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# GAZETTEER OF COAL-MINE LAKES IN SOUTHWESTERN INDIANA

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GAZETTEER OF COAL-MINE LAKES IN SOUTHWESTERN INDIANA

By Linda L. Bobo

U.S. GEOLOGICAL SURVEY. WATER RESOURCES DIVISION,

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Water-Resources Investigations 79-67

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Indianapolis, Indiana

June 1979

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UNITED STATES DEPARTMENT OF THE INTERIOR  
CECIL D. ANDRUS, Secretary  
GEOLOGICAL SURVEY  
H. William Menard, Director

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METRIC CONVERSION FACTORS

The inch-pound units used in this report can be converted to the metric system of units as follows:

Multiply inch-pound-system units	By	To obtain metric units
inch (in.)	25.40	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
square mile (mi <sup>2</sup> )	2.590	square kilometer (km <sup>2</sup> )
acre	4,047	square meter (m <sup>2</sup> )
acre	0.4047	hectare (ha)
cubic foot per second (ft <sup>3</sup> /s)	0.0283	cubic meter per second (m <sup>3</sup> /s)
cubic foot per second per square mile [(ft <sup>3</sup> /s)/mi <sup>2</sup> ]	0.0109	cubic meter per second per square kilometer [(m <sup>3</sup> /s)/km <sup>2</sup> ]



## GAZETTEER OF COAL-MINE LAKES IN SOUTHWESTERN INDIANA

By Linda L. Bobo

## ABSTRACT

This gazetteer is a catalog of lakes formed by surface coal mining in southwestern Indiana that are 0.5 acre or larger and in nonactive mine areas. Approximately 1,000 of the lakes are listed by 7.5-minute quadrangle topographic-map name, lake-identification number, latitude and longitude, and county. Other data given are shape of lake, maximum length, mean width, length and development of shoreline, surface area, orientation, presence of a stream inlet or outlet, and geologic data (geologic formation of area surrounding the lake and the mined coal-bed member). Field data (sampling date, pH, specific conductance, apparent color of lake, and general vegetation along the shoreline) were collected for 287 of the lakes.

Two-hundred eighty-seven lakes were sampled once for pH and specific conductance. Vegetation along the shoreline and apparent color of each lake were identified at the same time. Although these data are not sufficient to quantify the water quality of the lakes, they do illustrate the variability of these characteristics. The pH of the 287 lakes ranged from 2.5 to 10.0; however, the pH of 80 percent of them ranged from 6 to 9. Specific conductance ranged from 99 to 3,800 micromhos per centimeter at 25° Celsius. Specific conductance for approximately 70 percent of the lakes in the Staunton and Brazil Formations was less than 500 micromhos per centimeter at 25° Celsius, but for approximately 65 percent in the Dugger and Petersburg Formations it was greater than 1,000 micromhos per centimeter at 25° Celsius. The apparent colors of the lakes observed were varying shades of aqua, blue, brown, lime green, red, and green. Eighty percent of the lakes sampled were green.

Lake sizes ranged from a chosen minimum of 0.5 acre to a maximum of 344 acres. Maximum length ranged from 0.1 to 2 miles, and the mean width was generally less than 0.8 mile.

## INTRODUCTION

More than 5,000 coal-mine lakes have been formed by surface mining in southwestern Indiana, of which approximately 20 percent are in nonactive mine areas. Some of the lakes have potential uses as fisheries or recreational facilities, but some that are part of stream-drainage systems may affect downstream water quality. Because an inventory of these coal-mine lakes would be useful in planning limnologic and hydrologic studies and in managing resources, the U.S. Geological Survey collected and cataloged information for approximately 1,000 coal-mine lakes, ranging from 0.5- to 344-acre size in nonactive mine areas. The minimum size was chosen because lakes smaller than 0.5 acre have little recreational use.

The study area and the 49 Geological Survey 7.5-minute quadrangle topographic maps used in this report are shown in figure 1, and an alphabetical listing of the maps is given in table 1. Locations of the lakes are shown on the maps (figs. 2-50) by dots and lake-identification numbers. (Figures 2-50 and accompanying table 2, as well as figures 51-54, follow References.)

Because of the large number of lakes to be cataloged, a computer program was developed (Duke K. Bristow and Steven W. Morris, written commun., December 1977) for a Wang 2220T<sup>1</sup> minicomputer and digitizer to calculate latitude, longitude, and morphological data (maximum length, mean width, length and development of shoreline, surface area, and orientation) of each lake from U.S. Geological Survey 7.5-minute quadrangle topographic maps. Some of the lakes described in this report (table 2) are not on topographic maps because they were formed after the maps were prepared. An approximate location of each lake not previously shown was marked on the maps in the field. Where both field and morphological data are listed for a lake in table 2, the data are accurate to the sampling date. Where only morphological data are listed, the data were not field checked and are accurate only to the date that the topographic map was prepared. Field and geologic data were stored by the computer and were printed out with the lake-location and morphological data.

Geologic data (geologic formation of area surrounding the lake and the mined coal-bed member) of the area surrounding the lakes were taken from geology and coal-deposit maps (Friedman, 1961; Gray, Wayne, and Wier, 1970; Hutchison, 1958, and 1960; Kottlow-ski, 1954, 1959, and 1960; Wier, 1952; Walt A. Hasenmueller, Indiana Geological Survey, oral and written commun., March and June 1977; T. K. Greeman, U.S. Geological Survey, oral commun., 1978; and Indiana Department of Natural Resources, Jasonville, Ind., unpublished data for 1965-77, November 1977).

Field data (sampling date, pH, specific conductance, apparent color of lake determined by visual examination of the lake by two observers, and type of vegetation along the shoreline) were collected for 287 lakes having easy access. These lakes were sampled once for pH and specific conductance, and vegetation along the shoreline and apparent color of each lake were identified at the same time.

## EXPLANATION OF GAZETTEER INFORMATION

Lake Location

Table 1 is an alphabetical listing of the names of the forty-nine 7.5-minute quadrangle topographic maps on which the locations of coal-mine lakes are plotted. The lakes can be located by county code, lake identification number, and latitude and longitude, all given in table 2 and explained in "Explanation of Abbreviations and Codes Used in Table 2." Values of latitude and longitude are the coordinates of the mouth of the lake through which the principal, natural discharge of water will flow or of closed basins, the southernmost point of the lake shoreline and are accurate to +1 second. In figures 2 through 50, dots and lake-identification numbers on the map identify the points where the latitude and longitude for the lakes were taken.

<sup>1</sup>The use of brand names in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.



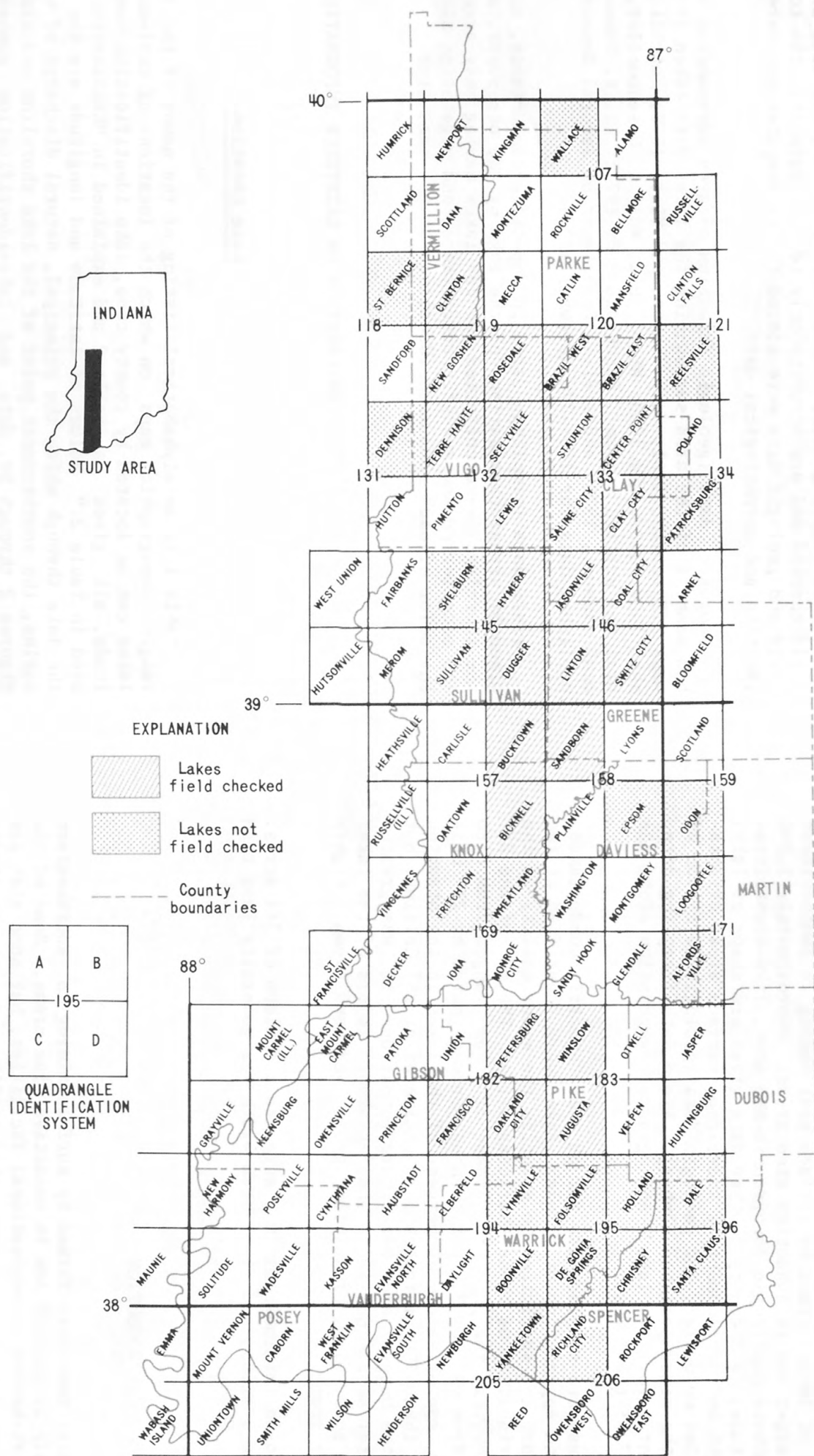


Figure 1.-- Study area and the U.S. Geological Survey 7.5-minute quadrangle topographic maps(shaded areas) used in this report.



Table 1.--Alphabetical list of U.S. Geological Survey 7.5-minute quadrangle maps used in this report

Quadrangle			Quadrangle		
Figure	Name	Identification number <sup>1</sup>	Figure	Name	Identification number <sup>1</sup>
2	Alfordsville	171C	27	Loogootee	171A
3	Augusta	183C	28	Lynville	194B
4	Bicknell	157D	29	New Goshen	119C
5	Boonville	194D	30	Oakland City	182D
6	Brazil East	120D	31	Odon	159C
7	Brazil West	120C	32	Patricksburg	134C
8	Bucktown	157B	33	Petersburg	182B
9	Center Point	133B	34	Reelsville	121C
10	Chrisney	195D	35	Richland City	206A
11	Clay City	133D	36	Rosedale	119D
12	Clinton	119A	37	Saint Bernice	118B
13	Coal City	146B	38	Saline City	133C
14	Dale	196A	39	Sandborn	158A
15	DeGonia	195C	40	Santa Claus	196C
16	Dennison	131B	41	Seelyville	132B
17	Dugger	145D	42	Shelburn	145A
18	Epsom	158D	43	Staunton	133A
19	Folsomville	195A	44	Sullivan	145C
20	Francisco	182C	45	Switz City	146D
21	Fritchton	169A	46	Terre Haute	132A
22	Holland	195B	47	Wallace	107A
23	Hymera	145B	48	Wheatland	169B
24	Jasonville	146A	49	Winslow	183A
25	Lewis	132D	50	Yankeetown	205B
26	Linton	146C			

<sup>1</sup>Quadrangle identification number is used for locating 7.5-minute quadrangle topographic maps in figure 1.

#### Morphological Data

Morphological data provide information about physical properties of the lakes. (See table 2 and "Explanation of Abbreviations and Codes Used in Table 2.") The presence of a lake inlet (IN) or outlet (OU) and the assignment of one of ten geometrical shapes (SHAPE) by Reid and Wood (1976) to a lake was taken from the topographic maps. Maximum length (LENGTH), mean width (WIDTH), length of shoreline (SHORE), surface area (AREA), shoreline development (SHORE DEV.), and orientation (ORIEN) were calculated and digitized from 7.5-minute quadrangle topographic maps and are given in table 2. (See Reid and Wood, 1976.) Percentage error of the morphological data is  $\pm 5$  percent.

