do---------	9-19-41	680	Dr	78	8	S; 12ft, 12sl, dia 7½	60	18	Sd	Pl	C	4	---	------	Dd 19.5 ft pumping 55 gpm; L.
16B1	-------do---------	---------do---------	1-18-41	715	Dr	40	8	S; 20ft, 12sl, dia 7½	18	31	Sd	Pl	U	18	---	------	Dd 2.5 ft after 5 hr pumping 55 gpm; L.
16C1	-------do---------	---------do---------	1-31-41	716	Dr	50	2½	S; 7ft, 60g, dia 1¼	17	33	Sd	Pl	U	17	---	------	Yield 5 gpm; sand from 0-50 ft.
16N1	Kingsford Corp.	---------do---------	5-13-42	721	Dr	101	---	----------	19	82	Sd,G	Pl	U	10	T	------	See log well 18N3.
18N2	-------do---------	---------do---------	5-15-42	718	Dr	90	---	----------	19	71	Sd,G	Pl	U	19	T	------	L.
18N3	-------do---------	---------do---------	5-21-42	723	Dr	102	---	----------	17	85	Sd	Pl	U	17	T	------	L.
18N4	-------do---------	---------do---------	5-26-42	723	Dr	100	---	----------	---	---	Sd	Pl	U	---	T	------	See log well 18N3.
18N5	-------do---------	---------do---------	6-24-42	724	Dr	87	---	----------	19	68	Sd,G	Pl	U	19	T	------	See log well 18N2.
18N6	-------do---------	---------do---------	8-30-42	725	Dr	70	34	Gp; S; 20ft, dia 12	20	50	Sd	Pl	U	20	P	T	Dd 25.5 ft after 8.5 hr pumping 810 gpm; temp 51; see log well 18N2.
18N7	-------do---------	---------do---------	10- 3-42	723	Dr	74	34	Gp; S; 20ft, 105sl, dia 12	21	53	Sd	Pl	U	21	P	T	Dd 33 ft after 8.5 hr pumping 740 gpm; temp 51; see log well 18N3.
18N8	-------do---------	---------do---------	10-24-42	724	Dr	66	34	-------do---------	20	46	Sd	Pl	U	20	P	T	Dd 21 ft after 8 hr pumping 760 gpm; temp 51; see log well 18N2.
21N1	Mr. Zahrn	Shell Oil Co.	1941	687	Dr	300	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 140 ft; 130 ft shale underlain by 5 ft limestone and 25 ft dolomite.
30G1	R. Gumz	Indiana-Michigan Water Development Co.	3-20-47	691	Dr	298	6	----------	---	---	Sd	Pl	----	---	T	------	Bedrock at 200 ft; L.
30G2	-------do---------	---------do---------	3-26-47	689	Dr	24	6	S; 6ft, 16sl, dia 5½	5	22	Sd	Pl	U	5	I	------	Dd 4 ft pumping 55 gpm; see log well 30G1.
35/3W-10N1	Munding Dairy Co.	----------	About 1930	746	Dr	50	8	S	---	---	Sd	Pl	----	---	I	L5	
13B1	F. Janisch	Westville Well Co.	--------	720	J	40	4	S; 20ft	---	---	Sd	Pl	----	8	N	------	
35/4W-31P1	Indiana State Highway Department	W. Foley	3-12-57	738	Dr	184	4	Sh	97	67	Sh	M?	C	15	P	P	Dd 133 ft pumping 6 gpm; Ca, L.
36/1W- 4Q1	J. Siddlos	M. J. Mauck	9-21-31	700	Dr	875	10	----------	17	175	Sd	Pl	U	17	---	------	Oil test; bedrock at 200 ft; L.
4Q2	-------do---------	---------do---------	4-12-32	700	Dr	1,738	10-6¼	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 188 ft.
5N1	N. Wiltfong	Hunts Hoosier Hardware	1- 4-57	752	J	50	2	S; 4½ft, 60g, dia 1	33	17	Sd	Pl	U	33	D	------	Yield 13 gpm; brown sand from 0-50 ft; Ca.
10B1	Mill Creek Methodist Church	E. Brooker	3-14-56	695	J	26	2	S; 3½ft, 60g, dia 1¼	20	6	G,Sd	Pl	C	7	P	------	L.
18K1	C. E. Adams	Hunts Hoosier Hardware	7- 3-59	705	J	28	2	S; 4ft, 60g, dia 1	10	18	Sd	Pl	U	10	D	------	Ca, L.
21G1	Mr. Knowlton	Shell Oil Co.	1941	691	Dr	330	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 123 ft; 177 ft shale underlain by 17 ft limestone and 13 ft dolomite.
23B1	R. Singleton	Sriver Drilling Co.	1-28-47	692	J	42	2	S; 3ft, 60g, dia 1¼	---	---	Sd,G	Pl	----	6	D	J1/2	Ca.
27N1	Mr. Nowland	Shell Oil Co.	1941	689	Dr	300	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 120 ft; 150 ft shale underlain by 16 ft limestone and 14 ft dolomite, water-bearing; water had hydrogen sulfide gas.
30M1	Mr. Cigon	---------do---------	1941	698	Dr	285	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 150 ft; 115 ft shale underlain by 14 ft dolomite.
33N1	J. E. Short, Jr.	----------	10-20-41	687	Dr	1,368	8-5¼	----------	51	68	Sd	Pl	----	---	---	------	Oil test; bedrock at 151 ft; L.
34N1	Mr. Bierly	Shell Oil Co.	1941	690	Dr	310	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 132 ft; 138 ft shale underlain by 37 ft limestone and 6 ft dolomite.
36/2W- 5C1	E. Smith	---------do---------	9- 2-43	790	Dr	1,565	8½	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 180 ft; L.
6E1	V. Bornacchi	Indiana-Michigan Water Development Co.	4- 4-47	795	Dr	86	6	S; 20ft, 15sl, dia 5½	16	70	Sd,G	Pl	U	16	Ir	T20	Dd 5ft pumping 35 gpm.
6E2	-------do---------	---------do---------	2- 3-54	795	Dr	100	12	S; 20ft, 12sl, dia 11¼	30	71	Sd,G	Pl	C	17	Ir	T40	Dd 53 ft after 3 hr pumping about 400 gpm; L.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
36/2W- 6E3	V. Bernacchi	Indiana-Michigan Water Development Co.	2- 7-57	795	Dr	88	8	S; 20ft	19	69	Sd,G	Pl	C	18	Ir	------	Dd 31 ft pumping 360 gpm; screen, upper 15 ft 17 slot, lower 5 ft 15 slot; L.
7F1	City of La Porte	---------do---------	8- 1-30	780	Dr	105	6	S; 10ft, 10sl, dia 5½	---	---	Sd	Pl	----	---	N	JJ	Yield 50 gpm; sand overlain by 4 ft top soil.
7G1	--------do--------	Layne-Northern Co., Inc.	3-27-50	680	Dr	103	6	S; 10ft, 10sl	27	77	Sd,G	Pl	C	6	P	T5	Dd 7 ft after 2.5 hr pumping 55 gpm; Ca, L.
7M1	V. Probst	----------	--------	795	Da	28	1¼	S	---	---	Sd	Pl	----	---	---	1/4	
7M2	Mr. Henry	Shell Oil Co.	1941	799	Dr	440	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 220 ft; 211 ft shale underlain by 9 ft dolomite.
8B1	Mr. Clayton	---------do---------	1941	792	Dr	380	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 209 ft; 166 ft shale underlain by 5 ft dolomite.
10N1	B. Bernacchi	Hunts Hoosier Hardware	4-30-57	770	J	44	2	S; 4ft, 60g, dia 1	29	15	Sd	Pl	U	20	D	------	Yield 13 gpm; Ca, L.
10Q1	L. Zoborosky	---------do---------	7- 2-58	755	J	34	2	--------do---------	20	14	Sd	Pl	U	20	D	------	See log well 10N1; Ca.
12N1	Mr. Stoffer	Shell Oil Co.	1941	747	Dr	395	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 202 ft; 173 ft shale underlain by 5 ft limestone and 15 ft dolomite.
14N1	Mr. Whetzell	---------do---------	1941	739	Dr	367	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 190 ft; 155 ft shale underlain by 2 ft limestone and 20 ft dolomite.
15A1	M. Bookman	Hunts Hoosier Hardware	2-56	750	J	32	2	S; 3½ft, 60g, dia 1	16	16	Sd,G	Pl	U	16	D	J1/2	Yield 13 gpm; Ca, L.
19B1	D. Rose	---------do---------	7-30-59	770	J	35	2	S; 4ft, 60g, dia 1	22	13	Sd	Pl	C	17	S	------	Ca, L.
19Q1	Mr. Langman	Shell Oil Co.	1941	786	Dr	390	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 187 ft; 184 ft shale underlain by 19 ft dolomite.
23L1	Grand Trunk Railway	D. Main	About 1913	734	Dr	257	---	----------	5	168	Sd,G	Pl	U	5	---	------	Oil test; bedrock at 205 ft; L.
26P1	H. Coppens	D. Lantz	7- 1-53	734	Da	21	1¼	S; 3ft, 60g	---	---	Sd	Pl	----	---	S	J1/2	Yield 6 gpm; Ca.
28B1	Mr. Bealer	Shell Oil Co.	1941	741	Dr	357	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 258 ft; 82 ft shale underlain by 17 ft dolomite.
31E1	Town of Kingsbury	Layne-Northern Co., Inc.	11- 6-41	745	Dr	97	---	----------	21	76	Sd	Pl	U	21	T	------	See log well 31E2.
31E2	C. Bottou	---------do---------	4-16-42	745	Dr	88	8	S; 20ft, 20sl	18	70	Sd,G	Pl	U	18	N	------	Dd 18 ft pumping 380 gpm; L.
31P1	U. S. Government	---------do---------	11-26-40	737	Dr	89	8	S; 20ft, 20sl, dia 7½	17	72	Sd	Pl	U	17	O	------	Dd 3 ft after 4 hr pumping 50 gpm; observation well La Porte 3; water level measured 16.89 ft below lsd, 11-4-55; G, L.
31P2	--------do--------	---------do---------	6- 5-41	730	Dr	80	---	----------	10	64	Sd	Pl	U	10	---	------	See log well 31P1.
31P3	--------do--------	---------do---------	8- 7-41	736	Dr	92	34	Gp; S; 15ft, 105sl, dia 12	16	76	Sd	Pl	U	10	---	------	Dd 26 ft pumping 850 gpm; see log well 31P1.
32D1	Mr. Newson	Shell Oil Co.	1941	740	Dr	362	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 145 ft; 105 ft shale underlain by 22 ft dolomite.
32K1	U. S. Government	Layne-Northern Co., Inc.	12-30-40	740	Dr	84	8	S; 20ft, 20sl, dia 7½	20	64	Sd	Pl	U	20	---	------	Dd 1.5 ft after 4 hr pumping 50 gpm; temp 52; L.
32K2	--------do--------	---------do---------	1-15-41	741	Dr	80	8	--------do---------	20	64	Sd	Pl	U	20	O	------	Dd 2 ft after 4.5 hr pumping 50 gpm; observation well La Porte 5; water level measured 17.11 ft below lsd, 12-1-55; see log well 32K1.
33J1	--------do--------	---------do---------	1-22-41	738	Dr	73	8	--------do---------	17	56	Sd,G	Pl	U	17	---	------	Dd 2 ft after 5 hr pumping 50 gpm; temp 52; L.
34L1	--------do--------	---------do---------	1- 9-41	738	Dr	67	8	--------do---------	20	49	Sd	Pl	U	20	---	------	Dd 3 ft after 4 hr pumping 60 gpm; temp 52; L.

