

STATE OF INDIANA
INDIANA DEPARTMENT OF CONSERVATION
DIVISION OF WATER RESOURCES

BULLETIN NO. 20

GROUND-WATER RESOURCES
OF NORTHWESTERN INDIANA

Preliminary Report: Fulton County



Prepared by the
GEOLOGICAL SURVEY
UNITED STATES DEPARTMENT OF THE INTERIOR
In cooperation with the
DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION

1964

INDIANA DEPARTMENT OF CONSERVATION

Donald E. Foltz, Director

BULLETIN NO. 20

OF THE

DIVISION OF WATER RESOURCES

Charles H. Bechert, Director

GROUND-WATER RESOURCES OF NORTHWESTERN INDIANA

Preliminary Report: Fulton County

BY

J. S. ROSENSHEIN AND J. D. HUNN
GEOLOGISTS, U. S. GEOLOGICAL SURVEY

Prepared by the
GEOLOGICAL SURVEY .

UNITED STATES DEPARTMENT OF THE INTERIOR

In cooperation with the
DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION

1964

CONTENTS

	Page
Abstract-----	1
Introduction-----	2
Purpose and scope-----	2
Location and areal extent-----	2
Well-numbering system-----	4
Acknowledgments-----	5
Data collection and processing-----	5
General geology and sources of ground water-----	6
Confined and unconfined conditions-----	8
Types of wells-----	8
Summary-----	9
Records-----	9
Selected bibliography-----	11
Publications of cooperative ground-water program-----	81
Index-----	83

ILLUSTRATIONS

(All plates in pocket)

	Page
Plate 1. Map of Fulton County, Ind., showing location of wells and test holes-----	
2. Map of Fulton County, showing availability of ground water-----	
3. Map of Fulton County, showing hardness of water in sand and gravel of Pleistocene age-----	
Figure 1. Map of Indiana, showing gravel area covered by this report, areas under investigation, and areas covered by reports published under cooperative program-----	3
2. Sketch showing well-numbering system-----	4

TABLES

	Page
Table 1. Significance of selected dissolved mineral constituents and properties of ground water-----	7
2. Grain size and equivalent screen openings-----	9
3. Records of wells and test holes in Fulton County, Ind.-----	12
4. Selected logs of wells and test holes in Fulton County-----	24
5. Field chemical analyses of water from wells in Fulton County-----	66
6. Water levels in observation wells in Fulton County-----	75

GROUND-WATER RESOURCES OF NORTHWESTERN INDIANA

Preliminary Report: Fulton County

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

ABSTRACT

Fulton County, in northwestern Indiana, has an area of about 370 square miles. Glaciofluvial sand and gravel of Pleistocene age is the chief source of ground water for domestic, stock, industrial, and public supplies. Wells that tap this source generally are less than 150 feet deep and yield from 5 to 1,000 gpm (gallons per minute). The underlying bedrock is not extensively used as a source of ground water. However, the bedrock of Devonian and Devonian and Mississippian (?) age is a potential source of water, although quality and quantity available is uncertain. Field chemical analyses show that the hardness of water from the glaciofluvial sand and gravel generally is greater than 200 and less than 450 ppm (parts per million). Except locally the concentration of iron exceeds maximum concentration recommended in the U. S. Public Health Service drinking-water standard for iron and manganese together. However, in a small area in the north-central part, this standard is not exceeded.

This preliminary report contains tabulated records of about 470 wells and test holes giving information about well construction, water level, condition of occurrence, and characteristics of water-bearing material; selected logs for about 180 wells and test holes giving driller's description of material penetrated and authors' interpretation of their geologic age; results of 260 field chemical analyses giving hardness of water and the bicarbonate, chloride, iron, and sulfate contents; and water levels in 5 observation wells indicating the magnitude of short-term and long-term water level fluctuations of 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 Fulton County shows the location of each well or test hole listed in this report. Additional maps show the availability of ground water in the county and the areal distribution of hardness of water from the unconsolidated rocks of Pleistocene age.

INTRODUCTION

Purpose and Scope

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

This report is the sixth of a series of preliminary reports to be published on the ground-water resources and geology of northwestern Indiana. The purpose of the 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 immediate supervision of C. M. Roberts, district geologist for Indiana.

Location and Areal Extent

Fulton County is in the northwestern part of Indiana (fig. 1). The county is nearly rectangular and includes about 370 square miles. It is bounded on the north by Marshall County, on the south by Cass and Miami Counties, on the west by Pulaski County, and on the east by Kosciusko, Miami and Wabash Counties.

Well-Numbering System

A numbering system is used to locate and identify the wells and test holes in this report. The number that is assigned each well or test hole indicates its location according to the official rectangular public-land survey. For example, in the number for well 30/4-36H1, the numbers preceding the hyphen indicate that the well is in T. 30 N., R. 4 E. 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 and test holes are numbered consecutively. Therefore, well 36H1 is the first well listed in SE $\frac{1}{4}$ sec. 36, T. 30 N., R. 4 E.

A narrow strip in the east-central part of the county is subdivided into land grants. In this area the grid of the rectangular public-land survey has been projected through the grants and wells in this area numbered in accordance with the system used in the rectangular survey area.

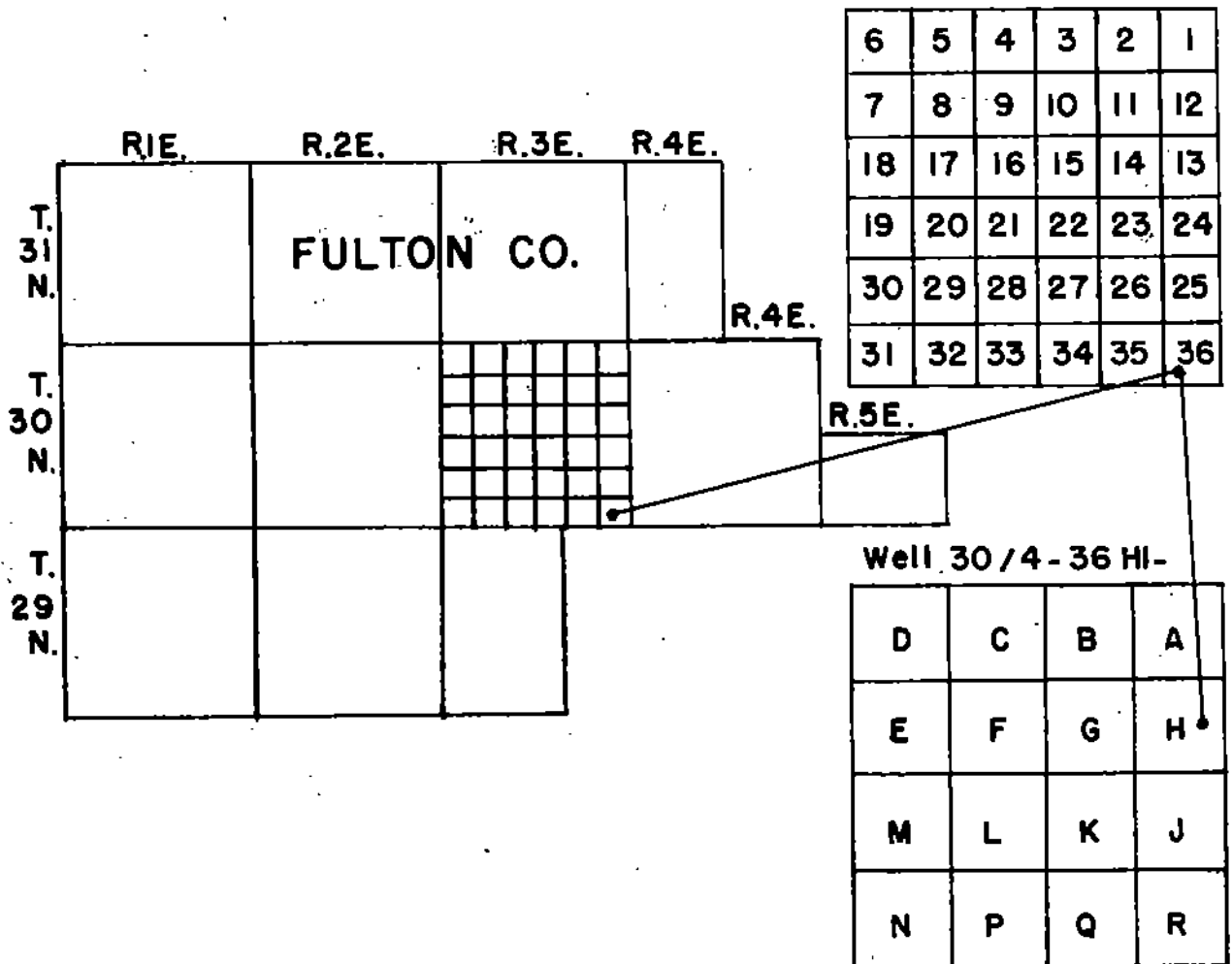
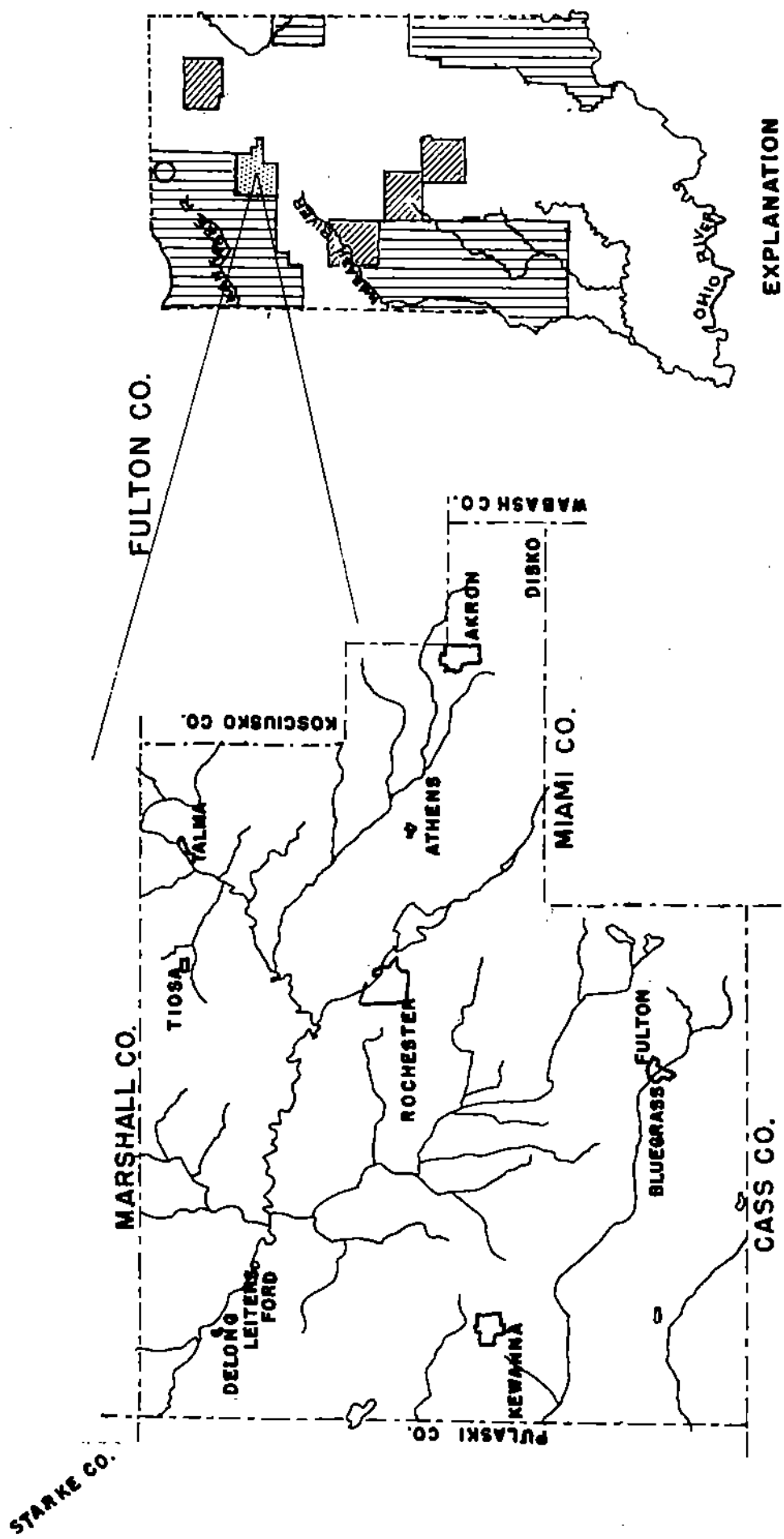


FIGURE 2.-- Sketch showing well-numbering system



EXPLANATION

- AREA COVERED BY THIS REPORT
- AREA UNDER INVESTIGATION
- AREAS COVERED BY REPORTS PUBLISHED UNDER THE COOPERATIVE PROGRAM

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

AREAS COVERED BY REPORTS PUBLISHED UNDER THE COOPERATIVE PROGRAM

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 processing the data in the field. Well drillers, whose names are listed in the table of well records, furnished much of the information summarized in tables 3 and 4.

The authors also 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; 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. The locations of wells were checked further in the field if major discrepancies existed between the reported location and the property record in the plat books, if the location given could not be verified from county records, or if the verified location was not sufficiently accurate to be used.

Plate 1 shows the location of water wells and test holes and test holes drilled for purposes other than water supply. Most of these locations are shown to the nearest 10 acres. The basic data for these wells and test holes are summarized in table 3. In addition, selected driller's logs of wells and test holes are given in table 4.

Samples of water were collected at the time well sites were visited. These water samples were analyzed in the field office for hardness of water and alkalinity (expressed as bicarbonate) and chloride and sulfate contents by standard titration methods. The iron content of the water was determined at the well site immediately after the sample was collected. A visual method was used to determine the iron concentration in parts per million by matching the color of the treated sample to that of a liquid-color standard having a known iron concentration. The results of the field chemical analyses (table 5) were used to select sites for collecting larger water samples for more comprehensive chemical analyses by the laboratory of the U. S. Geological Survey.

Observation wells were established prior to and during the investigation in order to obtain relative changes in storage in the ground-water reservoir. Table 6 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. Wherever 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 Fulton County are of Ordovician age. These rocks consist of dolomite, dolomitic limestone, and shale and are overlain by dolomitic limestone, shale, and dolomite of Silurian age. The rocks of Ordovician and Silurian age are not used as a source of water supply in the county because these rocks generally lie more than 800 to 900 feet and 400 to 500 feet, respectively, below the surface, and the water they contain generally has a dissolved-solids content of more than 5,000 ppm (parts per million). However, in a small area in the southeastern part of the county the rocks of Silurian age lie directly below the glacial drift and may contain water that is moderately mineralized.

The rocks of Silurian age are overlain by dolomite and 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). Few water wells have been drilled into the rocks of Devonian and Devonian and Mississippian(?) age. Although these limestone and shales are not extensively used as a source of water in Fulton County, they are a potential source of water of which the quality and quantity available is uncertain.

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 Maxinkuckee moraine in the north-central and western part; the Packerton moraine in the extreme southeastern part; the glaciofluvial plains in the northern part; and the ground moraine in the southern and extreme eastern part.