#### Field Data

Field measurements were made for 287 easily accessible lakes, just off the shoreline and approximately 1 ft below the water surface. (See table 2 and "Explanation of Abbreviations and Codes Used in Table 2.") A multi-parameter Martek Mark V water-quality monitor or a Leeds and Northrup pH meter and a Beckman RC19 conductivity bridge were used to measure pH and specific conductance. General vegetation along the shoreline of the lakes was also categorized. Apparent color of lake water is a subjective measurement based on visual observation by two persons, who grouped color shades into the following categories: aqua, blue, green, brown, lime green, and red.

Apparent color is derived from inherent properties of water and its surroundings (Ruttner, 1963). Properties affecting apparent color of a lake include vegetation, plankton, suspended sediment, and substances in solution or colloidal suspension. Also weather conditions and the time of day sampled may affect apparent color of the lake. Turbidity, which is directly related to apparent color, was not quantitatively measured but was visually noted as varying from clear to cloudy.

The purpose of collecting the data was to provide some indication of the variability of the preceding characteristics from lake to lake. They may vary with time, depth, and distance from shoreline and therefore cannot be used to quantify the water quality of the lakes.

The field data may be useful with remote-sensing techniques for identifying certain water-quality characteristics, if relations can be established between such characteristics as apparent color and pH (Eros Data Center, Sioux Falls, South Dakota, oral commun., 1977-78; and Moore, 1978).

#### Geologic Data

The coal bed or member (CB) and the general rock-unit formation (FM) adjacent to the lake were given for each lake where accurate information was available. (See "Explanation of Abbreviations in Codes Used in Table 2.") A generalized stratigraphic column showing time unit, thickness, lithology, selected coal beds and members, and rock-unit formation and group is given in figure 51 (Powell, 1972).

#### SUMMARY OF DATA

Approximately 1,000 Indiana coal-mine lakes were cataloged, but only 287 lakes were sampled for on-site measurement of specific conductance and pH. The specific conductance of the 287 lakes ranged from 99 to 3,800 micromhos per centimeter at 25°C (Celsius) and pH, from 2.5 to 10.0 (fig. 52). However, the pH of 80 percent of the lakes sampled ranged from 6 to 9, which is similar to the pH ranges observed for most open lakes (Wetzel, 1975; Reid and Wood, 1976).

The geologic formations occupied by the lakes sampled in ascending order, were Mansfield, Brazil, Staunton, Linton, Petersburg, and Dugger Formations of Pennsylvanian age (fig. 51). Most sampled are in either the Brazil or Petersburg Formations. Most of the pH values of lake water samples representative of the geologic formations were in the range from 7.0 to 10.0 (fig. 54). Specific conductance of the water from approximately 70 percent of the lakes sampled in the Brazil and Staunton Formations was



less than 500  $\mu\text{mho}/\text{cm}$  at 25°C, but for water from approximately 65 percent of the lakes sampled in the Petersburg and Dugger Formations it was greater than 1,000  $\mu\text{mho}/\text{cm}$  at 25°C. Specific conductance of water from lakes in the Linton Formation was evenly distributed in the general range from 250 to 1,000  $\mu\text{mho}/\text{cm}$  at 25°C (fig. 53).

Apparent color of 80 percent of the lakes sampled was green, but apparent colors of the remaining 20 percent were varying shades of aqua, blue, brown, lime green, and red (fig. 54). Apparent color of lakes is a subjective measurement based on visual observation by two persons, who grouped the color shades into the preceding six categories. The intensity and shade of the apparent color of lakes may vary seasonally. A random group of lakes, representing each color, was observed for these changes over 1 year. Findings indicated that the apparent color may be representative of the time of year that the lakes were sampled. Turbidity, which is directly related to apparent color, was not measured, but visual observations indicated that it varied greatly in the lakes sampled.

All 15 acidic lakes sampled (pH from 2.5 to 3.9) appeared to be clear and free of plant and animal life (fig. 54). Very little, if any, vegetation was found along the shoreline of these lakes. Of the 15 lakes sampled, one was red and 14 were aqua. The red color of the clear acidic lake (pH 3.0) was probably due to reflection from iron floc on the bottom.

The pH of the remaining 272 lakes ranged from 4.9 to 10.1. The pH of the 229 green lakes ranged from 4.9 to 10.1; 22 brown lakes, from 6.8 to 9.1; 16 alkaline aqua lakes, from 5.2 to 8.8; 2 blue lakes, from 7.5 to 7.7; and of 2 lime-green lakes, from 6.1 to 6.5. The pH of the one alkaline red lake was 7.3.

Although many of the green, brown, and 16 alkaline (pH) aqua lakes appeared to be turbid, plant and animal life were visible in most of them. The blue lakes appeared to be less turbid than the green or brown lakes, and plant life on the lake bottom was visible. The one alkaline red lake and the two lime-green lakes appeared to be the most turbid of all. The turbidity and the apparent color of the red lake were probably due to iron floc dispersed throughout the water, and those of the two lime-green lakes were due to massive amounts of algae dispersed throughout the water.

Lake size ranged from a chosen minimum of 0.5 acre to 344 acres. Maximum length ranged from 0.1 to 2 mi. Mean width was generally less than 0.8 mi.

Data were collected only as a first step in field reconnaissance. Additional data would be needed to explain why a lake has a particular color, pH, or specific conductance and why lakes in certain geologic formations have similar or dissimilar characteristics. An acidic lake can be next to several alkaline lakes and be in the same geologic formation. A lake can also be acidic at one end and alkaline at the other (D. M. Corbett, oral commun., 1978). Variation in mineralogy of the lateral facies within the strata may account for different water-quality characteristics of these adjacent lakes in the same formation.

Specific conductance and pH indicate that many of these lakes have a potential for future recreational and economic uses, as well as for wildlife preserves, but other factors such as accessibility, slope of bank, and lake size may be limiting factors in establishing recreational or economic uses of a lake.

## REFERENCES

- Friedman, S. A., 1961, Geology and coal deposits at the Terre Haute and Dennison Quadrangles, Vigo County, Indiana: U.S. Geological Survey Coal Investigations Map C-44.
- Gray, H. H., Wayne, W. J., and Wier, C. E., 1970, Geologic map of 1° X 2° Vincennes Quadrangle and parts of adjoining quadrangles, Indiana and Illinois, showing bed-rock and unconsolidated deposits: Indiana Department of Natural Resources, Geological Survey Division.
- Hutchison, H. C., 1958, Geology coal deposits of the Seelyville Quadrangle, Vigo County, Indiana: U.S. Geological Survey Coal Investigations Map C-27.
- \_\_\_\_\_, 1960, Geology and coal deposits of the Brazil Quadrangles, Indiana: Indiana Department of Conservation, Geological Survey Bulletin no. 16, 50 p., and two maps.
- Kottowski, F. E., 1954, Geology and coal deposits of the Dugger Quadrangle, Sullivan County, Indiana: U.S. Geological Survey Coal Investigations Map C-11.
- \_\_\_\_\_, 1959, Geology and coal deposits of the Coal City Quadrangle, Greene, Clay, and Owen Counties, Indiana: U.S. Geological Survey Coal Investigations Map C-28.
- \_\_\_\_\_, 1960, Geology and coal deposits of the Switz City Quadrangle, Greene County, Indiana: U.S. Geological Survey Coal Investigations Map C-41.
- Moore, G. K., [1978], Satellite surveillance of physical water-quality characteristics, in International Symposium on Remote Sensing of Environment, Manila, Philippine Islands, 12th, 1978, Proc.: Ann Arbor, Mich., Environmental Research Institute, Michigan, v. 1, p. 445-462.
- Powell, R. L., 1972, Coal strip-mined land in Indiana: Indiana Department of Natural Resources, Geological Survey Division Special Report 6, 18 p.
- Reid, G. K., and Wood, R. D., 1976, Ecology of inland waters and estuaries: New York, D. Van Nostrand Company, 485 p.
- Ruttner, Franz, 1963, Fundamentals of Limnology: Toronto, Canada, University of Toronto Press, 295 p.
- Wetzel, R. G., 1975, Limnology: Philadelphia, Pa., W. B. Saunders Company, 743 p.
- Wier, C. E., 1952, Geology and mineral deposits of the Jasonville Quadrangle, Indiana: Indiana Department of Conservation, Geological Survey Bulletin no. 6, two maps.



EXPLANATION OF ABBREVIATIONS AND CODES USED IN TABLE 2

LAT AND LONG: Lat (latitude north) and long (longitude west) in D (degrees), M (minutes) and S (seconds) recorded to nearest  $\pm$  1 second.

LAKE ID: (Lake identification): Numbers for locating coal-mine lakes on the 7.5-minute quadrangle topographic maps in this report.

CO (County):

Code	County	Code	County
021	Clay	123	Perry
027	Daviess	125	Pike
037	Dubois	133	Putnam
045	Fountain	147	Spencer
051	Gibson	153	Sullivan
055	Greene	163	Vanderburgh
083	Knox	165	Vermillion
097	Martin	167	Vigo
119	Owen	173	Warrick
121	Parke		

SHAPE: Geometrical shape of lakes shown on the 7.5-minute quadrangle topographic maps in this report.

Code	Shape	Code	Shape
C	Circular	R	Rectangular
BR	Branched	S	Subcircular
E	Elliptical	SR	Subrectangular
IR	Irregular	TR	Triangular
L	Lunate	TO	Trough

LENGTH: Distance between the two most widely separated points on the lake, in miles. Maximum length.

WIDTH: Mean width calculated by computer using the equation  $Width = A/L$  where, A is area, in square miles  
L is length, in miles.

SHORE: Length of shoreline calculated by the computer and digitizer, in miles.

AREA: Surface area of a lake calculated by the computer and digitizer, in acres.

SHORE DEV: Shoreline development. The ratio of "shoreline length" to the length of the circumference of a circle of area equal to that of the lake" determined by:

$$D_L = \frac{L}{2\sqrt{\pi} A}$$

where:

$D_L$  is shoreline development  
L is shoreline, in miles  
A is area, in square miles.

A value of 1 represents a uniform circular lake. The greater the number, the greater the irregularity of the lake's shape (Wetzel, 1975).

ORIEN: The degree of orientation from true north

I	Stream	Code	Meaning
N	Inlet to lake	N	No
		Y	Yes
O	Stream		
U	Outlet to lake	N	No
		Y	Yes

SAMPLE: Month/Year (date of collection)

PH: Negative logarithm of effective hydrogen ion activity, in gram equivalents per liter, on a scale from 0 to 14; numbers less than 7 represent increasing acidity; numbers greater than 7 represent increasing alkalinity.

SPEC COND: Specific conductance, in micromhos per centimeter at 25°Celsius; a measure of the ability of water to conduct an electric current and an indication, within wide limits, of the ionic concentration of a solution.

COLOR: Apparent color of lake water determined visually by two observers.

Code	Color
A	Aqua
BL	Blue
BR	Brown
G	Green
LG	Lime green
R	Red

VEG: The general type of vegetation along shoreline of lakes.