36/3W- 1E1	La Porte-Daniels Woolen Mills	----------	5-13-29	600	Dr	40	8	S; 10ft, dia 4	---	---	Sd,G	Pl	U	20	N	------	Dd 41 ft pumping 35 gpm.
1E2	-------do--------	Layne-Northern Co., Inc.	8-28-55	600	Dr	90	30	Gp; S; 30ft, 130sl, dia 18	20	90	Sd,G	Pl	U	20	N	------	Dd 17 ft after 8.5 hr pumping 700 gpm; L.
1L1	A. Barnacchi	Indiana-Michigan Water Development Co.	7-24-30	797	Dr	60	6	S; 10ft, 30sl	26	34	G,Sd	Pl	C	19	I, Ir	------	See log well 1L2.
1L2	-------do--------	---------do---------	7- 1-49	797	Dr	66	6	S; 10ft, 15sl, dia 5½	22	44	G,Sd	Pl	C	20	I, Ir	T	Dd 0 ft after 2 hr pumping 55 gpm; L.
1Q1	Dr. Cartor	Hunts Hoosier Hardware	5- 8-57	795	J	38	2	S; 4ft, 60g, dia 1	21	19	Sd,G	Pl	U	21	D	------	L.
3J1	C. Pauler	---------do---------	--------	822	J	48	2	-------do--------	30	18	Sd,G	Pl	U	30	D	------	L.
3K1	U.S. Government	Clark Drilling Co.	11- 9-55	832	Dr	194	4	S; 10ft, 8sl	37	157	Sd	Pl	U	37	P	J5	Yield 50 gpm; Ca, L.
3L1	A. Dinwiddie	A. Good	6-54	820	J	52	2	S; 60g	38	14	G,Sd	Pl	U	38	D	------	Gravel and sand from 0-52 ft.
3P1	Mr. Cassidy	Hunts Hoosier Hardware	--------	827	J	54	4	S; 8ft, 80g	35	19	Sd,G	Pl	U	35	P	J2	Yield 60 gpm; Ca, L.
3Q1	R. Dysard	J. Dill	1949	822	J	44	2	S; 3ft, 60g, dia 1	---	---	Sd	Pl	----	24	D	J1/2	Yield 5 gpm.
3Q2	R. Richman	---------do---------	6-10-52	822	J	54	2	S; 60g	---	---	Sd	Pl	----	26	D	J1/2	Yield 6 gpm.
3Q3	R. Hibner	Mr. Darnthouse	9-53	827	J	53	2	S; 4ft, 40g	44	9	Sd	Pl	C	---	D	------	Yield 13 gpm; L.
3Q4	Mr. Dietz	A. Good	--------	826	J	53	2	S; 60g	---	---	G	Pl	----	36	D	L	
3Q5	S. Small	Hunts Hoosier Hardware	8-29-59	827	J	51	2	S; 3½ft, 60g, dia 1	37	14	Sd	Pl	U	37	D	------	See log well 3K1.
3R1	E. Pinkerton	A. Good	Spring 1952	823	J	42	2	S; 60g	---	---	Sd	Pl	----	32	D	J1/2	Yield 5 gpm.
5M1	Scipio Township Volunteer Fire Department	D. Lantz	9-55	835	J	60	2	S; 3ft, 60g	---	---	Sd	Pl	----	20	---	J3/4	For fire protection.
6H1	H. Hughes	Hunts Hoosier Hardware	8-24-54	840	J	89	2	S; 4½ft, 60g	65	4	Sd,G	Pl	C	50	D	J1/2	Yield 15 gpm; L.
7C1	C. Levenduski	Westville Well Co.	6- 9-55	830	J	56	2	S; 4ft, 60g, dia 1	---	---	Sd	Pl	----	40	D,S	3/4	Ca.
9R1	E. Carson	Mr. Darnthouse	6- 1-54	813	J	40	2	S; 3ft, 60g, dia 1	28	12	Sd	Pl	C	13	S	1/2	Ca, L.
9S2	-------do--------	---------do---------	---------	813	Dn	27	1½	S	---	---	Sd	Pl	----	---	D	1/2	Ca.
10A1	K. Anderson	---------	---------	815	J	38	2	S; 3ft, 60g, dia 1	---	---	Sd	Pl	----	15	D	L1	
10A2	J. Croner	Hunts Hoosier Hardware	6-12-57	815	J	46	2	S; 4ft, 60g	30	10	Sd,G	Pl	U	30	D	------	Yield 13 gpm; L.
10A3	A. Lower	Westville Well Co.	7- 5-50	815	J	59	3	S; 5ft, 10sl, dia 2	30	29	Sd	Pl	U	30	D	------	L.
10A4	Moyer Construction Co.	---------do---------	7- 1-59	815	J	57	2	S; 3ft, dia 1	---	---	Sd,G	Pl	U	10	D	------	Brown sand and medium gravel from 0-57 ft.
10C1	La Porte County Asylum	Indiana-Michigan Water Development Co.	-------	815	Dr	74	6	S; 20ft, dia 5½	38	36	G,Sd	Pl	C	38	P	T5	Dd 50 ft pumping 100 gpm; screen, upper 10 ft 20 sl, lower 5 ft 25 sl; L.
10C2	-------do--------	---------do---------	7-28-44	815	Dr	97	6	S; 30ft, 20sl, dia 5½	45	52	Sd	Pl	C	34	P	T	Dd 9 ft pumping 45 gpm; sand overlain by 45 ft clay and sand; Ca.
10G1	W. Baker	Hunts Hoosier Hardware	9-15-58	815	J	50	2	S; 4ft, 60g, dia 1	43	7	Sd	Pl	C	32	D	------	L.
10M1	B. Strausburry	----------	---------	815	J	42	2	S; 60g	---	---	Sd	Pl	----	---	D	L1/3	
10N2	C. Fitzsimmons	----------	---------	815	J	40	2	S; 3½ft, 60g, dia 1	---	---	Sd	Pl	----	12	D	L1/3	
10N3	P. Milsinglo	Lakeland Well Drillers	2- 4-57	815	J	66	2	S; 3½ft, 80g, dia 1	---	---	Sd	Pl	----	30	D	J1/3	Ca.
10K1	W. Cuff	Hunts Hoosier Hardware	8-11-58	815	J	43	2	S; 4ft, 60g, dia 1	30	13	Sd	Pl	U	30	D	------	L.
11F1	T. B. Davis	Westville Well Co.	7- 9-56	815	J	68	2	S; 4½ft	---	---	Sd	Pl	----	---	D	------	
16C1	Door Village Parsonage	D. Lantz	4- 6-54	810	Dn	28	1¼	S; 60g	---	---	Sd	Pl	----	19	D	1/3	Yield 8 gpm; Ca.
16D1	G. Glen	Hunts Hoosier Hardware	4-25-57	820	J	40	2	S; 4ft, 60g, dia 1	---	---	Sd,G	Pl	----	22	D	------	Yield 13 gpm; L.
18E1	A. Hackstead	---------do---------	2-55	825	J	41	2	S; 4½ft, 60g, dia 1	---	---	Sd,G	Pl	----	27	D	J1/2	Yield 13 gpm; Ca, L.
36/4W- 1G1	J. C. Keene	---------do---------	4-24-57	835	J	82	2	S; 4ft, 60g, dia 1	---	---	Sd,G	Pl	----	62	D	J1/2	Yield 13 gpm; L.
1G2	F. Surns	---------do---------	9-11-58	835	J	81	2	-------do--------	---	---	Sd	Pl	----	60	D	------	See log well 1G1.
1Q1	J. Grover	----------	--------	835	J	59	2	S; 5ft, 50g, dia 1	---	---	Sd,G	Pl	----	43	D	J1/2	Yield 10 gpm.
2D1	Indiana Toll Road Commission	----------	--------	774	B	20	---	----------	---	---	------	--	----	---	T	------	L.
2F1	E. Schmidt	J. Dill	1947	845	J	69	2	S; 3½ft, 60g, dia 1	---	---	Sd	Pl	----	44	D	J1/2	
2G1	H. Eicholborg	----------	--------	840	J	80	2	S; 3ft, 60g, dia 1	---	---	Sd	Pl	----	55	D,S	J	
3A1	Indiana Toll Road Commission	Westville Engineering Co.	6- 7-54	754	B	32	2½	----------	18	12	Sd	Pl	C	---	T	------	Flowed 10 gpm from pipe 3 ft above ind; see log well 3A2.
3A2	-------do--------	---------do---------	5-26-54	755	B	42	2½	----------	36	6	Sd,G	Pl	C	---	T	------	Flowed 3 gpm; L.
3G1	-------do--------	---------do---------	---------	826	B	52	---	----------	38	14	Sd	Pl	C	28	T	------	See log well 3G4.
3G2	-------do--------	---------do---------	5-25-54	804	B	52	2½	----------	---	---	Sd	Pl	----	16	T	------	L.
3G3	-------do--------	---------do---------	5-26-54	812	B	38	2½	----------	36	20	Sd	Pl	C	32	T	------	See log well 3G4.
3G4	-------do--------	---------do---------	5-26-54	810	B	52	2½	----------	---	---	------	--	----	---	T	------	No water reported; L.
3N1	-------do--------	---------do---------	5-24-54	861	B	42	2½	----------	---	---	------	--	----	---	T	------	Do.
3N2	-------do--------	---------do---------	5-24-54	842	B	42	2½	----------	---	---	------	--	----	---	T	------	Do.
5F1	S. Sloboda	Lakeland Well Drillers	7-20-50	750	J	108	2	----------	95	13	Sd	Pl	C	40	D	J	Sand overlain by 95 ft clay; Ca.
5J1	Indiana Toll Road Commission	Layne-Northern Co., Inc.	6- 1-55	775	Dr	113	0	S; 10ft, 20sl, dia 5½	59	54	Sd,G	Pl	C	28	P	------	Dd 16 ft after 8 hr pumping 55 gpm; Ca, L.
5J2	J. Klunas	Westville Well Co.	1- 3-56	780	J	94	2	S; 4½ft, dia 1	---	---	Sd,G	Pl	----	---	D	------	
5M1	M. Josh	---------do---------	7- 3-59	750	J	87	2	S; 3ft, dia 1	81	6	Sd,G	Pl	C	28	D	------	Ca, L.
7C1	Indiana Toll Road Commission	Westville Engineering Co.	5-13-54	770	B	30	2½	----------	11	19	Sd,G	Pl	U	11	T	------	See log well 7G1.
7G1	-------do--------	---------do---------	5-13-54	778	B	30	2½	----------	11	19	Sd	Pl	C	6	T	------	L.
8A1	-------do--------	---------do---------	5-22-54	791	B	86	2½	----------	---	---	Sd	Pl	----	---	T	------	L.
8A2	-------do--------	---------do---------	5-22-54	778	B	82	2½	----------	56	26	Sd	Pl	C	26	T	------	L.
8A3	-------do--------	---------do---------	5-21-54	774	B	52	2½	----------	19	8	Sd	Pl	C	5	T	------	See log well 8A4.
8A4	-------do--------	---------do---------	5-21-54	770	B	52	2½	----------	20	7	Sd	Pl	C	3	T	------	L.
8A5	-------do--------	---------do---------	5-22-54	769	B	62	2½	----------	---	---	Sd	Pl	C	2	T	------	L.
8A6	-------do--------	---------do---------	5-19-54	768	B	50	2½	----------	35	15	Sd,G	Pl	C	6	T	------	L.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
36/4W- 8A7	Indiana Toll Road Commission	Westville Engineering Co.	8-26-54	770	D	52	2½	----------	28	26	Sd	Pl	C	6	T	------	See log well 8A10.
8A8	------do------	------do------	5-21-54	773	D	52	2½	----------	45	7	Sd	Pl	C	9	T	------	L.
8A9	------do------	------do------	5-20-54	776	B	52	2½	----------	43	9	Sd	Pl	C	6	T	------	See log well 8A8.
8A10	------do------	------do------	5-21-54	776	B	52	2½	----------	28	26	Sd,G	Pl	C	11	T	------	L.
8A11	Dr. Keeling	Hunts Hoosier Hardware	5-21-58	770	J	40	2	S; 4ft, 80g, dia 1	---	---	Sd	Pl	-----	24	P	J1/2	L.
8A12	------do------	------do------	6-10-58	770	J	52	3	S; 6ft, 60g, dia 1½	35	17	Sd	Pl	U	35	P	J3/4	See log well 8A14; Ca.
8A13	------do------	------do------	8- 5-58	780	J	50	2	S; 5ft, 60g, dia 1	---	---	Sd	Pl	-----	40	D	J	Do.
8A14	------do------	------do------	9- 5-58	780	J	60	3	S; 6ft, 80g, dia 1½	---	---	Sd	Pl	-----	40	D	------	Ca, L.
8C1	S. Hyska	Westville Well Co.	8-25-56	750	J	45	2	S; 4½ft	---	---	Sd	Pl	-----	---	D	------	Ca.
8C2	Indiana Toll Road Commission	Westville Engineering Co.	5-23-54	714	B	82	2½	----------	5	77	Sd,G	Pl	U	5	T	------	L.
8C3	------do------	------do------	5-12-54	771	D	82	2½	----------	5	77	Sd	Pl	U	---	T	------	L.
8C4	------do------	------do------	5-19-54	780	D	70	2½	----------	---	---	Sd	Pl	-----	---	T	------	See log well 8C3.
8C5	------do------	------do------	5-18-54	768	D	82	2½	----------	45	37	Sd	Pl	C	6	T	------	L.
8C6	------do------	------do------	5-15-54	765	B	92	2½	----------	---	---	Sd,G	Pl	C	11	T	------	L.
8C7	------do------	------do------	5-16-54	765	D	92	2½	----------	---	---	Sd,G	Pl	C	6	T	------	L.
8D1	------do------	------do------	5-20-54	722	B	32	2½	----------	---	---	Sd,G	Pl	-----	2	T	------	See log well 8D2.
8D2	------do------	------do------	5-20-54	720	B	52	2½	----------	6	46	Sd,G	Pl	-----	6	T	------	L.
8P1	Mrs. Ortman	----------	About 1880	812	--	82	---	----------	---	---	Sd	Pl	-----	47	D	J1/4	Ca.
9C1	Indiana Toll Road Commission	Westville Engineering Co.	5-24-54	813	D	32	2½	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
9D1	------do------	------do------	5-21-54	795	B	40	2½	----------	21	19	Sd,G	Pl	U	21	T	------	L.
10B1	H. Schmidt	----------	--------	855	J	88	2	S; 5ft, 60g, dia 1	---	---	Sd	Pl	-----	73	D,S	------	
10D2	------do------	----------	--------	855	J	88	2	------do------	---	---	Sd	Pl	-----	73	D	L	
10C1	H. Gottshaw	----------	--------	855	J	82	2	S; 3ft, 80g, dia 1	---	---	Sd,G	Pl	-----	---	---	J1/2	
10H1	G. Vincent	----------	--------	825	J	89	2	S; 3½ft, 80g, dia 1	---	---	Sd	Pl	-----	51	D	J1/2	Ca.
12D1	B. Anderson	----------	--------	845	J	80	2	S; 80g	---	---	Sd	Pl	-----	31	D,S	J1/2	
12N1	G. Schlack	Hunts Hoosier Hardware	2-56	837	J	62	2	S; 3½ft, 60g, dia 1	---	---	Sd,G	Pl	-----	42	D	------	Yield 13 gpm; Ca, L.
12P1	G. Dhuyvetter	J. Dill	2-15-51	835	J	55	2	S; 3ft, 60g	---	---	Sd	Pl	-----	35	D,S	L1/3	Ca.
12Q1	------do------	Westville Well Co.	4-57	835	J	78	2	----------	---	---	Sd	Pl	-----	20	S	------	
13K1	A. Morrold	----------	--------	825	Dn	51	1½	S; 3ft, 60g, dia 1½	---	---	Sd	Pl	-----	---	S	L	Well point driven inside 25-ft dug well.
14A1	C. Matton	----------	--------	830	J	55	2	----------	---	---	Sd	Pl	-----	28	D	L1/3	
14K1	W. Payne	----------	1-12-55	827	J	67	2	----------	---	---	Sd	Pl	-----	---	D	J1/2	
14N1	W. D. Clemonts	----------	--------	827	J	59	2	S; 3ft, 60g	---	---	Sd	Pl	-----	43	D	L	
14N2	C. Stephens	J. Dill	6-56	827	J	65	2	------do------	60	5	Sd	Pl	C	30	D	1/2	Sand overlain by 60 ft red clay and gravel; Ca.
14P1	K. Olson	Hunts Hoosier Hardware	5- 2-55	827	J	56	2	S; 3½ft, 60g, dia 1	48	8	Sd,G	Pl	C	30	D	J1/2	L.
15P1	K. Redder	------do------	4-25-57	812	J	48	2	S; 4ft, 60g, dia 1	42	6	Sd	Pl	C	31	D	------	Yield 13 gpm; Ca, L.
19E1	M. Switt	Lakeland Well Drillers	4-17-57	792	J	165	2	------do------	160	9	Sd,G	Pl	C	60	D	J3/4	Ca, L.
21D1	R. Poston	Mr. Barnthouse	1952	830	J	63	2	S; 4ft, 80g, dia 1	55	8	Sd	Pl	-----	---	D,S	J1/2	Sand overlain by 55 ft red clay with shale fragments; Ca.
23D1	J. Pflugshaupt	----------	--------	827	J	42	2	S	---	---	Sd	Pl	-----	---	D	1/4	
25L1	E. J. Dohart	----------	--------	790	J	40	2	S; 80g	---	---	Sd	Pl	-----	20	D,S	1/2	Yield 7 gpm; Ca.
28M1	Town of Westville	B. J. Moore and Son	--------	805	Dr	108	10	S; 40sl	---	---	Sd	Pl	-----	22	P	T	
28N1	K. Hoover	Sriver Drilling Co.	6- 9-51	802	Dr	117	4	S; 8ft, 60g, dia 2½	35	82	Sd,G	Pl	C	25	P	------	Ca, L.
28N2	------do------	------do------	--------	802	J	67	2	S	---	---	Sd,G	Pl	C	---	P	------	
30D1	A. Coates	Westville Well Co.	7-24-59	795	J	64	2	S; 3ft, 60g, dia 1	15	49	Sd,G	Pl	U	15	D	------	L.
32F1	Beaty Memorial Hospital	Layne-Northern Co., Inc.	7-29-48	790	Dr	85	30	Gp; S; 20ft, 55sl, dia 12	---	---	Sd	Pl	-----	20	P	T	Dd 26 ft pumping 380 gpm.
32F2	------do------	------do------	8-23-48	790	Dr	52	6	S; 10ft, dia 4	20	32	Sd,G	Pl	U	20	N	------	Yield 50 gpm; sand and gravel from 0-52 ft.
32L1	------do------	------do------	9-22-48	790	Dr	84	30	Gp; S; 20ft, 55sl, dia 12	19	65	Sd	Pl	U	18	P	T	Dd 27 ft pumping 370 gpm; L.
37/1W- 5C1	C. Dartmess	Hunts Hoosier Hardware	3- 1-56	840	J	93	2	S; 4½ft, 60g, dia 1	76	17	Sd,G	Pl	U	76	D,S	J1	Yield 15 gpm; Ca, L.
6H1	H. Vosburgh	------do------	7-14-56	850	J	95	2	S; 5ft, 60g, dia 1	89	6	Sd	Pl	U	80	D	------	Brown coarse sand from 0-95 ft; Ca.
7R1	D. Williamson	------do------	3-28-57	830	J	85	2	S; 4½ft, 60g, dia 1	64	21	Sd,G	Pl	U	64	D	------	Ca, L.

37/1W- 8E1	D. Pfiefer and R. Ekart	Hunts Hoosier Hardware	9- 3-54	840	J	100	2	S; 4½ft, 60g	57	43	Sd,G	Pl	U	57	D	J1	Yield 15 gpm; sand and gravel from 0-100 ft; Ca.
8M1	W. Harris	---------do---------	3-18-56	820	J	68	2	S; 5ft, 60g, dia 1	49	19	G,Sd	Pl	U	49	D	J	Yield 13 gpm; Ca, L.
9L1	H. C. Hunt	---------do---------	1955	790	J	90	2	S; 4½ft, 60g	36	54	Sd	Pl	U	36	D	J1/2	Yield 15 gpm; Ca, L.
9L2	C. A. L. Moore	---------do---------	6-53	790	J	53	2	S; 60g	38	15	Sd	Pl	U	38	D	J1/2	Brown sand with little gravel from 0-53 ft.
10P1	E. Turak	---------do---------	7-18-59	820	J	94	2	S; 4ft, 60g, dia 1	80	14	Sd,G	Pl	U	80	D,S	------	Ca, L.
17E1	H. Stonish	---------do---------	2-12-57	815	J	82	2	S; 4½ft, 60g, dia 1	75	7	Sd	Pl	C	43	D	J1/2	Yield 13 gpm; L.
21Q1	H. and E. Hofstetter	N. Hope	11-10-51	780	J	71	2	S; 60g	---	---	Sd	Pl	-----	---	N	------	
22D1	D. Turak	Hunts Hoosier Hardware	Spring 1958	770	J	58	2	S; 4ft, 60g, dia 1	32	26	Sd	Pl	U	32	D	------	Ca, L.
28E1	L. Wilson	Sriver Drilling Co.	--------	735	Da	20	1½	S; 4ft, 60g, dia 1½	---	---	Sd	Pl	----	15	---	------	
29J1	Mr. Tuszynski	Hunts Hoosier Hardware	4-56	805	J	84	2	S; 4½ft, 60g, dia 1	65	19	G,S	Pl	U	65	D,S	J1	Yield 13 gpm; Ca, L.
31C1	W. Dawson	---------do---------	9-10-57	787	J	64	2	S; 3½ft, 60g, dia 1	49	15	Sd	Pl	U	49	---	------	Do.
31L1	H. Loter	---------do---------	4- 9-57	775	J	58	2	---------do---------	43	15	Sd	Pl	U	43	---	------	Yield 13 gpm; L.
37/2W- 1D1	Notre Dame University	Indiana-Michigan Water Development Co.	9-22-33	810	Dr	170	8	S; 24ft, dia 7	---	---	Sd,G	Pl	----	58	P	T20	Dd 44 ft pumping 170 gpm; screen, upper 19 ft 24 sl, lower 5 ft 10 sl; see log well 1D2.
1D2	---------do---------	---------do---------	6-11-45	810	Dr	171	8	S; 20ft, dia 7	---	---	Sd	Pl	-----	58	P	T	Yield 65 gpm; screen, upper 10 ft 10 sl, lower 10 ft 15 sl; Ca, L.
2A1	R. Mrozinski	Hunts Hoosier Hardware	4-57	810	J	58	2	S; 4ft, 60g, dia 1	40	18	Sd,G	Pl	U	40	S	J1/2	Yield 13 gpm; Ca, L.
2M1	R. Whoatbrook	---------do---------	2-55	815	J	84	2	S; 3ft, 60g	53	11	Sd,G	Pl	U	53	D	J1/2	L.
3D1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	1954	862	D	30	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 3D2.
3D2	---------do---------	---------do---------	1954	857	B	41	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
4A1	---------do---------	---------do---------	1954	858	B	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 4A4.
4A2	---------do---------	---------do---------	1954	858	B	46	---	----------	---	---	-----	--	-----	---	T.	------	No water reported; see log well 4A3.
4A3	---------do---------	---------do---------	1954	858	B	55	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
4A4	---------do---------	---------do---------	1954	857	B	48	---	----------	---	---	-----	--	-----	---	T	------	Do.
4A5	---------do---------	---------do---------	1954	854	B	35	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 4A3.
4E1	J. Charno	----------	10-22-48	884	Dr	785	8-6½	----------	---	---	-----	--	-----	---	---	------	Oil test; bedrock at 283 ft; 278 ft shale underlain by 234 ft limestone.
4N1	E. Pagle	N. Hope	10-29-51	855	J	134	2	S; dia 1	---	---	Sd	Pl	-----	---	D	J1/2	Medium sand overlain by red and blue clay.
4N2	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	4-23-54	861	B	45	---	----------	11	34	Sd	Pl	----	10	T	------	L.
4N3	---------do---------	---------do---------	4-54	860	B	45	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 4N2.
5C1	J. Wollinski	Hunts Hoosier Hardware	8-26-59	900	J	180	2	S; 5ft, 60g, dia 1	166	14	Sd	Pl	U	166	D	------	Ca, L.
5D1	A. Janicki	---------do---------	Summer 1946	890	J	155	2	S; 60g	143	12	Sd	Pl	U	143	D	L	Sand with few gravel overlain by 5 ft clay.
5L1	E. Sullivan	---------do---------	4-17-57	860	J	119	2	S; 4½ft, 60g, dia 1	103	16	Sd	Pl	U	103	D	------	Yield 13 gpm; L.
5P1	J. Warfield	Mr. Barnthouse	--------	840	J	129	2	S; 4ft, 60g	118	13	Sd	Pl	U	75	D	J	Yield 12 gpm; sand from 0-131 ft.
5R1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5-21-54	858	B	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 5R2.
5R2	---------do---------	---------do---------	5-22-54	852	D	40	---	----------	---	---	Sd	Pl	-----	18	T	------	L.
5R3	---------do---------	---------do---------	5-20-54	850	D	35	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 5R7.
5R4	---------do---------	---------do---------	1954	861	D	45	---	----------	---	---	-----	--	-----	---	T	------	Do.
5R5	---------do---------	---------do---------	1954	861	B	39	---	----------	---	---	Sd	Pl	-----	---	T	------	See log well 5R7.
5R6	---------do---------	---------do---------	1954	860	B	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 5R7.
5R7	---------do---------	---------do---------	1954	860	B	46	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
7A1	M. Pritzen	H. B. Phillips	1- 7-43	814	Dr	1,528	---	----------	---	---	-----	--	-----	---	---	------	Oil test; bedrock at 200 ft.
7E1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	4-21-54	829	B	40	---	----------	7	33	Sd,G	Pl	U	7	T	------	See log well 7E3.
7E2	---------do---------	---------do---------	4-21-54	828	B	38	---	----------	7	31	Sd	Pl	U	7	T	------	Do.
7E3	---------do---------	---------do---------	4-20-54	830	B	52	---	----------	10	42	Sd	Pl	-----	0	T	------	L.
7H1	---------do---------	Indiana-Michigan Water Development Co.	4-18-55	790	Dr	109	8	S; 15ft, 12sl	24	86	Sd	Pl	U	24	P	T5	Dd 69.5 ft after 8 hr pumping 110 gpm; Ca, L.
7H2	---------do---------	KOF Foundation Test Borings, Inc.	4-23-54	787	D	44	---	----------	14	30	Sd,G	Pl	U	14	T	------	L.
7H3	---------do---------	---------do---------	4-23-54	787	B	44	---	----------	14	30	Sd,G	Pl	U	14	T	------	See log well 7H2.
7H4	---------do---------	---------do---------	4-24-54	787	B	43	---	----------	14	29	Sd,G	Pl	U	14	T	------	Do.
7H5	---------do---------	---------do---------	4-28-54	787	B	48	---	----------	14	32	Sd,G	Pl	U	14	T	------	Do.
7H6	---------do---------	---------do---------	4-18-54	787	B	40	---	----------	15	25	Sd,G	Pl	U	15	T	------	Do.
7H7	---------do---------	---------do---------	4-20-54	787	B	42	---	----------	14	28	Sd,G	Pl	U	14	T	------	Do.
7P1	D. Proud	Hunts Hoosier Hardware	8-12-59	860	J	104	2	S; 4ft, 60g, dia 1	90	14	Sd	Pl	U	90	D	------	L.
8B1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5-22-54	842	B	37	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
8D2	---------do---------	---------do---------	5-10-54	845	B	35	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 8B1.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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				
37/2W- 8B3	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5-21-54	852	B	40	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 8D1.
8B4	-------do--------	---------do---------	6- 3-54	837	B	60	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
8D5	-------do--------	---------do---------	5-29-54	838	B	60	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 8B4.
8B6	-------do--------	---------do---------	5-29-54	838	B	40	---	----------	---	---	-----	--	----	---	T	------	Do.
8D7	-------do--------	---------do---------	6- 2-54	839	B	45	---	----------	---	---	-----	--	----	---	T	------	Do.
8B8	-------do--------	---------do---------	6- 1-54	840	B	40	---	----------	---	---	-----	--	----	---	T	------	Do.
8D9	-------do--------	---------do---------	5-29-54	839	B	46	---	----------	---	---	-----	--	----	---	T	------	Do.
8B10	-------do--------	---------do---------	5-28-54	840	B	46	---	----------	---	---	-----	--	----	---	T	------	Do.
8B11	-------do--------	---------do---------	6- 2-54	840	B	60	---	----------	---	---	-----	--	----	---	T	------	Do.
8N1	H. Cole	J. Dill	1-57	800	J	48	2	S; 3ft, 60g	43	5	Sd	Pl	C	26	D	L1/2	Sand overlain by 43 ft red clay and gravel; Ca.
9E1	J. J. Klaca	Hunts Hoosier Hardware	7-10-54	850	J	80	2	S; 4½ft, 60g	70	10	Sd,G	Pl	U	70	S	L	Yield 15 gpm; sand and gravel overlain by 10 ft clay.
9L1	W. W. Griffith	Lakeland Well Drillers	11-30-56	815	J	150	2	S; 5½ft, 60g, dia 1	---	---	Sd,G	Pl	----	---	D,S	J1	Ca.
10E1	C. Young	Hunts Hoosier Hardware	7-56	835	J	80	4	S; 8ft, 10sl	---	---	Sd,G	Pl	U	47	Ir	J5	Yield 60 gpm; sand and gravel overlain by 72 ft sand.
10L1	W. Kegbein	---------do---------	3- 3-56	835	J	65	2	S; 3½ft, 60g, dia 1	47	18	Sd,G	Pl	U	47	D	J1/2	Yield 13 gpm; Ca, L.
11B1	Trustees, Kankakee Township	---------do---------	Summer 1952	810	J	70	4	-------do--------	35	35	Sd,G	Pl	U	35	P	J5	Yield 50 gpm; white sand and gravel overlain by 60 ft brown sand and gravel.
11E1	M. Warner	---------do---------	Summer 1945	815	J	50	2	S; 60g	30	20	Sd	Pl	U	30	D	J1/2	Brown coarse sand and gravel from 0-50 ft.
11E2	Mr. Mansfield	---------do---------	10- 6-57	825	J	67	2	S; 3½ft, 60g, dia 1	53	14	Sd	Pl	U	53	D	------	Yield 13 gpm; L.
11F1	N. Massey	---------do---------	Fall 1955	820	J	55	2	-------do--------	30	25	Sd,G	Pl	U	30	D	J1/2	Yield 13 gpm; sand and gravel from 0-55 ft; Ca.
11F2	G. Willinski	---------do---------	11-23-55	820	J	60	2	-------do--------	35	25	Sd,G	Pl	U	35	D	K1/2	Yield 13 gpm; L.
11G1	R. Stevens	---------do---------	7-51	810	J	67	2	S; 60g	50	17	Sd,G	Pl	U	50	D	J3/4	Brown coarse sand and gravel 0-67 ft.
11J1	South Bend Lathe Co.	Layne-Northern Co., Inc.	3- 5-57	810	Dr	75	8	S; 10ft, 15sl, dia 7⅝	28	55	Sd	Pl	U	28	N	------	Dd 24 ft after 24 hr pumping 150 gpm; L.
11J2	-------do--------	---------do---------	3-15-57	810	Dr	75	8	-------do--------	31	47	Sd	Pl	U	31	N	------	Dd 30 ft after 24 hr pumping 150 gpm; L.
11M1	Seneca Co.	Hunts Hoosier Hardware	4-16-56	810	J	53	2	S; 4½ft, 60g, dia 1	35	18	Sd,G	Pl	U	35	I	J1/2	L.
11N1	E. Smith	---------do---------	4-57	820	--	95	4	S; 5ft	56	39	Sd,G	Pl	U	56	---	SJ3/4	L.
12M1	Indiana State Highway Department	---------do---------	5- 9-58	810	J	60	4	S	33	27	G,Sd	Pl	U	33	P	L	Ca, L.
15A1	L. Stoner	---------do---------	9-56	810	J	62	2	S; 3½ft, 60g, dia 1	40	22	Sd,G	Pl	U	40	D	J1/2	Yield 13 gpm; see log well 15D1.
15D1	J. Booras	---------do---------	3-13-59	815	J	58	2	S; 4ft, 60g, dia 1	42	16	Sd,G	Pl	U	42	D	------	L.
17K1	L. Donchin	---------do---------	Summer 1952	790	J	40	4	S; 8ft. 60g	30	10	Sd,G	Pl	C	16	I	J2	White sand and blue gravel overlain by 30 ft clay and sand.
18N1	M. Fisher	Godfrey Drilling Co.	10- 6-46	815	Dr	450	8-6	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 240 ft; L.
20L1	-------do--------	---------do---------	4-12-47	820	--	503	8½-6½	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 231 ft; L.
20P1	Mrs. Garrison	Hunts Hoosier Hardware	11-28-56	820	J	57	2	S; 3½ft, 60g, dia 1	40	17	Sd,G	Pl	U	40	D	J1/2	Yield 13 gpm; Ca, L.
20Q1	R. Biehl	Westville Well Co.	9-19-56	815	J	61	2	S; 4½ft	---	---	Sd	Pl	----	---	D	------	
20R1	N. Plotz	J. P. Miller Artesian Well Co.	1947	815	Dr	124	6	S; 20ft	53	72	Sd,G	Pl	U	53	I	T5	Dd 13 ft after 3 hr pumping 65 gpm; screen, upper 10 ft 15 sl, lower 10 ft 10 sl; Ca, L.
21H1	G. Sherwood	Hunts Hoosier Hardware	10-12-54	765	J	34	2	S; 60g	---	---	Sd	Pl	----	9	D	J1/2	
25A1	Mr. Cummings	N. Hope	5- 6-52	800	J	60	2	S; 60g	---	---	Sd	Pl	----	---	D	------	
26D1	Dr. Scholl	Hunts Hoosier Hardware	4-17-55	770	J	30	2	S; 4½ft, 60g, dia 1½	14	10	Sd	Pl	U	14	S	J1	Yield 15 gpm; brown sand overlain by 8 ft black dirt.
26D2	-------do--------	---------do---------	11- 7-56	770	J	42	3	S; 6ft, dia 1½	21	21	Sd,G	Pl	U	21	D,S	J3/4	Yield 18 gpm; Ca, L.