The unconsolidated rocks of Pleistocene age range in thickness from about 100 (Wayne, 1956, pl. 1) to more than 250 feet. The rocks consist chiefly of glaciofluvial sand and gravel, clayey and sandy till, and some glaciolacustrine clay and silt. The glaciofluvial sand and gravel is locally more than 150 feet thick and is the chief source of ground water for domestic and stock, industrial, and public supplies. Wells that tap this aquifer are generally less than 150 feet deep and yield from 5 to 1,000 gpm (gallons per minute).

The unconsolidated rocks of Pleistocene age are overlain locally by thin alluvium, wind-blown sand and organically rich sand, silt, and clay of Recent age. The deposits of Recent age are too thin to be a source of ground water.

Plate 2 shows the availability of ground water in the unconsolidated rocks underlying the county. Plate 3 shows the areal 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 and less than 450 ppm. The iron content generally exceeds maximum concentration recommended in the U. S. Public Health Service drinking-water standards for iron and manganese together except locally as in a small area in the north-central part of the county where this standard is not exceeded.

The range in concentration of selected constituents and properties is summarized in the table below. This table shows the minimum, mode, and maximum concentrations of various constituents and properties of water from sand and gravel of Pleistocene age.

Constituent or property	Minimum (ppm)	Mode (ppm)	Maximum (ppm)
Iron (Fe)-----	0.1	1.7	7.5
Bicarbonate (HCO ₃)-----	151	426	532
Sulfate (SO ₄)-----	5	46	175
Hardness as CaCO ₃ -----	180	326	540

Table 1 indicates the significance of the various constituents and properties of the water that are listed in table 5.

Table 1.--Significance of selected dissolved mineral constituents
and properties of ground water ^{a/}

Constituent or property	Significance
Iron (Fe)-----	Oxidizes to reddish-brown sediment upon exposure to air. More than about 0.3 ppm stains laundry and utensils reddish-brown. More than 0.5 to 1.0 ppm imparts objectionable taste to water. Larger quantities favor growth of iron bacteria. Objectionable for food processing, textile processing, beverages, ice manufacturing, brewing, and other purposes.
Bicarbonate (HCO ₃)-----	Bicarbonate in conjunction with carbonate (CO ₃) produces alkalinity. Bicarbonate of calcium and magnesium decomposes in steam boilers and hot water facilities to form scale and release corrosive carbon-dioxide gas.
Sulfate (SO ₄)-----	Sulfate in water containing calcium forms hard scale in steam boilers. In large amounts sulfate in combination with other ions gives bitter taste to water. Some calcium sulfate is considered beneficial in the brewing process.
Chloride (Cl)-----	Gives salty taste to drinking water when present in large amounts in combination with sodium. Increases the corrosiveness of water when present in large amounts.
Hardness as CaCO ₃ (Calcium and magnesium)-----	Hard water increases amount of soap needed to make lather. Forms scale in boilers, water heaters, and pipes. Leaves curdy film on bathtubs and other fixtures and on materials washed in the water.

a/ Adapted in part from Palmquist and Hall (1961), p. 34-36.

CONFINED AND UNCONFINED CONDITIONS

Ground water occurs in the consolidated and unconsolidated rocks of Fulton County under confined (artesian) conditions or under unconfined (water-table) conditions. Under confined conditions the aquifer (water-yielding material) is overlain directly by relatively impervious material, and the water will rise above the level at which it is encountered in the aquifer. Under unconfined conditions the aquifer 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 Fulton County. Most water wells 3-inches or more in diameter are generally constructed by the cable-tool, or percussion method, but some of these wells have been drilled by the rotary, reverse-rotary, and jetting methods. Where the water-bearing material is sand and gravel, the well is generally finished with a well screen set in the aquifer 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.

Water wells less than 3-inches in diameter are constructed in unconsolidated material by driving or jetting. The driven well consists of a small-diameter pipe having a drive point attached to the end, which is driven into shallow water-bearing material. The jetted well is constructed by forcing water under pressure out of a hollow-rod or small-diameter drill pipe that is fitted with a jetting bit. As the material is washed out of the hole ahead of the casing, the casing is driven down into the hole. After the water-bearing material is penetrated the well is generally finished with a well-point screen set in the water-bearing material below the bottom of the casing. Table 2 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 test holes in Fulton County generally were drilled by the cable-tool method. Structure test holes for foundations and bridges generally were drilled by the wash-boring method. Various methods were used in these types of test-hole drilling to recover samples of material penetrated, such as, driving a sampling tube into the material after specific intervals of boring or collecting samples from the bailer after specific intervals of cable-tool drilling.

Table 2.--Grain size and equivalent screen openings

Grain size: After Wentworth (1922). Slot size: In thousandths (0.001) of an inch.
 Equivalent screen openings: From commercial catalogs for water-well supplies. 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, public, and industrial supplies from sand and gravel of Pleistocene age. The underlying bedrock is not extensively used as a source of water. However, the rocks of Devonian and Devonian and Mississippian(?) age are a potential source of water, although quality and quantity available is uncertain.

The chemical quality of water from the rocks of Pleistocene age varies. The water is generally hard to very hard. The iron content exceeds the U. S. Public Health Service drinking-water standards for iron and manganese together in much of the county except locally as in a small area in the extreme north-central part where this standard is not exceeded.

RECORDS

The records of about 470 wells and test holes are given in table 3. 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 and test holes was interpolated from topographic maps. Altitudes of boring were leveled by the State agency for whom the borings were made.

Table 4 contains the selected logs of about 180 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 260 partial chemical analyses of water are given in table 5. The analyses were determined in the field office of the Geological Survey. This table gives information about geologic source, temperature, concentration in parts per million of iron, bicarbonate, sulfate, chloride,

and hardness (calcium, magnesium) 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 official standards have been established for hardness of water. However, water with respect to hardness is generally classified (Lamar, 1942, p. 25-26) as follows: 0-60 ppm soft; 61-120 ppm moderately hard; 121-200 ppm hard; more than 200 ppm very hard.

Table 6 contains the records of five observation wells of which two were established during the investigation and three prior to the investigation. The water levels in the observation wells were measured 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. Daily water levels are given for the observation well equipped with a recording gage, and periodic water levels are given for the observation wells measured manually. For additional water levels see water-supply papers listed under U. S. Geological Survey in selected bibliography. Factors affecting the water levels in the observation wells are also indicated. The location of observation wells is shown on plate 1.

SELECTED BIBLIOGRAPHY

- Capps, S. R., 1910, The underground waters of north-central Indiana: U. S. Geol. Survey Water-Supply Paper 254, 279 p.
- Gutstadt, A. M., 1958, Cambrian and Ordovician stratigraphy and oil and gas possibilities in Indiana: Indiana Dept. Conserv., Geol. Survey Bull. 14, 103 p.
- Harrell, Marshall, 1935, Ground Water in Indiana: Indiana Dept. Conserv., Div. Geology Pub. 133, 504 p.
- Hem, J. D., 1959, Study and interpretation of the chemical characteristics of natural water: U. S. Geol. Survey Water-Supply Paper 1473, 269 p.
- Keech, C. F., and Dresszen, V. H., 1959, Geology and ground-water resources of Clay County, Nebr. with a section on chemical quality of water by F. H. Rainwater: U. S. Geol. Survey Water-Supply Paper 1468, p. 62-86.
- Lamar, W. L., 1942, Industrial quality of public water supplies in Georgia, 1940: U. S. Geol. Survey Water-Supply Paper 912, 83 p.
- Leverett, Frank, 1899, Wells of northern Indiana: U. S. Geol. Survey Water-Supply and Irrig. Paper 21, 82 p.
- Leverett, Frank, and Taylor, F. B., 1915, The Pleistocene of Indiana and Michigan and the history of the Great Lakes: U. S. Geol. Survey Mon. 53, 529 p.
- Logan, W. N., 1932, Geologic map of Indiana: Indiana Dept. Conserv., Div. Geology Pub. 112.
- Palmquist, W. N., Jr., and Hall, F. R., 1961, Reconnaissance of ground-water resources in the Blue Grass Region Kentucky: U. S. Geol. Survey Water-Supply Paper 1533, 39 p.
- Patton, J. B., 1956, Geologic map of Indiana: Indiana Dept. Conserv., Geol. Survey Atlas Mineral Resources Map 9.
- Rosenshein, J. S., and Cosner, O. J., 1956, Ground-water resources of Tippecanoe County, Indiana: Appendix basic data: Indiana Dept. Conserv., Div. Water Resources Bull. 8, 67 p.
- U. S. Geological Survey, issued annually, Water levels and artesian pressure in observation wells in the United States: U. S. Geol. Survey Water-Supply Papers 817, 840, 845, 886, 906, 936, 944, 986, 1016, 1023, and 1071.
- Wayne, W. J., 1956, Thickness of drift and bedrock physiography of Indiana north of the Wisconsin glacial boundary: Indiana Dept. Conserv., Geol. Survey Prog. Rept. 7, 70 p.
- _____, 1958, Glacial Geology of Indiana: Indiana Dept. Conserv., Geol. Survey Atlas Mineral Resources Map 10.
- Wentworth, C. K., 1922, A scale of grade and class terms for clastic sediments: Jour. Geology, vol. 30, p. 377-392.

Table J.--Records of wells and test holes in Fulton County, Indiana

Well: See text for description of well-numbering system.
 Altitude: Altitude of land-surface datum from topographic map except as noted in text p. 9.
 Type of well: B, bored; Dm, driven; Dr, drilled; J, jetted.
 Finish: Gp, gravel pack; Co, open end; Oh, open hole; S, screen; dia, diameter in inches; G, gravel; Sd, sand; Is, limestone.
 Character: C, gravel; Sd, sand; Is, limestone.
 Geologic age: D, Devonian; Pl, Pleistocene.
 Condition of occurrence: C, confined; U, unconfined; see text for definition.

Water level: In feet below land-surface datum on date of completion of well, except where otherwise noted. Domestic: Dm, driven; Dr, drilled; J, jetted; Ir, irrigation; K, not used; O, observation; P, public supply; S, stock; T, test.
 Type of pump and horsepower: C, centrifugal; J, jet; L, lift; P, pitcher; S, submersible; T, turbine; numeral indicates rated horsepower of electric motor.
 Remarks: Ca, field chemical analysis in table S; dd, drawdown; gpm, gallons per minute; L, log of well in table 4; S, samples available for inspection.

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					Use	Type of pump and horsepower	Remarks
									Thickness (feet)	Character	Geologic age	Conditions of occurrence	Water level (feet)			
28/1-1P1	A. Schoold	Rochester Well and Pump Co.	10-28-56	781	J	52	2	S; 3 ft	Sd,G	Pl	C	12	D	P	Yield 13 gpm; Ca, L.	
3D1	A. Walsh	-----	4-13-51	761	J	92	2	S; 2ft, 30sl	G	Pl	---	15	D	---	Yield 20 gpm; Ca.	
9E1	T. H. White	Fisher Bros. Well Drilling Co.	7-16-59	761	J	88	4 1/2	S; 5ft, 14sl, dia 1 1/2	G	Pl	C	19	D,S	---	Dd 8 ft after 6 hr pumping 14 gpm; Ca, L.	
11C1	T. Walsh	-----	7-30-59	782	J	90	4 1/2	S; 4ft, 14sl, dia 3	G	Pl	C	22	D,S	---	Yield 16 gpm; L.	
11C2	-----	-----	8-15-59	762	J	80	4 1/2	S; 8 ft, 14sl, dia 3	G,Sd	Pl	C	18	D,S	---	Dd 10 ft after 2 hr pumping 40 gpm; L.	
13H1	M. Haro	McCraw Well Drilling Co.	11-6-55	775	J	85	2	S; 2 1/2 ft, 10sl	G,Sd	Pl	C	19	D,S	J 1/2	Yield 15 gpm; fine sand and fine to medium gravel overlain by 77 ft blue soft clay, Ca.	
22F1	Trustees, Wayne Township	D. Henderson	9-23-56	762	Dr	115	4	S; 10ft, 25sl	G	Pl	C	18	P	S1	Dd 2 ft pumping 40 gpm; Ca, L.	
23F1	C. Ross	Rochester Well and Pump Co.	-----	785	J	100	2	S; 3ft, 50g, dia 1 1/2	Sd	Pl	C	35	S	---	Ca, L.	
22A1	L. Gault	McCraw Well Drilling Co.	1956	758	J	50	2	S	G	Pl	C	18	---	---	Gravel overlain by 46 ft brown and blue clay.	
26G1	E. H. Malono	J. Henderson	7-9-59	789	J	94	2	S; 2 1/2 ft, 60g, dia 1 1/2	G,Sd	Pl	C	---	D,S	---	Yield 20 gpm; Ca, L.	
29/2-1R1	H. Morris	McCraw Well Drilling Co.	1957	793	J	83	2	S; 3ft, 10sl, dia 1 1/2	G	Pl	C	15	D	C 1/2	Ca, L.	
4D1	Z. Cook	-----	1956	788	J	77	2	S; 3ft, 60g, dia 1 1/2	G	Pl	C	19	---	---	Ca, L.	
4F1	N. Isberg	Fisher Bros. Well Drilling Co.	9-26-59	768	J	73	2 1/2	S; 3ft, 60g, dia 1 1/2	G	Pl	C	11	D,S	J1/3	Yield 17 gpm; Ca, L.	
8P1	H. E. Nickels	McCraw Well Drilling Co.	7-16-59	775	J	59	2	S; 3ft, 10sl, dia 1 1/2	G	Pl	C	20	S	L	Yield 10 gpm; Ca, L.	
12A1	E. Tranbarger	Rochester Well and Pump Co.	3-16-55	800	J	74	2	S; 3ft, 50g, dia 1 1/2	Sd,G	Pl	C	19	D	J 1/2	Sand and fine to medium gravel overlain by 53 ft yellow and blue clay; Ca.	
13C1	L. Rouch	McCraw Well Drilling Co.	1957	802	J	74	2	S	G,Sd	Pl	C	23	D	---	L.	
14C1	C. Rousenbly	-----	1956	793	J	66	2	S	G	Pl	C	22	S	---	Gravel overlain by 66 ft blue hard clay.	
14F1	-----	-----	5-21-55	792	J	83	2	S; 2 1/2 ft, 10sl	G	Pl	C	18	S	---	Yield 15 gpm; fine to medium gravel overlain by 58 ft blue clay with some sand; Ca.	
22D1	C. Fred	-----	1957	792	J	28	2	S	G,Sd	Pl	---	20	S	L	Gravel and sand overlain by 20 ft brown clay; Ca.	
23G1	P. B. Stewart and Co.	-----	7-29-60	790	J	85	2	S; 4ft, 10sl, dia 1 1/2	G	Pl	C	12	P,S	J	Yield 40 gpm; Ca, L.	
23G2	J. Dewitt	J. Henderson	7-18-59	792	J	20	---	S; 2 1/2 ft, 60g, dia 1 1/2	G,Sd	Pl	C	12	D	P	See log well 23G1; Ca.	
23J1	M. Walz	McCraw Well Drilling Co.	12-10-55	789	J	52	2	S; 2 1/2 ft, 10sl	G	Pl	C	8	D	J1/4	Yield 35 gpm; see log well 23J4; Ca.	
23J2	P. Eastorday	-----	1956	789	J	53	2	S; 2 1/2 ft, 10sl, dia 1 1/2	G	Pl	C	12	D	L1/4	See log well 23J4.	
23J3	M. Burns	-----	12-22-59	792	J	59	2	S; 2 1/2 ft, 10sl, dia 1 1/2	G	Pl	C	13	D	---	Yield 10 gpm; Ca, L.	
23J4	V. Rouch	J. Henderson	8-20-59	792	J	60	2	S; 3ft, 60g, dia 1 1/2	Sd,G	Pl	C	18	D	---	Yield 15 gpm; L.	