Code	Vegetation
B	Bush
G	Grass
T	Tree
W	Weed

CB (coal bed) and FM (formation)

Code	Explanation	Code	Explanation
7	Danville Coal Member (VII)		
6	Hymera Coal Member (VI)	D	Dugger
5B	Coal Vb		
5	Springfield Coal Member (V)	P	Petersburg
4	Survant Coal Member (IV)		
3A	Colchester Coal Member (IIIa)	L	Linton
3	Seeleyville Coal Member (III)		
PL	Perth Limestone Member	S	Staunton
M	Minshall and Buffaloville Coal Members		
U	Upper Block Coal Member	B	Brazil
L	Lower Block Coal Member		
MH	Mariah Hill Coal Bed		
SM	St. Meinrad Coal Bed	M	Mansfield



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

ALFORDSVILLE 171C																							
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	36	33	86	56	22	1-A	27	R	0.07	0.011	0.17	0.55	1.6	156	N	N							
38	36	22	86	56	23	1-B	27	R	0.10	0.008	0.23	0.59	2.1	103	N	N							
38	36	00	86	56	32	2	27	TO	0.12	0.009	0.25	0.74	2.0	35	N	N							
38	34	45	86	56	18	3-A	27	IR	0.10	0.018	0.25	1.16	1.6	127	N	N							
38	34	51	86	56	22	3-B	27	IR	0.07	0.015	0.16	0.72	1.3	74	N	N							
38	36	21	86	59	37	4-A	27	BR	0.28	0.013	0.67	2.35	3.1	107	Y	N							
38	36	27	86	59	36	4-B	27	IR	0.08	0.022	0.22	1.19	1.4	143	N	N							

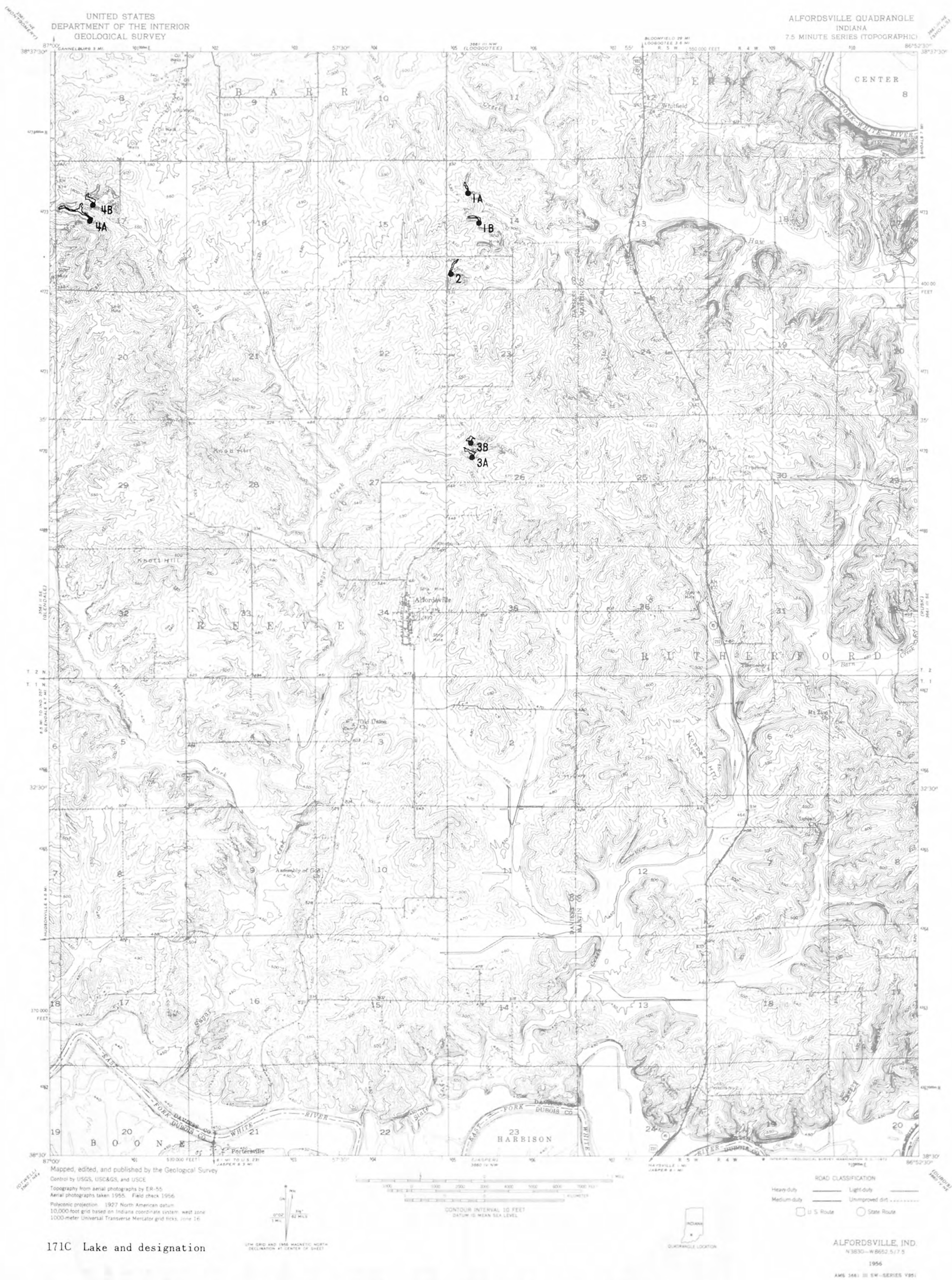


Figure 2.-- Coal-mine lakes within the Alfordsville Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

AUGUSTA																							1830																						
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM																						
D	M	S	D	M	S																																								
38	19	43	87	11	28	7	125	BR	0.18	0.021	0.47	2.63	2.0	110	N	N						S	P																						
38	20	17	87	11	55	6	125	IR	0.10	0.038	0.30	2.60	1.3	136	N	N						S	P																						
38	16	40	87	13	40	21-B	125	IR	0.31	0.100	1.08	19.99	1.7	172	Y	N						S	P																						
38	18	22	87	08	18	13-S	125	BR	0.20	0.020	0.62	2.72	2.7	37	N	N						S	P																						

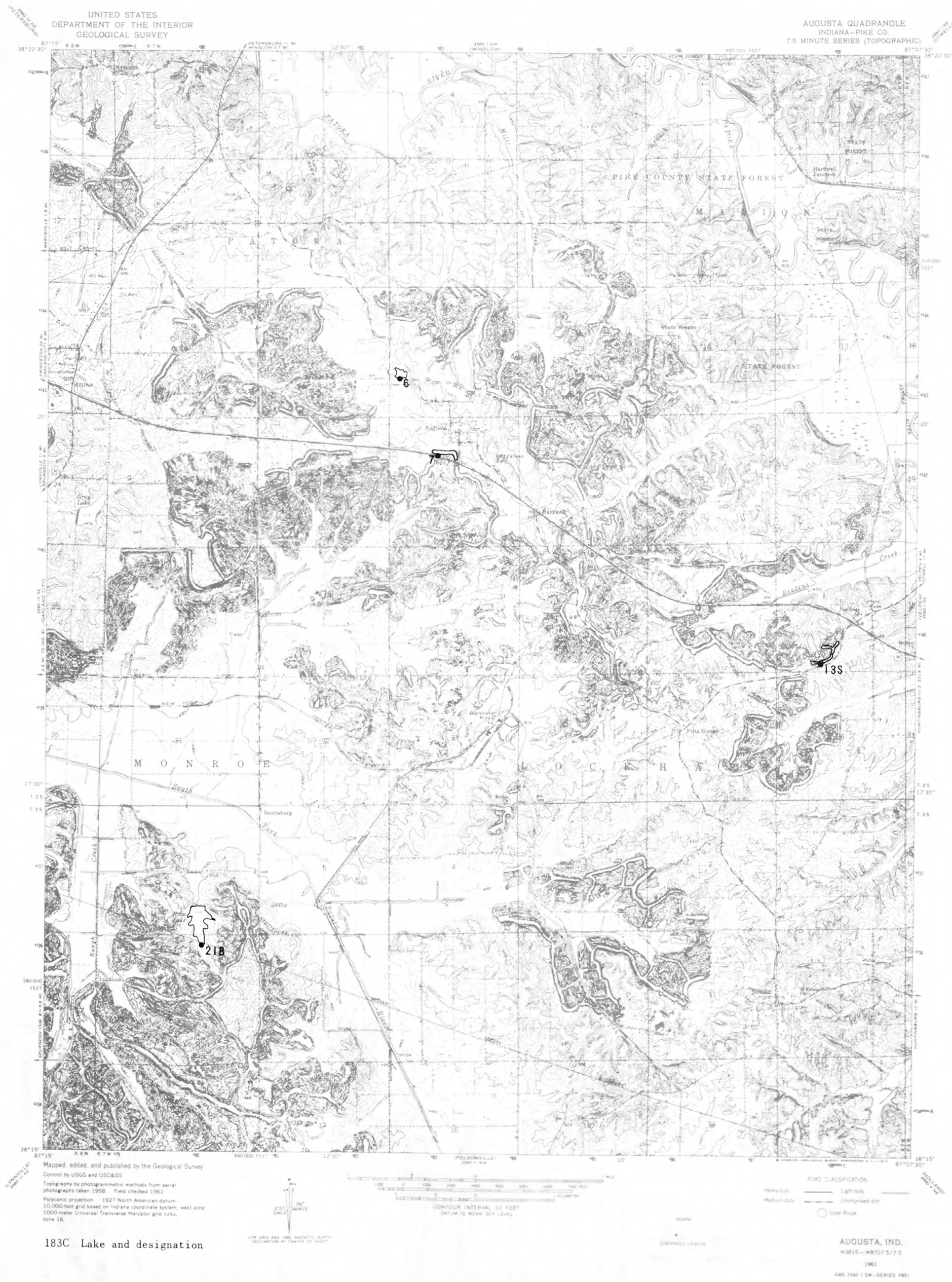


Figure 3.-- Coal-mine lakes within the Augusta Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

BICKNELL										157D													
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38 51 19			87 16 43			1	83	BR	0.52	0.030	1.54	10.42	3.4	145	N	N	6/78			G	N	5	P
38 51 04			87 16 27			2	83	R	0.16	0.018	0.37	1.98	1.8	156	N	N						5	P
38 50 58			87 17 00			3	83	R	0.15	0.021	0.34	2.15	1.6	142	N	N						5	P
38 50 26			87 16 55			4	83	BR	0.61	0.028	1.77	11.27	3.7	176	N	N						5	P
38 50 23			87 16 57			5	83	TO	0.52	0.023	1.28	7.79	3.2	177	N	N	6/78	8.0	549	G	G	5	P
38 50 18			87 17 13			6	83	BR	0.22	0.034	0.99	5.02	3.1	84	N	N	6/78	8.1	934	G	W	5	P
38 49 58			87 17 14			7	83	BR	0.37	0.027	1.16	6.71	3.2	137	Y	N	6/78			G	G	5	P
38 49 45			87 17 12			8	83	R	0.08	0.020	0.22	1.17	1.4	173	N	N	6/78			BR	W	5	P
38 49 36			87 17 08			9	83	BR	0.27	0.016	0.70	2.87	2.9	117	N	N	6/78	7.8	946	G	N	5	P
38 49 28			87 16 58			10	83	R	0.14	0.016	0.32	1.56	1.8	31	N	N						5	P
38 49 23			87 16 47			11	83	IR	0.41	0.032	1.48	8.68	3.6	97	N	N	6/78			G	TGBW	5	P
38 48 57			87 17 01			12	83	R	0.31	0.018	0.65	3.65	2.4	1	N	N	6/78			G	N	5	P
38 49 00			87 16 55			13	83	TO	0.05	0.077	0.53	2.81	2.2	132	N	N	6/78	7.8	1841	G	N	5	P
38 48 45			87 16 52			14	83	IR	0.17	0.025	0.40	2.77	1.7	5	N	N						5	P
38 48 47			87 17 02			15	83	TO	0.14	0.021	0.32	2.04	1.6	15	N	N						5	P
38 48 47			87 17 11			16	83	R	0.12	0.020	0.29	1.68	1.6	90	N	N						5	P
38 48 35			87 17 03			17	83	R	0.11	0.030	0.25	2.25	1.2	6	N	N						5	P
38 48 42			87 17 23			18	83	TO	0.17	0.027	0.41	3.12	1.6	91	N	N						5	P
38 48 35			87 16 45			19	83	IR	0.19	0.042	0.64	5.38	1.9	163	N	N						5	P
38 48 28			87 16 54			20	83	IR	0.16	0.041	0.46	4.47	1.5	35	N	N						5	P
38 48 28			87 17 16			21	83	IR	0.09	0.020	0.21	1.20	1.4	15	N	N						5	P
38 48 21			87 17 14			22	83	TO	0.27	0.020	0.64	3.56	2.4	152	N	N						5	P
38 48 18			87 17 35			23	83	R	0.17	0.072	0.40	8.19	1.0	68	N	N						5	P
38 47 47			87 18 17			24	83	R	0.27	0.020	0.56	3.54	2.1	4	N	N						5	P
38 47 19			87 18 07			25	83	BR	0.76	0.032	2.22	15.66	4.0	107	N	N						5	P
38 47 04			87 18 02			26	83	BR	0.30	0.050	1.13	9.93	2.5	72	N	N						5	P
38 49 10			87 15 53			27	83	TO	0.29	0.020	0.68	3.85	2.4	7	N	N						5	P
38 50 00			87 16 20			28	83	BR	0.63	0.036	1.51	14.81	2.8	164	N	N						5	P
38 50 20			87 16 12			29	83	IR	0.13	0.036	0.39	3.15	1.5	10	N	N						5	P
38 50 02			87 16 03			30	83	TO	0.28	0.017	0.61	3.25	2.4	62	N	N	6/78			G	TGBW	5	P
38 50 09			87 15 32			31	83	TO	0.20	0.017	0.43	2.29	2.0	104	N	N						5	P