37/2W-28K1	R. C. Witter Co.	Indiana-Michigan Water Development Co.	9-11-35	748	Dr	40	6	----------	4	36	Sd	Pl	U	4	T	------	Sand overlain by 5 ft muck.
28K2	City of La Porte	----------	--------	748	Du	25	600	----------	---	---	Sd,G	Pl	U	13	O,P	------	Observation well La Porte 1. water level measured 11.90 ft below lsd, 7-4-42.
28M1	Mr. Rumely	Shell Oil Co.	1941	795	Dr	447	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 210 ft; 232 ft shale underlain by 5 ft dolomite.
28C1	G. Jolley	Hunts Hoosier Hardware	5-14-58	800	J	33	2	S; 4½ft, 40g, dia 1	---	---	G,Sd	Pl	----	23	Ir	------	Yield 13 gpm; L.
29D1	C. Hunt	Sriver Drilling Co.	7-50	810	J	77	4	S; 8ft, 60g, dia 2½	36	41	Sd,G	Pl	U	36	P	------	Sand and gravel from 0-77 ft.
29E1	J. Horvatt	Hunts Hoosier Hardware	11-54	805	J	46	2	S; 60g	40	6	Sd,G	Pl	C	25	D	------	Yield 15 gpm; L.
29E2	A. Sincox	---------do---------	4-57	805	J	51	3	S; 5ft, dia 1½	30	21	Sd,G	Pl	U	30	D	------	L.
29F1	S. J. Halter	---------do---------	9-20-56	800	J	43	2	S; 3½ft, 60g, dia 1	32	11	Sd,G	Pl	U	32	D	L	Yield 13 gpm; L.
30H1	Square Deal Electric	---------do---------	3- 5-58	810	J	49	2	--------do--------	---	---	Sd	Pl	-----	30	P	------	Yield 13 gpm; Ca, L.
30K1	R. E. Green	---------do---------	9-12-54	810	J	72	2	S; 60g	---	---	Sd,G	Pl	-----	25	D	J1/2	Yield 13 gpm; L.
30L1	City of La Porte	Layne-Northern Co., Inc.	2-25-57	800	Dr	174	7	----------	61	113	Sd	Pl	C	---	T	------	L.
30L2	--------do--------	---------do---------	6- 5-57	800	Dr	150	34	Gp; S; 54ft. 12sl, dia 8	85	65	Sd	Pl	C	12	P	------	Dd 42 ft after 1 hr pumping 1,000 gpm; L.
30L3	--------do--------	---------do---------	7-23-46	800	Dr	113	34	Gp; S; 26½ft, dia 12	65	48	Sd	Pl	C	12	P	------	Dd 47 ft pumping 1,100 gpm; L.
30L4	--------do--------	---------do---------	3-24-43	800	Dr	111	---	----------	85	45	Sd,G	Pl	C	12	T	------	See log well 30L3.
31M1	D. Woods	J. Dill	4-55	803	J	40	2	S; 60g	33	7	Sd	Pl	C	25	D	J	Yield 12 gpm; sand overlain by 33 ft red clay and gravel; Ca.
32E1	Baker Bros.	Shell Oil Co.	1941	794	Dr	380	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 200 ft; 172 ft shale underlain by 8 ft dolomite.
32R1	F. Lenick	Hunts Hoosier Hardware	9-56	790	J	35	2	S; 4½ft, 60g, dia 1	22	13	Sd	Pl	U	22	S	------	Yield 13 gpm; brown sand from 0-35 ft.
33P1	L. Lockwood	Sriver Drilling Co.	5- 2-47	810	J	76	3	S; 4ft, 60g, dia 2	---	---	Sd,G	Pl	----	60	---	------	
33Q1	H. Landwer	Hunts Hoosier Hardware	3- 8-57	820	--	95	3	S; 4½ft, dia 1½	73	22	Sd,G	Pl	U	73	D	J1	L.
35J1	F. Lango	----------	--------	770	J	42	2	S; 4ft, 60g, dia 1	---	---	G,Sd	Pl	----	32	S	J3/4	
37/3W- 2N1	T. Logos	H. Hopo	11- 2-51	770	J	125	2	S; 60g	---	---	Sd	Pl	----	---	D	J3/4	
2N1	Mr. Lovendowski	Hunts Hoosier Hardware	1955	830	J	170	3	S; 5ft	160	10	Sd	Pl	C	108	D	J1	Yield 20 gpm; L.
3K1	W. Schwonk	---------do---------	Fall 1953	785	J	82	2	S; 60g	70	12	Sd	Pl	----	---	D	J1/3	White coarse sand overlain by about 70 ft clay and sand; Ca.
3K2	O. Troth	---------do---------	6-27-57	785	J	75	2	S; 4½ft, 60g, dia 1	60	0	Sd	Pl	C	12	N	------	White sand overlain by 69 ft clay; water level measured 15.90 below lsd, 12-10-50.
3K3	E. Schultz	---------do---------	5-15-58	770	J	33	2	S; 4ft, 60g. dia 1	26	7	Sd	Pl	C	6	D	J1/2	Ca, L.
4F1	Friendly Acres	---------do---------	1940	705	J	36	2	Oo	---	---	G,Sd	Pl	C	---	D,P	------	Flowed 80 gpm; Ca.
4F2	O. Smith	----------	--------	690	J	40	2	----------	---	---	Sd,G	Pl	C	+7	D,S	------	Discharge measured 12 gpm, 3-28-57; Ca.
4K1	T. Pahl	----------	--------	705	--	-----	---	----------	---	---	Sd	Pl	----	---	D	------	Spring issuing from sand; discharge less than 1 gpm; Ca.
5D1	C. Harmon	Hunts Hoosier Hardware	Summer 1952	665	J	30	2	S; 60g	10	20	Sd,G	Pl	U	10	D	J3/4	
5E1	Great Lakes Duck Farm	E. Hutchingson	--------	681	Dr	203	4	Oo	---	---	Sd,G	Pl	C	+35	I,S	------	Flowed 270 gpm; Ca.
5G1	J. J. Mark	----------	1932	660	J	175	2	----------	---	---	G,Sd	Pl	C	+30	D,S	------	Discharge measured 60 gpm, 3-28-57; finished with slotted pipe; Ca.
5H1	V. Dull	Hunts Hoosier Hardware	5- 1-58	670	J	56	2	S; 4ft, 60g, dia 1	50	6	Sd	Pl	C	---	---	------	Flowed 12 gpm; L.
5P1	Mr. Bossermaan	----------	--------	655	--	-----	---	----------	---	---	Sd	Pl	----	---	N	------	Spring; discharge measured 21 gpm, 3-28-57; Ca.
5P2	--------do--------	----------	--------	655	--	-----	---	----------	---	---	Sd	Pl	----	---	N	------	Spring; discharge measured 3 gpm, 3-28-57; Ca.
6C1	Indiana State Highway Department	Testing Service Corp.	--------	633	B	46	2½	----------	---	---	Sd,G	Pl	----	---	T	------	See log well 6C3.
6C2	--------do--------	---------do---------	--------	632	B	52	2½	----------	---	---	Sd,G	Pl	----	---	T	------	Do.
6C3	--------do--------	---------do---------	--------	635	D	55	2½	----------	---	---	Sd,G	Pl	----	---	T	------	L, S.
6C4	--------do--------	---------do---------	--------	634	B	52	2½	----------	---	---	Sd,G	Pl	----	---	T	------	See log well 6C3.
6C5	--------do--------	---------do---------	--------	633	D	52	2½	----------	---	---	Sd,G	Pl	----	---	T	------	Do.
6E1	--------do--------	---------do---------	--------	642	B	62	2½	----------	---	---	Sd,G	Pl	----	---	T	------	L.
6E2	--------do--------	---------do---------	--------	642	D	56	2½	----------	---	---	Sd	Pl	----	---	T	------	See log well 6E3.
6E3	--------do--------	---------do---------	--------	643	D	56	2½	----------	---	---	Sd,G	Pl	----	---	T	------	L.
6E4	--------do--------	---------do---------	--------	643	B	54	2½	----------	---	---	G	Pl	----	---	T	------	L.
6P1	Wonder Well Farm	----------	1936	655	Da, B	52	12	Oo	50	2	Sd,G	Pl	C	---	N	------	Discharge measured 60 gpm, 3-21-57; originally bored as 2-inch well; sand and gravel overlain by 50 ft clay and hardpan; Ca.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
37/3W- 7D1	F. DeWolf	A. Good	--------	665	J	72	2	----------	70	2	Sd,G	Pl	C	+7	D	------	Discharge estimated 5 gpm, 3-21-57; sand and gravel overlain by 70 ft clay and hardpan.
8F1	L. Scott	Shell Oil Co.	1941	755	Dr	415	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 230 ft; 280 ft shale underlain by 3 ft limestone and 2 ft dolomite.
8J1	F. Mazzukelly	Lakeland Well Drillers	6-14-56	770	J	130	3	S; 7ft, 80g, dia 2	---	---	Sd	Pl	----	30	---	1	
9N1	N. Josch	--------	--------	785	J	98	2	S; 3ft, 60g, dia 1	---	---	G	Pl	----	73	D	L1/2	Yield 4 gpm.
9R1	S. Armentrout	----------	10-25-54	800	J	110	2	S; 4½ft, 80g, dia 1	---	---	Sd	Pl	----	---	---	------	Yield 5 gpm; Ca.
9R2	R. Wheatbrook	Hunts Hoosier Hardware	3- 7-58	800	J	90	2	S; 4½ft, 80g, dia 1	---	---	Sd	Pl	----	65	D	------	Yield 13 gpm; Ca, L.
10N1	Dr. Kosling	----------do----------	1-17-57	855	J	102	2	----------do----------	84	18	Sd	Pl	U	84	D	------	Yield 13 gpm; L.
11A1	L. Kozlowski	----------	--------	---	--	-----	---	----------	---	---	Sd	Pl	----	---	---	------	Spring, flows only during wet seasons.
11H1	Mr. Fritzen	Shell Oil Co.	1941	774	B	438	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 348 ft: 85 ft shale underlain by 5 ft dolomite.
11J1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5-18-54	780	B	38	---	----------	14	24	Sd	Pl	C	7	T	------	L.
11J2	-------do--------	----------do----------	5-18-54	780	B	25	---	----------	7	18	Sd	Pl	U	7	T	------	See log well 11J6.
11J3	-------do--------	----------do----------	4- 6-54	792	B	45	---	----------	20	25	Sd	Pl	U	20	T	------	Do.
11J4	-------do--------	----------do----------	4- 5-54	794	D	80	---	----------	---	---	Sd	Pl	----	---	T	------	L.
11J5	-------do--------	----------do----------	4- 7-54	788	B	45	---	----------	17	28	Sd	Pl	U	17	T	------	See log well 11J6.
11J6	-------do--------	----------do----------	4- 3-54	791	B	50	---	----------	---	---	Sd	Pl	----	---	T	------	L.
11J7	-------do--------	----------do----------	4-10-54	797	B	41	---	----------	---	---	Sd	Pl	----	---	T	------	See log well 11J6.
11J8	-------do--------	----------do----------	5-18-54	778	B	35	---	----------	29	6	Sd	Pl	C	2	T	------	L.
11K1	-------do--------	----------do----------	1954	858	D	55	---	----------	42	9	Sd	Pl	U	42	T	------	L.
11K2	-------do--------	----------do----------	1954	841	B	35	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
11N1	-------do--------	Layne-Northern Co., Inc.	5-23-55	845	Dr	186	6	S; 20ft, 10sl	164	22	Sd	Pl	C?	89	P	------	Dd 14 ft after 8 hr pumping 50 gpm; Ca, L.
11P1	-------do--------	KOF Foundation Test Borings, Inc.	5-14-54	848	B	50	---	----------	---	---	Sd	Pl	U	21	T	------	L.
11P2	-------do--------	----------do----------	5-13-54	847	D	35	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 11P1.
11P3	-------do--------	----------do----------	5-11-54	846	B	35	---	----------	---	---	Sd	Pl	C	5	T	------	See log well 11P1.
11P4	-------do--------	----------do----------	5-12-54	848	B	40	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 11P1.
11P5	-------do--------	----------do----------	5-14-54	845	B	40	---	----------	---	---	-----	--	----	---	T	------	Do.
11Q1	-------do--------	----------do----------	1954	862	D	50	---	----------	---	---	-----	--	----	---	T	------	Do.
12A1	R. Marshall	Hunts Hoosier Hardware	8-25-54	775	J	29	2	S	9	20	Sd	Pl	U	9	D	J1/2	Yield 15 gpm; brown sand from 0-29 ft; Ca.
12F1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	6-10-54	772	D	25	---	----------	9	16	Sd	Pl	U	9	T	------	Silty sand from 0-25 ft.
12N1	-------do--------	----------do----------	5-22-54	848	D	20	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
12N2	-------do--------	----------do----------	4-17-54	836	B	50	---	----------	---	---	-----	--	----	---	T	------	Do.
12N3	-------do--------	----------do----------	4-10-54	834	D	45	---	----------	---	---	-----	--	----	---	T	------	Lost water at 28 ft; see log well 12N2.
12N4	-------do--------	----------do----------	4-20-54	839	B	34	---	----------	---	---	-----	--	----	---	T	------	See log well 12N2.
12N5	-------do--------	----------do----------	4-21-54	836	D	30	---	----------	16	14	Sd,G	Pl	U	16	T	------	Do.
12N6	-------do--------	----------do----------	4-20-54	830	B	35	---	----------	10	25	Sd	Pl	U	10	T	------	L.
12N1	-------do--------	----------do----------	4- 8-54	789	B	45	---	----------	18	27	Sd	Pl	U	18	T	------	Silty fine to medium sand from 0-45 ft.
12N2	-------do--------	----------do----------	4- 9-54	793	D	42	---	----------	18	24	Sd	Pl	U	18	T	------	Silty fine to medium sand from 0-42 ft.
12N3	-------do--------	----------do----------	4- 9-54	795	D	50	---	----------	---	---	Sd	Pl	----	---	T	------	L.
13L1	S. Trofanowski	Hunts Hoosier Hardware	10- 8-58	845	J	74	2	S; 4ft, 60g, dia 1	61	13	Sd,G	Pl	U	61	D	J1/2	Yield 13 gpm; L.
14D1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	4-15-54	875	B	45	---	----------	13	13	Sd	Pl	U	13	T	------	L.
14D2	-------do--------	----------do----------	4-16-54	874	D	35	---	----------	9	17	Sd	Pl	U	9	T	------	See log well 14D1.