29/2-24DI	P. Zartman	McGrew Well Drilling Co.	1955 700	J	34	2	S; 2 1/2 ft, 10 in 1	32	2	G	PI	C	D	L1/4	Yield 13 gpm; fine gravel overlain by 52 ft blue clay; blue clay at 34 ft; Ca. L.
24FI	A. E. Killions	J. Henderson	7-16-59 798	J	65	2	S; 3ft, 50g, dia 1 1/2	60	5	G, Sd	PI	C	19	D	Yield 15 gpm; sand overlain by 36 ft blue sandy clay; Ca. Ca.
24NI	C. Baker	McGrew Well Drilling Co.	1957 790	Dr	19	1 1/2	---	15	4	G	PI	C	12	B	Gravel overlain by 15 ft clay. Ca. L.
26JI	V. Stringley	J. Henderson	9-30-59 802	J	40	2	S; 2 1/2 ft, 10 in 1, dia 1 1/2	36	4	Sd	PI	C	14	S	Ca.
30CI	L. Rouch	Rochester Well and Pump Co.	8-16-50 782	J	43	2	S; 3ft, 80g, dia 1 1/2	---	---	G	PI	---	21	D	Yield 17 gpm; Ca. L.
32NI	G. Wilson	J. Henderson	2-2-60 785	J	78	2	S; 3 1/2 ft, 80g, dia 1 1/2	71	7	G	PI	C	24	D	Yield 10 gpm; Ca. L.
32PI	L. Siders	McGrew Well Drilling Co.	12-7-59 802	J	82	2	S; 2 1/2 ft, 10 in 1, dia 1 1/2	35	27	Sd, G	PI	C	35	D	Yield 10 gpm; Ca. L.
35HI	E. Richter	---	10-2-57 802	J	803	2	S; 2 1/2 ft, 10 in 1	54	4	G, Sd	PI	C	20	D	Ca. L., blue gravel overlain by 44 ft blue clay.
35HI	---	---	1957 805	J	49	2	---	44	5	G	PI	C	17	---	Yield 10 gpm; Ca. L.
29/2-3BI	W. Gottschalk	McGrew Well and Pump Co.	---	J	78	2	S; 2 1/2 ft, 10 in 1	72	6	Sd	PI	C	45	D, S	Yield 10 gpm; L.
3FI	F. Gottschalk	McGrew Well Drilling Co.	3-29-51 822	J	80	2	S; 3ft, 60g, dia 1 1/2	---	---	G	PI	C	32	---	Gravel overlain by yellow and blue clay.
3LI	F. Ross	---	7-25-59 821	J	52	2	S; 3ft, 10 in 1, dia 1 1/2	42	10	G	PI	C	30	S	Yield 10 gpm; Ca. L.
4PI	W. Gottschalk	---	9-19-55 812	J	42	2	S; 3ft, dia 1 1/2	---	---	G	PI	---	29	S	Gravel overlain by 102 ft blue soft clay; Ca. L.
7PI	G. Jewell	---	10-27-59 800	J	57	2	S; 3ft, 10 in 1, dia 1 1/2	52	5	G	PI	C	19	D, S	Yield 8 gpm; Ca. L.
10HI	C. Baker	---	1956 832	J	106	2	---	102	4	G	PI	C	45	D	Yield 12 gpm; L.
10NI	C. M. Pearson	---	7-18-50 800	J	86	2	S; 3ft, 12 in 1, dia 1 1/2	82	4	G, Sd	PI	C	4	D	Yield 10 gpm; L.
15DI	P. Whitesel	Rochester Well and Pump Co.	3-18-57 800	J	181	2	S; 3ft, 50g, dia 1 1/2	---	---	G	PI	---	28	D	Yield 8 gpm; Ca. L.
15FI	J. Vandivan	---	7-4-50 810	J	47	2	S; 3ft, 50g	---	---	G	PI	---	7	---	Yield 14 gpm; Ca. L.
15FI	H. A. Hessler	---	6-15-58 810	J	137	2	---	---	---	G	PI	---	8	D	Yield 12 gpm; L.
15FI	L. Pamoaban	---	6-13-56 810	J	131	2	---	---	---	G	PI	---	8	D	Yield 13 gpm; Ca. L.
15FI	H. E. Spohn	McGrew Well Drilling Co.	1956 800	J	75	2	---	71	4	G	PI	C	2	D	Iron medium gravel overlain by 71 ft blue soft clay.
15FI	Mrs. Gerrard	Rochester Well and Pump Co.	6-13-50 810	J	131	2	---	125	6	G, Sd	PI	C	7	D	Yield 13 gpm.
15JI	C. R. Burns	---	5-16-50 823	J	55	2	S; 2ft, 30 in 1, dia 1 1/2	---	---	G	PI	---	12	D	Yield 12 gpm; Ca. L.
15NI	W. H. Strauss	---	8-18-59 813	J	41	2	S; 3ft, 10 in 1, dia 1 1/2	29	12	Sd, G	PI	C	22	D	Yield 16 gpm; Ca. L.
16HI	W. Burns	---	2-28-50 805	J	232	2	S; 3ft, 10 in 1, dia 1 1/2	---	---	G	PI	---	14	D	Yield 13 gpm; Ca. L.
16HI	E. Shaffor	J. Henderson	7-10-59 805	J	32	---	S; 3ft, 10 in 1, dia 1 1/2	29	6	G, Sd	PI	C	9	D	L.
16HI	Mr. Robbins	---	7-21-59 805	J	23	---	S; 2 1/2 ft, 80g, dia 1 1/2	21	3	G, Sd	PI	C	8	D	L.
16HI	G. King	McGrew Well Drilling Co.	7-18-50 805	J	76	2	S; 3ft, 10 in 1, dia 1 1/2	73	3	G, Sd	PI	C	15	D	Yield 10 gpm; L.
16JI	Mr. Ehrhardt	Rochester Well and Pump Co.	7-1-52 800	Dr	46	4	S; 3ft, 25 in 1	---	---	G	PI	---	20	D	Ca.
18RI	D. Webster	---	3-2-56 800	J	46	2	S; 2 1/2 ft, 50g, dia 1 1/2	---	---	G, Sd	PI	---	2	D	Ca.
18RI	E. and C. Hontschler	---	9-27-57 800	J	91	2	S; 2 1/2 ft, 10 in 1, dia 1 1/2	78	13	Sd, G	PI	C	3	D	L.
21LI	E. Kuch	McGrew Well Drilling Co.	1956 810	J	110	2	S; 2 1/2 ft, 10 in 1, dia 1 1/2	---	---	Sd, G	PI	C	39	S	Yield 15 gpm; Ca.
22DI	J. A. Neillinger	Rochester Well and Pump Co.	6-7-54 798	J	57	2	S; 3ft, 80g	---	---	Sd, G	PI	C	5	D	J1/4
22DI	R. Miller	---	4-23-55 798	J	49	2	S; 3ft, 50g, dia 1 1/2	---	---	G	PI	---	1	D	J1/4
22FI	P. and F. Morr	---	4-9-53 810	J	39	2	S; 3ft, 10 in 1, dia 1 1/2	---	---	G	PI	---	12	D	---
22FI	Mr. Davis	---	4-18-57 810	J	113	2	S; 3ft, 50g, dia 1 1/2	88	25	Sd, G	PI	C	36	D	---
22FI	E. Baseler	C. W. Kendall	7-12-49 825	Dr	1,322	8	---	---	---	G	PI	---	3	D	---
27RI	O. Hartzler	Rochester Well and Pump Co.	2-4-54 815	J	57	2	S; 3ft, 10 in 1	54	3	G	PI	C	20	D, S	J1/3
30/1-1CI	C. L. Goyer	Fisher Bros. Well Drilling Co.	8-28-60 760	J	80	2 1/2	S; 3ft, 60g, dia 1 1/2	44	36	G, Sd	PI	C	15	D	---
2LI	F. C. Hudkins	Rochester Well and Pump Co.	10-10-58 772	J	111	2	S; 3ft, 50g, dia 1 1/2	---	---	Sd, G	PI	---	28	D, S	J1/3
5AI	C. Sessers	Fisher Bros. Well Drilling Co.	7-10-59 785	J	81	2 1/2	S; 3ft, 60g, dia 1 1/2	70	14	Sd, G	PI	C	34	D	L1/4
6CI	H. E. Moore	E. Brooker, Jr.	2-24-56 727	J	69	2	S; 3ft, 60g	56	13	Sd, G	PI	C	---	D	---
6GI	Mr. Sholby	---	---	J	---	2	---	---	---	Sd, G	PI	C	---	D	---
6GI	Mr. Lowe	E. Brooker	About 1925	J	81	2	---	---	---	G	PI	C	---	D	---
6HI	Mr. Newton	---	728	J	---	2	---	---	---	Sd, G	PI	C	---	D	---

Table 3.--Records of wells and test holes in Fulton 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				
30/1- 6B2	S. Pittenger	Fisher Bros. Well Drilling Co.	8-16-60	724	J	62	2 1/2		30	G, Sd	Pl	C	D		Flows; L.
6H2	K. Apploman	-----do-----	4-22-60	727	J	55	2 1/2			G	Pl	C	D		Flows; gravel overlain by 52 ft blue clay and sand. Yield 12 gpm; L.
6J1	R. Jones	J. Masters	7- 2-59	733	J	64	2	S; 3 1/2 ft, 10 in., dia 1 1/2	46	G, Sd	Pl	C	D		Flows; discharge measured 10 gpm, 9-18-57; water level measured 2.1 ft above land, 9-18-57; Ca.
6K1	H. C. Sutton	E. Brooker, Jr.	Spring 1854	727	J	62	2			G	Pl	C	D		Flows; sand and gravel overlain by 80 ft blue clay. Yield 14 gpm; sand and gravel overlain by 80 ft sand and clay. Flows; discharge measured 3 gpm, 9-18-57; water level measured 1 ft above land, 9-18-57; Ca.
6L1	F. Jahako	Fisher Bros. Well Drilling Co.	7- 9-60	733	J	66	2 1/2	S; 3 1/2 ft, p, dia 2 1/2	80	Sd, G	Pl	C	D		Flows; discharge measured 3 gpm, 9-18-57; water level measured 1 ft above land, 9-18-57; Ca.
6L2	G. Mitchell	-----do-----	7-31-59	730	J	65	2 1/2	S; 3 ft, 60g, dia 1 1/2		Sd, G	Pl	C	D		Flows; discharge measured 3 gpm, 9-18-57; water level measured 1 ft above land, 9-18-57; Ca.
6P1	Mr. Salathe	-----do-----	-----	730	J	-----	2	S; 3 ft, 60g, dia 1 1/2		Sd, G	Pl	C	D		Flows; discharge measured 3 gpm, 9-18-57; water level measured 1 ft above land, 9-18-57; Ca.
6P2	Clark's Park	Rochester Well and Pump Co.	4-12-60	730	J	62	2	S; 3 ft, 50g, dia 1 1/2	9	Sd, G	Pl	C	D, P		Flows; yield 17 gpm; L.
6R1	W. Gollner	-----do-----	8-18-57	728	J	72	2	S; 3 ft, 25s1		Sd	Pl	C	D		Yield 15 gpm; Ca, L.
9E1	F. Seich	Fisher Bros. Well Drilling Co.	7-12-60	762	J	88	2	S; 3 ft, 60g, dia 1 1/2	81	G, Sd	Pl	C	J1/2		Dis 2 1/2 ft after 2 hr pumping 40 gpm; L.
12P1	J. M. Hall	-----do-----	8-28-59	756	J	90	4 1/2	S; 5 ft, 20s1, dia 3		Sd, G	Pl	C	D, S		Dis 10 ft after 4 hr pumping 80 gpm; L.
14R1	R. Loebeke	-----do-----	9- 8-60	778	J	112	4 1/2	S; 7 ft, 18s1, dia 3 1/2		G, Sd	Pl	C	D, S		Observation well Fulton 6; water level measured 20.71 ft below land, 5-11-56; see log well 27F1.
27D1	Winnac Coll Spring Corp.	A. L. Cox and Son	-----	772	Dr	117	10			Sd, G	Pl	C	O		Dis 6 ft after 8 hr pumping 330 gpm; Ca, L.
27F1	Town of Kowanna	Layne-Northern Co., Inc.	7- 5-51	775	Dr	133	12	S; 10 ft	119	G, Sd	Pl	C	P	715	Yield 20 gpm.
34Q1	L. Maddox	Rochester Well and Pump Co.	4- 6-51	782	J	97	2	S; 2 ft, 30s1		G	Pl	C	P		Ca, L.
30/2- 1E1	O. McMahan	J. McDardod	7-14-59	763	J	38	2	S; 3 ft, 60g, dia 1 1/2	26	Sd	Pl	C	D, S		Yield 10 gpm; Ca.
30/2- 3D1	Birton Methodist Church	Rochester Well and Pump Co.	9-21-53	782	J	85	2	S; 3 ft, 10s1		G	Pl	C	P		Yield 10 gpm; Ca.
4K1	W. Koneall	-----do-----	10- 8-59	757	J	56	2	S; 3 ft, 50g, dia 1 1/2		G	Pl	C	D, S		Yield 14 gpm.
4L1	L. Conover	-----do-----	5-26-55	760	J	62	2	S; 3 ft, 50g		G	Pl	C	D, S		Yield 13 gpm.
4N1	J. Eraman	-----do-----	7-11-56	752	J	51	2	S; 3 ft, 25s1		Sd	Pl	C	L1/4		Yield 15 gpm; Ca, L.
6A1	H. J. Darnell	-----do-----	11-18-52	750	J	74	2	S; 3 ft, 25s1		G	Pl	C	L		Ca.
6A2	R. Wilson	-----do-----	10-18-53	770	J	38	2	S; 3 ft, 50g		Sd	Pl	C	L		Yield 11 gpm; Ca, L.
12G1	W. W. Friedrich	-----do-----	8-13-56	770	J	48	2	S; 3 ft, 60g		G	Pl	C	L		Yield 13 gpm; Ca.
12J1	G. Moody	-----do-----	9- 4-51	777	J	46	2	S; 3 ft, 40g, dia 1 1/2	27	Sd, G	Pl	C	L		Yield 16 gpm; Ca, L.
17C1	J. O. Wells	-----do-----	11- 2-58	777	J	46	2	S; 3 ft, 41g, 1 1/2	46	G	Pl	C	L		Yield 13 gpm.
17J1	F. S. Rumley	-----do-----	9- 1-50	751	J	47	2	S; 3 ft, 60g	34	Sd, G	Pl	C	L		Yield 15 gpm; Ca, L.
18C1	F. S. Rumley	Fisher Bros. Well Drilling Co.	8-29-53	751	J	47	2	-----do-----	32	Sd, G	Pl	C	D, S	J1	Yield 30 gpm sand and gravel overlain by 186 ft blue sticky clay and 29 ft rod sand and clay; Ca.
18N1	J. McKinney	-----do-----	2-37	772	Dr	185	4	On		Sd, G	Pl	C	D, S	J1	Ca.
19E1	H. Johnston	Rochester Well and Pump Co.	1-21-54	767	J	58	2	S; 3 ft, dia 1 1/2		G	Pl	C	D, S	J1/4	Ca.
20C1	G. Wilson	-----do-----	5-26-56	755	J	50	2	S; 3 ft, 50g, dia 1 1/2	10	Sd, G	Pl	U	D, S	J	Yield 13 gpm; Ca, L.
23C1	R. Wagner	-----do-----	5-12-52	783	J	50	2	S; 3 ft		G	Pl	C	D, S	J1/2	Ca.
24R1	C. Neff	Fisher Bros. Well Drilling Co.	8-20-59	777	J	43	2 1/2	S; 3 ft, 60g, dia 1 1/2		G	Pl	C	D		Ca, L.
25H1	G. Carlson	Rochester Well and Pump Co.	4-25-56	781	J	39	2	S; 3 ft, 50g, dia 1 1/2	24	Sd, G	Pl	C	D	J1/4	Yield 12 gpm; L.