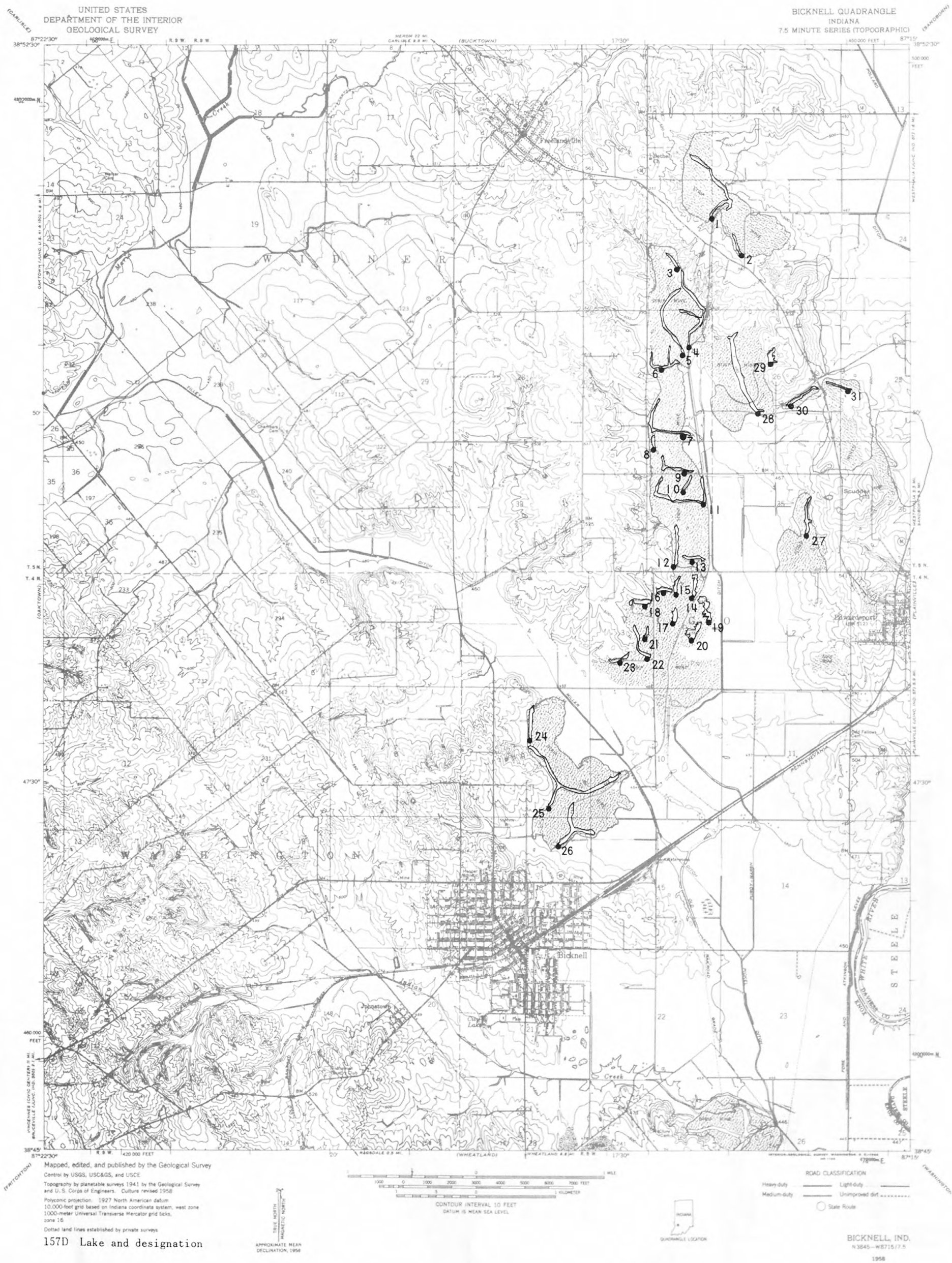


Figure 4.-- Coal-mine lakes within the Bicknell Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

BOONVILLE										1940																			
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM						
D	M	S	D	M	S																								
38	03	35	87	15	13	1	173	IR	0.74	0.125	3.56	59.80	3.2	86	N	N						5	P						
38	03	51	87	16	35	2	173	IR	0.32	0.049	1.52	10.26	3.4	43	N	N						5	P						
38	03	50	87	15	59	3-A	173	IR	0.11	0.024	0.31	1.78	1.6	163	N	N						5	P						
38	03	50	87	15	58	3-B	173	IR	0.12	0.027	0.33	2.24	1.6	40	N	N						5	P						
38	03	50	87	16	31	4	173	IR	0.11	0.028	0.30	2.16	1.5	111	N	N						5	P						

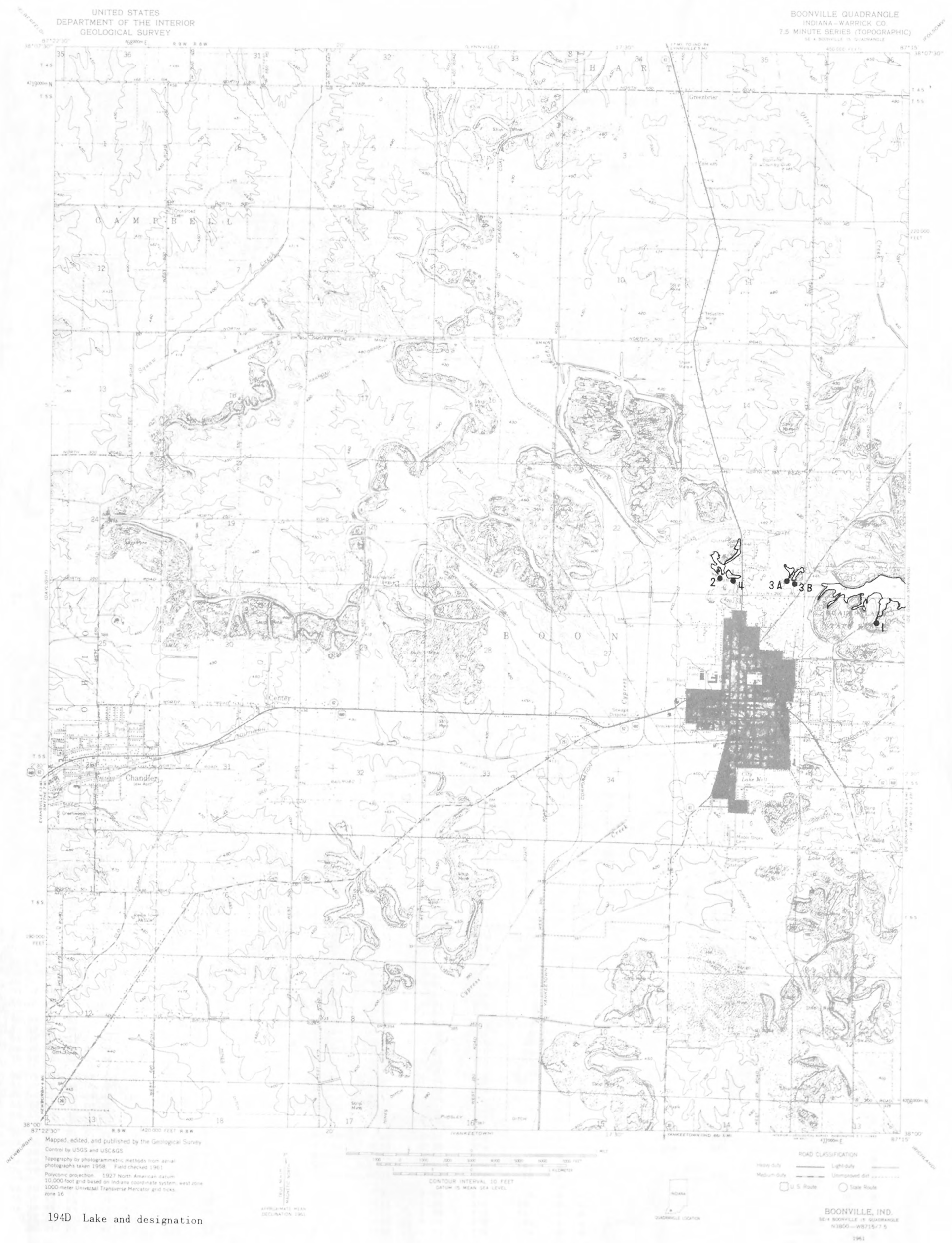


Figure 5.-- Coal-mine lakes within the Boonville Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