37/3W-14D1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	4-13-54	871	B	42	---	----------	---	---	Sd	Pl	----	4	T	------	L.
14J1	S. T. Condoro	Hunts Hoosier Hardware	9-17-54	845	J	86	2	S; 4ft, 60g	72	14	G,Sd	Pl	U	72	D	L	Yield 15 gpm; Ca, L.
15A1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	4-15-54	869	D	40	---	----------	32	8	Sd	Pl	C	2	T	------	L.
15A2	-------do--------	---------do---------	4-17-54	875	D	50	---	----------	12	22	Sd	Pl	U	12	T	------	L.
15A3	-------do--------	---------do---------	4-14-54	872	D	35	---	----------	21	14	Sd	Pl	C	2	T	------	See log well 15A4.
15A4	-------do--------	---------do---------	4-14-54	869	D	40	---	----------	23	17	Sd	Pl	C	2	T	------	L.
15A5	-------do--------	---------do---------	4-13-54	875	D	50	---	----------	---	---	Sd	Pl	----	12	T	------	L.
15F1	-------do--------	---------do---------	5-29-54	857	B	50	---	----------	---	---	------	--	----	---	T	------	No water reported; see log well 15F6.
15F2	-------do--------	---------do---------	5-26-54	845	B	40	---	----------	---	---	------	--	----	---	T	------	Do.
15F3	-------do--------	---------do---------	5-28-54	862	B	70	---	----------	---	---	------	--	----	---	T	------	Do.
15F4	-------do--------	---------do---------	5-27-54	847	B	41	---	----------	---	---	------	--	----	---	T	------	Do.
15F5	-------do--------	---------do---------	5-25-54	852	B	40	---	----------	---	---	------	--	----	---	T	------	Do.
15F6	-------do--------	---------do---------	5-27-54	854	B	60	---	----------	---	---	------	--	----	---	T	------	No water reported; L.
15F7	-------do--------	---------do---------	5-26-54	846	B	40	---	----------	---	---	------	--	----	---	T	------	No water reported; see log well 15F6.
15F8	-------do--------	---------do---------	5-26-54	859	B	71	---	----------	---	---	------	--	----	---	T	------	No water reported; L.
15F9	-------do--------	---------do---------	5-26-54	846	B	40	---	----------	---	---	------	--	----	---	T	------	No water reported; see log well 15F8.
15F10	-------do--------	---------do---------	5-26-54	856	B	41	---	----------	---	---	------	--	----	---	T	------	Do.
15H1	J. Johnson	Hunts Hoosier Hardware	3-22-57	885	J	164	2	S; 4½ft, 60g, dia 1	---	---	Sd	Pl	----	101	D,S	J1	Yield 5 gpm; Ca, L.
15J1	Mr. Shutler	Shell Oil Co.	1941	859	Dr	487	---	----------	---	---	------	--	----	---	---	------	Oil test; bedrock at 351 ft; 131 ft shale underlain by 5 ft dolomite.
16D1	Mr. Noah	J. Dill	7-12-54	920	J	188	2	S; 80g	182	8	Sd	Pl	C	135	D	J1	Yield 10 gpm; L.
16E1	A. Schultz	Hunts Hoosier Hardware	3-12-59	920	J	160	2	S; 5ft, 80g, dia 1	130	30	Sd,G	Pl	U	130	---	------	L.
16F1	J. Koziol	---------do---------	8-10-59	920	J	154	2	---------do---------	130	24	Sd	Pl	U	130	D,S	------	L.
16G1	T. Koel	---------do---------	8-53	920	J	142	2	S; 80g	130	12	Sd	Pl	----	130	D	J1	Ca.
16K1	La Porte Heating Co.	---------do---------	7-23-54	900	J	138	2	S; 4ft, 80g	122	16	Sd,G	Pl	U	122	N	------	Yield 15 gpm; white sand and gravel overlain by 36 ft clay.
16K2	W. Terry	Mr. Harnthouse	9-54	910	J	145	2	S; 5ft, 80g	---	---	Sd	Pl	----	138	D	L	Yield 8 gpm; L.
16K3	American Telephone and Telegraph Co.	Westville Well Co.	12-31-53	920	J	165	2	S; 4½ft	---	---	Sd	Pl	----	110	---	------	
16K4	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	6- 8-54	890	D	45	---	----------	---	---	Sd	Pl	C	12	T	------	See log well 16K10.
16K5	-------do--------	---------do---------	6- 4-54	887	B	45	---	----------	---	---	------	--	----	---	T	------	No water reported; see log well 16K10.
16K6	-------do--------	---------do---------	6- 5-54	890	D	85	---	----------	34	31	Sd	Pl	C	1	T	------	L.
16K7	-------do--------	---------do---------	6- 4-54	884	B	52	---	----------	---	---	------	--	----	---	T	------	No water reported; L.
16K8	-------do--------	---------do---------	6- 8-54	886	B	45	---	----------	---	---	Sd	Pl	C	11	T	------	See log well 16K10.
16K9	-------do--------	---------do---------	6- 8-54	884	B	40	---	----------	33	7	Sd	Pl	C	12	T	------	Do.
16K10	-------do--------	---------do---------	6- 4-54	883	B	50	---	----------	---	---	------	--	----	---	T	------	No water reported; L.
16K11	-------do--------	---------do---------	6- 7-54	882	B	40	---	----------	38	2	Sd	Pl	C	7	T	------	See log well 16K10.
16K12	-------do--------	---------do---------	6- 7-54	881	B	50	---	----------	---	---	------	--	----	---	T	------	No water reported; see log well 16K7.
16K13	-------do--------	---------do---------	6- 8-54	879	B	45	---	----------	---	---	------	--	----	---	T	------	No water reported; see log well 16K10.
16L1	P. Schofield	Hunts Hoosier Hardware	Fall 1955	920	J	145	2	S; 5ft, 80g	140	10	Sd,G	Pl	C	135	D	------	Yield 15 gpm; L.
18C1	C. Bassett	J. Dill	8-55	740	J	76	4	S; 60g	68	8	Sd	Pl	C	8	---	------	For pond; sand overlain by 68 ft blue clay; Ca.
18D1	W. Kossler	---------do---------	10-55	745	J	40	2	-------do--------	15	25	Sd	Pl	U	15	D	L1/4	Yield 6 gpm; sand from 0-40 ft.
18E1	A. Masolbas	---------do---------	7- 1-53	745	J	80	2	S; 2½ft, 80g	30	50	Sd	Pl	U	30	D	L	Yield 10 gpm; fine sand overlain by 20 ft rod clay.
18G1	V. Janzaruk	Hunts Hoosier Hardware	5-20-58	775	J	82	2	S; 3ft	70	12	Sd	Pl	C	40	---	------	L.
18N1	R. W. Scott	H. Hopa	11-14-51	800	J	70	2	S; 4ft, 60g	---	---	Sd	Pl	----	---	D	------	
19C1	P. Paul	---------do---------	Fall 1952	815	J	165	2	S; 60g	---	---	Sd	Pl	----	---	D	J	
19J1	Summit Prison Farm	----------	--------	910	Dr	267	6	S; 4ft, 60g, dia 3	---	---	Sd,G	Pl	----	143	P,S	------	Dd 5 ft pumping 10 gpm.
19J2	-------do--------	Indiana-Michigan Water Development Co.	3-25-38	910	Dr	264	6	S; 8ft, 30sl, dia 4½	221	43	Sd,G	Pl	C	143	P,S	T7-1/2	Dd 10 ft pumping 120 gpm; L.
19J3	-------do--------	---------do---------	9-20-41	910	Dr	275	6	S; 15ft, 8sl, dia 4	232	43	Sd	Pl	C	145	N	------	L.
19J4	-------do--------	---------do---------	4- 7-50	910	Dr	177	8	S; 15ft, 12sl, dia 7½	140	37	Sd,G	Pl	C	140	P,S	T10	L.
19J5	-------do--------	Layne-Northern Co., Inc.	9-23-55	905	Dr	200	6	S; 20ft	---	---	Sd	Pl	----	128	P,S	T	Dd 32 ft after 8 hrs pumping 120 gpm; Ca, L.
19M1	T. Nedza	J. Dill	8-55	---	J	190	2	S; 60g	185	5	Sd	Pl	C	105	D	J1	Yield 6 gpm; sand overlain by 185 ft blue clay mixed with sand.
20F1	L. W. Hoploglo	---------do---------	--------	890	J	200	2	----------	---	---	Sd	Pl	----	121	D,S	------	
20F2	-------do--------	Shell Oil Co.	1941	871	Dr	499	---	----------	---	---	------	--	----	---	---	------	Oil test; bedrock at 320 ft; 177 ft shale underlain by 2 ft dolomite.
20H1	Indiana Toll Road Commission	Westville Engineering Co.	4-28-54	861	D	40	---	----------	9	31	Sd	Pl	U	9	T	------	L.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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				
37/3W-20H2	Indiana Toll Road Commission	Westville Engineering Co.	4-29-54	858	D	41	---	----------	18	23	Sd,G	Pl	U	18	T	------	L.
20H3	-------do--------	---------do---------	4-29-54	861	B	44	---	----------	25	19	Sd	Pl	U	25	T	------	L.
20H4	-------do--------	---------do---------	4-28-54	860	B	40	---	----------	---	---	Sd	Pl	----	19	T	------	L.
20H5	-------do--------	---------do---------	4-30-54	859	B	26	---	----------	14	12	Sd	Pl	----	14	T	------	L.
20H6	-------do--------	---------do---------	4-28-54	858	B	40	---	----------	18	22	Sd,G	Pl	U	18	T	------	L.
21G1	H. Fredrick	----------	--------	850	--	75	2	S; 3ft, 60g	---	---	Sd	Pl	----	57	D	J1/2	Yield 6 gpm.
21G2	W. Sowers	D. Lantz	--------	850	J	74	2	S; 3½ft, 60g dia 1½	---	---	Sd	Pl	----	49	D	1/2	
21J1	W. H. Johnson	Westville Well Co.	4- 8-56	850	J	95	2	S; 4½ft	---	---	Sd	Pl	----	---	---	------	
21J2	H. B. Richardson	Hunts Hoosier Hardware	1- 9-59	850	J	73	2	S; 5ft, 60g, dia 1	54	19	Sd,G	Pl	U	54	---	------	L.
21L1	R. O. Knoll	---------do---------	4-15-55	860	J	76	2	S; 3½ft, 60g, dia 1	60	16	Sd,G	Pl	C	47	D	J1/2	Yield 13 gpm; white sand and gravel overlain by 60 ft gravelly clay.
21R1	R. Danielson	---------do---------	11- 4-57	845	J	78	2	S; 4ft, 60g, dia 1	70	6	Sd	Pl	C	54	D	------	Yield 13 gpm; L.
22E1	F. Scott	Shell Oil Co.	1941	830	Dr	453	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 280 ft; 159 ft shale underlain by 14 ft dolomite.
22K1	B. Diehl	Westville Well Co.	7-27-56	810	--	100	2	S; 4½ft	---	---	Sd	Pl	----	---	---	------	
22M1	Fraternal Order of Elks	Layne-Northern Co., Inc.	5-19-45	850	Dr	92	12	S; 8ft	56	30	Sd	Pl	U	56	P	------	Dd 25 ft pumping 160 gpm; dirty sand from 0-92 ft.
22N1	D. Clendenen	----------	--------	845	J	117	2	S; 3ft, 60g, dia 1	---	---	Sd	Pl	----	75	D,S	1/2	
22N2	C. Ellis	----------	10-27-54	830	--	70	2	S	---	---	Sd	Pl	----	30	D	1/2	
22N3	R. Chipman	Hunts Hoosier Hardware	4-18-55	845	J	78	2	S; 4½ft, 60g, dia 1	72	6	Sd,G	Pl	C	55	D	------	Yield 13 gpm; L.
22Q1	Pine Lake Cemetery	Sriver Drilling Co.	--------	815	J	43	3	S; 6ft, 60g, dia 2	---	---	Sd	Pl	----	2	---	------	Ca.
23R1	M. Swanson	J. Dill	3-56	800	J	68	2	S; 60g	60	6	G	Pl	C	52	---	------	Gravel overlain by 60 ft red clay and gravel; temp 55.
24C1	T. Rose	Hunts Hoosier Hardware	10- 4-57	830	J	77	2	S; 4½ft, 60g, dia 1	---	---	Sd,G	Pl	----	55	S	L	Yield 13 gpm; Ca, L.
24N1	D. Read	Mr. Barnthouse	5-54	800	J	46	2	S; 3½ft, 60g	37	9	G	Pl	C	14	D	J	Yield 15 gpm; L.
24N2	W. Kowalczyk	Westville Well Co.	4-24-56	815	J	79	2	S; 4½ft	---	---	Sd	Pl	----	---	D	------	
24N3	D. Deuitch	Mr. Barnthouse	8-11-53	800	J	74	2	S; 3ft, 60g, dia 1	61	13	Sd	Pl	C	34	D	J1/2	Yield 6 gpm; medium sand overlain by 61 ft red clay and gravel.
24P1	L. D. Keller	Hunts Hoosier Hardware	2- 8-56	815	J	55	2	S; 3½ft, 60g, dia 1	---	---	Sd,G	Pl	----	40	D	------	Yield 13 gpm; Ca, L.
25B1	T. Rose	Shell Oil Co.	1941	816	Dr	432	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 208 ft; 219 ft shale underlain by 5 ft dolomite.
26D1	E. Redding	Hunts Hoosier Hardware	4-55	825	J	35	2	S; 4½ft, 60g, dia 1	18	17	Sd,G	Pl	U	18	D	J1/2	Yield 13 gpm; white sand and gravel overlain by 30 ft black dirt and brown sand.
26E1	Mr. Kabelin	Shell Oil Co.	1941	823	Dr	442	---	----------	---	---	-----	--	----	---	---	------	Oil test; bedrock at 235 ft; 201 ft shale underlain by 6 ft dolomite.
26J1	T. Tate	H. Hope	5-13-52	825	J	71	2	S; 4ft, 60g	---	---	Sd	Pl	----	---	D	------	
26J2	R. Gropp	Hunts Hoosier Hardware	7-28-56	825	J	70	2	S; 4½ft, 60g, dia 1	65	5	Sd,G	Pl	C	32	D	J	Ca, L.
27F1	B. Sommerfield	Mr. Barnthouse	4-54	805	J	45	2	S; 4ft, 40sl, dia 1	33	12	Sd	Pl	C	14	D	1/4	Yield 11 gpm; L.
27G1	F. Wilhelm	Hunts Hoosier Hardware	10-20-56	805	J	86	2	S; 5½ft, 60g, dia 1	78	8	Sd,G	Pl	C	6	D	------	Yield 13 gpm; L.
27G2	M. Albrecht	---------do---------	10-25-56	805	J	117	2	S; 4½ft, 60g, dia 1	108	9	G	Pl	C	6	D	J1/3	Yield 13 gpm; Ca, L.
27J1	La Porte Lake Development Assoc.	Layne-Northern Co., Inc.	4- 7-52	805	Dr	755	6	----------	---	---	Sd,G	Pl	----	---	T	------	Bedrock at 245 ft; L.
27M1	H. Webb	H. Hope	10-16-51	820	J	97	2	S; 60g	---	---	Sd	Pl	----	---	D	J1/2	
27M2	C. Dunzion	Westville Well Co.	8-13-56	820	J	69	2	S; 4½ft	---	---	Sd	Pl	----	---	---	------	Ca.
28A1	R. Guenther	Sriver Drilling Co.	5-25-54	835	J	73	4	S; 6ft, 60g, dia 2½	---	---	Sd	Pl	----	26	D	------	
28A2	Mr. Baldwin	Westville Well Co.	8-16-56	835	J	74	2	S; 4½ft	---	---	Sd	Pl	----	---	---	------	
28H1	N. Reeg	Hunts Hoosier Hardware	8- 6-56	810	J	76	2	S; 4ft, 60g, dia 1	18	58	Sd,G	Pl	C	10	D	L	Yield 13 gpm; white sand and gravel overlain by 18 ft dirt, sand and clay.
28R1	T. Ogle	Mr. Barnthouse	6-25-54	815	J	55	2	S; 4ft, 40g	38	17	Sd	Pl	C	14	D	J	Yield 14 gpm; L.
28R2	-------do--------	Hunts Hoosier Hardware	11-25-55	815	J	75	2	S; 4½ft, 60g, dia 1	---	---	Sd,G	Pl	----	18	D	J1/2	L.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
37/4W- 3R1	R. Pagels	Hunts Hoosier Hardware	6-10-56	655	J	57	2	S; 4½ft, 60g, dia 1	51	6	Sd,G	Pl	C	23	D	L	Yield 13 gpm; white sand and gravel overlain by 51 ft blue clay; Ca.
4N1	Interstate Glass House Restaurant	Indiana-Michigan Water Development Co.	5- 6-39	643	Dr	131	6	S; 15ft, 30sl, dia 5½	89	42	Sd	Pl	----	---	P, Ac	S	Dd 33 ft pumping 100 gpm; L.
5A1	Meyer Drugs	Westville Well Co.	--------	625	Dr	320	6	----------	---	---	Ls?	D?	----	---	Ac	S	Yield 30 gpm.
5H1	J. Ruby	Indiana-Michigan Water Development Co.	7-20-38	632	Dr	147	6	S; 16ft, 12sl, dia 5½	105	38	Sd	Pl	C	+7	D	Tl-1/2	Dd 10 ft pumping 120 gpm; Ca, L.
5P1	Arno Adhesive Tapes, Inc.	Layne-Northern Co., Inc.	4-12-55	630	Dr	155	16-8	----------	---	---	-----	--	----	---	Do	------	Bedrock at 153 ft; L.
5P2	L. Dunn	H. Hope	Winter 1951	635	J	120	2	S; 60g	---	---	Sd	Pl	C	+6	D	J3/4	Flowed; Ca.
7A1	Northwest Transit Co.	Lakeland Well Drillers	4- 3-57	640	Dr	98	4	S; 3ft, 60g	94	4	Sd	Pl	C	5	I,P	J11	Dd 50 ft after about 4 hr pumping 15 gpm; L.
7B1	Indiana State Prison	Layne-Northern Co., Inc.	7- 2-54	635	Dr	67	6	S; 10ft, dia 5½	57	10	Sd	Pl	C	0	I	T2	Dd 20 ft pumping 40 gpm; Ca, L.
7H1	M. Dukowski	Indiana-Michigan Water Development Co.	1-11-45	640	Dr	92	4	S; 6ft, 60g, dia 3	---	---	Sd	Pl	C	0	---	P	Dd 15 ft pumping 4 gpm; bedrock at 180 ft; L.
9D1	H. L. Silcox	----------	--------	658	J	52	2	S; 3½ft, 80g, dia 1	---	---	Sd	Pl	----	20	D	J	Ca.
9D1	Rapp and Rapp	B. J. Moore and Son	9-21-48	643	J	120	2	S; 60g	74	46	Sd	Pl	----	---	---	------	L.
9M1	Michigan City Municipal Airport	Westville Well Co.	0- 3-56	660	J	54	2	S; 4½ft	---	---	Sd	Pl	----	---	P	P	
9Q1	A. Kolodief	Lakeland Well Drillers	7- 8-56	655	J	100	2	----------	---	---	Sd	Pl	----	---	D	------	
10P1	K. McKee	----------	--------	650	J	68	2	S; 3ft, 60g, dia 1	---	---	Sd,G	Pl	----	5	D	J1/2	Yield 8 gpm; Ca.
11C1	C. Hyener	Westville Well Co.	4-16-56	630	J	86	2	S; 4½ft	---	---	Sd	Pl	----	---	D	------	Ca.
11F1	Indiana State Highway Department	Testing Service Corporation	--------	617	D	32	2½	----------	---	---	-----	--	----	---	T	------	See log well 11F6.
11F2	--------do--------	---------do---------	--------	617	B	32	2½	----------	---	---	-----	--	----	---	T	------	Do.
11F3	--------do--------	---------do---------	--------	617	B	34	2½	----------	---	---	-----	--	----	---	T	------	Do.
11F4	--------do--------	---------do---------	--------	617	D	32	2½	----------	---	---	-----	--	----	---	T	------	Do.
11F5	--------do--------	---------do---------	--------	617	B	32	2½	----------	---	---	-----	--	----	---	T	------	Do.
11F6	--------do--------	---------do---------	--------	619	B	34	2½	----------	---	---	-----	--	----	---	T	------	L, S.
11G1	--------do--------	---------do---------	--------	619	D	34	2½	----------	---	---	Sd	Pl	----	4	T	------	L, S.
11G2	--------do--------	---------do---------	--------	618	B	32	2½	----------	---	---	Sd	Pl	----	5	T	------	See log well 11G1.
11G3	--------do--------	---------do---------	--------	618	B	32	2½	----------	2	12	Sd	Pl	U	2	T	------	L.
11G4	--------do--------	---------do---------	--------	618	B	32	2½	----------	2	13	Sd	Pl	U	2	T	------	See log well 11G3.
11K1	A. Coffor	J. Dill	4-16-54	648	J	51	2	Oo	51	2	G	Pl	C	+5	D	------	Flowed 36 gpm from 2-inch pipe when drilled; discharge from 3/4-inch pipe measured 3 gpm, 3-28-57; water level measured 3.4 ft above lsd, 3-28-57; Ca, L.
11Q1	R. Rotcher	Lakeland Well Drillers	3- 9-57	645	J	22	2	S; 3ft, 60g, dia 1	6	16	Sd	Pl	U	6	D	------	Sand from 0-22 ft.
11Q2	O. Clough	Hunts Hoosier Hardware	10- 5-57	645	J	29	2	S; 4½ft, 60g, dia 1	16	13	Sd	Pl	U	16	D	------	Yield 13 gpm; white sand overlain by 23 ft brown sand.
11R1	Mr. Kring	H. Hope	Fall 1953	645	J	90	3	S; 40g, dia 2	---	---	G,Sd	Pl	C	---	Ir	Tl-1/2	Flows; for fire protection.
11R2	Mr. Farris	---------do---------	Summer 1955	640	J	92	2	Oo	---	---	Sd,G	Pl	C	---	D	------	Flowed.
12A1	Michigan City Bait Co.	Lakeland Well Drillers	10-12-56	650	Dr	50	4	----------	36	14	Sd	Pl	C	---	---	------	Flowed 200 gpm; sand overlain by 36 ft clay.
12B1	H. Smith	J. Dill	8-47	655	J	83	3	----------	---	---	Sd	Pl	C	+21	D	------	Flowed 55 gpm.
12D1	G. Cox	Hunts Hoosier Hardware	6-11-56	640	J	32	2	S; 4½ft, 80g, dia 1	16	18	Sd,G	Pl	U	18	D	J1/3	Yield 13 gpm; L.
12H1	O. Bradley	Lakeland Well Drillers	--------	---	J	72	2	S; 4ft, 80g, dia 1	---	---	Sd	Pl	----	---	---	------	Flowed.
12J1	C. Kindig	Hunts Hoosier Hardware	6-19-57	700	J	47	2	S; 4ft, 60g, dia 1	34	13	Sd,G	Pl	C	18	D	------	L.
12Q1	H. Lingus	J. Dill	8-56	675	J	53	3	S; 5ft, 60g	45	8	Sd	Pl	C	12	D	------	L.