Table 3.--Records of wells and test holes in Pulmon 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				Use	Type of pump and horsepower	Remarks	
									Thickness (feet)	Character	Geologic age	Conditions of occurrence				
30/A-6J2	X. MacFarland	Rochester Well and Pump Co.	8-10-59	783	J	43	2	8; 3ft, 50g, dia 1 1/2	33	10	G, Sd	Pl	C	14	P	Yield 16 gpm; Ca, L.
8M1	A. K. Smith	-----do-----	8-3-52	795	J	55	2	3; 3ft, 18sl	---	---	G	Pl	---	14	D	Yield 13 gpm; Ca.
8M2	Borghoff Cafe	-----do-----	8-25-50	797	J	61	2	3; 3ft, dia 1 1/2	---	---	G	Pl	---	13	Ac	Yield 14 gpm; Ca.
8M3	R. Flynn	-----do-----	3-1-57	793	J	40	2	3; 3ft, 80g, dia 1 1/2	---	---	Sd, G	Pl	U	18	P	Yield 12 gpm.
9K1	City of Rochester	-----do-----	---	777	Dr	28	1 1/2	---	---	---	Sd, G	Pl	U	---	O	Observation well Fulton 3; water level measured 10.24 ft below land, 10-17-55.
9K2	U. S. Government	Rochester Well and Pump Co.	6-16-53	778	Dr	66	4	3; 3ft, 25sl	8	58	Sd, G	Pl	U	8	---	Yield 60 gpm; for fish hatchery; sand and gravel from 0-86 ft.
9K3	Rosalor Drug Store	-----do-----	5-5-54	778	J	62	2	3; 3ft	8	54	Sd, G	Pl	U	8	Ac	Yield 12 gpm; sand and gravel from 0-52 ft.
9H1	M. Feoco	-----do-----	8-21-51	784	J	56	2	3; 2ft, 30sl	---	---	G	Pl	---	---	---	Yield 5 gpm.
9J1	Schroer Root Beer Stand	-----do-----	5-3-54	783	J	42	2	3; 3ft	---	---	G	Pl	---	10	P	Yield 12 gpm.
9J2	D. Kneadlich	-----do-----	9-21-56	787	J	43	2	3; 3ft, 60g	12	31	Sd, G	Pl	U	12	D	Yield 12 gpm; Ca, L.
9J3	M. Bordinburg	McGraw Well Drilling Co.	1957	785	Dr	39	1 1/2	3; 3ft, 10sl, dia 1 1/2	6	33	G, Sd	Pl	U	6	---	Yield 12 gpm; sand and gravel from 0-39 ft.
9J4	D. Harvey	Rochester Well and Pump Co.	7-11-57	784	J	42	2	3; 3ft, 40g, dia 1 1/2	---	---	G	Pl	---	7	D	Yield 15 gpm.
9K1	A. Sherbondy	-----do-----	8-16-52	782	J	64	2	3; 3ft, dia 1 1/2	---	---	G	Pl	---	6	D	Yield 17 gpm; L.
9K2	O. Rockwell	-----do-----	8-12-52	782	J	60	2	---	---	---	G	Pl	---	5	D	Yield 15 gpm; pea-sized gravel overlain by 53 ft sand and gravel.
9K3	W. Howe	-----do-----	8-23-56	785	J	87	2	3; 4ft	10	57	Sd	Pl	U	10	D	Yield 14 gpm; L.
9K4	W. P. Sindlinger	-----do-----	8-4-59	782	J	56	2	3; 3ft, 60g, dia 1 1/2	6	50	Sd, G	Pl	U	6	L	Yield 30 gpm; sand and gravel from 0-61 ft.
9K5	J. Barnett	-----do-----	7-30-59	786	J	67	2	---	9	58	Sd, G	Pl	U	9	Dr	Sand and gravel from 0-61 ft; Ca.
9K6	W. Billman	-----do-----	10-2-57	782	J	61	2	3; 3ft, 50g, dia 1 1/2	7	54	Sd, G	Pl	U	7	L	Yield 15 gpm; L.
9Q1	Mr. Amort	-----do-----	8-16-54	782	J	61	2	3; 3ft, 12sl	---	---	Sd, G	Pl	---	---	---	Yield 12 gpm; sand and gravel from 0-80 ft.
9Q2	L. Hishling	-----do-----	12-13-54	782	J	61	2	3; 3ft, 30g	4	57	Sd, G	Pl	---	---	---	Yield 50 gpm; Ca.
9Q3	H. Halbert	-----do-----	12-4-56	783	J	61	2	3; 3ft, dia 1	12	48	Sd, G	Pl	U	12	D	Yield 13 gpm; sand and gravel from 0-80 ft.
9R1	Dr. Mitchell	-----do-----	6-23-56	785	J	60	2	3; 3ft, 50g, dia 1 1/2	---	---	G	Pl	---	4	D	Yield 13 gpm; sand and gravel overlain by 35 ft soil and sand.
9R2	R. O. Cooper	-----do-----	5-10-57	780	J	42	2	3; 3ft, 25sl	5	33	Sd, G	Pl	U	5	D	Yield 10 gpm; L.
10K1	Airport Grocery	-----do-----	4-28-54	789	J	42	2	3; 3ft, 25sl	---	---	G	Pl	---	10	P	Yield 15 gpm; Ca, L.
10E2	Mrs. Hasting	-----do-----	9-11-56	786	J	38	2	3; 3ft, 60g	---	---	Sd, G	Pl	---	---	---	Yield 15 gpm; Ca, L.
10F1	H. Banneshagen	-----do-----	3-10-56	782	J	103	2	3; 3ft, 50g, dia 1 1/2	---	---	Sd, G	Pl	---	10	D	Yield 18 gpm; Ca, L.
10F2	C. Dalton	-----do-----	5-14-56	785	J	77	2	---	---	---	Sd, G	Pl	---	7	D	Yield 13 gpm; Ca, L.
10G1	L. McGon	-----do-----	6-22-54	792	J	43	2	---	---	---	Sd, G	Pl	---	15	D	Yield 18 gpm; Ca, L.
10J1	R. Miller	-----do-----	8-25-50	787	J	40	2	---	29	11	Sd, G	Pl	C	10	D	Yield 13 gpm; Ca, L.
10J2	C. Alstrom	-----do-----	3-30-56	780	J	39	4	3; 2ft, 50g, dia 1 1/2	12	27	Sd, G	Pl	U	12	D	Yield 60 gpm.
10K1	R. Moore	-----do-----	6-18-50	780	J	44	4	3; 25sl	---	---	G	Pl	---	12	D	Yield 10 gpm.
10K2	J. E. Fyfe	-----do-----	6-2-50	785	J	36	2	---	---	---	G	Pl	---	---	---	Yield 10 gpm; Ca, L.
10K3	H. Rosington	-----do-----	3-20-53	785	J	37	2	3; 3ft	---	---	G	Pl	---	16	D	Yield 15 gpm.
10K4	D. Righttengor	-----do-----	11-7-55	790	J	72	2	3; 3ft, 50g, dia 1 1/2	---	---	G	Pl	---	---	---	Yield 13 gpm; originally drilled to 51 ft; deepened 3-29-56; water level 12 ft below land, 3-29-56; L.
10M5	V. Smith	-----do-----	8-17-52	785	J	39	2	---	---	---	G	Pl	---	12	D	Yield 13 gpm; sand and gravel from 0-80 ft.
10L1	A. Gray	-----do-----	9-6-48	784	J	78	2	3; 3ft, 60g, dia 1 1/2	---	---	G	Pl	---	15	J	Yield 13 gpm; gravel overlain by 38 ft fine sand.
10L2	L. Babcock	-----do-----	1955	787	J	62	2	3; 3ft, dia 1	45	17	Sd, G	Pl	C	---	---	Yield 12 gpm; sand and gravel from 0-80 ft.
10L3	-----do-----	Rochester Well and Pump Co.	3-12-56	787	J	42	2	3	10	32	Sd, G	Pl	U	10	D	Yield 13 gpm; gravel overlain by 38 ft fine sand.
10M1	Mr. Griffon	-----do-----	7-11-54	785	J	60	2	3; 3ft, 50g, dia 1 1/2	13	67	Sd, G	Pl	U	13	P	Yield 12 gpm; sand and gravel from 0-80 ft.
10M2	R. C. Brown	-----do-----	12-7-56	780	J	41	2	3; 2ft, 18sl	6	36	Sd, G	Pl	U	0	D	Yield 13 gpm; gravel overlain by 38 ft top soil and sand.

30/3-10M3	Trustees, H. E. Miller Estate	4-18-37	780	J	42	2	3; 3ft, 50g, dia 1 1/2	9	Sd	Pl	U	10	D	J	Yield 14 gpm; Ca.
10M4	W. Bailey	6-20-58	780	J	61	2	S; 3ft, 80g	9	Sd,G	Pl	U	9	D	J	Yield 13 gpm; Ca, L.
10M5	P. Wollman	4-8-57	780	J	40	2	S; 3ft, 50g, dia 1 1/2	6	G	Pl	U	6	D	L	Yield 15 gpm.
10M6	-----	4-8-57	780	J	43	2	-----	6	Sd,G	Pl	U	6	D	J	Gravel overlain by red and gray sand.
10M7	C. Milton	12-13-54	785	J	39	2	S; 3ft, 180l	6	Sd,G	Pl	U	6	D	-----	Yield 16 gpm; Ca, L.
10M8	J. Nowell	8-3-59	783	J	43	2	S; 3ft, 50g, dia 1 1/2	8	Sd,G	Pl	U	8	D	LI/A	Yield 17 gpm; coarse gravel overlain by 53 ft top soil and sand; Ca.
12N1	R. Worner	9-19-57	793	J	37	2	-----	11	Sd,G	Pl	U	11	D	LI/A	Yield 13 gpm.
13D1	H. Moore	2-28-53	792	J	82	2	S; 250l dia 1 1/2	55	G	Pl	-----	10	S	LI/A	Ca.
13D2	-----	9-8-53	792	J	80	2	S; 3ft, 120l	55	Sd	Pl	-----	12	D	JL/A	Ca.
14E1	Mr. Stophos	9-15-54	790	J	85	2	S; 3ft, 120l	47	Sd	Pl	-----	5	D	JL/A	Ca.
15A1	H. C. Poreival	9-21-57	790	J	51	2	S; 3ft, 50g, dia 1 1/2	47	Sd	Pl	-----	5	D	JL/A	Ca.
15B1	Mr. Batts	4-17-54	790	J	73	2	S; 3ft	6	Sd,G	Pl	-----	6	D	LI/A	Sand from 0-55 ft.
15E2	K. Keadig	12-3-55	780	J	55	2	S; 2 1/2ft, 60g, dia 1 1/2	6	Sd	Pl	-----	6	D	LI/A	Yield 30 gpm; L.
15E3	W. Moeller	10-30-58	780	J	56	2	S; 4ft, 90g	-----	Sd,G	Pl	-----	10	D	J	Yield 14 gpm; L.
15E4	R. Blue	11-2-56	780	J	58	2	S; 2 1/2ft, 100l	-----	Sd,G	Pl	-----	10	D	J	Yield 10 gpm; Ca, L.
15E5	C. W. Shaffer	7-17-59	780	J	55	2	S; 2 1/2ft, 100l, dia 1 1/2	-----	Sd,G	Pl	-----	10	D	J	Yield 10 gpm; Ca, L.
15F1	Mr. Muller	3-16-54	787	J	67	2	S; 3ft, 100l	-----	Sd,G	Pl	-----	9	Jr	-----	Yield 15 gpm.
15F2	C. D. Kessley	5-1-56	785	J	41	2	S; 2ft, 120l	6	Sd,G	Pl	-----	6	D	JL/A	Yield 11 gpm; gravel overlain by 28 ft sand.
15F3	R. Clow	6-4-58	783	J	74	2	S; 3ft, 180l	-----	Sd,G	Pl	-----	8	D	LI/A	Yield 15 gpm; L.
15F4	Mrs. A. Huddleston	11-18-58	784	J	71	2	S; 3ft, 180l	-----	Sd,G	Pl	-----	8	D	LI/A	Yield 13 gpm; L.
15F5	N. Gorban	7-30-56	784	J	70	2	S; 3ft, 80g, dia 1 1/2	-----	Sd,G	Pl	-----	8	D	LI/A	Yield 17 gpm; L.
15G1	C. Keadigbaum	9-1-53	792	J	50	2	S; 3ft, dia 1 1/2	-----	G, Sd	Pl	-----	10	D	LI/A	Yield 13 gpm.
15G2	D. Ziesman	6-16-55	790	J	56	2	S; 3ft, 50g, dia 1 1/2	-----	G, Sd	Pl	-----	10	D	LI/A	Ca.
15H1	J. Tippy	3-17-51	790	J	42	2	S; 3ft	4	Sd,G	Pl	-----	10	D	LI/A	Ca.
15H2	Loyal Order of Moose	8-28-48	778	Dr	64	4	S; 10ft	4	Sd,G	Pl	-----	9	D	LI/A	Ca.
15H3	O. E. Henderson	6-2-55	782	J	63	2	S; 3ft, 50g, dia 1 1/2	-----	Sd,G	Pl	-----	9	D	JL	Yield 17 gpm.
16F1	K. Zartman	1957	814	J	70	2	-----	39	G, Sd	Pl	-----	39	D	-----	Drain sandy gravel overlain by 35 ft blue clay.
16F2	F. K. Jones	11-17-58	820	J	102	2	S; 3ft, 50g, dia 1 1/2	-----	Sd,G	Pl	-----	50	D,S	J	Yield 15 gpm; L.
16F3	R. Hopper	7-6-59	805	J	62	2	S; 3ft, 50g, dia 1 1/2	51	Sd,G	Pl	-----	36	D	-----	Yield 15 gpm; L.
16F4	E. P. Bouvier	7-7-59	810	J	60	2	S; 2 1/2ft, 50g, dia 1 1/2	43	Sd,G	Pl	-----	43	D	-----	Yield 16 gpm; same log well 16M1.
16H1	L. Callivan	9-28-57	800	J	50	2	S; 3ft, 50g, dia 1 1/2	24	G, Sd	Pl	-----	24	D	-----	Yield 13 gpm; sand and gravel from 0-55 ft.
16H2	K. R. Goodman	6-3-55	788	J	55	2	S; 2 1/2ft, 50g, dia 1 1/2	4	Sd,G	Pl	-----	4	D	JL/A	-----
16H3	W. K. Simpson	9-6-55	787	J	55	2	S; 3ft, 50g, dia 1 1/2	48	Sd,G	Pl	-----	16	D	JL/A	Yield 14 gpm; L.
16H4	D. Davis	6-18-58	778	J	68	2	S; 3ft, 80g	-----	Sd,G	Pl	-----	6	D	J	Yield 12 gpm; L.
16H5	L. Miller	10-20-56	778	J	62	2	-----	-----	G	Pl	-----	6	D	-----	-----
16H6	O. J. Bargar	1957	787	J	52	2	S; 3ft, 100l, dia 1 1/2	-----	Sd,G	Pl	-----	6	D	-----	Coarse gravel overlain by 54 ft sand; Ca.
16H7	E. W. Seo	10-10-56	778	J	58	2	S; 3ft, 60g, dia 1 1/2	0	Sd,G	Pl	-----	6	D	J	-----
16H8	W. Morris	8-18-57	872	J	135	2	S; 2 1/2ft	100	G	Pl	-----	100	D	J2	Yield 12 gpm; Ca, L.
16M1	J. Vrana	10-17-56	808	J	59	2	S; 2 1/2ft, 50g, dia 1 1/2	40	Sd	Pl	-----	40	D	JL/2	Yield 12 gpm; Ca, L.
17A1	R. McGriff	9-30-52	802	J	46	2	S; 3ft, 100l	-----	G	Pl	-----	30	D	-----	-----
17B1	K. Castleman	1949	787	J	48	2	S; 3ft, 60g	-----	Sd	Pl	-----	25	D	JL/2	-----
17C1	A. Oldfather	10-22-57	787	J	43	2	S; 2ft, 50l	12	Sd	Pl	-----	12	D	-----	Yield 12 gpm; Ca, L.
17H1	A. Weaver, Jr.	9-22-53	803	J	57	2	S; 3ft, 100l	-----	Sd	Pl	-----	40	B	JL/2	Yield 12 gpm.
17K1	R. Smalley	5-4-50	807	J	64	2	S; 3ft, 100l	-----	Sd	Pl	-----	27	D	JL/2	Yield 10 gpm.
17K2	-----	9-20-56	808	J	49	2	S; 3ft, 60g, dia 1 1/2	-----	G	Pl	-----	34	D	JL/2	-----
17P1	C. Richardson	8-15-51	802	J	40	2	S; 250l	-----	G	Pl	-----	13	D	-----	Yield 13 gpm.
17P2	-----	9-11-51	802	J	82	2	S; 100l	-----	G	Pl	-----	30	D	-----	Yield 12 gpm.
18B1	C. Black	10-15-51	783	J	47	2	-----	-----	G	Pl	-----	33	N	-----	-----
18H1	H. Slanason	3-13-55	793	J	38	2	S; 2 1/2ft, 500l, dia 1 1/2	-----	G	Pl	-----	33	N	-----	-----
20E1	O. McMahon	7-28-58	796	J	34	2	S; 3ft, 100l, dia 1 1/2	21	G	Pl	-----	15	S	J	Yield 20 gpm; Ca, L.
21F1	L. Seick	6-2-60	810	J	37	2	S; 2 1/2ft, 100l, dia 1 1/2	-----	Sd,G	Pl	-----	15	S	J	Yield 10 gpm; Ca, L.
21L1	H. Carruthers	3-28-51	811	J	38	2	S; 3ft, 60g, dia 1 1/2	-----	G	Pl	-----	18	D	-----	Ca.
23E1	B. Burton	4-11-55	767	Dr	140	4	S; 3ft, 300l	7	Sd,G	Pl	-----	7	D	SL-1/2	Sand and gravel from 0-140 ft; blue clay at 149 ft; Ca. Oil test; bedrock at 248(?) ft.
24H1	T. Robers	11-1-49	832	Dr	1,283	8	-----	-----	-----	-----	-----	-----	-----	-----	-----
25J1	G. B. Van Buren	3-13-56	780	J	61	2	S; 3ft	-----	0, Sd	-----	-----	-----	-----	-----	-----