BRAZIL EAST 120D																							
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	36	40	87	02	20	1-D	121	IR	0.11	0.025	0.36	1.80	1.9	48	Y	Y						U	B
39	36	22	87	01	20	1-B	121	IR	0.43	0.081	1.60	22.50	2.4	9	Y	Y						U	B
39	36	15	87	05	13	3-A	21	BR	0.06	0.015	0.15	0.68	1.3	16	N	N						U	B
39	36	09	87	05	09	3-B	21	R	0.06	0.020	0.15	0.84	1.2	118	N	N						U	B
39	36	04	87	05	17	3-C	21	IR	0.14	0.047	0.78	4.37	2.6	49	N	N						U	B
39	36	31	87	05	46	2-C	121	TO	0.12	0.013	0.28	1.13	1.8	24	N	N						U	B
39	36	57	87	05	35	2-F	121	R	0.11	0.012	0.25	0.90	1.8	49	Y	Y						UL	B
39	36	55	87	05	42	2-I	121	BR	0.08	0.026	0.21	1.50	1.2	124	N	N						UL	B
39	36	12	87	05	36	2-J	21	BR	0.12	0.021	0.37	1.73	2.0	107	N	N						UL	B
39	36	05	87	05	28	5	21	IR	0.05	0.057	0.37	2.09	1.8	0	N	N						UL	B
39	36	13	87	06	16	6-F	21	IR	0.09	0.010	0.21	0.68	1.8	18	N	N	08/77	2.5	458	A	G	U	B
39	36	07	87	06	00	6-B	21	IR	0.11	0.024	0.27	1.77	1.4	69	N	N						UL	B
39	36	41	87	07	19	8-E	121	R	0.15	0.029	0.42	3.05	1.7	38	N	N						M	B
39	36	20	87	07	01	9-B	121	IR	0.22	0.037	0.62	5.35	1.9	69	N	N	08/77	7.9	802	G	TG		
39	36	21	87	07	10	9-E	121	IR	0.12	0.049	0.57	4.10	2.0	34	N	N	08/77	8.2	805	G	G		
39	36	15	87	06	52	9-G	21	BR	0.12	0.011	0.29	0.91	2.1	133	N	N						MU	B
39	36	08	87	06	45	9-J	21	IR	0.10	0.025	0.37	1.75	2.0	4	N	N							
39	36	05	87	06	49	9-L	21	BR	0.09	0.024	0.30	1.50	1.7	175	N	N							
39	35	58	87	06	55	9-M	21	IR	0.16	0.045	0.52	4.89	1.6	47	N	N							
39	36	00	87	06	57	9-N	21	IR	0.08	0.035	0.26	1.91	1.3	159	N	N							
39	35	27	87	06	49	10-G	21	IR	0.11	0.039	0.56	2.98	2.3	33	N	N						M	B
39	35	29	87	06	59	10-H	21	IR	0.13	0.062	0.99	5.47	3.0	85	N	N						M	B
39	35	31	87	06	34	11	21	IR	0.15	0.026	0.53	2.63	2.3	46	N	N	08/77		157	G	TG	MU	B
39	35	27	87	05	49	13	21	IR	0.10	0.034	0.44	2.23	2.1	178	N	N						U	B
39	34	11	87	05	25	14-A	21	IR	0.37	0.036	1.37	8.85	3.3	124	N	N						UL	B
39	34	01	87	05	23	14-C	21	IR	0.07	0.018	0.26	0.84	2.0	155	N	N							
39	34	13	87	06	37	14-D	21	IR	0.13	0.054	0.44	4.60	1.4	88	Y	N							
39	34	22	87	07	13	14-E	21	IR	0.22	0.055	0.89	7.81	2.2	13	Y	N							
39	33	44	87	05	07	15-G	21	IR	0.15	0.030	0.47	2.96	1.9	143	N	N						MU	B
39	33	41	87	04	59	15-H	21	IR	0.11	0.030	0.35	2.23	1.7	166	N	N						MU	B
39	33	40	87	05	16	15-K	21	IR	0.05	0.015	0.13	0.53	1.3	102	N	N	08/77	8.5	488	G	G	MU	B
39	33	35	87	05	11	15-L	21	R	0.09	0.015	0.22	1.00	1.5	113	N	N						MU	B
39	33	49	87	06	19	16	21	R	0.03	0.021	0.12	0.51	1.2	84	N	N	08/77	9.0	459	G	G	UL	B
39	33	41	87	05	55	18-A	21	IR	0.12	0.019	0.30	1.58	1.7	74	N	N	08/77	8.5	369	A	G		B
39	33	40	87	05	48	18-B	21	IR	0.15	0.016	0.32	1.64	1.8	71	N	N	08/77	7.8	465	G	TG		B
39	33	24	87	06	19	19	21	IR	0.22	0.018	0.62	2.62	2.7	58	N	N	08/77	3.5	1094	A	G	U	B
39	33	18	87	04	15	22	21	IR	0.35	0.026	1.05	5.98	3.0	85	N	N	08/77	8.6	515	G	G		
39	33	44	87	06	37	24	21	IR	0.09	0.015	0.23	0.99	1.6	4	N	N	08/77	9.6	425	G	G	UL	B
39	33	38	87	07	07	26-B	21	R	0.05	0.012	0.15	0.47	1.5	15	N	N	08/77	8.2	311	BR	TGW	MU	B
39	32	51	87	07	01	26-I	21	IR	0.18	0.016	0.43	2.01	2.1	119	N	N	08/77			LG	TGW	MU	B
39	32	18	87	05	27	28	21	IR	0.17	0.023	0.44	2.68	1.9	6	N	N	08/77			G	TG	3A	B
39	32	22	87	06	18	29-A	21	IR	0.32	0.026	0.80	5.54	2.4	99	Y	Y	08/77			G	TG	U	B
39	32	14	87	06	22	29-B	21	R	0.05	0.017	0.14	0.64	1.2	135	N	N						U	B
39	32	09	87	06	20	29-C	21	IR	0.10	0.015	0.26	0.98	1.9	119	N	N	08/77			BR	TG	U	B
39	30	57	87	04	48	32	21	IR	0.13	0.031	0.39	2.78	1.7	148	N	N	08/77	6.2	262	G	G	U	B
39	30	51	87	05	09	33-A	21	IR	0.15	0.031	0.35	3.05	1.4	51	N	N						U	B
39	30	45	87	05	04	33-B	21	IR	0.12	0.027	0.37	2.15	1.8	137	N	N						U	B
39	30	41	87	05	05	33-C	21	IR	0.13	0.028	0.40	2.41	1.8	155	N	N						U	B
39	30	44	87	05	12	33-D	21	IR	0.07	0.026	0.24	1.22	1.5	96	N	N						U	B
39	30	46	87	05	28	34-C	21	IR	0.21	0.046	0.71	6.42	2.0	110	N	N						U	B
39	30	38	87	05	38	34-G	21	IR	0.26	0.029	1.23	5.17	3.8	118	N	N						UL	B
39	30	30	87	05	19	35-C	21	IR	0.22	0.015	0.50	2.17	2.4	17	N	N	08/77	8.8	296	A	TG	UL	B
39	30	24	87	05	23	35-E	21	R	0.11	0.019	0.26	1.42	1.6	0	N	N	08/77	8.2	412	G	TG	U	B
39	30	20	87	05	23	35-F	21	R	0.04	0.034	0.14	0.91	1.1	175	N	N	08/77			BR	TG	U	B
39	30	26	87	05	33	35-J	21	TD	0.11	0.009	0.25	0.69	2.1	32	N	N						U	B
39	30	20	87	05	33	35-I	21	TD	0.11	0.011	0.25	0.80	2.0	41	N	N						U	B
39	30	21	87	05	33	35-K	21	SC	0.05	0.053	0.22	1.81	1.1	4	N	N						U	B
39	30	01	87	06	34	36	21	IR	0.15	0.075	0.65	7.68	1.6	158	N	N	08/77	8.7	414	G	TG	U	B
39	30	17	87	04	13	39	21	BR	0.11	0.021	0.31	1.59	1.7	7	N	N	08/77	8.6	158	BR	TG	U	B
39	30	07	87	03	29	38	21	R	0.05	0.019	0.16	0.70	1.3	157	N	N						L	B
39	32	41	87	03	05	40-A	21	IR	0.17	0.023	0.41	2.59	1.8	179	N	N							B
39	32	39	87	03	05	40-B	21	IR	0.19	0.032	0.46	4.16	1.6	52	Y	N							B
39	30	26	87	03	30	41	21	IR	0.21	0.051	0.74	7.00	1.9	93	N	N							B

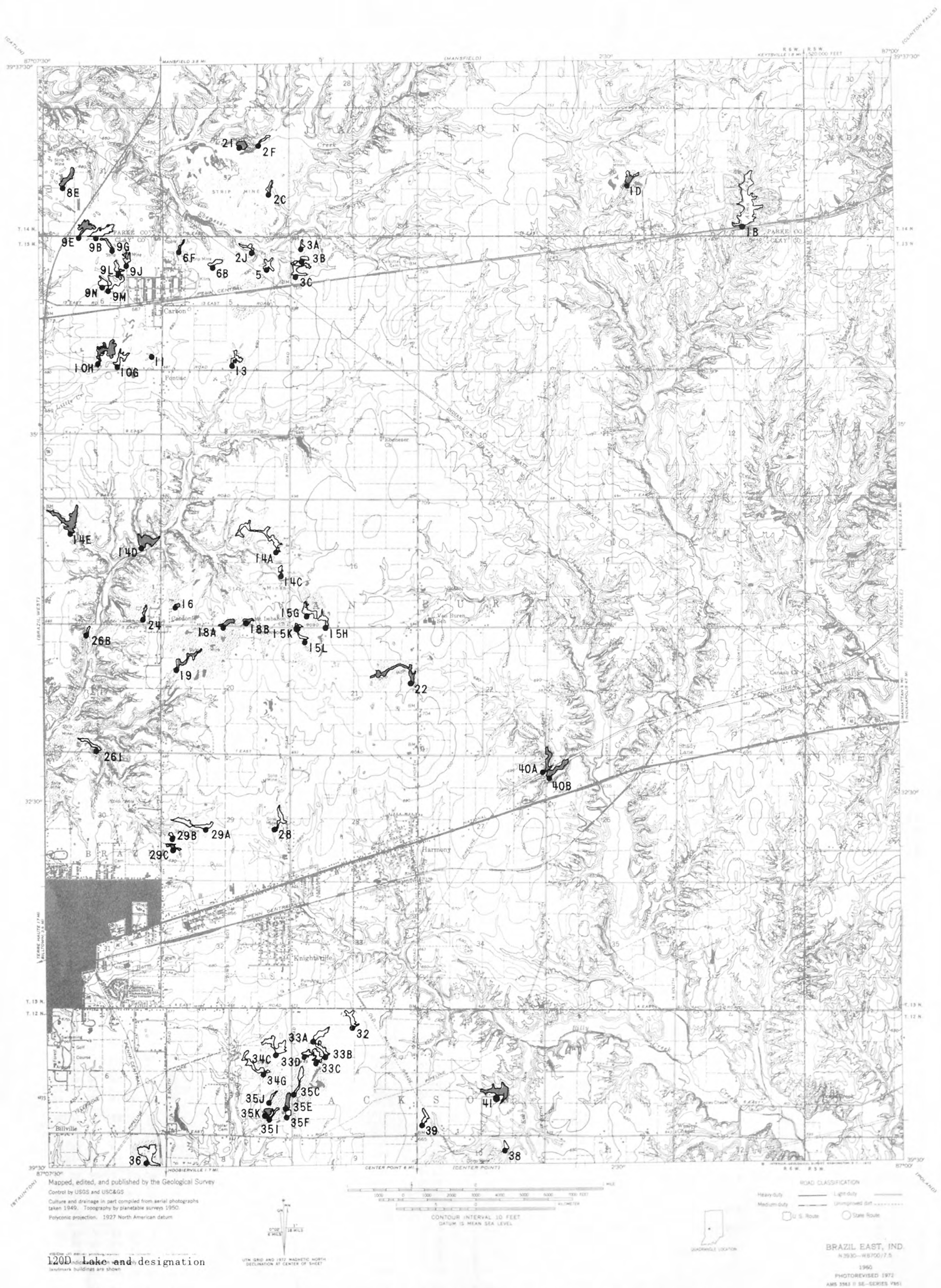


Figure 6.-- Coal-mine lakes within the Brazil East Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

BRAZIL WEST 120C																			
LAT	LONG	LAKE	CD	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
39 37 03	87 07 52	1	121	SR	0.09	0.015	0.21	0.92	1.6	16	Y	Y						U	B
39 36 26	87 09 02	6	121	IR	0.11	0.013	0.25	0.96	1.8	56	N	N				G	G	UL	B
39 36 16	87 08 41	7-C	21	BR	0.06	0.017	0.23	0.74	1.9	80	Y	Y						U	B
39 36 11	87 08 46	7-D	21	SR	0.06	0.019	0.17	0.82	1.4	38	N	N						U	B
39 36 13	87 08 51	7-E	21	L	0.07	0.018	0.19	0.89	1.4	165	N	N						U	B
39 35 42	87 08 57	9-J	21	IR	0.11	0.018	0.27	1.30	1.7	86	N	N						U	B
39 35 35	87 08 47	9-R	21	SR	0.08	0.013	0.18	0.73	1.5	92	N	N						M	B
39 35 29	87 08 50	9-S	21	IR	0.26	0.034	0.66	5.73	1.9	87	N	N				G	G	M	B
39 35 30	87 09 04	9-U	21	TO	0.11	0.013	0.24	1.04	1.6	94	N	N				G	G	U	B
39 35 29	87 08 31	10	21	TR	0.05	0.015	0.11	0.49	1.1	103	N	N	8/77	8.3	482	G	G		
39 35 11	87 09 10	11	21	IR	0.34	0.025	0.78	5.58	2.3	31	N	N	8/77	8.3	925	G	G	U	B
39 35 46	87 09 26	12	21	BR	0.15	0.023	0.37	2.29	1.7	4	Y	Y						U	B
39 35 43	87 10 07	14	21	SR	0.34	0.015	0.78	3.34	3.0	65	N	N	8/77			G	G	L	B
39 35 18	87 12 37	17-A	167	SC	0.04	0.024	0.14	0.76	1.2	122	N	N	8/77	9.5	302	G	TGB	3	S
39 35 20	87 12 39	17-B	167	IR	0.06	0.020	0.17	0.93	1.2	131	N	N						3	S
39 35 19	87 12 48	17-C	19	TO	0.08	0.013	0.19	0.73	1.5	173	N	N						3	S
39 35 24	87 13 24	18-A	19	IR	0.12	0.032	0.35	2.56	1.5	45	N	N	8/77	9.1	823	G	TG	3	S
39 35 20	87 13 45	18-C	167	IR	0.17	0.024	0.50	2.79	2.1	92	N	N						3	S
39 35 18	87 13 26	18-D	167	BR	0.07	0.026	0.21	1.26	1.3	145	N	N						3	S
39 35 01	87 13 18	18-H	167	SR	0.12	0.018	0.27	1.52	1.5	147	N	N							
39 34 55	87 13 01	19	167	IR	0.07	0.029	0.22	1.35	1.3	43	N	N	8/77	10.2	251	G	GB	3	S
39 34 42	87 13 54	21-A	167	BR	0.18	0.030	0.56	3.49	2.1	60	N	N							
39 34 56	87 14 17	21-B	167	IR	0.07	0.016	0.15	0.75	1.2	106	N	N	8/77			G	T	3U	SB
39 34 53	87 14 21	21-C	167	TR	0.09	0.031	0.33	2.00	1.6	90	N	N	8/77			R		M	B
39 34 19	87 14 15	22	167	IR	0.62	0.030	1.61	12.41	3.2	63	N	N						3	S
39 34 11	87 13 18	23-C	167	IR	0.10	0.040	0.31	2.56	1.4	127	N	N						3	S
39 34 07	87 13 13	23-D	167	SR	0.09	0.032	0.25	1.94	1.3	0	N	N						3M	SB
39 33 58	87 12 45	24-D	167	BR	0.18	0.035	0.49	4.09	1.7	141	N	N						3M	SB
39 33 49	87 12 47	24-E	167	IR	0.22	0.088	1.23	12.57	2.4	63	N	N	8/77	8.2	2106	G	G	3M	SB
39 33 51	87 12 23	24-G	167	IR	0.10	0.022	0.25	1.52	1.4	162	N	N						3M	SB
39 33 36	87 12 26	24-J	167	IR	0.22	0.059	0.64	8.48	1.5	164	N	N	8/77			G	G	3M	SB
39 34 39	87 10 04	25-A	21	IR	0.17	0.037	0.56	4.31	1.9	83	Y	Y	8/77	8.5	761	G	G	M	B
39 34 32	87 09 59	25-B	21	BR	0.13	0.030	0.43	2.63	1.9	115	N	N						M	B
39 34 29	87 10 02	25-D	21	BR	0.21	0.032	0.69	4.61	2.2	62	N	N						M	B
39 32 36	87 07 54	26-A	21	BR	0.13	0.028	0.43	2.46	1.9	157	N	N						U	B
39 32 02	87 08 30	26-B	21	IR	0.12	0.037	0.36	3.03	1.4	61	N	N						U	B
39 32 57	87 14 22	27-E	167	IR	0.20	0.013	0.45	1.82	2.4	44	N	N	8/77	8.3	943	G	TG	3	S
39 32 55	87 14 04	27-C	167	L	0.10	0.031	0.51	2.15	2.4	54	Y	Y						3	S
39 33 00	87 14 36	30	167	R	0.06	0.018	0.16	0.82	1.3	103	N	N						3	S
39 32 50	87 14 40	31	167	BR	0.08	0.036	0.32	2.04	1.6	56	N	N						3	S
39 32 43	87 14 09	32	167	E	0.10	0.027	0.25	1.87	1.3	103	N	N						3	S
39 32 15	87 13 39	33	167	IR	0.36	0.024	1.06	5.79	3.1	37	N	N						3	S
39 31 41	87 14 52	34	167	IR	0.27	0.033	0.77	5.85	2.2	84	Y	N						3	S
39 30 09	87 11 17	35	21	IR	0.13	0.025	0.36	2.28	1.7	9	N	N						M	B
39 30 11	87 10 27	36-A	21	BR	0.13	0.028	0.46	2.41	2.1	0	N	N						3	S
39 30 15	87 10 41	36-B	21	IR	0.18	0.023	0.42	2.83	1.7	110	Y	N						3	S
39 30 24	87 09 09	37	21	BR	0.11	0.024	0.40	1.73	2.1	110	N	N						3	S





TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

BUCKTOWN										157B									
LAT	LONG	LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U							
38 59 37	87 15 53	1	153	R	0.04	0.010	0.10	0.28	1.4	175	N	N						6	D
38 59 31	87 15 52	2	153	R	0.12	0.012	0.29	0.98	2.1	111	N	N						6	D
38 58 48	87 15 34	3	153	BR	0.42	0.023	1.35	6.36	3.8	30	N	N	6/78	7.2	1226	G	TGBW	6	D
38 58 36	87 15 19	4	153	R	0.37	0.033	1.17	8.04	2.9	18	Y	N	11/77	7.3	944	G	TG	6	D
38 58 04	87 15 53	5	153	IR	0.95	0.034	3.04	20.99	4.7	7	N	N	6/78	7.3	757	G	TGBW	6	D
38 57 45	87 15 29	6	153	BR	0.52	0.031	1.63	10.47	3.6	126	N	N	11/77	7.4	1800	G	TG	6	D

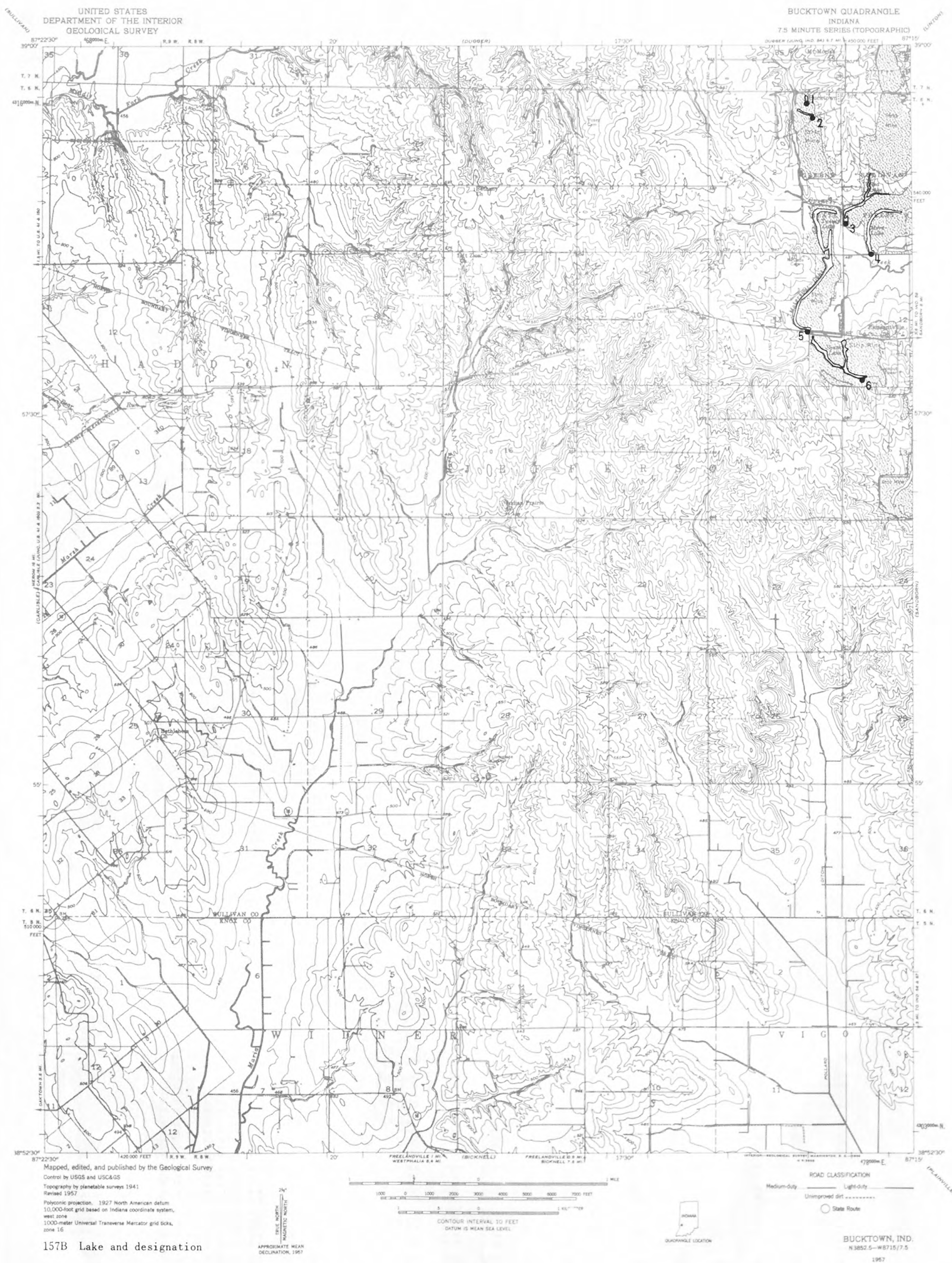


Figure 8.-- Coal-mine lakes within the Bucktown Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

CENTER POINT 133B																						
LAT D M S	LONG D M S	LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIENT (DEGS)	I	O	U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM		
39 29 32	87 03 03	1-A	21	R	0.10	0.028	0.28	1.90	1.4	28	N	N								L	B	
39 29 33	87 02 53	1-B	21	IR	0.17	0.027	0.42	3.11	1.7	124	N	N								L	B	
39 29 23	87 02 51	1-C	21	IR	0.18	0.014	0.39	1.74	2.1	0	N	N								L	B	
39 29 20	87 02 45	1-D	21	BR	0.18	0.031	0.74	3.79	2.7	24	N	N		8/77	8.5	279	G	TC		L	B	
39 29 29	87 02 28	1-E	21	R	0.17	0.014	0.47	1.63	2.6	134	N	N								L	B	
39 29 20	87 02 32	1-G	21	TO	0.05	0.007	0.11	0.24	1.7	168	N	N		8/77			BR	TC			B	
39 29 09	87 02 57	2-A	21	IR	0.17	0.019	0.39	2.08	1.9	21	N	N								L	B	
39 29 18	87 02 47	2-B	21	IR	0.09	0.023	0.29	1.45	1.7	175	Y	N		8/77			G	TC		L	B	
39 29 17	87 02 42	2-C	21	R	0.11	0.013	0.25	0.97	1.8	92	N	N		8/77	8.4	186	G	BR	TC	L	B	
39 29 07	87 02 36	2-D	21	IR	0.15	0.019	0.36	1.97	1.8	7	N	N								L	B	
39 29 07	87 02 46	2-E	21	TO	0.19	0.023	0.45	2.94	1.9	34	N	N									B	
39 29 57	87 04 14	3-A	21	IR	0.12	0.019	0.33	1.58	1.8	60	N	N		8/77	8.3	323	G		TC		B	
39 29 52	87 04 05	3-B	21	IR	0.20	0.016	0.49	2.14	2.4	177	N	N									B	
39 29 51	87 04 14	4-M	21	IR	0.17	0.014	0.35	2.26	1.6	8	N	N									B	
39 28 57	87 03 48	4-F	21	BR	0.15	0.024	0.43	2.42	2.0	6	N	N									B	
39 28 53	87 04 11	4-J	21	BR	0.17	0.042	0.72	4.74	2.3	63	N	N		8/77	8.2	353	BR	TC			B	
39 28 48	87 04 16	4-K	21	IR	0.09	0.022	0.24	1.36	1.5	7	Y	N		8/77	7.6	464	BR	TC			B	
39 28 41	87 04 14	4-M	21	IR	0.11	0.021	0.24	1.50	1.4	27	N	N		8/77	8.3	299	G		TC		B	
39 28 34	87 04 06	4-T	21	BR	0.10	0.032	0.37	2.29	1.7	25	N	N		8/77	8.7	162	G		TC		B	
39 28 50	87 04 17	4-U	21	IR	0.18	0.018	0.46	2.28	2.2	179	N	N		8/77	8.3	150	BR		TC		B	
39 28 55	87 04 34	4-V	21	IR	0.15	0.028	0.41	2.77	1.7	60	N	N									B	
39 28 29	87 03 16	6-B	21	IR	0.26	0.032	0.71	5.47	2.1	147	N	N		8/77	8.6	447	G		TC		B	
39 28 32	87 03 17	6-C	21	TO	0.14	0.011	0.30	1.10	2.0	85	N	N		8/77	8.4	395	BR		TC		B	
39 28 33	87 03 09	6-F	21	BR	0.25	0.033	0.74	5.57	2.2	1	N	N		8/77	8.3	690	G		TC		B	
39 28 42	87 03 00	6-D	21	IR	0.09	0.027	0.27	1.59	1.5	66	N	N									B	
39 28 12	87 03 35	6-G	21	IR	0.42	0.066	1.47	18.01	2.4	60	Y	N									B	
39 28 07	87 03 33	7-A	21	IR	0.33	0.029	0.88	6.34	2.5	4	N	N									B	
39 27 59	87 05 03	8-B	21	IR	0.38	0.040	1.31	9.91	2.9	5	N	N		8/77	8.5	463	G		TC		B	
39 27 53	87 04 52	8-F	21	R	0.23	0.031	0.56	4.69	1.8	85	N	N		8/77	8.4	333	G		TC		B	
39 28 00	87 04 43	8-G	21	IR	0.12	0.033	0.33	2.68	1.4	175	N	N		8/77	8.4	571	G		TC		B	
39 27 59	87 04 37	8-H	21	L	0.09	0.018	0.29	1.13	2.0	23	N	N									B	
39 28 52	87 05 42	9	21	IR	0.65	0.071	1.69	29.75	2.2	3	Y	Y									B	
39 29 45	87 06 14	10-A	21	IR	0.23	0.039	0.64	5.93	1.8	112	N	N		8/77	9.2	275	G		TC		B	
39 29 38	87 06 13	10-B	21	IR	0.12	0.025	0.31	1.93	1.5	152	N	N									B	
39 29 32	87 06 20	10-C	21	IR	0.12	0.030	0.31	2.54	1.4	178	N	N									B	
39 29 23	87 06 14	10-F	21	IR	0.16	0.043	0.59	4.74	1.9	146	N	N									B	
39 29 32	87 07 24	11	21	BR	0.25	0.043	1.40	7.07	3.7	90	N	N									B	
39 28 36	87 06 20	12-B	21	BR	0.08	0.030	0.26	1.57	1.5	8	N	N									B	
39 28 29	87 06 17	12-C	21	IR	0.14	0.015	0.43	1.46	2.5	116	N	N		8/77	8.7	370	G	BR	TC	L	B	
39 28 29	87 06 12	12-D	21	IR	0.09	0.049	0.31	3.17	1.2	162	N	N		8/77							B	
39 28 37	87 07 22	13-B	21	IR	0.24	0.022	0.56	3.47	2.1	141	N	N									B	
39 28 32	87 07 23	13-C	21	IR	0.06	0.018	0.21	0.74	1.8	123	N	N		8/77	8.5	985	G			L	B	
39 28 31	87 06 47	13-E	21	IR	0.07	0.020	0.18	0.93	1.3	6	N	N		8/77	8.9	225	G		TC		B	
39 28 37	87 06 44	13-J	21	IR	0.08	0.031	0.25	1.69	1.3	18	N	N		8/77	9.0	238	G		TC		B	
39 28 43	87 06 44	13-K	21	IR	0.14	0.024	0.35	2.16	1.7	90	N	N		8/77	8.4	215	G			L	B	
39 28 56	87 06 31	13-P	21	L	0.12	0.023	0.38	1.95	1.9	143	N	N									B	
39 29 02	87 06 36	13-Q	21	R	0.08	0.029	0.22	1.62	1.2	151	N	N									B	
39 29 09	87 07 00	13-T	21	BR	0.12	0.021	0.36	1.75	1.9	25	N	N									B	
39 28 17	87 07 17	14-A	21	R	0.15	0.053	0.42	5.30	1.3	89	N	N		8/77	9.0	413	G		TC		B	
39 28 17	87 06 05	14-C	21	IR	0.17	0.045	0.61	5.01	1.9	143	N	N									B	
39 28 14	87 06 11	14-D	21	R	0.16	0.026	0.37	2.77	1.6	159	N	N									B	
39 28 22	87 06 17	14-G	21	L	0.12	0.015	0.30	1.24	1.9	64	N	N									B	
39 28 22	87 06 39	15-A	21	BR	0.14	0.032	0.42	2.97	1.7	32	N	N									B	
39 28 00	87 06 42	15-D	21	IR	0.16	0.044	0.74	4.82	2.4	27	N	N		8/77	8.5	243	G			L	B	
39 28 12	87 07 19	15-J	21	IR	0.27	0.028	0.71	5.06	2.2	9	N	N									B	
39 27 38	87 07 27	15-N	21	TO	0.17	0.073	0.76	8.18	1.9	92	N	N		8/77	8.2	845	G		TC		B	
39 26 50	87 07 15	16-E	21	R	0.14	0.046	0.37	4.28	1.3	87	N	N		8/77	8.6	315	G		TC		B	
39 26 44	87 07 17	16-G	21	IR	0.17	0.045	0.37	4.28	1.3	87	N	N		8/77	8.6	315	G		TC		B	
39 26 35	87 0																					