37/3W-28R3	T. Ogle	Hunts Hoosier Hardware	12-30-55	815	J	58	2	S; 3½ft, 60g, dia 1	18	40	Sd,G	Pl	U	18	D	J1/2	Yield 13 gpm; white sand and gravel overlain by 52 ft brown sand, gravel, and black dirt.
28R4	A. Bowman	J. Dill	11-55	820	J	69	2	S; 60g	67	5	Sd	Pl	C	32	D	------	Temp 55; L.
20I1	M. Anderson	---------do---------	6-55	865	J	87	2	S; 3ft, 60g	80	7	G	Pl	C	70	D,S	P	Yield 12 gpm; fine gravel overlain by 80 ft red clay and gravel; Ca.
29E2	Indiana Toll Road Commission	Westville Engineering Co.	4-30-54	869	B	50	---	------------------	41	9	Sd	Pl	U	41	T	------	L.
29E3	--------do--------	---------do---------	1954	868	D	40	---	------------------	---	---	-----	--	-----	---	T	------	No water reported; see log well 29E5.
29E4	--------do--------	---------do---------	1954	869	D	50	---	------------------	---	---	-----	--	-----	---	T	------	See log well 29E2.
29E5	--------do--------	---------do---------	1954	870	D	50	---	------------------	---	---	-----	--	-----	---	T	------	L.
29F1	R. Kuhn	Hunts Hoosier Hardware	4- 1-58	850	J	128	2	S; 6ft, 60g, dia 1	120	8	Sd	Pl	C	85	D	------	L.
29H1	F. Klose	--------------------	--------	845	J	70	2	S; 3½ft, 60g, dia 1	---	---	Sd	Pl	-----	38	D,S	J1/2	Yield 8 gpm.
29J1	Mr. Orr	Shell Oil Co.	1941	842	Dr	493	---	------------------	---	---	-----	--	-----	---	---	------	Oil test; bedrock at 308 ft; 175 ft shale underlain by 10 ft dolomite.
29L1	G. Engstrom	Hunts Hoosier Hardware	6-28-58	845	J	98	2	S; 5ft, 60g, dia 1	---	---	Sd	Pl	-----	75	D	------	L.
30H1	Indiana Toll Road Commission	Westville Engineering Co.	1954	847	D	42	---	------------------	---	---	-----	--	-----	---	T	------	No water reported; L.
31D1	--------do--------	---------do---------	5- 2-54	865	B	46	2½	------------------	---	---	-----	--	-----	---	T	------	Do.
31D2	--------do--------	---------do---------	5- 4-54	865	B	42	2½	------------------	---	---	-----	--	-----	---	T	------	No water reported; see log well 31D1.
31D3	--------do--------	---------do---------	5- 3-54	865	B	60	2½	------------------	---	---	-----	--	-----	---	T	------	No water reported; see log well 31D4.
31D4	--------do--------	---------do---------	5- 4-54	864	B	60	---	------------------	---	---	-----	--	-----	---	T	------	L.
31D5	--------do--------	---------do---------	5- 3-54	864	B	60	2½	------------------	---	---	-----	--	-----	---	T	------	L.
31D6	--------do--------	---------do---------	5- 4-54	860	B	60	2½	------------------	---	---	-----	--	-----	---	T	------	No water reported; see log well 31D4.
31D7	--------do--------	---------do---------	1954	862	B	30	---	------------------	---	---	-----	--	-----	---	T	------	No water reported; L.
31J1	J. Kramer	--------------------	--------	855	J	92	2	------------------	---	---	Sd	Pl	-----	30	D,S	J3/4	Yield 8 gpm.
31J2	K. Kramer	J. Dill	6-58	855	J	75	2	S; 3ft, 60g	70	5	Sd	Pl	C	57	D	------	Sand overlain by 70 ft clay and gravel.
31L1	Mr. Lewis	Mr. Barnthouse	4- 2-54	855	J	94	2	S; 60g	81	13	Sd	Pl	C	42	D,S	3/4	Yield 8 gpm; Ca, L.
33K1	R. Swanson	--------------------	--------	840	J	61	2	S; 3½ft, 60g, dia 1	---	---	Sd	Pl	-----	18	D	1/2	Ca.
33L1	J. Chalik	Layne-Northern Co., Inc.	4-29-49	835	Dr	75	8	S; 10ft, dia 6	31	45	Sd,G	Pl	U	31	S	T5	Dd 21 ft pumping 265 gpm; Ca, L.
33R1	S. Jasko	Westville Well Co.	8- 1-56	835	J	95	3	S; 4½ft	---	---	Sd	Pl	-----	---	D	------	
34E1	A. Grochowick	Hunts Hoosier Hardware	2- 6-56	840	J	83	2	S; 3½ft, 60g, dia 1	---	---	Sd,G	Pl	-----	45	D	J	Yield 13 gpm; see log well 34E2.
34E2	C. A. Zimmerman	---------do---------	7-10-59	840	J	72	2	S; 4ft, 60g, dia 1	50	22	Sd,G	Pl	C	35	D	------	L.
34P1	City of La Porte	---------do---------	6-19-58	800	J	84	2	--------do---------	---	---	Sd,G	Pl	-----	28	P	L	Ca, L.
35G1	Shreve Construction Co.	Layne-Northern Co., Inc.	10-15-51	807	Dr	51	---	------------------	---	---	-----	--	-----	---	T	------	L.
35L1	City of La Porte	---------do---------	3-24-42	807	Dr	89	---	------------------	15	74	Sd,G	Pl	U	15	T	------	See log well 35L3.
35L2	--------do--------	---------do---------	3-26-48	807	Dr	92	---	------------------	---	---	Sd,G	Pl	-----	---	T	------	L.
35L3	--------do--------	---------do---------	4- 8-48	807	Dr	124	8-6	------------------	12	112	Sd,G	Pl	U	12	T	------	L.
35L4	--------do--------	---------do---------	6-18-48	807	Dr	132	38	Gp; 5; 40ft, 80sl, dia 18	11	121	Sd,G	Pl	U	11	N	------	Dd 51.5 ft after 5 hr pumping 1,700 gpm; L.
35L5	--------do--------	---------do---------	1-25-51	807	Dr	30	12	------------------	---	---	Sd	Pl	U	---	N	------	For dewatering; muddy hard sand from 0-30 ft.
36C1	--------do--------	---------do---------	10- 1-48	807	Dr	138	8-6	------------------	---	---	Sd,G	Pl	-----	---	T	------	L.
36C2	--------do--------	---------do---------	3- 3-51	807	Dr	137	38	Gp; 5; 40ft, 105sl, dia 18	18	122	Sd,G	Pl	U	18	N	T125	Dd 58 ft after 24 hr pumping 2,000 gpm; temp 54; see log well 36C1.
37/4W- 1J1	Indiana State Highway Department	Testing Service Corporation	1958	631	B	32	2½	------------------	0	18	Sd	Pl	U	0	T	------	L.
1J2	--------do--------	---------do---------	1958	637	D	32	2½	------------------	4	28	Sd,G	Pl	U	4	T	------	See log well 1J3.
1J3	--------do--------	---------do---------	1958	640	B	56	2½	------------------	3	36	Sd	Pl	U	3	T	------	L, S.
1J4	--------do--------	---------do---------	1958	642	D	36	2½	------------------	4	30	Sd	Pl	U	4	T	------	See log well 1J3.
1J5	--------do--------	---------do---------	1958	637	D	36	2½	------------------	4	32	Sd	Pl	U	4	T	------	Light-brown medium sand from 0-36 ft.
1R1	T. H. Tennant	Hunts Hoosier Hardware	8-13-59	660	J	80	2	Oa	80	---	G	Pl	C	---	D	------	Flowed 33 gpm; Ca, L.
2D1	W. Yoater	Lakeland Well Drillers	2- 9-57	645	J	56	2	S; 3½ft, 90g, dia 1¼	---	---	Sd	Pl	U	---	D	J	Sand from 0-56 ft; Ca.
2D2	C. Young	---------do---------	3- 7-57	645	J	53	2	S; 3ft, 80g, dia 1	30	23	Sd	Pl	U	30	D	1/3	Yield 17 gpm; sand from 0-53 ft.
2E1	White Eagles Park	--------------------	5-26-55	630	J	70	2	------------------	---	---	Sd	Pl	-----	12	---	1	Yield 10 gpm.
2E2	R. White	Hunts Hoosier Hardware	3-14-57	635	J	40	2	S; 3½ft, 60g, dia 1	---	---	Sd,G	Pl	-----	16	D	------	Yield 15 gpm; L.
2F1	Mr. Brizick	---------do---------	8-19-57	630	J	35	2	S; 4½ft, 60g, dia 1	30	5	Sd	Pl	C	15	N	------	Yield 13 gpm; L.
2H1	Ramsey Trailer Sales	Lakeland Well Drillers	6-11-56	635	J	81	2	S; 5½ft, 80g, dia 1	---	---	Sd	Pl	-----	---	P	J3/4	Ca.
2K1	V. Kelly	J. Dill	3-56	645	J	48	2	S; 3ft, 60g	42	6	Sd	Pl	C	33	D	J1/2	Yield 8 gpm; temp 56; L.
2R1	S. Dysard	---------do---------	5-55	635	J	50	2	S; 3ft, 80g	45	5	Sd	Pl	C	21	D	J1/2	Yield 12 gpm; temp 55; L.
3A1	Evergreen Baptist Church	---------do---------	5- 1-57	635	J	110	3	S; 10ft, 80g, dia 2	124	16	Sd	Pl	C	40	P	J1-1/2	Yield 17 gpm; L.
3Q1	C. E. Krulik	Hunts Hoosier Hardware	5-25-56	660	J	103	2	S; 4½ft, 80g, dia 1	97	0	G,Sd	Pl	C	30	D	------	Yield 13 gpm; Ca, L.

37/4W-13D1	----------	----------	--------	665	--	-----	---	----------	---	---	Sd	Pl	-----	---	N	-------	Spring; discharge measured 7 gpm, 3-28-57; spring zone 3 ft above creek; eight other springs in zone; combined flow estimated 65 gpm; Ca.
13C1	Mr. Borgstrom	J. Dill	--------	670	J	63	2	S; 60g	---	---	Sd	Pl	-----	18	D	J1/2	
13D1	W. Fishbacker	Westville Well Co.	4-53	665	--	50	2	S; 3ft, 80g	---	---	Sd	Pl	-----	---	D	J1/2	
13D2	J. Schudorick	Hunts Hoosier Hardware	7-15-59	665	J	69	2	S; 5ft, 60g, dia 1	64	5	Sd	Pl	C	14	D	-------	L.
13G1	E. Stolligross	---------do---------	7-22-54	680	J	79	2	S; 4½ft, 60g	70	9	Sd,G	Pl	C	15	P	J1/2	Yield 15 gpm; Ca, L.
13H1	Mr. Herrold	Shell Oil Co.	1941	727	Dr	394	---	----------	---	---	------	--	-----	---	---	-------	Oil test; bedrock at 294 ft; 80 ft shale underlain by 20 ft dolomite.
14J1	Mr. Lasko	J. Dill	1953	---	J	69	3	S; 40g	---	---	Sd,G	Pl	C	---	D	-------	Flowed.
14K1	R. Clough	---------do---------	7- 1-59	670	J	55	2	S; 3ft, 60g, dia 1	48	7	Sd	Pl	C	32	D	-------	L.
14L1	J. Lemons	---------do---------	5-22-54	685	J	30	2	S; 2½ft, 80g	20	10	Sd	Pl	C	12	D, Ir	-------	Yield 8 gpm; L.
14P1	W. Randolph	---------do---------	8-56	700	J	52	2	S; 3ft, 60g	45	7	Sd	Pl	C	25	D	-------	Ca, L.
14Q1	J. Guyer	----------	--------	680	J	44	2	----------	---	---	Sd	Pl	-----	8	---	-------	
15B1	Indiana State Highway Department	Testing Service Corporation	--------	629	B	30	2½	----------	---	---	------	--	-----	---	T	-------	See log well 15B8.
15B2	-------do---------	---------do---------	--------	629	B	30	2½	----------	---	---	------	--	-----	---	T	-------	Do.
15B3	-------do---------	---------do---------	--------	646	B	52	2½	----------	---	---	------	--	-----	---	T	-------	No water reported; L.
15B4	-------do---------	---------do---------	--------	645	B	54	2½	----------	---	---	Sd,G	Pl	C	---	T	-------	Flowed; L, S.
15B5	-------do---------	---------do---------	--------	643	B	53	2½	----------	---	---	------	--	-----	---	T	-------	L.
15B6	-------do---------	---------do---------	--------	637	B	52	2½	----------	16	8	Sd,G	Pl	C	13	T	-------	See log well 15B3.
15B7	-------do---------	---------do---------	--------	627	B	32	2½	----------	8	11	Sd	Pl	C	0	T	-------	See log well 15B8.
15B8	-------do---------	---------do---------	--------	627	B	32	2½	----------	0	18	Sd,G	Pl	U	0	T	-------	L.
15C1	-------do---------	---------do---------	--------	620	B	30	2½	----------	28	2	Sd,G	Pl	C	---	T	-------	Flowed; see log well 15B8.
15C2	-------do---------	---------do---------	--------	620	B	30	2½	----------	---	---	------	--	-----	---	T	-------	Do.
15E1	-------do---------	---------do---------	--------	632	B	32	2½	----------	---	---	------	--	-----	---	T	-------	See log well 15E2.
15E2	-------do---------	---------do---------	--------	632	B	50	2½	----------	30	14	Sd,G	Pl	C	+17	T	-------	L, S.
15E3	-------do---------	---------do---------	--------	633	B	32	2½	----------	---	---	------	--	-----	---	T	-------	See log well 15E2.
15E4	-------do---------	---------do---------	--------	634	B	32	2½	----------	---	---	------	--	-----	---	T	-------	Do.
16M1	-------do---------	Brighton Engineering Co.	11-14-50	659	B	30	2½	----------	---	---	------	--	-----	---	T	-------	L.
10R1	Coolspring Township School	Indiana-Michigan Water Development Co.	2- 3-38	656	Dr	62	8	S; 10ft, 30sl, dia 5½	52	10	G	Pl	C	+2	O	-------	Dd 3.5 ft pumping 180 gpm; observation well La Porte 6; water level measured 4.00 ft above lsd, 5-20-56; L.
17J1	Indiana State Highway Department	Brighton Engineering Co.	11-13-58	658	B	30	2½	----------	---	---	------	--	-----	---	T	-------	See log well 17J2.
17J2	-------do---------	---------do---------	12-58	661	B	50	2½	----------	---	---	------	--	-----	---	T	-------	L, S.
17L1	-------do---------	---------do---------	11-20-58	660	B	30	2½	----------	---	---	------	--	-----	---	T	-------	See log well 17L2.
17L2	-------do---------	---------do---------	11-21-58	600	B	50	2½	----------	---	---	------	--	-----	---	T	-------	L, S.
17M1	-------do---------	---------do---------	11-19-58	660	B	30	2½	----------	---	---	------	--	-----	---	T	-------	See log well 17L2.
17M2	-------do---------	---------do---------	11-19-58	660	B	50	2½	----------	24	17	Sd	Pl	U	24	T	-------	L.
18E1	-------do---------	---------do---------	11-11-58	650	B	30	2½	----------	12	18	Sd	Pl	U	12	T	-------	L.
18M1	-------do---------	---------do---------	11- 7-58	659	B	55	2½	----------	---	---	Sd	Pl	-----	12	T	-------	L.
18Q1	J. Foldenauer	Lakeland Well Drillers	8-14-56	670	J	56	2	S; 4ft, 80g, dia 1	50	6	Sd	Pl	C	---	---	1/2	Flowed; L.
18R1	J. Fisch	---------do---------	2- 4-57	667	J	92	2	S; 4ft, 80g, dia 1	88	4	Sd	Pl	C	---	D,S	J1/2	Ca, L.
19C1	D. Roman	---------do---------	10-22-56	661	J	67	2	S; 4½ft, 60g, dia 1½	---	---	Sd	Pl	-----	---	---	J	
21N1	K. Nowatzke	----------	8-25-55	666	J	35	2	S; 60g, dia 1	---	---	Sd	Pl	-----	8	D,S		
22P1	R. Nickolson	J. Dill	1-55	---	J	55	2	S; 3ft, 60g	50	5	Sd,G	Pl	C	40	D	-------	Sand and gravel overlain by 40 ft fine sand and clay and 10 ft sand.
24A1	C. Trafelet	---------do---------	8-56	800	J	199	3	S; 4ft, 60g	190	9	Sd	Pl	C	84	---	-------	L.
24D1	A. Krueger	---------do---------	5-29-54	700	J	35	2	S; 2½ft, 80g	30	5	Sd	Pl	C	15	D	J1/3	Yield 8 gpm; fine sand overlain by 30 ft clay mixed with fine sand.
26A1	J. Dill	---------do---------	1-47	830	J	126	2	S; 3ft, 80g	120	6	Sd	Pl	C	85	D	J1	Ca, L.
26C1	M. Fenton	---------do---------	8-55	760	J	124	3	S; 5ft, 80g	115	9	Sd	Pl	C	20	D	-------	Yield 30 gpm; L.
26H1	M. Hakes	---------do---------	6-21-54	820	J	108	2	S; 80g	105	3	Sd	Pl	C	85	D	L	L.
26M1	A. LeRoy	---------do---------	3-15-55	810	J	85	2	S; 3ft, 60g, dia 1	---	---	Sd	Pl	-----	35	D,S	1/2	
26R1	J. Stalbaum	----------	--------	875	J	130	2	S; 3ft, 80g, dia 1	---	---	Sd	Pl	-----	95	D,S	L1/3	Ca.
27B1	F. Dynowski	----------	--------	735	J	58	2	S; 3ft, 60g, dia 1	---	---	Sd	Pl	-----	38	D,S	J1/2	Yield 4 gpm.
27C1	J. M. Jozwiak	J. Dill	8-56	740	J	60	2	S; 3ft, 60g	55	5	Sd	Pl	C	42	D	-------	Sand overlain by 55 ft red clay and gravel; temp 55; Ca.
27D1	J. Sawicki	---------do---------	5-56	770	J	96	2	-------do---------	90	6	Sd	Pl	C	65	D	-------	Coarse sand overlain by 90 ft red clay and gravel; temp 55.
32J1	Pleasant Valley Park	---------do---------	5-55	695	J	46	2	S; 3ft, 80g	40	6	Sd	Pl	C	10	D	P	Yield 12 gpm; fine sand overlain by 40 ft blue clay; Ca.
35J1	Indiana Toll Road Commission	Westville Engineering Co.	--------	843	D	45	---	----------	---	---	------	--	-----	---	T	-------	No water reported; L.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
37/4W-35J2	Indiana Toll Road Commission	Westville Engineering Co.	--------	850	D	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 35J1.
35N1	------do-------	---------do---------	5-26-54	834	D	32	---	----------	23	9	Sd	Pl	U	23	T	------	See log well 35P4.
35P1	------do-------	---------do---------	5-25-54	852	B	62	2½	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
35P2	------do-------	---------do---------	5-25-54	852	B	62	2½	----------	---	---	-----	--	-----	---	T	------	Do.
35P3	------do-------	---------do---------	5-20-54	853	D	62	2½	----------	---	---	-----	--	-----	---	T	------	Do.
35P4	------do-------	---------do---------	5-26-54	855	B	62	2½	----------	38	9	Sd	Pl	U	36	T	------	L.
35Q1	A. Wozniak	--------	--------	840	J	75	2	S; 60g, dia 1	---	---	Sd	Pl	-----	21	---	J3/4	Ca.
38A1	Indiana Toll Road Commission	Westville Engineering Co.	5-12-54	868	D	30	2½	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
36F1	------do-------	---------do---------	5- 5-54	840	B	30	---	----------	---	---	-----	--	-----	---	T	------	Do.
36G1	------do-------	---------do---------	5- 5-54	881	D	51	---	----------	7	44	Sd	Pl	U	7	T	------	See log well 36G5.
36G2	------do-------	---------do---------	5- 5-54	884	D	52	---	----------	15	37	Sd	Pl	C	12	T	------	See log well 36G4.
36G3	------do-------	---------do---------	5- 5-54	883	B	36	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 36G5.
36G4	------do-------	---------do---------	5- 5-54	887	D	55	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
36G5	------do-------	---------do---------	5- 6-54	888	D	56	---	----------	---	---	-----	--	-----	---	T	------	Do.
36G6	------do-------	---------do---------	5-12-54	875	B	30	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 36G5.
36M1	------do-------	---------do---------	5- 6-54	844	B	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
36M2	------do-------	---------do---------	5- 6-54	848	D	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 36M1.
38/1W- 7Q1	R. Ackerman	Hunts Hoosier Hardware	12-55	765	J	90	3	S	89	4	Sd	Pl	C	55	D,S	J1	Yield 17 gpm; Ca, L.
16J1	Indiana Toll Road Commission	Raymond Concrete Pile Co.	4-14-54	811	D	45	---	----------	24	20	Sd,G	Pl	C	9	T	------	L.
16P1	------do-------	KOF Foundation Test Borings, Inc.	6-11-54	821	D	45	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 16P2.
16P2	------do-------	---------do---------	6- 9-54	820	D	55	---	----------	---	---	Sd,G	Pl	C	14	T	------	L.
16Q1	------do-------	---------do---------	6-12-54	823	D	30	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 16Q5.
16Q2	------do-------	---------do---------	6-12-54	820	D	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
16Q3	------do-------	---------do---------	6-10-54	818	D	48	---	----------	28	20	Sd,G	Pl	C	14	T	------	See log well 16Q5.
16Q4	------do-------	---------do---------	6-12-54	819	D	40	---	----------	24	16	Sd,G	Pl	C	14	T	------	L.
16Q5	------do-------	---------do---------	6- 9-54	820	B	50	---	----------	25	25	Sd,G	Pl	C	9	T	------	L.
17P1	M. S. Olson	Hunts Hoosier Hardware	5-28-57	785	J	58	2	S; 4ft, 60g, dia 1	44	14	Sd,G	Pl	C	24	D	------	Yield 13 gpm; Ca, L.
18D1	F. Miller	---------do---------	3-11-58	760	J	59	2	S; 4½ft, 60g, dia 1	53	6	Sd	Pl	C	47	D	------	Do.
18D2	------do-------	F. Miller	--------	760	Dr	24	1¼	S	---	---	Sd	Pl	-----	---	S	L	Ca.
19E1	G. Grott	Hunts Hoosier Hardware	3-22-55	845	J	94	2	S; 3½ft, 60g, dia 1	78	16	G,Sd	Pl	U	78	D,S	------	Yield 13 gpm; Ca, L.
19M1	J. Drozovich	---------do---------	11- 2-55	825	J	72	2	S; 4ft, 60g, dia 1	58	16	Sd,G	Pl	U	58	D	L	Yield 13 gpm; sand and gravel overlain by 18 ft clay and sand.
19N1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5- 6-54	810	B	44	---	----------	---	---	-----	--	-----	---	T	------	L.
19N2	------do-------	---------do---------	5- 5-54	811	D	35	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 19N1.
19N3	------do-------	---------do---------	5- 6-54	810	D	45	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 19N4.
19N4	------do-------	---------do---------	5- 4-54	810	B	46	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
20M1	------do-------	---------do---------	5-10-54	822	D	40	---	----------	---	---	-----	--	-----	---	T	------	Do.
20M2	------do-------	---------do---------	5- 9-54	822	B	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 20M5.
20M3	------do-------	---------do---------	5-10-54	821	B	45	---	----------	---	---	-----	--	-----	---	T	------	Do.
20M4	------do-------	---------do---------	5- 9-54	819	B	35	---	----------	---	---	-----	--	-----	---	T	------	No water reported; see log well 20M1.
20M5	------do-------	---------do---------	5-10-54	818	B	45	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
20Q1	C. Hunter	Hunts Hoosier Hardware	8-19-54	805	J	57	2	S; 60g	43	15	G,Sd	Pl	U	43	D	J1/2	Yield 15 gpm; sand and gravel overlain by 21 ft brown clay.
21B1	S. L. Adams	Srivor Drilling Co.	8-24-53	800	J	69	2	S; 3ft, 80g, dia 1¼	52	17	G,Sd	Pl	U	52	D	------	Ca, L.
21D1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	6-12-54	806	D	45	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.