Table 3.---Records of wells and test holes in Fulton 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			Geologic age	Character	Conditions of occurrence	Water level (feet)	Use	Type of pump and horsepower	Remarks
									Depth to top (feet)	Thickness (feet)	Water-bearing zone							
30/3-26M1	H. Taylor	Rochester Well and Pump Co.	10-20-55	808	J	44	2	3; 3ft, dia 1 1/2	41	3	G	Pl	C	22	D, S	L1/4	Gravel overlain by 41 ft yellow clay; Ca. Sand gravel overlain by 70 ft blue clay; Ca. Yield 8 gpm; Ca.	
26N1	Mr. Amkerstrand	-----do-----	8-28-55	823	J	83	2	9; 2 1/2ft, 10in1	70	13	Sd, G	P2	C	33	D	L	Yield 8 gpm; Ca.	
27J1	C. C. Waggoner	-----do-----	9-19-51	832	J	103	2	9; 2ft, 30in1	---	---	G	Pl	---	---	D	J1	Ca. Gravel overlain by clay; Ca. Yield 15 gpm; L.	
27M1	M. C. Severna	-----do-----	8-29-52	828	J	88	2	9; 3ft, 50g, dia 1 1/2	---	---	G	Pl	---	---	D	L1/4	Yield 16 gpm; Ca, L.	
28N1	L. Washburn	-----do-----	10-28-55	812	J	43	2	9; 3ft, 50g, dia 1 1/2	61	15	Sd, G	P2	C	18	D	L1/4	Yield 16 gpm; Ca, L.	
28P1	D. Felto	-----do-----	11-7-59	810	J	78	2	-----do-----	---	---	G	Pl	---	---	D	J1/2	Yield 16 gpm; Ca, L.	
30P1	M. Reed	-----do-----	1-19-54	792	J	85	2	3; 3ft, dia 1 1/2	---	---	Sd, G	P1	C	18	D, S	J	Yield 10 gpm; originally drilled to 62 ft; blue and yellow gravel from 62-72 ft; record missing from 0-62 ft; Ca, L.	
30M1	J. Brown	-----do-----	9-1-59	795	J	78	2	3; 3ft, 50g, dia 1 1/2	---	---	Sd, G	P1	C	22	---	J	Yield 70 gpm; Ca.	
31G1	S. H. Brower	-----do-----	803	J	50	2	8; 3ft, 60g, dia 1 1/2	---	---	---	Sd, G	P1	---	---	---	---	---	
32B1	H. Lown	Rochester Well and Pump Co.	4-2-57	817	D ^r	82	4	8; 20in1, dia 3 1/2	---	---	G	Pl	---	---	---	---	---	
33Q1	B. Koja	-----do-----	9-14-54	832	J	83	2	5; 3ft, 12in1	---	---	G	Pl	---	---	D, S	J1/4	Yield 13 gpm; Ca.	
34C1	I. Baker	-----do-----	11-21-58	832	J	76	4	9; 4ft, 25in1, dia 3 1/2	---	---	Sd, G	P1	C	30	S	J	Yield 60 gpm; Ca, L.	
34J1	G. O. McMillen	-----do-----	2-16-40	835	J	---	2	2; 3 1/2ft, 10in1	---	---	G	Pl	---	---	---	---	---	
34M1	H. Sampson	-----do-----	8-3-54	817	J	70	2	5; 3ft, 12in1	---	---	G	Pl	---	---	---	J1/3	---	
34W2	C. Sampson	-----do-----	4-23-58	835	J	72	2	5; 3ft, 50g, dia 1 1/2	---	---	G	Pl	---	---	---	---	---	
34N1	R. Cook	McGraw Well Drilling Co.	7-56	830	J	50	2	-----do-----	35	15	Sd, G	P1	U	35	D	J1/2	Yield 10 gpm; originally drilled to 62 ft; blue and yellow gravel from 62-72 ft; record missing from 0-62 ft; Ca, L.	
34Q1	Mr. Erubaker	Rochester Well and Pump Co.	4-27-50	840	J	68	2	9; 10in1	---	---	Sd	P1	---	---	---	---	---	
35A1	D. Shewley	McGraw Well Drilling Co.	1856	822	J	75	2	9; 3ft, 10in1, dia 1 1/2	35	40	G, Sd	P1	---	---	S	---	---	
35D1	Mr. Davidson	Rochester Well and Pump Co.	10-20-49	832	J	58	2	9; 3ft, 60g	---	---	G	P1	---	---	D	---	---	
35J1	N. Meiser	-----do-----	11-13-58	825	J	97	2	9; 3ft, 10in1	---	---	G	P1	C	40	S	L	Yield 10 gpm; Ca, L.	
35Q1	A. Powell	McGraw Well Drilling Co.	10-1-58	832	J	75	2	3; 2 1/2ft, 10in1, dia 1 1/2	---	---	G	P1	C	43	D, S	J1/3	Yield 10 gpm; Ca, L.	
35R1	R. L. Ogile	-----do-----	9-28-59	840	J	75	2	8; 3ft, 10in1, dia 1 1/2	---	---	G	P1	C	45	D, S	---	Yield 5 gpm; see log well 35Q; Ca.	
36L1	M. Bouch	-----do-----	10-5-54	830	J	68	2	3; 3ft	---	---	Sd	P1	---	---	J1/4	---	---	
36/4-1A1	F. Bosen	H. Sauer and Sons	5-2-60	898	J	48	2	9; 3 1/2ft, 12in1, dia 1 1/2	33	15	G	P1	C	32	D, S	---	Yield 20 gpm; Ca, L.	
1A1	-----do-----	-----do-----	7-3-51	804	J	28	---	8; 3ft	24	4	G	P1	C	20	---	---	Yield 11 gpm; gravel overlain by 24 ft yellow clay.	
2N1	H. Funnell	-----do-----	4-15-60	855	J	83	2	3; 3 1/2ft, 12in1, dia 1 1/2	---	---	G	P1	---	---	D, S	J	Yield 15 gpm; Ca, L.	
4D1	W. Safford	Rochester Well and Pump Co.	11-24-54	820	J	73	2	3; 3ft, 12in1	70	J	G	P1	C	16	D, S	L1/4	---	
5E1	D. Peterson	-----do-----	11-21-56	815	J	80	2	9; 2ft, 18in1	43	37	Sd, G	P1	C	30	D, S	J	Yield 15 gpm; Ca, L.	
5H1	R. Bacon	H. Sauer and Sons	11-9-52	812	J	43	2	9; 3ft, 12in1	40	3	G	P1	C	18	S	C	Yield 17 gpm; Ca, L.	
5K1	M. Blumenthal	Rochester Well and Pump Co.	5-22-57	816	J	61	4	9; 4ft, 25in1, dia 4	---	---	G	P1	---	---	S	---	Yield 20 gpm; Ca.	
7C1	J. Burns	P. Cox	8-18-60	797	J	40	2	3; 3 1/2ft, 12in1, dia 1 1/2	---	---	G	P1	C	11	D, S	---	Yield 15 gpm; Ca, L.	
7F1	O. Miller	Rochester Well and Pump Co.	3-28-51	809	J	45	2	3; 3ft, 60g, dia 1 1/2	---	---	Sd	P1	---	---	D	---	Ca.	
7N1	H. Maddux	-----do-----	6-19-58	809	J	53	2	3; 3ft, dia 1 1/2	25	28	Sd	P1	---	D	J	Yield 13 gpm; L.		
7R1	A. Striver	-----do-----	3-2-55	808	J	42	2	-----do-----	10	32	G, Sd	P1	U	11	D	P	Yield 13 gpm; Gravel overlain by sand.	
7P1	C. H. Meredith	-----do-----	8-11-49	807	J	33	2	8; 60g	---	---	G	P1	---	D	P	---	Ca.	
7F2	Oliver Farm Machinery Co.	-----do-----	11-10-49	808	J	43	2	3	---	---	G	P1	---	12	P	J1/4	---	
7P3	R. Bowers	-----do-----	2-1-55	803	J	38	2	9; 2 1/2ft, 50g, dia 1 1/2	12	24	Sd, G	P1	U	12	D	---	Yield 13 gpm; Gravel overlain by sand.	