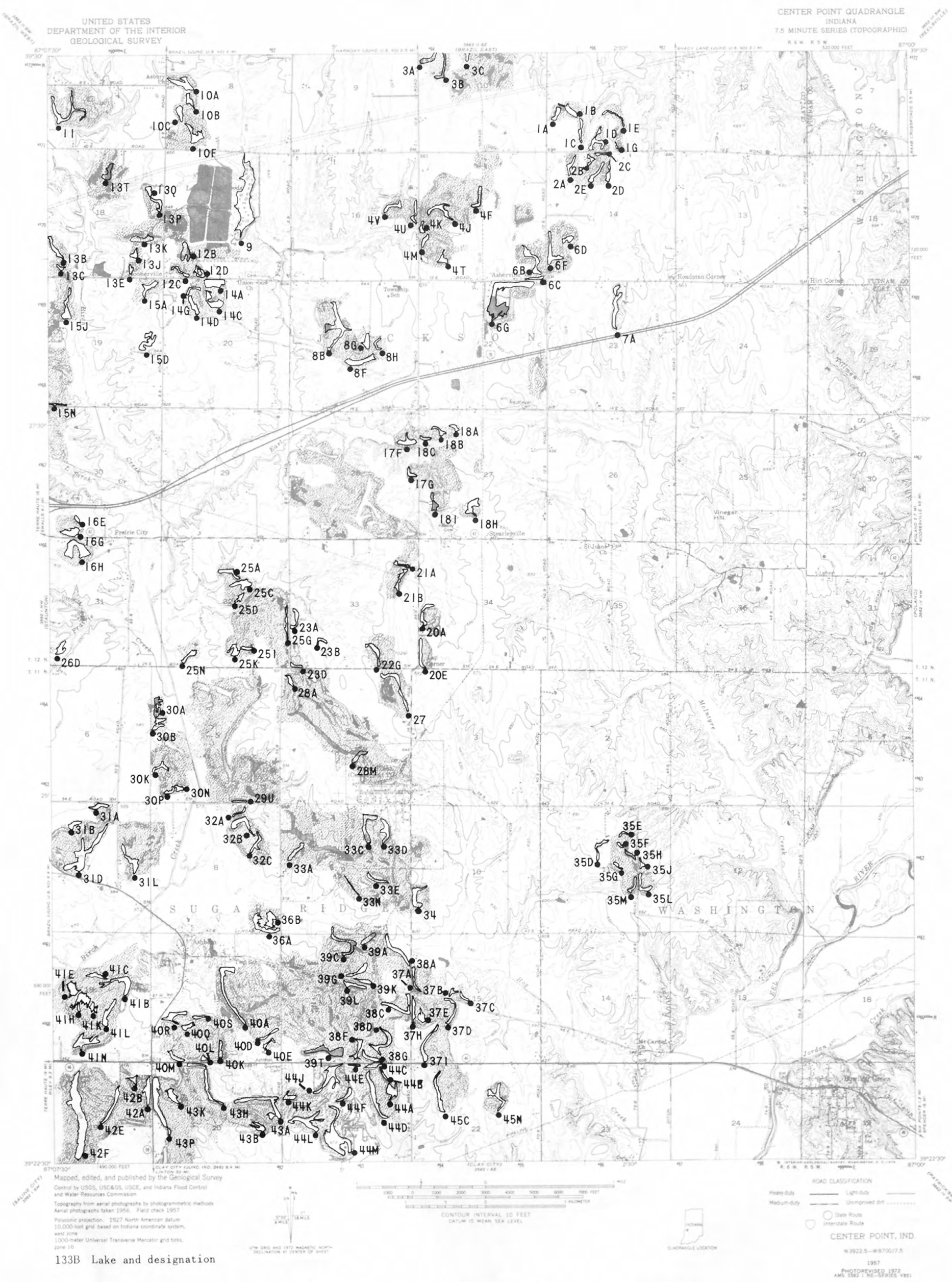


Figure 9.-- Coal-mine lakes within the Center Point Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

CHRISNEY 195D																		
LAT	LONG	LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND			
38 07 09	87 00 25	1	147	TO	0.10	0.017	0.22	1.16	1.4	4	N	N						B
38 06 40	87 00 30	2	147	SR	0.07	0.012	0.19	0.64	1.7	129	N	N						B

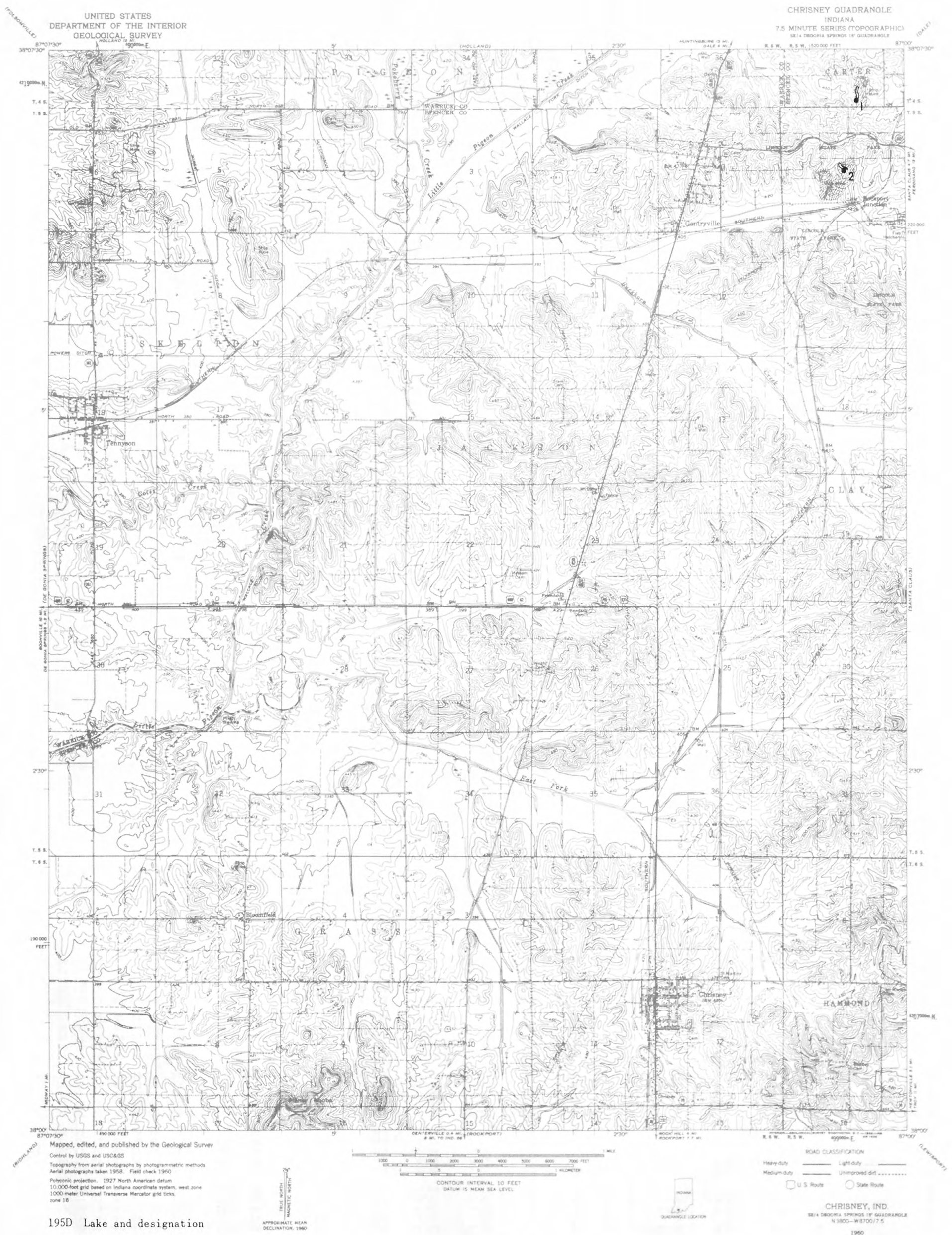


Figure 10.-- Coal-mine lakes within the Chrisney Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