38/1W-21N1	J. Vitek	Hunts Hoosier Hardware	5-54	705	J	67	2	S; 60g	40	27	Sd,G	Pl	C	30	D	J1/2	L.
28B1	E. Johnson	---------do---------	3- 4-55	795	J	45	2	S; 3½ft, 60g, dia 1	28	17	G,Sd	Pl	U	28	P	------	Yield 13 gpm; brown gravel and sand overlain by 18 ft brown clay and gravel; Ca.
28C1	J. V. Fonta	---------do---------	6-10-58	780	J	40	2	S; 4ft, 60g, dia 1	32	8	Sd,G	Pl	C	18	D	------	Ca, L.
28C2	J. R. Pazul	---------do---------	7- 7-59	780	J	28	2	-------do--------	18	10	Sd,G	Pl	U	18	D	------	Sand and gravel overlain by 3 ft clay.
28D1	J. Hunter	H. Hope	11-16-51	790	J	63	2	S; 4ft, 60g	---	---	Sd,G	Pl	----	---	D	P	
28D2	B. Issen	---------do---------	11-28-51	780	J	91	2	S; 6ft, 60g	83	8	Sd,G	Pl	----	---	D	------	Yield 7 gpm.
28D3	S. Cohen	---------do---------	11-30-51	780	J	91	---	-------do--------	83	8	Sd	Pl	----	---	D	J1/2	Yield 7 gpm; coarse sand overlain by blue clay.
28D4	P. Sam	Hunts Hoosier Hardware	7-54	790	J	40	2	S; 60g	18	22	Sd,G	Pl	U	18	D	P	L.
28F1	R. Jones	---------do---------	7-53	780	J	86	2	S; 40g	75	11	Sd,G	Pl	C	15	D	------	Yield 15 gpm; coarse sand and pea-sized gravel overlain by 60 ft silty blue clay and 15 ft brown sand.
28K1	P. Marr	---------do---------	11-54	780	J	54	2	S; 60g	36	18	Sd	Pl	C	14	D,P	J1/2	Yield 15 gpm; white sand overlain by 36 ft clay and sand; Ca.
28L1	W. Mueller	---------do---------	8-14-58	775	J	50	2	S; 4ft, 60g, dia 1	38	21	Sd,G	Pl	C	12	D	------	Ca, L.
28Q1	T. Garoutte	---------do---------	Spring 1949	780	J	30	2	S; 60g	20	19	Sd,G	Pl	C	14	D	J1	Ca.
28Q2	W. Holman	---------do---------	--------	780	J	77	2	S; 4ft, 60g, dia 1	---	---	Sd,G	Pl	----	10	D	------	Yield 13 gpm; L.
29A1	R. Echart	---------do---------	7-55	803	J	88	2	S; 4½ft, 60g, dia 1	70	17	Sd,G	Pl	U	70	D	J3/4	Sand and gravel overlain by 84 ft sand.
29A2	F. Czarnecki	---------do---------	5- 8-57	775	J	22	2	S; 4ft, 60g, dia 1	17	5	Sd	Pl	C	7	D	------	Yield 13 gpm; white sand overlain by 17 ft clay.
29B1	H. Werth	---------do---------	5-10-57	795	J	48	2	S; 3½ft, 60g, dia 1	34	14	G	Pl	U	34	D	------	Yield 15 gpm; brown gravel overlain by 18 ft brown sand.
29D1	W. Robb	---------do---------	7-21-54	810	J	62	2	S; 4ft, 60g	50	12	Sd,G	Pl	C	45	D	J	Yield 15 gpm; sand and gravel overlain by 20 ft clay and 30 ft sand.
29P1	R. Kelly	---------do---------	8-25-58	860	J	118	2	S; 4ft, 60g, dia 1	---	---	Sd	Pl	----	93	D	------	Ca, L.
31A1	A. Thompson	---------do---------	Summer 1940	830	J	40	2	S; 60g	25	15	Sd,G	Pl	U	25	D	J1/2	Fine to coarse sand with gravel from 0-40 ft; Ca.
31R1	C. Kelly	---------do---------	12-24-56	855	J	102	2	S; 4ft, 60g, dia 1	76	26	Sd,G	Pl	U	76	D,S	L	Yield 13 gpm; L.
32Q1	R. Marloy	---------do---------	11-23-56	840	J	88	2	-------do--------	71	17	Sd,G	Pl	U	71	I	J3/4	Do.
32Q2	P. Parry	---------do---------	11- 1-57	840	J	89	2	S; 4½ft, 60g, dia 1	---	---	Sd	Pl	----	70	D	------	Do.
33K1	L. Belsaas	---------do---------	12-23-55	820	J	88	2	-------do--------	69	17	Sd	Pl	U	69	D	L	Yield 13 gpm; Ca, L.
38/2W-12Q1	R. Tichelski	---------do---------	7-49	705	J	60	2	S; 60g	50	10	Sd	Pl	C	20	S	J1/2	Ca, L.
14Q1	G. Monkoe	---------do---------	4-56	---	J	29	2	S; 4½ft, 60g, dia 1	25	4	Sd	Pl	C	---	D	L	Flowed 7 gpm; discharge measured 2.5 gpm, 3-13-57; Ca, L.
14Q2	Dr. Carter	---------do---------	4-56	---	J	69	2	-------do--------	63	6	Sd	Pl	C	---	D	J1/4	Flowed 12 gpm; L.
14Q3	B. Phelm	---------do---------	8-28-58	---	J	70	2	S; 5ft, 60g, dia 1	70	9	Sd	Pl	C	6	P	------	Ca, L.
14Q4	C. Strese	---------do---------	11-11-58	---	J	32	2	S; 4ft, 60g, dia 1	27	5	Sd	Pl	C	14	D	------	See log well 14Q1; Ca.
15D1	J. Williams	---------do---------	4-49	700	J	46	2	S; 60g	---	---	Sd,G	Pl	----	18	---	J1/2	Yield 25 gpm.
17A1	D. Lewis	---------do---------	7-53	640	J	36	2	-------do--------	---	---	Sd,G	Pl	----	15	D	J1/2	Yield 20 gpm.
17Q1	L. Sharpe	---------do---------	7-54	675	J	56	2	-------do--------	50	6	Sd,G	Pl	C	18	D	J1/2	Yield 12 gpm; Ca, L
18P1	R. Stevenson	---------do---------	7-30-58	645	J	41	2	S; 5ft, 60g, dia 1	33	8	Sd,G	Pl	C	8	D	------	L.
18Q1	O. Slater	A. Good	--------	645	J	49	2	-------do--------	---	---	Sd	Pl	C	---	D	------	Flowed 2 gpm; Ca.
21R1	A. C. Crowl	Hunts Hoosier Hardware	7-27-54	685	J	165	2	S; 4½ft, 60g	160	5	Sd	Pl	C	80	D	J1	Yield 15 gpm; L.
22A1	G. Morton	T. Johnson and E. Wicklund	4-30-46	704	Dr	792	6-5½	-------do--------	---	---	Sd	Pl	----	---	---	------	Oil test; bedrock at 175 ft; L.
22D1	A. S. Homer	Hunts Hoosier Hardware	10-53	680	J	119	2	-------do--------	110	0	G	Pl	C	---	D	------	Flowed 15 gpm; fine to coarse gravel overlain by 110 ft blue clay and fine sand; Ca.
22E1	A. Schuck	---------do---------	8- 4-56	755	J	94	2	S; 4ft, 60g, dia 1	90	4	Sd	Pl	C	30	D	L	Yield 13 gpm; Ca, L.
22Q1	Mr. Kuehn	---------do---------	10-52	790	J	150	2	S; 10sl	150	0	Sd,G	Pl	C	80	D	L	White coarse sand and gravel overlain by 75 ft blue clay and silt and 75 ft gravel and brown sand; Ca.
24A1	Mr. Mateycak	---------do---------	6-15-57	770	J	63	2	S; 4ft, 60g, dia 1	---	---	Sd,G	Pl	----	48	D	------	Yield 13 gpm; L.
24H1	J. Laskoski	---------do---------	10-50	845	J	90	2	S; 60g	75	15	Sd,G	Pl	U	75	D	L1	Sand and gravel overlain by 50 ft brown coarse sand and 10 ft brown clay.
24P1	P. Jozwick	H. Hope	7-52	815	J	88	2	-------do--------	---	---	Sd,G	Pl	----	---	D	------	
24R1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5- 7-54	810	B	51	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
24R2	-------do--------	---------do---------	5- 8-54	809	B	40	---	----------	---	---	-----	--	----	---	T	------	Do.
24R3	-------do--------	---------do---------	5-19-54	784	B	35	---	----------	---	---	-----	--	----	---	T	------	L.
25B1	H. Duff	Hunts Hoosier Hardware	9-12-54	---	J	49	2	S; 4ft, 60g	35	14	Sd,G	Pl	U	35	---	J	Yield 15 gpm; sand and gravel overlain by 18 ft clay; Ca.
25C1	M. Kolsh	---------do---------	8-24-57	---	J	65	2	S; 4ft, 60g, dia 1	51	14	Sd	Pl	U	51	D	------	Yield 13 gpm; L.
25D1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5- 1-54	815	B	40	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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				
38/2W-25D2	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	5- 3-54	815	B	34	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 25D1.
25D3	J. H. Maior	Hunts Hoosier Hardware	8-14-58	---	J	77	2	S; 5ft, 60g, dia 1	---	---	Sd	Pl	----	58	D	------	L.
25D4	F. Kober	----------do----------	4-23-58	---	J	60	2	S; 4ft, dia 1	40	20	Sd,G	Pl	U	40	D	------	See log well 25C1.
25G1	Mr. Ebel	----------do----------	5-28-57	---	J	58	2	S; 4ft, 60g, dia 1	50	8	Sd	Pl	C	31	D	------	Yield 13 gpm; see log well 25C1; Ca.
25H1	P. D. Swinandorf	----------do----------	---------	---	J	54	2	S; 60g	40	14	Sd,G	Pl	U	40	D	J1/2	Yield 13 gpm; see log well 25C1.
25N2	Mr. LaRocha	----------do----------	8-11-54	---	J	54	2	S; 4½ft, 60g	40	14	Sd,G	Pl	U	40	D	J1/2	Yield 15 gpm; see log well 25N4; Ca.
25N3	K. Delwator	----------do----------	Summer 1955	---	J	54	2	S; 3½ft, 60g, dia 1	35	23	Sd,G	Pl	U	35	D	J1/2	Yield 15 gpm; see log well 25C1.
25N4	Mr. Schlunt	----------do----------	6- 5-56	---	J	52	2	----------do----------	30	22	Sd,G	Pl	U	30	D	L	Yield 13 gpm; L.
25N5	M. Johnson	----------do----------	5-14-57	---	J	85	2	S; 4ft, 60g, dia 1	---	---	Sd	Pl	----	63	D	------	Yield 13 gpm; Ca, L.
25N6	A. Bart	----------do----------	5-16-57	---	J	76	2	--------do----------	60	16	G,Sd	Pl	C	45	D	------	Yield 13 gpm; L.
26A1	Indiana Toll Road Commission	KOF Foundation Test Borings, Inc.	---------	790	B	24	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26A4.
26A2	--------do---------	----------do----------	5- 5-54	815	B	30	---	----------	---	---	-----	--	----	---	T	------	Do.
26A3	--------do---------	----------do----------	5- 4-54	814	B	35	---	----------	---	---	-----	--	----	---	T	------	Do.
26A4	--------do---------	----------do----------	5- 4-54	814	B	40	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
26A5	--------do---------	----------do----------	5- 4-54	815	B	35	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26A4.
26G1	--------do---------	----------do----------	6-12-54	816	B	20	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
26G2	--------do---------	----------do----------	5-15-54	820	B	45	---	----------	---	---	-----	--	----	---	T	------	Do.
26G3	--------do---------	----------do----------	5-22-54	826	D	38	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26G2.
26G4	--------do---------	----------do----------	5-21-54	825	D	40	---	----------	---	---	-----	--	----	---	T	------	Do.
26G5	--------do---------	----------do----------	5-18-54	831	D	40	---	----------	---	---	-----	--	----	---	T	------	Do.
26H1	--------do---------	----------do----------	6-14-54	811	B	20	---	----------	16	4	Sd	Pl	C	3	T	------	L.
26K1	--------do---------	----------do----------	5-21-54	824	B	35	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26K2.
26K2	--------do---------	----------do----------	5-18-54	831	D	40	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
26K3	--------do---------	----------do----------	5-19-54	830	D	35	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26K2.
26K4	--------do---------	----------do----------	5-22-54	825	D	35	---	----------	---	---	-----	--	----	---	T	------	Do.
26N1	--------do---------	----------do----------	4-30-54	830	B	45	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
26N2	--------do---------	----------do----------	5- 1-54	830	D	30	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26N1.
26N3	--------do---------	----------do----------	4-29-54	829	D	35	---	----------	---	---	-----	--	----	---	T	------	Do.
26N4	--------do---------	----------do----------	5- 1-54	829	D	34	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26N1.
26P1	--------do---------	----------do----------	4-30-54	828	B	35	---	----------	---	---	-----	--	----	---	T	------	No water reported; L.
26P2	--------do---------	----------do----------	4-29-54	828	D	27	---	----------	---	---	-----	--	----	---	T	------	No water reported; see log well 26P1.
28C1	K. Reynolds	Hunts Hoosier Hardware	---------	720	J	32	2	S; 3½ft, 60g, dia 1	28	4	Sd	Pl	----	---	D	J1/2	L.
30G1	Mr. Vogets	----------do----------	Fall 1954	730	J	74	2	--------do---------	68	6	G	Pl	C	45	---	L	L.
30K1	C. Schleyer	----------do----------	1938	715	Dn	30	1½	S; 60g	---	---	Sd	Pl	C	---	---	------	Flowed 3 gpm.
30K2	G. Graf	----------do----------	8-31-54	700	J	26	2	S; 3ft, 60g	23	3	Sd	Pl	C	---	D	P	Flowed; yield 15 gpm; sand overlain by 23 ft clay.
30L1	T. Keough	----------do----------	9- 6-58	700	J	86	3	S; 5½ft, 80g, dia 1½	57	9	Sd	Pl	----	---	D	------	L.
31R1	M. Baker	----------do----------	5-27-57	890	J	130	2	S; 4ft, 60g, dia 1	110	20	Sd	Pl	U	110	D	------	Yield 13 gpm; brown sand from 0-130 ft; Ca.
32C1	J. Shiffli	----------do----------	5- 4-55	785	J	48	2	S; 3½ft, 60g, dia 1	36	12	Sd	Pl	C	25	D	L	Brown sand overlain by 36 ft sand, gravel, and clay.
32C2	L. Lotter	----------do----------	Summer 1949	805	J	57	2	S; 60g	---	---	Sd	Pl	----	40	D	------	Brown sand overlain by about 40 ft mixed sand and clay.
32E1	J. C. Koster	----------do----------	4- 2-58	855	J	128	2	S; 4ft, 60g, dia 1	---	---	Sd	Pl	----	93	D	------	Yield 13 gpm; Ca, L.
32M1	M. Dittmar	----------do----------	8-26-59	860	J	115	2	S; 5ft, 60g, dia 1	102	13	Sd,G	Pl	U	102	D	------	L.