30/4-11M	Trustees, Strick Estate	H. Sauer and Sons	10-3-49	839	J	44	2	S; 3ft, 12in, dia 1 1/2	39	5	G	Pl	C	16	S	L	Yield 15 gpm; Ca, L.
11N1	H. Page	do	8-12-52	833	J	46	2	S; 3ft, 12in	43	2	Sd	Pl	C	18	D	J	Yield 17 gpm; sand overlain by 4 1/2 ft yellow and blue clay.
13L1	E. Terrall	do	12-27-55	857	J	55	2	S; 3ft, 10in	52	13	G	Pl	C	24	D,S	J1/4	Yield 17 gpm; Ca, L.
13U1	C. Uctor	do	10-26-52	850	J	66	2	S; 3ft, 12in	82	4	Sd,G	Pl	C	20	D	J1/3	Yield 15 gpm; Ca, L.
17E1	E. Koster	Rochester Well and Pump Co.	3-1-54	816	J	44	2	S; 4ft	30	14	Sd,G	Pl	C	15	D	J1/3	Yield 12 gpm; sand and fine gravel overlain by 30 ft hard clay; Ca.
17Q1	W. Zimmerman	do	8-3-57	812	J	40	2	S; 3ft, 50g, dia 1 1/2	---	---	G	Pl	---	5	S	P	Yield 12 gpm; Ca.
18C1	American United Episcopalian Church	do	808	808	Do	30	1 1/2	S; 60g	---	---	Sd	Pl	---	---	P	---	---
19C1	F. W. Bosore	Rochester Well and Pump Co.	4-22-60	810	J	27	2	S; 3ft, 50g, dia 1 1/2	15	12	Sd	Pl	C	10	D	---	Yield 16 gpm; Ca, L.
23C1	R. Riley	Rochester Well and Pump Co.	7-12-60	827	J	26	2	S; 3ft, 10in, dia 1 1/2	---	---	G	Pl	---	15	D,S	---	Yield 15 gpm; Ca, L.
23D1	Mr. Kuzgalaki	do	10-11-54	837	Do	35	1 1/2	S	---	---	Sd	Pl	---	16	D	J	---
23D1	Mr. McBroom	Rochester Well and Pump Co.	7-9-52	832	J	38	2	S; 3ft	38	3	G	Pl	C	12	D	---	Yield 17 gpm; Ca, L.
24D1	H. Hartman	do	4-4-55	840	J	38	2	S; 3ft, 10in	34	4	G	Pl	C	12	D	---	Yield 15 gpm; L.
24G1	Town of Akron	do	1944	849	Dr	70	8	S; 13ft, 80in	---	---	G	Pl	---	23	P	T15	Do 16 ft pumping 240 gpm.
24G2	do	do	1944	849	Dr	70	8	S	---	---	G	Pl	---	23	P	T15	Yield 15 gpm; Ca, L.
24H1	T. Robinson	H. Sauer and Sons	10-11-58	862	J	52	2	S; 3ft, 12in, dia 1 1/2	47	6	G	Pl	C	17	D	J1/3	Sand and gravel overlain by 45 ft gravel, mud, and top soil.
24J1	D. A. Pike Lumber Co.	Stremmel and Hill	7-8-40	868	Dr	92	4	S	---	---	Sd,G	Pl	---	35	N	---	Yield 15 gpm; Ca.
24K1	E. Hoffman	H. Sauer and Sons	4-11-57	852	J	42	2	S; 2ft, 10in, dia 1 1/2	---	---	G	Pl	---	19	D	L	Yield 15 gpm; Gravel overlain by 36 ft clay; Ca.
24L1	F. Waigenath	do	1951	850	J	39	2	---	36	3	G	Pl	C	3	D	---	Yield 20 gpm; Gravel overlain by 54 ft yellow and blue clay with some stones; Ca.
25F1	A. A. Gast	do	1-18-52	852	J	57	2	S; 3ft	54	3	G	Pl	C	18	D	---	Yield 14 gpm; L.
25M1	W. K. Gast	do	1951	830	J	23	2	---	20	3	G,Sd	Pl	C	4	S	P	Yield 13 gpm; Ca, L.
26H1	O. Sawman	Rochester Well and Pump Co.	4-6-54	855	J	165	2	S; 3ft, 10in	161	4	G	Pl	C	35	D,S	J1/2	Yield 17 gpm; originally drilled to 74 ft; Ca, L.
26Q1	A. C. Hammerl	H. Sauer and Sons	1951	852	J	114	2	S; 3ft	---	---	G,Sd	Pl	C	3	D	---	Yield 12 gpm; gravel overlain by clay.
26K1	G. Bowen	Rochester Well and Pump Co.	1-26-54	860	J	49	2	S; 3ft	---	---	Sd	Pl	---	28	N	---	Yield 70 gpm; Ca, L.
30B1	R. Masteller	do	8-9-55	830	J	112	2	S; 3ft	---	---	G	Pl	C	16	S	---	Yield 15 gpm; Ca, L.
32D1	E. Runkle	do	9-10-55	825	J	120	4	S; 4ft, 20in	90	30	Sd,G	Pl	C	18	D	J1	Yield 55 gpm; Ca, L.
32E1	F. DeLusk	do	1-28-57	827	J	57	2	S; 3ft, 50g	53	4	G	Pl	C	30	D,S	J	Yield 15 gpm; Ca, L.
34E1	D. Stinson	do	1-28-56	847	Dr	64	4	S; 2ft, 10in	54	10	Sd	Pl	C	25	D,S	S1	Yield 15 gpm; Ca, L.
35G1	E. Artor	do	3-3-60	885	J	106	2	S; 3ft, 10in, dia 1 1/2	91	15	G,Sd	Pl	C	40	D,S	---	Yield 15 gpm; Ca, L.
36H1	E. L. Opplo	H. Sauer and Sons	5-3-57	860	J	58	2	S; 3ft, 10in, dia 1 1/2	---	---	G	Pl	---	50	S	L	Yield 12 gpm.
36J1	M. Clark	Rochester Well and Pump Co.	8-29-57	885	J	188	2	S; 3ft, 50g, dia 1 1/2	137	48	Sd,G	Pl	C	70	D,S	J3/4	Yield 12 gpm; Ca, L.
30/5-20M1	R. Harlan	H. Sauer and Sons	7-55	873	J	54	2	S; 3ft, 10in	43	11	G	Pl	U	43	D	J	Yield 15 gpm; Ca, L.
21C1	E. Doone	do	7-24-52	862	Do	26	1 1/2	S; 3ft, 12in	19	7	G	Pl	U	19	N	---	Yield 12 gpm; gravel overlain by 5 ft clay and sand.
21F1	B. Shirogan	do	1951	869	J	95	2	S; 3ft, 12in	92	3	G	Pl	C	43	D	---	Yield 15 gpm; Ca, L.
27R1	C. Gearhart	do	8-5-55	855	J	42	2	S; 3ft, 12in	---	---	G	Pl	---	36	N	---	Yield 14 gpm.
27R2	do	do	4-1-57	852	J	43	2	S; 2ft, 25in	---	---	G	Pl	---	22	D	J	Yield 17 gpm; Ca.
28G1	E. Bamorlin	Rochester Well and Pump Co.	3-57	892	J	84	3	S; 4ft, 12in	---	---	G	Pl	---	80	D,S	J1-1/2	Yield 40 gpm.
28K1	A. Bamorlin	Rochester Well and Pump Co.	11-15-51	908	J	92	2	S; 3ft, 25in	73	19	G,Sd	Pl	U	73	D	---	Yield 15 gpm; gravel with some sand from 36-92 ft; Ca.
28N1	J. Kraft	H. Sauer and Sons	5-18-60	872	J	46	2	S; 3ft, 12in, dia 1 1/2	---	---	G	Pl	---	---	D,S	---	Yield 15 gpm; L.
30P1	J. Millor	do	3-11-60	878	J	96	2	S; 6ft, 60g, dia 1 1/2	90	6	G	Pl	C	40	D,S	Do	Yield 13 gpm; Ca, L.
31/1-1R1	W. Kraft	Z. W. Schroeder	3-28-57	787	J	87	2	S; 3ft, 60g, dia 1 1/2	70	17	Sd,G	Pl	C	30	S	L	Yield 50 gpm; Ca.
1R1	do	Rochester Well and Pump Co.	2-23-51	792	J	99	4	S; 3ft, 20in	---	---	Sd,G	Pl	---	31	D	J	Do 7 ft after 2 hr pumping 30 gpm; gravel overlain by 63 ft sand, blue clay, and gravel; Ca.
2N1	E. Goodman	Fisher Bros. Well Drilling	9-24-58	748	J	73	4 1/2	S; 5ft, 20in, dia 3	---	---	G	Pl	---	15	D,S	S3/4	Do 7 ft after 2 hr pumping 30 gpm; gravel overlain by 63 ft sand, blue clay, and gravel; Ca.
2P1	D. DeWitt	do	8-20-58	764	J	78	2 1/2	S; 3ft, 60g, dia 1 1/2	---	---	Sd,G	Pl	C	14	D	---	Yield 12 gpm; Ca, L.
6K1	A. Conlon	do	7-20-60	731	J	128	2	---	125	3	G	Pl	C	14	D	---	Yield 30 gpm; Ca, L.
7A1	H. Langabaha	do	1-4-80	750	J	137	3	S; 5ft, 18in, dia 2 1/2	132	8	G	Pl	C	14	D	J1/2	Flow 15 gpm; Ca, L.
8H1	L. Ropplo	do	5-20-60	720	J	78	2	S; 3ft, 40g, dia 1 1/2	16	1	G,Sd	Pl	C	12	T	---	L, S.
8R1	Indiana State Highway Department	Fontville Engineering Co.	2-12-59	751	B	52	2 1/2	---	---	---	G,Sd	Pl	---	---	T	---	L, S.
8P2	do	do	2-12-59	752	B	38	2 1/2	---	---	---	---	---	---	---	T	---	L, S.
8P3	do	do	2-11-59	757	B	52	2 1/2	---	---	---	---	---	---	---	T	---	L, S.

Table 3.--Records of wells and test holes in Fulton 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				
31/1- 9K1	Indiana State Highway Department	Westville Engineering Co.	2-12-59	751	D	32	2 1/2	---	6	Sd	Pl	C	6	T	---	L, S.
9K2	---	---	2-11-59	753	B	32	2 1/2	---	12	Sd	Pl	C	---	T	---	See log well 8K2; S.
9K3	---	---	2-11-59	750	B	32	2 1/2	---	16	G, Sd	Pl	C	---	T	---	L, S.
12L1	B. Borryman	Fisher Bros. Well Drilling Co.	7-5-50	752	J	82	2	9; 3ft, 60g, dia 1 1/2	---	---	Pl	C	20	D	J1/2	Yield 16 gpm; Ca, L.
14K1	J. F. Seal	D. Henderson	6-20-47	724	Dr	52	4	---	---	Sd	Pl	---	6	D	---	Dd 3 ft after 1 hr. bailing 20 gpm; sand overlain by 12 ft top soil, clay and sand. Yield 40 gpm; Ca, L.
16D1	F. Ditsiro	Fisher Bros. Well Drilling Co.	4-12-50	776	J	101	3 1/2	3; 8 ft, 16sl, dia 3	11	G, Sd	Pl	C	50	D, S	---	See log well 8K3; S.
16D2	Indiana State Highway Department	Westville Engineering Co.	2-11-59	759	B	32	2 1/2	---	4	Sd, G	Pl	C	6	T	---	Yield 11 gpm; Ca, L.
16H1	A. N. McIntire	Fisher Bros. Well Drilling Co.	12-10-59	745	J	64	2 1/2	8; 3ft, 60g, dia 1 1/2	24	G, Sd	Pl	C	22	D	---	Ca. Yield 12 gpm; L.
16O2	Eric Railroad Co.	M. Zallora	1948	742	J	80	2	8; 3ft	---	G	Pl	C	---	P	---	Yield 14 gpm; gravel overlain by 7 1/2 ft yellow clay and sand.
16J1	J. Miller	Fisher Bros. Well Drilling Co.	7-4-50	745	J	58	2 1/2	8; 3ft, 60g, dia 1 1/2	---	G	Pl	C	19	D	L	Yield 15 gpm; L.
16M1	E. Jackson	---	6-8-80	745	J	78	2	---	5	G	Pl	C	36	D	---	---
16Q1	O. Tate	---	1-8-80	742	J	79	2	---	12	G, Sd	Pl	C	12	D	---	---
17A1	W. Clark	D. Harvey	9-8-80	750	J	67	2	8; 3ft, 60g, dia 1 1/2	6	G	Pl	C	54	D	L	---
17A2	Indiana State Highway Department	Westville Engineering Co.	2-11-59	755	B	30	2 1/2	---	4	G, Sd	Pl	C	12	T	---	L, S.
18B1	W. Paulstitch	Fisher Bros. Well Drilling Co.	11-18-59	742	J	69	2 1/2	8; 3ft, 60g, dia 1 1/2	4	G, Sd	Pl	C	29	D, S	---	Yield 14 gpm; L.
19O1	C. Wilsan	---	6-1-80	787	Dr	161	4	8; 3ft, 16sl, dia 1 1/2	16	Sd, G	Pl	C	54	D, S	S	Dd 20 ft after 3 hr pumping 50 gpm; Ca, L.
21B1	P. M. Deanis	Kennedy's Well Service	9-17-59	767	J	101	2	8; 3ft, 60g, dia 1 1/2	7	Sd, G	Pl	C	52	D	---	Yield 15 gpm; L.
21B2	W. Jones	E. W. Schroeder	7-2-59	743	J	141	2	8; 4ft, 60g, dia 1 1/2	21	G, Sd	Pl	C	10	D	---	Do.
21F1	L. Braswell	Fisher Bros. Well Drilling Co.	6-29-60	777	J	81	2 1/2	8; 3ft, 60g, dia 1 1/2	6	Sd, G	Pl	C	38	D	---	Yield 12 gpm; sand and gravel overlain by 85 ft blue clay.
21F2	A. Batschelar	---	7-17-80	782	J	88	2	8; 6ft, 18sl	8	Sd, G	Pl	C	48	D	---	Yield 40 gpm; L.
23F1	Loiters Ford Trustees, Aubbensabee Township	D. Henderson	8-7-47	743	Dr	58	4	8; 4ft, 20sl	32	Sd	Pl	U	24	D, P	J	Yield 20 gpm; L.
23G1	---	---	7-7-50	743	J	128	---	8; 6ft, 16sl	89	Sd	Pl	C	17	P	J1	Yield 40 gpm; Ca, L.
24M1	Mr. Hucker	Rechostor Well and Pump Co.	9-13-56	795	J	61	2	8; 3ft, 60g	21	Sd, G	Pl	U	40	D	---	Yield 11 gpm; Ca, L.
33F1	E. Rouch	Fisher Bros. Well Drilling Co.	6-1-50	767	J	101	2	8; 3ft, 60g, dia 1 1/2	6	Sd, G	Pl	C	35	S	L1/4	Yield 14 gpm; sand and gravel overlain by 95 ft blue clay and sand; Ca.
34D1	R. Zeider	---	2-16-60	767	J	91	2 1/2	---	13	G, Sd	Pl	C	27	D, S	---	Ca, L.
36F1	B. Brown	McGrow Well Drilling Co.	8-28-59	755	J	55	2	8; 2 1/2ft, 10sl, dia 1 1/2	21	Sd, G	Pl	C	14	S	---	Yield 10 gpm; Ca, L.
31/2- 1N1	E. Scheid	Rechostor Well and Pump Co.	6-15-55	905	J	92	2	8; 3ft, 50g, dia 1 1/2	---	G	Pl	---	82	D	L1/2	Yield 12 gpm; Ca.
1N2	---	---	5-5-55	903	J	211	4	8; 3ft, 20sl	---	C	Pl	---	82	S	S1	Yield 60 gpm.
3D1	V. Stayton	R. Price	8-3-59	876	J	184	2	8; 3ft, 12sl, dia 1 1/2	14	Sd, G	Pl	U	70	D	---	Yield 12 gpm; see log well 3D1; Ca.
3O2	---	---	8-19-58	876	J	84	2	8; 3ft, 12sl, dia 1 1/2	25	G, Sd	Pl	U	48	S	---	Yield 14 gpm; L.
4B1	P. C. Ward	J. Payne	8-20-59	827	J	73	2	8; 3ft, 60g, dia 1 1/2	---	G, Sd	Pl	U	24	D, S	J1/2	---
4P1	E. Fisher	Rechostor Well and Pump Co.	6-29-53	769	J	57	2	---	34	Sd, G	Pl	U	40	D	---	Yield 12 gpm; Ca, L.
4Q1	B. Dunn	---	4-10-56	812	J	74	2	8; 3ft, 58g, dia 1 1/2	---	Sd, G	Pl	U	11	D	J1/2	Yield 15 gpm; Ca.
7A1	L. Graves	---	2-12-51	781	J	86	2	8; 2ft, 30sl	---	Sd, G	Pl	U	16	D, S	L1/2	Yield 14 gpm; Ca, L.
7C1	R. Stotler	Fisher Bros. Well Drilling Co.	8-5-59	775	J	68	2 1/2	8; 3ft, 60g, dia 1 1/2	---	Sd, G	Pl	C	---	D, S	---	---