38/2W-33D1	J. Bogenski	Hunts Hoosier Hardware	7-54	875	J	117	2	S; 60g	110	7	Sd,G	Pl	C	90	D	J1	L.
33H1	Woods and Beach	---------do---------	7-46	850	J	119	2	-------do---------	115	4	Sd	Pl	C	---	S	------	Brown coarse sand overlain by about 115 ft brown soft clay; Ca.
34A1	Indiana Toll Road Commission	Layne-Northern Co., Inc.	1955	840	Dr	130	10	S; 15ft	77	53	Sd,G	Pl	U	77	P	------	Dd 14 ft pumping 150 gpm; L.
34A2	-------do--------	---------do---------	10-10-55	840	Dr	116	10	S	73	43	Sd,G	Pl	U	73	P	------	L.
34A3	-------do--------	KOF Foundation Test Borings, Inc.	5-24-54	845	B	35	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
34D1	Zionist Labor Party	Hunts Hoosier Hardware	Summer 1949	820	J	96	4	S; 60g	80	16	Sd,G	Pl	U	80	P	J2	Sand and gravel overlain by 40 ft clay mixed with sand.
34G1	Indiana Toll Road Commission	----------	3-11-54	800	D	15	---	----------	---	---	Sd	Pl	-----	2	T	------	See log well 34H1.
34H1	-------do--------	----------	1954	839	B	40	---	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
34H2	-------do--------	----------	1954	841	B	28	---	----------	---	---	-----	--	-----	---	T	------	Do.
35P1	S. Mrozinski	Hunts Hoosier Hardware	1941	845	J	95	2	S; 60g	---	---	Sd	Pl	-----	---	D,S	------	
35P2	-------do--------	---------do---------	5-14-56	845	J	95	2	S; 4½ft, 60g, dia 1	78	17	Sd	Pl	U	78	D,S	J1	Yield 13 gpm; L.
38/3W- 9Q1	Indiana State Highway Department	Testing Service Corp.	1958	676	B	42	2½	----------	37	5	Sd	Pl	C	15	T	------	See log well 9Q2.
9Q2	-------do--------	---------do---------	1958	678	D	52	2½	----------	32	8	Sd	Pl	C	14	T	------	L.
9Q3	-------do--------	---------do---------	1958	676	B	52	2½	----------	40	12	Sd	Pl	C	14	T	------	See log well 9Q2.
9Q4	-------do--------	---------do---------	1958	676	B	82	2½	----------	---	---	Sd	Pl	C	18	T	------	L, S.
9Q5	-------do--------	---------do---------	1958	670	B	46	2½	----------	24	18	Sd	Pl	C	14	T	------	L.
10E1	-------do--------	---------do---------	---------	673	D	62	2½	----------	---	---	Sd,G	Pl	-----	---	T	------	L, S.
10E2	-------do--------	---------do---------	---------	673	D	52	2½	----------	---	---	Sd,G	Pl	-----	---	T	------	See log well 10E1.
10E3	-------do--------	---------do---------	---------	673	D	63	2½	----------	---	---	Sd	Pl	-----	---	T	------	L.
10E4	-------do--------	---------do---------	---------	673	D	46	2½	----------	---	---	-----	--	-----	---	T	------	See log well 10E3.
11K1	J. Farina	Hunts Hoosier Hardware	9-58	675	J	46	2	S; 4½ft, 60g, dia 1	---	---	Sd	Pl	-----	10	D	J	Yield 13 gpm; white sand overlain by 30 ft clay and sand; Ca.
13B1	Mr. Wank	---------do---------	7-53	677	J	80	2	S; 3ft, 60g, dia 1¼	70	80	Sd	Pl	C	27	D	J1/2	Yield 13 gpm; white sand overlain by 70 ft blue clay and silt; Ca.
13H1	B. Shippel	A. Good	---------	695	J	70	2	----------	53	17	Sd,G	Pl	C	50	---	------	Coarse sand and gravel overlain by 53 ft clay and sand.
14A1	R. Grandorf	Hunts Hoosier Hardware	9-56	680	J	76	2	S; 4ft, 60g, dia 1	71	5	Sd	Pl	C	27	D	L	Yield 13 gpm; L.
15J1	W. Schultz	---------do---------	6-28-58	690	J	40	2	-------do--------	34	8	Sd	Pl	C	15	D	------	Ca, L.
16N1	H. Schultz	---------do---------	8-18-59	675	J	26	2	S; 8ft, 80g, dia 1	15	11	Sd	Pl	U	15	D,S	------	Brown fine sand from 0-26 ft.
17A1	R. Martin	Lakeland Well Drillers	12-22-57	650	J	67	2	S; 4ft, 60g, dia 1	60	7	Sd	Pl	C	---	D	J	Sand overlain by 60 ft clay; Ca.
17D1	T. Mazac	---------do---------	10-30-58	620	J	40	2	S; 3½ft, 80g, dia 1	---	---	Sd	Pl	-----	---	D	1/3	
17Q1	Indiana State Highway Department	Testing Service Corp.	---------	652	D	42	2½	----------	---	---	-----	--	-----	---	T	------	See log well 17Q3.
17Q2	-------do--------	---------do---------	---------	652	D	46	2½	----------	---	---	-----	--	-----	---	T	------	Do.
17Q3	-------do--------	---------do---------	---------	652	B	56	2½	----------	---	---	-----	--	-----	---	T	------	L.
17Q4	-------do--------	---------do---------	---------	653	B	32	2½	----------	---	---	-----	--	-----	---	T	------	See log well 17Q3.
17Q5	-------do--------	---------do---------	---------	654	B	36	2½	----------	---	---	-----	--	-----	---	T	------	Do.
18D1	Shady Oak Trailer Court	Lakeland Well Drillers	6- 6-56	620	J	18	2	S	13	5	Sd	Pl	U	13	P	J3/4	Ca.
19A1	M. Crama	Mr. Barnthouse	7-54	635	J	131	2	----------	---	---	-----	--	-----	---	T	------	No water reported; L.
22L1	H. Heath	Hunts Hoosier Hardware	9-18-57	685	J	95	2	S; 9ft, 60g, dia 1	84	11	Sd	Pl	C	35	D	------	Yield 12 gpm; white fine sand overlain by 84 ft blue clay and quicksand; Ca.
23A1	R. Kessler	---------do---------	Spring 1947	695	J	85	2	S; 60g	78	7	Sd	Pl	C	35	S	J1/2	White medium sand overlain by silt and clay; Ca.
23P1	S. Dull	---------do---------	Winter 1951	670	J	40	2	-------do--------	30	10	Sd,G	Pl	C	21	S	J1/2	White sand and gravel overlain by 30 ft hard blue clay and sand; Ca.
24L1	Mr. Ott	A. Good	---------	660	Dr	35	1½	S	---	---	Sd	Pl	-----	12	---	------	
26F1	Indiana State Highway Department	Westville Engineering Co.	2-18-59	683	B	30	2½	----------	2	28	Sd,G	Pl	U	2	T	------	See log well 26F2.
26F2	-------do--------	---------do---------	2-18-59	663	B	50	2½	----------	4	46	Sd	Pl	U	4	T	------	L, S.
26F3	-------do--------	---------do---------	2-18-59	664	B	30	2½	----------	6	24	Sd,G	Pl	C	2	T	------	L.
26F4	-------do--------	---------do---------	2-19-59	664	B	30	2½	----------	3	27	Sd,G	Pl	U	3	T	------	See log well 26F2.
31G1	G. Burns	Hunts Hoosier Hardware	5- 6-57	675	J	72	2	S; 4ft, 60g, dia 1	66	6	Sd,G	Pl	C	30	D	------	Yield 13 gpm; sand and gravel overlain by 66 ft clay; Ca.
31L1	Indiana State Highway Department	Testing Service Corp.	---------	624	B	36	2½	----------	---	---	Sd	Pl	C	3	T	------	L.
31L2	-------do--------	---------do---------	---------	622	D	30	2½	----------	24	12	Sd	Pl	C	3	T	------	L.
31L3	-------do--------	---------do---------	---------	624	D	32	2½	----------	---	---	Sd	Pl	C	---	T	------	See log well 31L1.
31L4	-------do--------	---------do---------	---------	622	D	32	2½	----------	---	---	Sd	Pl	-----	2	T	------	L, S.
31N1	-------do--------	---------do---------	9- 3-58	621	B	40	2½	----------	---	---	-----	--	-----	---	T	------	L.
31N2	-------do--------	---------do---------	9- 4-58	620	D	46	2½	----------	39	7	G,Sd	Pl	C	---	T	------	Flowed; L.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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
38/3W-33D1	C. Jones	Hunts Hoosier Hardware	7- 6-53	660	J	50	2	S; 60g	40	10	G	Pl	C	12	D	J1/2	Blue coarse gravel overlain by 40 ft blue clay mixed with sand and gravel.
33D2	R. Jones	---------do---------	Fall 1954	660	J	53	2	S; 4ft, 60g	---	---	G,Sd	Pl	-----	17	D	3/4	Yield 13 gpm; Ca, L.
33N1	R. Kowalski	---------do---------	8- 3-58	660	J	67	2	S; 3½ft, 60g, dia 1	51	16	G,Sd	Pl	U	51	D	------	Yield 13 gpm; L.
35B1	J. Benson	N. Hope	10-11-51	680	J	35	2	S; 80g	---	---	G	Pl	U	---	D	------	Gravel overlain by 8 ft sand; Ca.
35N1	O. and H. Pollock	Hunts Hoosier Hardware	12-20-56	685	J	40	2	S; 4ft, 60g, dia 1	34	6	Sd,G	Pl	C	---	D	J	Flowed 2.5 gpm; pumped 10 gpm; Ca, L.
36M1	D. Helm	---------do---------	5-13-58	700	J	100	2	-------do---------	80	20	Sd	Pl	C	13	N	N	L.
38/4W-12L1	Duneland Beach Assoc.	Indiana-Michigan Water Development Co.	12-15-39	585	Dr	37	12-6	----------	---	---	Sd	Pl	U	---	P	------	Sand from 0-37 ft.
12R1	M. J. Murray	Lakeland Well Drillers	5-20-56	630	J	39	2	S; 5½ft, 100g, dia 1	---	---	Sd	Pl	U	---	N	N	Sand from 0-39 ft.
13L1	L. Burns	--------	--------	610	J	23	2	S; 80g, dia 1	---	---	Sd	Pl	-----	---	---	------	
13N1	D. H. Mony	Lakeland Well Drillers	1- 2-56	---	J	154	3	S; 6½ft, 80g, dia 2	---	---	Sd	Pl	-----	75	D	L	Yield 17 gpm;
13P1	Maach Deluxe Drive-In	---------do---------	6- 2-56	620	J	22	2	S; 4ft, 80g, dia 1	---	---	Sd	Pl	-----	---	---	------	
13Q1	R. V. Hannick	---------do---------	Fall 1955	625	Dr	200	4	Oh	150	50	Sh	D	C	+7	P	------	Dd 15 ft pumping 20 gpm; well contained gas; Ca, L.
13Q2	-------do--------	---------do---------	Fall 1955	625	J	150	4	Oo	---	---	------	--	-----	---	---	------	Gas well; bedrock at 150 ft; see log well 13Q1.
13Q3	-------do--------	---------do---------	5-20-57	625	J	26	2	S; 4ft, 100g, dia 1	---	---	Sd	Pl	U	---	T	1-1/2	White sand overlain by 19 ft yellow sand; Ca.
14E1	Northern Indiana Public Service Co.	Layne-Northern Co., Inc.	7-12-33	600	Dr	140	---	----------	---	---	------	--	-----	---	T	------	Bedrock at 140 ft; clay overlain by 8 ft sand.
15R1	E. E. Moltzan	Lakeland Well Drillers	5-20-57	635	J	42	2	S; 3ft, 60g, dia 1	37	5	Sd	Pl	U	37	D	------	Sand from 0-42 ft.
22F1	Michiana Products Corp.	Moore Bros.	--------	---	Dr	30	---	----------	10	20	Sd	Pl	U	10	T	------	Sand from 0-30 ft.
22F2	-------do--------	---------do---------	--------	---	Dr	37	---	----------	4	33	Sd	Pl	U	4	T	------	Sand from 0-37 ft.
22F3	N. Winski	Lakeland Well Drillers	5-24-56	---	J	144	2	S; 3½ft, 60g, dia 1	138	12	Sd	Pl	C	---	N	------	Sand overlain by 108 ft clay and 30 ft sand; water reported high in chloride and sulfate content.
22L1	Michiana Products Corp.	Moore Bros.	--------	---	Dr	27	---	----------	6	21	Sd	Pl	U	6	T	------	Sand from 0-27 ft.
22L2	American Cyanamid Co.	J. P. Miller Artesian Well Co.	10- 2-52	615	Dr	295	12	Ou	---	---	Ls	D	C	+32	---	------	Flowed 1,000 gpm; for waste disposal; bedrock at 195 ft; L.
22M1	-------do--------	Layne-Northern Co., Inc.	6-12-51	615	Dr	645	---	----------	---	---	Ls	D,S	C	+22	---	------	Flowed 750 gpm; for waste disposal; L.
22M2	-------do--------	---------do---------	3-18-59	615	Dr	163	6	----------	8	19	Sd	Pl	U	8	T	------	L.
22M3	-------do--------	---------do---------	3-10-59	615	Dr	32	6	----------	7	15	Sd	Pl	U	7	T	------	Sand underlain by 10 ft clay.
22M4	-------do--------	---------do---------	2-26-59	615	Dr	142	6	----------	5	18	Sd	Pl	U	5	T	------	Sand underlain by 118 ft clay.
22M5	-------do--------	---------do---------	2-16-59	615	Dr	36	6	----------	9	25	Sd	Pl	U	8	T	------	Sand underlain by 2 ft clay.
23J1	L. Szabo	Lakeland Well Drillers	4-25-57	625	J	108	2	S; 3½ft, 60g	96	10	Sd	Pl	C	8	D	1/2	Ca, L.
23Q1	W. Werner	Hunts Hoosier Hardware	1952	635	J	90	2	----------	---	---	------	--	-----	---	---	------	No water reported; 70 ft blue clay with very little gravel overlain by 20 ft fine sand and clay.
24R1	F. Siscko	Lakeland Well Drillers	7-25-56	640	J	54	2	S; 4ft, 80g, dia 1	---	---	Sd	Pl	-----	0	D	------	
25B1	C. Parns	---------do---------	12-21-56	645	J	170	2	S; 3½ft, 10sl, dia 1½	---	---	Sd	Pl	-----	50	P	------	Yield about 10 gpm; Ca.
25D2	S. Back	---------do---------	1- 8-57	645	J	141	2	S; 5½ft, 80g, dia 1	136	8	Sd	Pl	C	10	---	------	L.
25G1	Green Acres Trailer Court	---------do---------	4- 5-57	640	Dr	113	4	S; 6½ft, 60g, dia 2	90	23	Sd	Pl	C	3	N	------	L.
25H1	D. Aorman	Mr. Barnthouse	7-14-54	645	J	62	2	S; 4ft, 40sl, dia 1½	55	7	Sd	Pl	C	3	D	------	Yield 16 gpm; L.
25Q1	E. Richter	Hunts Hoosier Hardware	2-55	625	J	164	2	S; 4½ft, 60g	160	4	Sd	Pl	C	---	D	J1/2	Flowed 2 gpm; pumped 13 gpm; white sand overlain by 160 ft blue and brown sandy clay; Ca.

38/4W-25R1	L. Minshaw	Lakeland Well Drillers	5-11-57	635	J	134	2	S; 4ft, 80g, dia 1	124	16	Sd	Pl	C	2	D	J1	Yield 33 gpm; Ca, L.
26A1	Lakeland School	B. J. Moore and Son	--------	635	Dr	107	---	S; 10ft, 88g	92	15	Sd	Pl	C	24	P	T3	Dd 4 ft pumping 15 gpm; Ca, L.
26D1	D. Michard	Mr. Barnthouse	6- 2-52	620	J	89	2	----------	---	---	-----	--	----	---	N	------	No water reported; blue clay from 0-89 ft; wells in area generally 10-12 ft deep.
26H1	R. and B. Kelly	Westville Well Co.	3- 2-56	645	J	54	2	S; 4½ft	---	---	Sd	Pl	----	---	D,S	------	
26P1	Peters Dairy Farm	Hunts Hoosier Hardware	3-16-57	620	J	103	2	S; 4½ft, 60g, dia 1	97	6	Sd,G	Pl	C	---	D,S	J1/2	Flowed 5 gpm; pumped 13 gpm; Ca, L.
28N1	Blockson and Co.	Layne-Northern Co., Inc.	11-19-45	590	Dr	36	30	Gp; S; 15ft, 80sl, dia 8	4	32	Sd	Pl	U	4	N	------	Dd 24 ft pumping 250 gpm; sand from 0-36 ft.
29N2	-------do--------	---------do---------	10- 3-40	590	Dr	26	34	Gp; S; 10ft, 105sl, dia 12	7	19	Sd,G	Pl	U	7	N	------	Dd 17 ft pumping 100 gpm; gray sand with some gravel overlain by 17 ft brown and yellow sand.
29N3	-------do--------	---------do---------	3-30-50	590	Dr	468	8	Oh	210	240	Ls,Ss	D,S	C	+52	Do	------	Flowed 780 gpm; bedrock at 148 ft; L.
29N4	-------do--------	---------do---------	11- 1-54	590	J	22	2½	----------	5	17	Sd	Pl	U	5	T	------	Sand from 0-22 ft.
29N5	-------do--------	---------do---------	9- 9-49	590	Dr	33	8	----------	7	20	Sd,G	Pl	U	7	T	------	L.
29N6	-------do--------	---------do---------	9-14-49	590	Dr	33	---	----------	---	---	Sd	Pl	----	---	T	------	L.
29K1	Dune Theater Corp.	B. J. Moore and Son	2- 8-56	609	J	53	2	----------	22	26	Sd,G	Pl	U	22	T	------	L.
29K2	Lido Theater	---------do---------	2-58	612	Dr	47	12	S; 20ft, 88g	22	25	Sd	Pl	U	22	---	T7-1/2	L.
29L1	Pullman Standard Car Manufacturing Co.	Layne-Northern Co., Inc.	--------	600	Dr	220	---	----------	100	120	Sd	Pl	C	---	---	N	Flowed; L.
30K1	South Shore Railroad	----------	1899	615	Dr	950	10	Oh	---	---	Ls	D,S	C	---	Do	------	Flowed 70 gpm; bedrock at 190 ft; L.
31R1	Indiana State Prison	Indiana-Michigan Water Development Co.	5- 3-38	620	Dr	126	4	----------	---	---	Sd	Pl	C	---	T	------	Flowed; see log well 31R2.
31R2	-------do--------	---------do---------	6-30-39	620	Dr	130	12	S; 15ft, 15sl, dia 10	74	56	Sd	Pl	C	---	N	------	Dd 7 ft pumping 200 gpm; flowed 140 gpm; discharge 3/4-inch pipe measured 2 gpm, 3-13-57; water level measured 8.6 ft above lsd, 3-13-57; Ca, L.
33J1	Joy Manufacturing Co.	Mr. Doyle	1929	627	Dr	382	8	----------	---	---	-----	--	----	---	---	------	Flowed 1,000 gpm; 182 ft limestone overlain by 200 ft sand, hardpan, and shale; water from limestone had hydrogen sulfide gas.
33J2	-------do--------	----------	3-15-25	627	Dr	238	8	----------	112	126	Sd,G	Pl	C	+3	T	------	Flows; Ca, L.
33R1	-------do--------	Layne-Northern Co., Inc.	3- 6-57	627	Dr	80	16	----------	---	---	-----	--	----	---	---	------	Filled with concrete; for testing drilling equipment; L.
34A1	Mrs. Joors	Mr. Barnthouse	9-25-52	620	J	61	2	S; 4½ft, 60g	51	10	Sd	Pl	C	20	D	------	Yield 15 gpm; white sand overlain by 51 ft blue clay and sand; Ca.
34B1	J. R. Sterling	---------do---------	5-12-54	625	J	19	2	S; 4ft, 60g	14	5	Sd	Pl	C	8	D	P	Yield 15 gpm; sand overlain by 14 ft yellow clay.
34M1	W. Stib	----------	--------	620	Dm	17	1¼	S; 3ft, 60g, dia 1¼	---	---	Sd	Pl	----	---	---	1/2	
34J1	R. Gielow	Westville Well Co.	1-24-56	625	J	28	2	S; 4½ft	---	---	Sd	Pl	----	---	D	1/2	Ca.
34J2	C. Wozniac	Lakeland Well Drillers	12-29-56	625	J	27	2	S; 3½ft, 80g, dia 1	---	---	Sd	Pl	----	13	D	J1/3	Yield 15 gpm.
34P1	C. Phillips	Hunts Hoosier Hardware	8-10-54	630	J	32	2	S; 5ft, 80g	26	6	Sd	Pl	C	5	D	J1/2	Yield 15 gpm; L.
34P2	-------do--------	---------do---------	4-57	630	J	33	2	S; 4½ft, 60g, dia 1	---	---	Sd	Pl	----	8	D1	J1/3	Yield 8 gpm; Ca, L.
34R1	E. Wackrow	---------do---------	--------	630	J	30	2	S; 60g	---	---	Sd,G	Pl	----	10	D	------	Yield 15 gpm; white sand and gravel overlain by 26 ft brown sand and clay.
34R2	J. Gombala	Lakeland Well Drillers	3-26-57	630	J	28	2	S; 4ft, 60g, dia 1	---	---	Sd	Pl	----	13	D	J1/2	Yield 15 gpm.
35E1	Schumake Construction Co.	Hunts Hoosier Hardware	7-53	620	J	21	2	S; 60g	18	4	Sd,G	Pl	C	8	I	------	White medium sand and gravel overlain by 18 ft clay; blue clay at 22 ft.
35E2	Country Cousin Drive-In	---------do---------	--------	620	J	10	2	S; 4½ft, 60g, dia 1	8	11	Sd	Pl	U	8	P	J	Yield 8 gpm; white sand overlain by 14 ft brown sand and dirt; water from several wells drilled into white coarse sand from 118-125 ft had strong saline taste; blue clay from 22-188 ft; Ca.
35K1	Phelps and Peck, Inc.	Indiana-Michigan Water Development Co.	11- 3-44	620	Dr	140	6	----------	127	13	Sh	D	C	---	T	------	Shale contained saline water and hydrogen sulfide gas; L.
36B1	Palmer Dairy	---------do---------	9- 8-45	630	Dr	188	6	S; 8ft, 25sl, dia 5½	180	8	Sd	Pl	C	---	I	T5	Flows 6 gpm; dd 80 ft pumping 40 gpm; L.
36B2	-------do--------	---------do---------	4-29-50	630	Dr	197	8	S; 7ft, 40sl, dia 5½	187	10	Sd,G	Pl	C	---	I	T5	Flows; dd 140 ft after 6 hr pumping 40 gpm; Ca, L.
36K1	212-Outdoor Theater	L. W. Ackermann	1948	635	J	156	3	S; 8ft, 60g	148	8	G	Pl	C	4	P	J1	Yield 30 gpm.