Table 3.--Records of wells and test holes in Fulton County, Indiana--Continued

Well	Owner	Driller	Date completed	Altitude (feet)	Type of well	Depth of well below land-surface (feet)	Diameter of well (inches)	Finished	Water-bearing zone				Water level (feet)	Use	Type of pump and horsepower	Remarks
									Thickness (feet)	Character	Geologic age	Conditions of occurrence				
31/3-1262	Rochester Hardware	Rochester Well and Pump Co.	5-26-54	772	J	54	2	8; 3ft								
14K1	P. Whendon	-----	8-16-56	767	J	57	2	8; 3ft, 60g								Flowed 5 gpm from pipe 3 ft below land.
14P1	F. Hibbs	-----	7-15-49	763	J	54	2	8; 3ft								Yield 13 gpm; Ca, L.
17B1	R. Rogers	-----	2-9-53	868	J	44	2	8; 10sl								Yield 10 gpm; Ca.
17H1	D. Parsons	-----	5-23-51	877	J	195	2	8								Ca.
18A1	F. M. Polley	-----	8-28-56	870	J	82	2	8								Ca.
18H1	E. Rusnell	-----	9-13-55	875	J	85	2	8; 3ft, dia 1 1/4								Yield 15 gpm; L.
19C1	W. C. Evans	McGrew Well Drilling Co.	9-13-55	840	J	68	2	8; 2 1/2ft, 10sl								Ca.
19J1	Indiana Metal Products Corp.	Striver Drilling Co.	4-25-46	813	Dr	56	4	8; 6ft, 60g, dia 2 1/4								Ca.
19J2	-----	-----	8-12-52	813	Dr	80	4	8; 10ft, 10sl								Ca.
19K1	-----	-----	8-12-52	870	J	180	2	8; 10sl								Ca.
20C1	G. Gruenberg	Rochester Well and Pump Co.	7-14-52	850	J	75	2	8; 3ft, 35sl								Ca.
20K1	-----	-----	7-31-56	800	J	60	2	8; 2ft								Yield 10 gpm; L.
22B1	E. M. Wagner	-----	7-30-55	755	J	80	2	8; 3ft								Flowed 2 gpm; Ca.
22B2	Camp Shohola	-----	7-11-52	755	J	79	2	8; 3ft, 30sl								Flowed 4 gpm; Ca.
22B3	F. Giovan	-----	7-29-55	757	J	81	2	8; 3ft, 35sl								Flowed 3 gpm; Ca.
22C1	K. Moiser	-----	5-27-52	767	J	44	2	8; 3ft, 35sl								Yield 18 gpm; Ca.
22N1	H. Haskins	-----	2-28-55	772	J	54	2	8; 60g, dia 1								Yield 12 gpm; Ca.
23D1	W. Rozanski	-----	1-31-57	770	J	58	2	8; 3ft, 50g, dia 1 1/4								Yield 15 gpm; Ca, L.
24E1	D. Dorrier	McGrew Well Drilling Co.	1956	780	J	63	2	8								Gravel overlain by 57 ft blue clay; Ca.
24J1	-----	Rochester Well and Pump Co.	6-4-52	810	Dr	102	6	8; 2ft, 30sl								Yield 10 gpm.
25K1	R. Koch	-----	8-14-53	782	J	58	2	8; 3ft								Ca.
25Q1	L. Switch	-----	1-7-57	803	J	52	2	8; 3ft								Yield 14 gpm; Ca, L.
26D1	D. Pfeiffer	-----	2-13-53	781	J	63	2	8; 3ft, 50g, dia 1 1/4								Ca.
26N1	N. Baldwin	-----	4-54	772	J	78	2	8								Yield 13 gpm; Ca.
27D1	J. Wambaugh	-----	2-18-57	773	J	43	2	8; 2 1/2ft, 10sl								Yield 15 gpm; Ca, L.
28A1	P. Ellor	McGrew Well Drilling Co.	9-15-55	772	J	57	2	8; 3ft, 50g, dia 1 1/4								Ca.
28E1	Q. A. Vandegrift	Rochester Well and Pump Co.	1954	772	J	39	2	8; 3ft								Yield 12 gpm; Ca.
28G1	P. Ellor	-----	2-18-54	775	J	72	2	8; 3ft								Yield 17 gpm; Ca.
28H1	-----	-----	4-20-53	775	J	40	2	8; 2 1/2ft, 16sl								Ca.
28J2	-----	-----	1-1-53	757	J	43	2	8; 3ft								Gravel overlain by sand; Ca.
29L1	F. Bastow	-----	10-12-53	757	J	40	2	8								Ca.
29M1	J. C. Pfeiffer	-----	1-1-49	785	J	89	2	8; 3ft, 60g								Ca.
30F1	Kentucky Farms	-----	3-18-54	767	J	40	2	8; 3ft, dia 1								Yield 16 gpm; Ca, L.
31F1	H. Sojehman	-----	7-28-56	787	J	43	2	8; 2 1/2ft, 50g, dia 1 1/4								Ca.
31N1	J. Ruchman	-----	1857	767	J	48	2	8; 3ft, 10sl, dia 1 1/4								L.
32C1	L. Norris	McGrew Well Drilling Co.	12-11-54	767	J	81	2	8; 3ft, 50g, dia 1 1/4								Ca.
32E1	J. Barts	Rochester Well and Pump Co.	9-18-56	765	J	79	2	8; 3ft, 18sl								Yield 13 gpm; Ca, L.
32E2	R. Redwald	-----	7-11-48	774	J	58	2	8; 3ft, 10sl								Yield 8 gpm.
32G1	M. Masorth	-----	6-7-55	785	J	48	1	8; 3ft, 20sl								Yield 30 gpm; fine to medium gravel overlain by sand.
32K1	T. Pentzine	-----	10-20-50	768	J	49	2	8; 3ft, 60g, dia 1 1/4								Gravel overlain by sand.
32N1	Trustees, C. Bouck Estate	-----	8-30-57	778	J	44	2	-----								Ca.
32Q1	J. Zoppo	-----	7-14-59	776	J	50	2	8; 2 1/2ft, 10sl, dia 1 1/4								Yield 13 gpm; Ca, L.
32Q2	B. Brock	McGrew Well Drilling Co.	8-3-59	780	J	42	2	8; 3ft, 50g, dia 1 1/4								Yield 10 gpm; Ca, L.
32R1	M. Thompson	Rochester Well and Pump Co.	8-3-59	780	J	42	2	8; 3ft, 50g, dia 1 1/4								Yield 16 gpm; Ca, L.

31/3-33P1	R. Smith	Rochester Well and Pump Co.	8-3-59	782 J	38	2	5; 3ft, 18in	10	29	G, Sd	P1	U	10	D, S	J1/4	Yield 13 gpm; sand and gravel from 0-39 ft; Ca.
34D1	J. Holt	-----	10-19-56	778 J	93	2	5; 2ft, 18in	85	8	Sd, G	P1	C	10	D, S	C1/2	Yield 14 gpm; Ca, L.
35K1	N. R. Anderson	-----	11-18-55	785 J	109	2	5; 3ft, 50g, dia 1 1/4	---	---	G, Sd	P1	---	16	D, S	J1/4	Ca.
31/4-5B1	A. Kryms	-----	5-10-40	792 J	58	2	---	---	---	G	P1	---	---	D	J1/3	Ca.
9M1	E. Busenbarg	-----	7-29-53	802 J	45	2	3; 2ft	---	---	G	P1	---	15	D, S	J	Ca.
16K1	L. Norris	-----	7-21-60	822 J	76	2	3 1/2 ft, 12in, dia	---	---	G	P1	C	30	D, S	---	Yield 12 gpm; Ca, L.
18P1	D. I. Eaton	Rochester Well and Pump Co.	9-11-50	800 J	81	2	3; 3ft	---	---	G	P1	---	26	D, S	J1/2	Ca.
21G1	A. A. Miller	H. Sauer and Sons	2-28-57	867 J	39	2	3; 21in	21	18	Sd, G	P1	U	21	D	J	Yield 15 gpm; sand and gravel from 0-39 ft; Ca.
29P1	C. Hinton	McGraw Well Drilling Co.	1956	830 J	63	2	8	59	4	Sd	P1	C	43	D, S	L	Yield 13 gpm; Ca, L.
29Q1	R. Peterson	Rochester Well and Pump Co.	3-15-56	830 J	82	2	8; 2ft, 18in	---	---	Sd, G	P1	---	44	D, S	J1/2	Yield 12 gpm; sand and gravel from 51.82 ft; record mist log from 0-51 ft; Ca.
31Q1	A. E. Stinson	-----	5-25-49	802 J	45	2	---	---	---	G	P1	---	18	S	---	Ca.
31Q2	-----	-----	11-17-52	802 J	55	2	8; 3ft	---	---	G, Sd	P1	---	---	S	---	Ca.
31Q3	-----	-----	2-7-53	808 J	53	2	---	---	---	Sd, G	P1	---	---	D	J1/4	Ca.

Table 4.--Selected logs of wells and test holes in Fulton County, Indiana

Well 29/1- 1F1

Type of record: Driller's log. Altitude: 761 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay-----	19	19	
Silt sand-----	28	47	
Gravel, medium-----	5	52	

Well 29/1- 9E1

Type of record: Driller's log. Altitude: 761 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil and yellow clay-----	10	10	
Clay, blue-----	40	50	
Clay, blue, and sand-----	10	60	
Clay, blue-----	10	70	
Clay, blue, sand, and gravel-----	9	79	
Gravel-----	8	87	

Well 29/1-11C1

Type of record: Driller's log. Altitude: 762 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	70	70	
Clay, blue, and sand-----	10	80	
Gravel-----	10	90	

Well 29/1-11C2

Type of record: Driller's log. Altitude: 762 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	25	25	
Sand and gravel-----	45	70	
Gravel-----	10	80	

Well 29/1-22F1

Type of record: Driller's log. Altitude: 762 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Fill-----	4	4	
Clay, red-----	4	8	
Clay, blue-----	21	29	
Sand, fine-----	1	30	
Clay, blue-----	21	51	
Sand, fine-----	2	53	
Clay, blue-----	18	71	

Table 4.--Selected logs of wells and test holes in Fulton County, Indiana--Cont.

Well 29/1-22F1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine-----	2	73	
Clay, blue-----	32	105	
Gravel, large-----	10	115	

Well 29/1-23F1

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

Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow and dark-----	15	15	
Clay, yellow-----	12	27	
Clay and hardpan-----	4	31	
Clay, blue-----	49	80	
Sand-----	1	81	
Sand, coarse, sharp-----	3	84	
Clay, blue-----	16	100	
Sand, coarse-----	3	103	Clover-seed size.

Well 29/1-36G1

Type of record: Driller's log. Altitude: 788 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Record missing-----	6	6	
Clay, sandy, blue-----	61	67	
Gravel, muddy, sandy, becoming cleaner and coarser with depth-----	18	85	
Gravel, coarse, clean-----	11	96	

Well 29/2- 1R1

Type of record: Driller's log from memory. Altitude: 793 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, with trace of sand-----	60	60	
Sand and gravel-----	5	65	
Clay-----	14	79	
Gravel, coarse-----	4	83	

Well 29/2- 4D1

Type of record: Driller's log from memory. Altitude: 768 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand and silt-----	22	22	
Clay, blue-----	3	25	

Table 4.--Selected logs of wells and test holes in Fulton County, Indiana--Cont.

Well 29/2- 4D1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Gravel-----	3	28	
Clay-----	46	74	
Gravel-----	3	77	

Well 29/2- 4F1

Type of record: Driller's log. Altitude: 768 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	20	20	
Clay, blue, and gravel-----	45	65	
Gravel-----	8	73	

Well 29/2- 9P1

Type of record: Driller's log. Altitude: 775 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, brown-----	6	6	
Clay, brown-----	6	12	
Clay, blue-----	16	28	
Gravel, gray, and clay; mixed----	26	54	
Gravel, coarse, blue-----	5	59	

Well 29/2-13C1

Type of record: Driller's log from memory. Altitude: 802 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	18	18	
Gravel, brown-----	6	24	
Clay, blue-----	42	66	
Sand, fine-----	3	69	
Gravel, blue-----	5	74	

Well 29/2-23G1

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

Quaternary System:			
Recent and Pleistocene Series:			
Top soil,-----	1	1	
Clay, brown-----	16	17	
Gravel, coarse, blue-----	3	20	
Clay, blue-----	4	24	
Gravel, medium, blue-----	4	28	
Clay, blue-----	8	36	
Clay, blue, and sand; mixed-----	14	50	

Table 4.--Selected logs of wells and test holes in Fulton County, Indiana--Cont.

Well 29/2-23G1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Gravel, medium, blue-----	14	64	
Clay, gray-----	24	88	
Gravel, medium, blue-----	7	95	

Well 29/2-23J3

Type of record: Driller's log. Altitude: 792 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	14	14	
Clay, blue-----	11	25	
Clay, hard, blue, and gravel; mixed-----	9	34	
Clay, blue-----	15	49	
Sand and blue clay-----	5	54	
Gravel, medium, blue-----	5	59	

Well 29/2-23J4

Type of record: Driller's log. Altitude: 792 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	2	2	
Clay, hard, blue-----	16	18	
Sand and gravel-----	4	22	
Clay, blue; with sandy gravel---	26	48	
Sand and gravel; gray-----	12	60	

Well 29/2-24E1

Type of record: Driller's log. Altitude: 798 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top and sub soil-----	10	10	
Clay, hard, sandy, blue-----	8	18	
Gravel, blue-----	3	21	
Clay, hard, sandy, blue-----	39	60	
Gravel, medium to coarse, sandy, gray-----	5	65	

Well 29/2-32N1

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

Quaternary System:			
Recent and Pleistocene Series:			
Top soil, muck, and peat-----	11	11	
Clay, bluish-gray-----	44	55	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 29/2-32N1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Gravel, muddy-----	2	57	
Clay, blue-----	14	71	
Gravel, blue-gray-----	7	78	

Well 29/2-32P1

Type of record: Driller's log. Altitude: 802 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	23	23	
Clay, blue-----	12	35	
Gravel, medium, brown-----	5	40	
Gravel, coarse, blue-----	2	42	
Sand, fine, yellow-----	16	58	
Gravel, fine, blue-----	4	62	

Well 29/2-35H1

Type of record: Driller's log. Altitude: 803 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	25	25	
Clay, blue, and sand-----	15	40	
Hardpan-----	14	54	
Gravel, coarse, blue-----	3	57	
Gravel, fine, and coarse sand----	1	58	

Well 29/3- 3B1

Type of record: Driller's log. Altitude: 830 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	20	20	
Clay, sandy-----	40	60	
Clay, blue-----	12	72	
Sand, medium, brown-----	6	78	

Well 29/3- 3L1

Type of record: Driller's log. Altitude: 821 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	14	14	
Hardpan, brown-----	7	21	
Clay, blue-----	6	27	
Hardpan-----	3	30	
Clay, soft, blue-----	12	42	
Gravel, medium, brown-----	10	52	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 29/3- 7P1

Type of record: Driller's log.

Altitude: 800 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	18	18	
Gravel, brown-----	2	20	
Clay, blue, and fine gravel-----	25	45	
Clay, soft, blue-----	7	52	
Gravel, medium, blue-----	5	57	

Well 29/3-10N1

Type of record: Driller's log.

Altitude: 800 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, sandy, blue-----	10	10	
Clay, blue, and gravel; mixed----	25	35	
Clay, gray, and sand-----	47	82	
Gravel, medium; blue-----	4	86	

Well 29/3-15E2

Type of record: Driller's log.

Altitude: 810 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand and small stone-----	10	10	
Clay, blue-----	36	46	
Sand, fine, with some gravel-----	1	47	
Clay, blue-----	73	120	
Silt-----	10	130	
Record missing-----	4	134	
Gravel, fine, brown-----	3	137	

Well 29/3-15E3

Type of record: Driller's log.

Altitude: 810 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand and small rocks-----	10	10	
Clay, blue-----	36	46	
Gravel-----	1	47	
Clay, blue-----	65	112	
Silt sand-----	14	126	
Gravel, medium-----	5	131	

Well 29/3-15M1

Type of record: Driller's log.