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

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finish	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				
38/4W-36B4	212-Outdoor Theater	D. J. Moore and Son	About 1952	635	--	171	---	----------	---	---	Sd	Pl	-----	18	T	------	L.
36E1	Michigan City	L. W. Ackerman	About 1950	630	J	140	2	S; 40g	---	---	Sd,G	Pl	C	---	P	------	Discharge measured 3 gpm, 3-12-57; water level measured 5.0 ft above lsd, 3-12-57; Ca.
36F1	W. Folga	Lakeland Well Drillers	8-14-57	640	J	140	2	S; 5½ft, 80g, dia 1	---	---	Sd	Pl	----	---	P	------	Ca.
36F2	K. Fisher	Hunts Hoosier Hardware	4- 4-59	640	J	94	2	S; 4ft, 60g, dia 1	88	6	Sd	Pl	C	10	D	J1/4	Ca, L.
36G1	E. Pawloski	Lakeland Well Drillers	12- 5-56	640	J	130	2	S; 4ft, 80g, dia 1	---	---	Sd	Pl	C	---	D	J	Ca.
36J1	J. H. Phillips	H. Hope	4-19-52	640	J	149	2	S; 80g	---	---	Sd	Pl	-----	---	N	J	Yield 6 gpm.
36J2	Television Associates	Lakeland Well Drillers	--------	---	J	180	2	S; 18ft, 100g, dia 1	---	---	Sd	Pl	C	50	P	J	Ca.
36P1	Swan Lake Memorial Gardens	Indiana-Michigan Water Development Co.	7-25-54	635	Dr	108	8	S; 20ft, 12sl	83	25	Sd	Pl	C	25	Ir	------	Dd 20 ft pumping 125 gpm; L.

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

Well 33/3W-10Q1

Type of record: Driller's log. Altitude: 671 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Organic matter	9	9	
Sand, gray	33	42	
Clay, blue	31	73	
Clay, very soft, blue	20	93	
Hardpan	3	96	
Sand, yellow, with yellow clay balls	10	106	
Sand and gravel	10	116	Shale at 116 feet.

Well 33/3W-18M1

Type of record: Driller's log. Altitude: 668 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	53	53	
Devonian system:			
Upper Devonian series:			
Shale	89	142	
Middle Devonian series:			
Lime	22	164	

Well 33/3W-19L1

Type of record: Driller's log. Altitude: 666 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand	97	97	
Devonian system:			
Upper Devonian series:			
Shale	23	120	
Middle Devonian series:			
Lime	17	137	

Well 33/4W-5R1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, medium	2	3	
Sand, medium, brown	3	6	
Sand, medium, gray	21	27	
Devonian system:			
Upper Devonian series:			
Shale	8	35	

Well 33/4W-8A1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Fill	3	3	
Loam, black	8	11	
Sand, fine, clean	17	28	
Clay, gray	28	56	Shale at 56 feet.

Well 33/4W-9N2

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	3	3	
Sand, dirty, yellow	5	8	
Sand, medium, gray	10	18	
Sand, coarse, and fine gravel	8	26	
Mississippian system:			
Lower Mississippian series?:			
Shale, gray	44	70	
Devonian system:			
Upper Devonian series:			
Shale, brown	75	145	
Middle Devonian series:			
Limestone, white	6	151	
Limestone, soft, brown	11	162	
Limestone, hard, white	7	169	
Limestone, white	9	178	
Limestone, hard, white	9	187	
Limestone, soft, brown	13	200	
Limestone, soft, white	8	208	
Limestone, hard, white	13	221	
Limestone, white and blue	2	223	
Limestone, soft, yellow	21	244	
Limestone, hard, white	6	250	

Well 33/4W-14M1

Type of record: Driller's log. Altitude: 668 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	36	36	
Devonian system:			
Upper Devonian series?:			
Shale	97	133	
Devonian and Silurian system; undifferentiated:			
Lime	389	522	
Lime, cherty	65	587	
Lime and shale	113	700	

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

Well 33/4W-14M1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Ordovician system:			
Upper Ordovician series:			
Shale and lime	51	751	
Shale	243	994	
Middle Ordovician series:			
Lime	58	1,052	

Well 33/4W-15N1

Type of record: Driller's log. Altitude: 668 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	7	7	
Sand	23	30	
Devonian system:			
Upper Devonian series:			
Shale	107	137	Contained water with hydrogen sulfide gas.
Middle Devonian series:			
Lime	29	166	

Well 33/4W-16D1

Type of record: Driller's log. Altitude: 674 feet.

Quaternary system:			
Recent and Pleistocene series:			
Glacial drift	22	22	
Devonian system:			
Upper Devonian series:			
Shale, black	103	125	
Devonian and Silurian system; undifferentiated:			
Lime	560	685	
Ordovician system:			
Upper Ordovician series:			
Shale, blue	21	706	
Lime	48	754	
Shale, blue	4	758	
Lime and shale	32	790	
Shale	210	1,000	
Middle Ordovician series:			
Lime	152	1,152	

Well 33/4W-19G1

Type of record: Driller's log. Altitude: 673 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil and muck	4	4	

Well 33/4W-19G1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, fine	18	22	
Sand, fine to medium, with gravel	16	38	

Well 33/4W-19Q1

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

Quaternary system:			
Recent and Pleistocene series:			
Soil	1	1	
Clay, sandy	2	3	
Sand, fine	23	26	
Sand, coarse	4	30	
Clay, sandy	2	32	
Sand, coarse, with some gravel	7	39	
Clay	6	45	

Well 33/4W-22A1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand	40	40	
Devonian system:			
Upper Devonian series:			
Shale	83	123	
Devonian and Silurian system; undifferentiated:			
Lime	515	638	
Lime, cherty	46	684	
Lime	6	690	
Ordovician system:			
Upper Ordovician series:			
Shale	20	710	
Lime	3	713	
Record missing	25	738	
Shale	265	1,003	
Middle Ordovician series:			
Lime	131	1,134	

Well 33/4W-24D1

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

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

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

Well 33/4W-24D1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Devonian system:			
Upper Devonian series:			
Shale	97	141	
Middle Devonian series:			
Lime	44	185	

Well 33/4W-26H1

Type of record: Driller's log. Altitude: 667 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	71	71	
Clay	6	77	
Sand	11	88	
Devonian system:			
Upper Devonian series:			
Shale	32	120	
Middle Devonian series:			
Lime	8	128	
Lime, sandy	15	143	
Lime	31	174	

Well 33/4W-27D1

Type of record: Driller's log. Altitude: 668 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay	7	7	
Sand	28	35	
Clay	18	53	
Sand	13	66	
Devonian system:			
Upper Devonian series:			
Shale	100	166	
Middle Devonian series:			
Lime	31	197	

Well 33/4W-29M1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay	8	8	
Sand	31	39	
Shale	6	45	Clay?.
Sand	10	55	
Devonian system:			
Upper Devonian series:			
Shale	89	144	

Well 33/4W-29M1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Devonian system:			
Middle Devonian series:			
Lime	35	179	

Well 34/3W-13C1

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

Quaternary system:			
Recent and Pleistocene series:			
Cinders	3	3	
Sand, medium	8	11	
Sand, coarse, and some gravel	24	35	
Sand, coarse, and gravel	15	50	
Clay	1	51	
Sand, fine to medium	4	55	
Sand, fine, muddy	25	80	
Clay, gray	21	101	

Well 34/3W-13C4

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

Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy	4	4	
Sand, fine, clean	3	7	
Sand, fine, muddy	3	10	
Gravel, fine, and sand	4	14	
Gravel, medium, and sand	12	26	
Sand, coarse, and gravel	20	46	
Gravel, fine, and sand	21	67	
Sand, coarse, and gravel	7	74	
Gravel, fine to coarse, with coarse sand	2	76	A few clay balls.

Well 34/3W-13D1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, medium, yellow	9	9	
Sand, coarse, with some gravel	11	20	
Sand, coarse, and gravel	15	35	
Sand, coarse	5	40	
Sand, coarse, and gravel	10	50	
Sand, coarse	10	60	
Sand, medium	11	71	
Clay, gray	3	74	

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

Well 34/3W-13H1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Muck, black	6	6	
Sand, dirty	3	9	
Sand, fine	8	17	
Sand, medium	21	38	
Gravel, fine, and sand	7	45	
Sand, fine	11	56	
Clay	19	75	
Sand, fine	7	82	
Clay, tough	13	95	
Sand, fine, and clay	8	103	
Clay, tough	2	105	
Sand, fine, and clay	2	107	
Clay, tough	2	109	
Clay, sandy, with some shaly gravel	4	113	
Devonian system:			
Upper Devonian series:			
Shale, brown	7	120	

Well 34/4W-4F1

Type of record: Driller's log. Altitude: 734 feet.

Quaternary system:			
Recent and Pleistocene series:			
Fill	2	2	
Soil and sand	6	8	
Gravel, fine, gray, and sand	2	10	
Sand, medium, gray	41	51	
Sand, coarse, gray	4	55	
Sand, medium, gray	28	83	
Devonian system:			
Upper Devonian series:			
Shale, blue	55	138	
Clay, hard, black	7	145	Shale.
Shale, blue and black	7	152	
Shale, black	3	155	
Shale, blue and black	8	163	
Clay, hard	10	173	Shale.
Shale, black	7	180	
Clay, hard, black	8	188	Shale.
Shale, black	2	190	
Limestone	1	191	
Shale, black	36	227	

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

Well 34/4W-7K2

Type of record: Driller's log. Altitude: 722 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Clay, sandy	8	9	
Gravel and sand	11	20	
Sand, medium	40	60	
Sand, fine	12	72	
Devonian system:			
Upper Devonian series:			
Shale, blue	3	75	

Well 35/1W-17R1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Clay, blue, and sand	6	8	
Sand and gravel	22	30	
Sand	10	40	

Well 35/2W-1N1

Type of record: Driller's log. Altitude: 689 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck and sand	3	3	
Sand	20	23	
Clay	12	35	
Gravel	1	36	
Clay	12	48	
Sand, coarse, clean	20	68	
Sand, fine, muddy	7	75	

Well 35/2W-3A2

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

Quaternary system:			
Recent and Pleistocene series:			
Sand	20	20	
Sand, coarse	10	30	
Sand, medium	18	48	
Sand, fine	14	62	
Sand, medium	22	84	Clay at 84 feet.

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

Well 35/2W-3C2

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand, dirty	16	18	
Sand, coarse	27	45	
Sand, medium	23	68	

Well 35/2W-3D1

Type of record: Driller's log. Altitude: 736 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil	4	4	
Sand, dirty	15	19	
Sand, fine, yellow	12	31	
Sand, medium, gray	14	45	
Sand, medium to coarse	18	63	
Clay	22	85	

Well 35/2W-3K1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand and clay	4	6	
Sand, coarse	44	50	
Sand, medium	37	87	Clay and fine sand at 87 feet.

Well 35/2W-4M2

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	2	2	
Sand, medium	28	30	
Sand, coarse	25	55	
Sand, medium	18	73	
Clay	3	76	

Well 35/2W-4M3

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	5	5	
Sand, yellow	28	33	
Sand, medium, yellow	6	39	

Well 35/2W-4M3--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, coarse, yellow	5	44	
Sand, coarse, gray	15	59	
Sand, medium to coarse, gray	4	63	
Sand, fine to medium	7	70	
Sand, fine	6	76	

Well 35/2W-5D2

Type of record: Driller's log. Altitude: 727 feet.

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, muddy	9	10	
Sand, coarse	30	40	
Sand, medium	44	84	
Clay	5	89	

Well 35/2W-5L1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay and sand	8	8	
Sand, medium, yellow	24	32	
Sand, fine	12	44	
Sand, coarse	8	52	
Sand, medium	20	72	Clay at 72 feet.

Well 35/2W-7J2

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

Quaternary system:			
Recent and Pleistocene series:			
Soil and dirty sand	8	8	
Sand, yellow	19	27	
Sand, yellow	8	35	
Sand, coarse	20	55	
Sand, medium	40	95	
Sand, fine	2	97	Clay at 97 feet.

Well 35/2W-8G1

Type of record: Driller's log. Altitude: 726 feet.

Quaternary system:			
Recent and Pleistocene series:			
Clay, sandy	7	7	
Sand, medium	41	48	
Sand, fine	5	53	

Well 35/2W-8G1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, medium	19	72	
Sand, fine	9	81	

Well 35/2W-10E1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay and sand	4	4	
Sand, medium	56	60	
Sand, coarse	20	80	
Sand, coarse, and gravel	7	87	
Sand, medium	9	96	

Well 35/2W-11D1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow	10	10	
Sand, coarse	15	25	
Sand, fine	29	54	Clay at 54 feet.

Well 35/2W-11H1

Type of record: Driller's log. Altitude: 688 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck	2	2	
Muck and sand	4	6	
Sand, fine	6	12	
Gravel and sand	2	14	
Clay	22	36	
Sand, medium	10	46	
Clay	18	64	
Sand, fine	26	90	Clay at 90 feet.

Well 35/2W-12A1

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

Quaternary system:			
Recent and Pleistocene series:			
Muck	4	4	
Sand, fine	12	16	
Sand, coarse	4	20	
Sand, medium	5	25	
Sand, coarse	5	30	
Sand, fine	15	45	

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

Well 35/2W-12A1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, medium	10	55	
Sand, coarse	4	59	
Clay	9	68	
Sand, fine	27	95	
Sand with clay strips	9	104	

Well 35/2W-12A3

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

Quaternary system:			
Recent and Pleistocene series:			
Muck and marl	5	5	
Sand, fine	11	16	
Sand, medium	9	25	
Sand, coarse	13	38	
Sand, fine	27	65	
Sand, fine, muddy	7	72	
Clay	6	78	
Sand, fine	17	95	
Sand, fine, muddy	9	104	

Well 35/2W-12H1

Type of record: Driller's log. Altitude: 686 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck	5	5	
Sand, fine	9	14	
Sand, coarse	21	35	
Sand, fine	18	53	
Sand, coarse	11	64	
Clay with sand strips	4	68	
Clay	7	75	
Sand, fine	7	82	
Clay and muddy sand	13	95	Clay at 95 feet.

Well 35/2W-12H2

Type of record: Driller's log. Altitude: 686 feet.

Quaternary system:			
Recent and Pleistocene series:			
Muck	3	3	
Clay	2	5	
Sand and marl	3	8	
Sand	3	11	
Gravel and sand	41	52	
Gravel, large	4	56	
Clay	4	60	

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

Well 35/2W-12H2--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, muddy	4	64	
Sand, fine, clean	8	72	
Sand, fine, becoming muddy	6	78	

Well 35/2W-16B1

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

Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, coarse	34	35	
Sand, medium	14	49	
Clay, blue	11	60	
Sand, medium	4	64	
Sand, fine	17	81	

Well 35/2W-18N2

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

Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy	21	21	
Sand, brown	10	31	
Sand, light-brown	18	49	
Sand, gray	15	64	
Sand, fine, and gravel	10	74	
Gravel and clay	5	79	
Sand, muddy	11	90	Clay at 90 feet.

Well 35/2W-18N3

Type of record: Driller's log. Altitude: 723 feet.

Quaternary system:			
Recent and Pleistocene series:			
Soil, sandy	19	19	
Sand, light-brown	29	48	
Sand, clean, gray	21	69	
Gravel and clay	5	74	
Sand	10	84	
Sand, fine, clean	5	89	
Sand	11	100	
Sand, fine, clean	2	102	Clay at 102 feet.

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

Well 35/2W-30G1

Type of record: Driller's log. Altitude: 691 feet.

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand, yellow, and clay	20	20	
Sand, fine, gray	5	25	
Clay, blue	2	27	
Sand, fine, and clay	14	41	
Clay	47	88	
Sand, fine, and clay	43	131	
Clay with brown shale	69	200	
Devonian system:			
Upper Devonian series:			
Shale, black	20	220	
Shale, blue	4	224	
Shale, brown	28	252	
Middle Devonian series:			
Lime, brown	3	255	
Limestone, white	4	259	
Limestone, brown	39	298	

Well 35/4W-31P1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Top soil	1	1	
Sand, fine	17	18	
Sand, fine, white	79	97	
Mississippian system?:			
Lower Mississippian series?:			
Shale, gray	87	184	

Well 36/1W-4Q1

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

Material	Thickness (feet)	Depth (feet)	Remarks
Quaternary system:			
Recent and Pleistocene series:			
Sand and gravel	17	17	
Quicksand, yellow	175	192	
Mud, soft, gray	8	200	
Devonian system:			
Upper Devonian series:			
Shale, dark to gray-brown	50	250	
Devonian and Silurian system, undifferentiated:			
Limestone, fossiliferous, porous, buff to brown, with pyrite	60	310	
Anhydrite, white, and gray limestone	110	420	

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

Well 36/1W-4Q1--Continued

Material	Thickness (feet)	Depth (feet)	Remarks
Devonian and Silurian system; undifferentiated:			
Dolomite, buff, with some anhydrite	70	490	
Dolomite, cherty, blue to light-buff	10	500	
Dolomite, hard, cherty, blue-gray	10	510	
Dolomite, shaly, blue-gray, with pyrite	40	550	
Dolomite, granular, light-buff	30	580	
Dolomite, bituminous, brown to buff	10	590	
Dolomite, granular, bluish-white	10	600	
Dolomite, granular, yellowish-white	75	675	

Well 36/1W-16B1

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

Quaternary system:			
Recent and Pleistocene series:			
Clay and sand	10	10	
Clay, blue	10	20	
Sand	2	22	
Gravel, medium	4	26	

Well 36/1W-18K1

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

Quaternary system:			
Recent and Pleistocene series:			
Sand, brown	10	10	
Sand, fine, brown	8	18	
Sand, fine to coarse	5	23	
Sand, coarse, brown	5	28	

Well 36/1W-33H1

Type of record: Driller's log. Altitude: 687 feet.

Quaternary system:			
Recent and Pleistocene series:			
Sand	6	6	
Shale, blue	45	51	Shale fragments (gravel).
Quicksand, gray	68	119	
Clay, yellow, and gravel	32	151	