Altitude: 813 feet

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	16	16	
Hardpan with embedded pebbles----	13	29	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 29/3-15M1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine gray-----	8	37	
Gravel, pea-sized-----	4	41	

Well 29/3-16H2

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

Quaternary System:			
Recent and Pleistocene Series:			
Soil, gravelly, sandy, yellow----	14	14	
Clay, sandy, blue-----	11	25	
Gravel, sandy-----	2	27	
Clay, blue, with some sand-----	2	29	
Gravel, sandy, grayish-yellow----	6	35	

Well 29/3-16H3

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

Quaternary System:			
Recent and Pleistocene Series:			
Top soil and yellow clay-----	4	4	
Clay, hard, sandy, blue-----	17	21	
Gravel, slightly sandy, blue- gray-----	3	24	

Well 29/3-16H4

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

Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	2	2	
Gravel, brown-----	12	14	
Clay-----	6	20	
Clay, blue, and gravel; mixed----	26	46	
Gravel, fine, blue-----	3	49	
Clay, blue, and sand; mixed----	24	73	
Gravel, medium, blue-----	3	76	

Well 29/3-16R2

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

Quaternary System:			
Recent and Pleistocene Series:			
Fill, muck, and sand with peat---	37	37	
Clay, blue-----	11	48	
Clay and stone-----	9	57	
Clay, blue-----	21	78	
Sand, fine, light-----	5	83	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 29/3-16R2--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, dark-----	3	86	
Gravel, coarse-----	5	91	

Well 29/3-22E2

Type of record: Driller's log. Altitude: 810 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil, sand, and yellow clay--	36	36	
Clay, blue-----	23	59	
Silt sand-----	12	71	
Clay, blue-----	17	88	
Sand and stone-----	4	92	
Gravel-----	1	93	
Sand, fine, gray-----	16	109	
Gravel-----	4	113	

Well 30/1- 1C1

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

Quaternary System:			
Recent and Pleistocene Series:			
Clay, red, and gravel-----	20	20	
Sand and gravel-----	10	30	
Clay, blue, and gravel-----	14	44	
Sand, fine, and gravel-----	26	70	
Gravel-----	10	80	

Well 30/1- 5A1

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

Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	50	50	
Clay, blue, and sand-----	20	70	
Sand and gravel-----	14	84	

Well 30/1- 6G1

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

Quaternary System:			
Recent and Pleistocene Series:			
Sand and stony clay-----	14	14	
Clay, stony, blue-----	7	21	
Clay and gravel; blue-----	1	22	
Clay, stony, blue and brown soft clay-----	14	36	
Clay, stony, blue, with sand-----	3	39	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/1- 6G1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, soft, blue, and sand mixed-	17	56	
Sand-----	9	65	
Gravel, pea-sized and larger-----	4	69	

Well 30/1- 6H2

Type of record: Driller's log. Altitude: 724 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	30	30	
Sand and gravel-----	29	59	
Gravel-----	3	62	

Well 30/1- 6J1

Type of record: Driller's log. Altitude: 733 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay-----	10	10	
Gravel-----	4	14	
Clay, red-----	2	16	
Sand-----	1	17	
Clay, blue-----	10	27	
Sand-----	2	29	
Clay, blue-----	3	32	
Sand-----	1	33	
Clay, blue-----	13	46	
Sand-----	3	49	
Gravel-----	15	64	

Well 30/1- 6P2

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

Quaternary System:			
Recent and Pleistocene Series:			
Soil, clayey-----	9	9	
Sand, fine, packed-----	9	18	
Sand, gray-----	36	54	
Sand, sharp, dark-----	4	58	
Gravel-----	4	62	

Well 30/1- 6R1

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

Quaternary System:			
Recent and Pleistocene Series:			
Top soil-----	2	2	
Marsh bog-----	16	18	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/1- 6R1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Silt sand-----	18	36	
Sand, gray-----	18	54	
Clay, blue-----	7	61	
Sand, fine-----	5	66	
Sand, dark-gray-----	3	69	
Sand, coarse, heavy-----	3	72	

Well 30/1- 9E1

Type of record: Driller's log. Altitude: 762 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	16	16	
Clay, blue-----	15	31	
Sand-----	10	41	
Clay, blue, and gravel-----	20	61	
Gravel and sand-----	24	85	
Gravel-----	3	88	

Well 30/1-12P1

Type of record: Driller's log. Altitude: 756 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	30	30	
Sand with clay and gravel-----	40	70	
Sand and gravel-----	20	90	

Well 30/1-14R1

Type of record: Driller's log. Altitude: 778 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	54	54	
Sand and gravel-----	34	88	
Clay, blue, and sand-----	10	98	
Gravel-----	14	112	

Well 30/1-27F1

Type of record: Driller's log. Altitude: 775 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Loam, sandy-----	3	3	
Clay, yellow-----	24	27	
Clay, sandy, blue-----	15	42	
Hardpan; blue clay-----	7	49	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/1-27F1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, fine, and clay-----	18	67	
Sand, dirty-----	15	82	
Clay, blue-----	14	96	
Gravel, coarse, with clay balls--	8	104	
Clay-----	1	105	
Sand, medium-----	6	111	
Clay, blue-----	8	119	
Gravel with clay balls-----	1	120	
Gravel and sand with large rocks-	13	133	Bedrock at 133 feet.

Well 30/2- 1E1

Type of record: Driller's log. Altitude: 763 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top and sub soil-----	12	12	
Clay, blue-----	14	26	
Sand, fine, light-gray-----	7	33	
Sand, fine to medium, gray-----	6	39	

Well 30/2- 4N1

Type of record: Driller's log. Altitude: 752 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand and blue clay-----	36	36	
Sand, fine-----	11	47	
Sand, fine to coarse-----	6	53	

Well 30/2- 8A2

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

Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	6	6	
Rock, hard, gray-----	4	10	Clay layer or boulder.
Sand, gray-----	22	32	
Sand, coarse, with some fine-----	6	38	

Well 30/2-12J1

Type of record: Driller's log. Altitude: 777 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	8	8	
Sand, fine, gray-----	6	14	
Sand, fine-----	2	16	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/2-12J1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Hardpan; clay and stone-----	11	27	
Sand, fine, gray-----	20	47	
Gravel, coarse-----	5	52	

Well 30/2-18C1

Type of record: Driller's log.	Altitude: 751 feet.		
Quaternary System:			
Recent and Pleistocene Series:			
Soil and yellow clay-----	18	18	
Clay, blue-----	16	34	
Sand-----	10	44	
Gravel, pea-sized and larger-----	3	47	

Well 30/2-20C1

Type of record: Driller's log.	Altitude: 755 feet.		
Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	18	18	
Sand, fine, gray-----	22	40	
Sand and gravel; gray-----	5	45	
Gravel, medium-----	5	50	

Well 30/2-24R1

Type of record: Driller's log.	Altitude: 777 feet.		
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	30	30	
Sand and clay-----	9	39	
Gravel-----	5	43	

Well 30/2-25H1

Type of record: Driller's log.	Altitude: 781 feet.		
Quaternary System:			
Recent and Pleistocene Series:			
Clay, yellow-----	18	18	
Clay, blue-----	6	24	
Sand, silty, gray-----	9	33	
Gravel with some fine sand-----	3	36	
Gravel-----	3	39	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/2-30N1

Type of record: Driller's log.

Altitude: 762 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue-----	19	19	
Sand and gravel; red-----	11	30	
Clay, blue-----	12	42	
Gravel-----	6	48	

Well 30/2-34D1

Type of record: Driller's log.

Altitude: 767 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, sandy, brown-----	46	46	
Sand-----	3	49	
Sand, fine, and blue soft clay---	8	57	
Gravel, medium to coarse, blue---	6	63	

Well 30/3- 3M1

Type of record: Driller's log.

Altitude: 792 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil, sand, and clay-----	36	36	
Sand, fine, silty-----	21	57	
Sand, dark-gray-----	5	62	
Gravel, pea-sized (3/8-inch)-----	5	67	

Well 30/3- 4Q1

Type of record: Driller's log.

Altitude: 789 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil, clay, gravel, and stone-----	36	36	
Sand, fine-----	26	62	
Gravel, medium-sized-----	4	66	

Well 30/3- 5B1

Type of record: Driller's log.

Altitude: 782 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	8	8	
Sand, fine, gray-----	15	23	
Clay, hard, blue-----	12	35	
Sand, fine, gray-----	4	39	
Gravel, coarse, blue-----	3	42	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/3- 5D1

Type of record: Driller's log.

Altitude: 763 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Fill and soil-----	18	18	
Sand with trace of gravel-----	11	29	
Clay, blue-----	5	34	
Sand, fine-----	20	54	
Sand, coarse-----	3	57	
Gravel, coarse-----	4	61	

Well 30/3- 5R3

Type of record: Driller's log.

Altitude: 778 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	30	30	
Sand, muddy-----	22	52	
Gravel, coarse, with chunks of blue clay-----	5	57	
Gravel, coarse, clean-----	8	65	
Gravel, clean-----	5	70	
Sand, clean-----	7	77	

Well 30/3- 7B1

Type of record: Driller's log.

Altitude: 777 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	4	4	
Gravel, brown-----	12	16	
Clay, blue-----	18	34	
Sand, fine, gray-----	12	46	
Gravel, fine, gray-----	3	49	
Gravel, medium, gray-----	3	52	

Well 30/3- 7K2

Type of record: Driller's log.

Altitude: 787 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	16	16	
Gravel, coarse-----	8	24	
Silt sand, gray-----	30	54	
Gravel, fine-----	7	61	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/3- 8A2

Type of record: Driller's log.

Altitude: 774 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Fill-----	4	4	
Soil-----	2	6	
Muck-----	4	10	
Clay-----	20	30	
Gravel-----	3	33	
Clay, sandy-----	9	42	
Sand, coarse, and gravel-----	38	80	
Sand, coarse, yellow-----	5	85	
Sand, coarse, and gravel-----	13	98	
Clay-----	2	100	

Well 30/3- 8E1

Type of record: Driller's log.

Altitude: 780 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Clay, hard, blue, with stones----	18	18	
Clay, soft, blue-----	18	36	
Sand-----	9	45	
Gravel-----	4	49	

Well 30/3- 8J1

Type of record: Driller's log.

Altitude: 783 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, loose-----	18	18	
Hardpan; clay and stone-----	12	30	
Gravel, coarse-----	10	40	

Well 30/3- 8J2

Type of record: Driller's log.

Altitude: 783 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil, sandy-----	5	5	
Gravel and stones-----	13	18	
Sand, fine, gray-----	7	25	
Hardpan-----	8	33	
Sand, coarse, gray-----	5	38	
Gravel, gray-blue-----	5	43	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/3- 9J2

Type of record: Driller's log.

Altitude: 787 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and sand-----	37	37	
Gravel-----	3	40	
Sand, fine-----	3	43	

Well 30/3- 9K3

Type of record: Driller's log.

Altitude: 785 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, loose-----	10	10	
Silt sand, fine-----	15	25	
Sand-----	5	30	
Sand, gray-----	32	62	
Sand, coarse-----	5	67	

Well 30/3- 9K5

Type of record: Driller's log.

Altitude: 786 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	54	54	
Sand, gray-----	4	58	
Clay, blue-----	2	60	
Sand, fine-----	3	63	
Gravel, medium, with some silt---	4	67	

Well 30/3- 9Q3

Type of record: Driller's log.

Altitude: 783 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil and yellow sand-----	6	6	
Sand, gray-----	20	26	
Sand-----	3	29	
Sand, packed, gray-----	26	55	
Gravel-----	6	61	

Well 30/3-10F1

Type of record: Driller's log.

Altitude: 792 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Soil, sandy, loose-----	10	10	
Sand, gray-----	15	25	
Gravel, pea-sized-----	5	30	
Sand, fine-----	50	80	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/3-10F1--Continued

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Gravel, coarse-----	3	83	
Record missing-----	20	103	

Well 30/3-10F2

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

Quaternary System:			
Recent and Pleistocene Series:			
Sand-----	8	8	
Sand, gray-----	20	28	
Sand, coarse-----	6	34	
Gravel-----	5	39	
Silt sand, gray-----	35	74	
Sand, coarse-----	3	77	

Well 30/3-10J1

Type of record: Driller's log. Altitude: 787 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil, sandy-----	11	11	
Hardpan; clay-----	18	29	
Sand, fine, gray-----	8	37	
Gravel, coarse, blue-----	3	40	

Well 30/3-10J2

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

Quaternary System:			
Recent and Pleistocene Series:			
Sand, red-----	10	10	
Sand, gray-----	8	18	
Sand-----	12	30	
Gravel-----	9	39	

Well 30/3-10K4

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

Quaternary System:			
Recent and Pleistocene Series:			
Sand, red-----	27	27	
Sand-----	13	40	
Clay, blue-----	29	69	
Gravel-----	3	72	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/3-10L2

Type of record: Driller's log.

Altitude: 787 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, blue -----	20	20	
Clay and sand; mixed-----	25	45	
Sand, medium to coarse-----	2	47	
Sand, fine, gray-----	12	59	
Gravel, very coarse-----	3	62	

Well 30/3-10M4

Type of record: Driller's log.

Altitude: 780 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Sand, gray, and gravel-----	54	54	
Sand, fine, gray-----	4	58	
Sand, medium to coarse-----	3	61	

Well 30/3-10M8

Type of record: Driller's log.

Altitude: 783 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil and sand; yellow-----	5	5	
Sand, fine, white-----	14	19	
Sand, gray-----	20	39	
Gravel, coarse, blue-----	4	43	

Well 30/3-15A1

Type of record: Driller's log.

Altitude: 790 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil and gray fine sand-----	41	41	
Clay, blue-----	6	47	
Sand, fine to coarse, gray, becoming darker with depth-----	34	81	

Well 30/3-15E3

Type of record: Driller's log.

Altitude: 780 feet.

Quaternary System:			
Recent and Pleistocene Series:			
Top soil, sand, and gravel-----	36	36	
Clay, blue-----	6	42	
Silt sand, fine-----	7	49	
Gravel, coarse-----	7	56	

Table 4.--Selected logs of wells and test holes in Fulton County, Ind.--Cont.

Well 30/3-15E4

Type of record: Driller's log.

Altitude: 780 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay and sand-----	36	36	
Sand-----	2	38	
Sand, fine-----	13	51	
Record missing-----	3	54	
Gravel, very coarse-----	4	58	

Well 30/3-15E5

Type of record: Driller's log.

Altitude: 780 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Clay, brown-----	12	12	
Gravel, brown-----	22	34	
Clay, blue-----	12	46	
Sand-----	8	54	
Gravel, medium, blue-----	4	58	

Well 30/3-15F3

Type of record: Driller's log.

Altitude: 783 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand, yellow-----	10	10	
Silt sand-----	18	28	
Sand, coarse-----	4	32	
Clay, blue-----	13	45	
Silt sand, gray-----	23	68	
Gravel, medium to coarse-----	6	74	

Well 30/3-15F5

Type of record: Driller's log.

Altitude: 784 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Top soil and sand; loose-----	18	18	
Sand, fine-----	3	21	
Silt sand, gray-----	7	28	
Clay, blue-----	21	49	
Silt sand, fine, gray-----	17	66	
Gravel, medium-----	4	70	

Well 30/3-16A1

Type of record: Driller's log.

Altitude: 778 feet.

Material	Thick- ness (feet)	Depth (feet)	Remarks
Quaternary System:			
Recent and Pleistocene Series:			
Sand and gravel; dirty-----	25	25	
Sand, medium, and gravel; clean--	13	38	