CLAY CITY																			133D				
LAT			LONG			LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U							
39	19	32	87	01	54	9-A	119	IR	0.12	0.023	0.37	1.81	1.9	125	N	N							B
39	19	17	87	02	03	9-C	119	IR	0.20	0.019	0.46	2.56	2.0	41	N	N							B
39	19	01	87	02	36	7-A	119	IR	0.40	0.021	0.87	5.58	2.6	89	N	N							B
39	18	34	87	02	33	7-B	119	BR	0.39	0.034	1.28	8.85	3.0	79	N	N							B
39	18	21	87	02	35	8	119	IR	0.26	0.021	0.68	3.66	2.5	62	N	N	6/78	7.2	202	G	TGB		B
39	18	22	87	03	19	17	21	IR	0.21	0.032	0.58	4.38	1.9	80	N	N	6/78	8.1	457	G	TG		B
39	18	34	87	04	23	19-A	21	BR	0.15	0.028	0.42	2.75	1.8	137	N	N							B
39	18	23	87	04	32	19-B	21	BR	0.18	0.034	0.61	4.00	2.1	33	N	N	6/78	9.0	159	G	G		B
39	18	23	87	04	41	19-F	21	IR	0.18	0.020	0.51	2.47	2.3	95	N	N	6/78	8.6	355	G	G		B
39	18	12	87	04	31	20-A	21	BR	0.21	0.035	0.60	4.85	1.9	39	Y	N							B
39	18	11	87	04	31	20-B	21	IR	0.23	0.030	0.85	4.51	2.8	174	Y	N	6/78	8.1	656	G	TG		B
39	17	54	87	03	57	21-C	21	IR	0.38	0.040	0.92	10.16	2.0	92	N	N	6/78	8.3	664	G	TG		B
39	17	55	87	03	42	21-E	21	TO	0.10	0.019	0.24	1.29	1.5	44	N	N							B
39	17	45	87	03	45	21-M	21	SR	0.14	0.020	0.29	1.91	1.5	153	N	N							B
39	17	31	87	04	49	28-A	21	BR	0.22	0.053	1.14	7.75	2.9	176	N	N	6/78			G	TGB		B
39	17	30	87	04	25	28-B	21	BR	0.27	0.046	1.03	8.21	2.5	57	N	N	6/78			G	TGB		B
39	16	12	87	03	46	30	21	SR	0.84	0.038	1.89	20.68	2.9	15	N	N	6/78	7.7	442	G	TG		B
39	17	05	87	03	51	31	21	BR	0.51	0.060	2.28	20.10	3.6	31	N	N	6/78	6.7	670	G	TG		B
39	16	04	87	03	23	33	21	IR	0.36	0.029	1.00	6.83	2.7	108	N	N	6/78	7.3	542	G	TG		B
39	15	53	87	03	29	34	21	IR	0.26	0.027	0.65	4.80	2.1	144	N	N	6/78	8.1	486	G	TG		B
39	15	40	87	03	03	32	119	IR	0.22	0.015	0.51	2.32	2.4	69	N	N							B
39	15	53	87	07	23	40	21	IR	0.10	0.025	0.31	1.70	1.7	145	N	N	6/78	3.4	1452	A	N		B
39	22	08	87	03	54	41	21	IR	0.15	0.024	0.41	2.36	1.9	102	N	N	6/78	7.3	718	G	TG		B
39	22	18	87	06	30	42	21	IR	0.26	0.038	0.75	6.47	2.1	179	Y	N							B
39	21	02	87	06	25	44-A	21	IR	0.18	0.026	0.41	3.09	1.6	113	N	N	6/78	6.5	683	G	G		B
39	20	53	87	06	19	44-B	21	TO	0.19	0.015	0.42	1.89	2.2	146	N	N							B
39	17	25	87	04	51	29-A	21	IR	0.05	0.024	0.21	0.78	1.7	42	N	N	6/78	8.0	684	G	TGB		B
39	17	18	87	04	29	29-D	21	BR	0.17	0.017	0.50	1.90	2.6	71	N	N	6/78	7.8	563	G	TGB		B
39	16	57	87	03	34	30-H	21	BR	0.12	0.012	0.36	1.02	2.6	112	N	N	6/78	8.2	425	G	TG		B
39	16	24	87	03	18	30-S	21	SR	0.08	0.013	0.20	0.71	1.7	164	N	N	6/78	6.9	542	G	TG		B

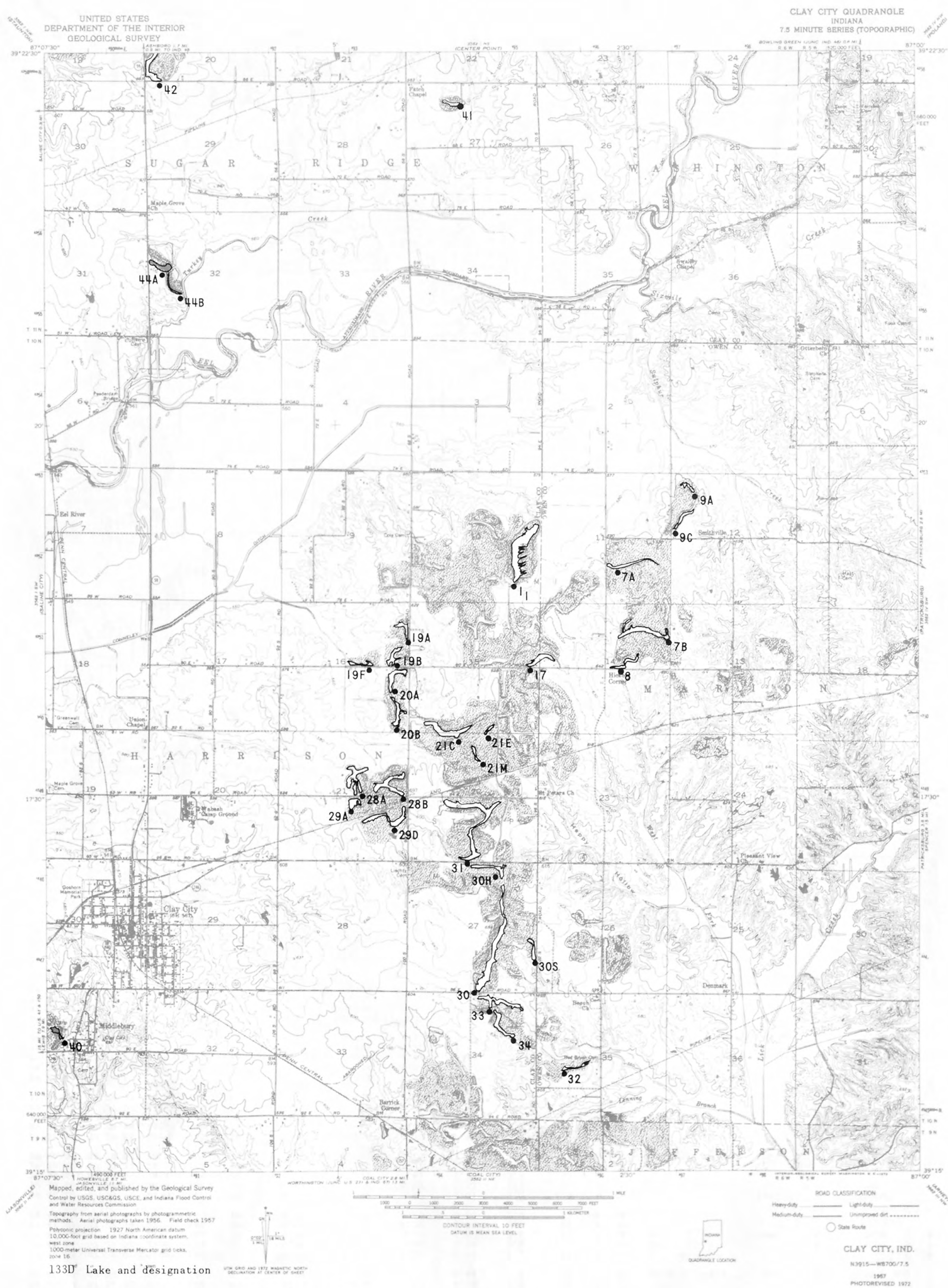


Figure 11.-- Coal-mine lakes within the Clay City Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

CLINTON 119A																							
LAT			LONG			LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
39	42	07	87	25	34	1	165	TO	0.09	0.015	0.21	0.93	1.5	85	N	N						5	P
39	41	57	87	26	01	3	165	BR	0.18	0.036	0.54	4.20	1.8	40	N	N						5	P
39	41	54	87	26	10	6	165	TO	0.10	0.011	0.21	0.73	1.7	0	N	N						5	P
39	41	47	87	26	05	9	165	R	0.24	0.026	0.52	4.25	1.8	123	N	N						5	P
39	40	05	87	24	52	10	165	R	0.22	0.037	0.51	5.51	1.5	127	Y	N	6/78	5.6	560	G	TG	5	P
39	41	23	87	29	01	21-A	165	TR	0.10	0.028	0.23	1.93	1.2	15	N	N						5	P
39	41	14	87	29	03	21-B	165	BR	0.20	0.015	0.52	2.06	2.5	176	N	N	6/78			G	TGBW	5	P
39	41	14	87	29	05	21-C	165	TO	0.21	0.010	0.43	1.47	2.5	177	N	N	6/78		1890	G	TGBW	5	P
39	41	03	87	29	44	22	165	IR	0.14	0.026	0.39	2.50	1.7	28	N	N							
39	40	29	87	29	36	23	165	IR	0.09	0.009	0.20	0.52	2.0	33	N	N							
39	40	12	87	28	50	26-A	165	IR	0.27	0.057	0.97	10.01	2.2	120	N	N	6/78	7.8	1695	G	TGBW		
39	40	08	87	28	30	26-H	165	IR	0.09	0.024	0.23	1.53	1.3	32	N	N							
39	40	01	87	28	45	26-I	165	IR	0.19	0.042	0.81	5.33	2.5	53	N	N							
39	39	53	87	28	33	26-J	165	IR	0.10	0.025	0.35	1.77	1.8	36	N	N							
39	40	07	87	28	57	26-K	165	IR	0.18	0.027	0.53	3.25	2.1	79	N	N	6/78	8.0	1250	G	TGBW		
39	39	45	87	28	55	26-N	165	IR	0.31	0.024	0.73	4.94	2.3	2	N	N	6/78	8.0	1260	G	TGBW		
39	39	44	87	28	48	26-Q	165	IR	0.14	0.011	0.32	1.05	2.2	11	N	N	6/78			G	G		
39	39	43	87	28	37	26-P	165	IR	0.11	0.024	0.40	1.77	2.1	107	N	N	6/78	7.7	1066	G	G		
39	39	49	87	29	07	27	165	E	0.09	0.025	0.21	1.48	1.2	27	N	N							
39	39	38	87	28	42	28	165	E	0.07	0.033	0.20	1.68	1.1	3	N	N	6/78	7.8	850	G	G		
39	39	30	87	28	42	29	165	SR	0.14	0.013	0.33	1.29	2.1	48	N	N							
39	39	24	87	28	47	30	165	IR	0.14	0.034	0.57	3.13	2.3	42	N	N							
39	39	26	87	28	57	31	165	IR	0.12	0.032	0.37	2.63	1.6	57	Y	N							
39	39	14	87	28	53	32-C	165	SR	0.08	0.025	0.22	1.47	1.3	54	N	N							
39	39	15	87	28	48	32-B	165	TO	0.07	0.017	0.17	0.84	1.3	9	N	N	6/78			G	TGBW		
39	39	03	87	28	42	32-F	165	IR	0.11	0.026	0.29	1.96	1.5	131	N	N	6/78	7.0	1973	G	TGBW		
39	38	52	87	28	49	33	165	TO	0.10	0.010	0.20	0.71	1.7	6	N	N							
39	38	48	87	28	51	34	165	SR	0.13	0.011	0.28	0.97	2.0	150	N	N							
39	38	36	87	28	46	35	165	IR	0.12	0.022	0.26	1.73	1.4	20	N	N							
39	38	05	87	25	35	45	165	IR	0.07	0.033	0.36	1.65	2.0	33	Y	N						5	P
39	37	47	87	25	19	46	165	SR	0.15	0.018	0.34	1.83	1.7	68	Y	N						5	P
39	38	58	87	24	37	47-B	165	BR	0.10	0.011	0.26	0.79	2.1	4	N	N						5	P
39	38	58	87	24	40	47-C	165	TR	0.08	0.014	0.18	0.79	1.4	151	N	N						5	P
39	38	53	87	24	40	47-D	165	IR	0.06	0.015	0.16	0.62	1.4	169	N	N						5	P
39	38	41	87	24	44	47-E	165	TO	0.18	0.011	0.37	1.37	2.2	8	Y	N						5	P
39	38	37	87	24	41	47-F	165	IR	0.09	0.019	0.24	1.27	1.5	65	N	N						5	P
39	38	32	87	24	41	47-G	165	SR	0.08	0.010	0.16	0.54	1.5	161	N	N						5	P
39	38	23	87	24	37	47-H	165	IR	0.17	0.015	0.40	1.80	2.1	158	N	N						5	P
39	37	52	87	24	33	49-B	165	IR	0.10	0.021	0.33	1.41	2.0	41	N	N	6/78	6.3	844	G	TGBW	5	P
39	37	40	87	24	33	49-F	165	TO	0.16	0.017	0.37	1.89	1.9	3	N	N						5	P
39	37	26	87	24	33	49-G	165	IR	0.32	0.018	0.77	3.78	2.8	19	N	N						5	P
39	37	29	87	24	21	49-H	165	IR	0.33	0.024	0.72	5.31	2.2	171	N	N						5	P
39	37	45	87	24	00	50	165	IR	0.21	0.017	0.56	2.33	2.6	179	N	N						5	P

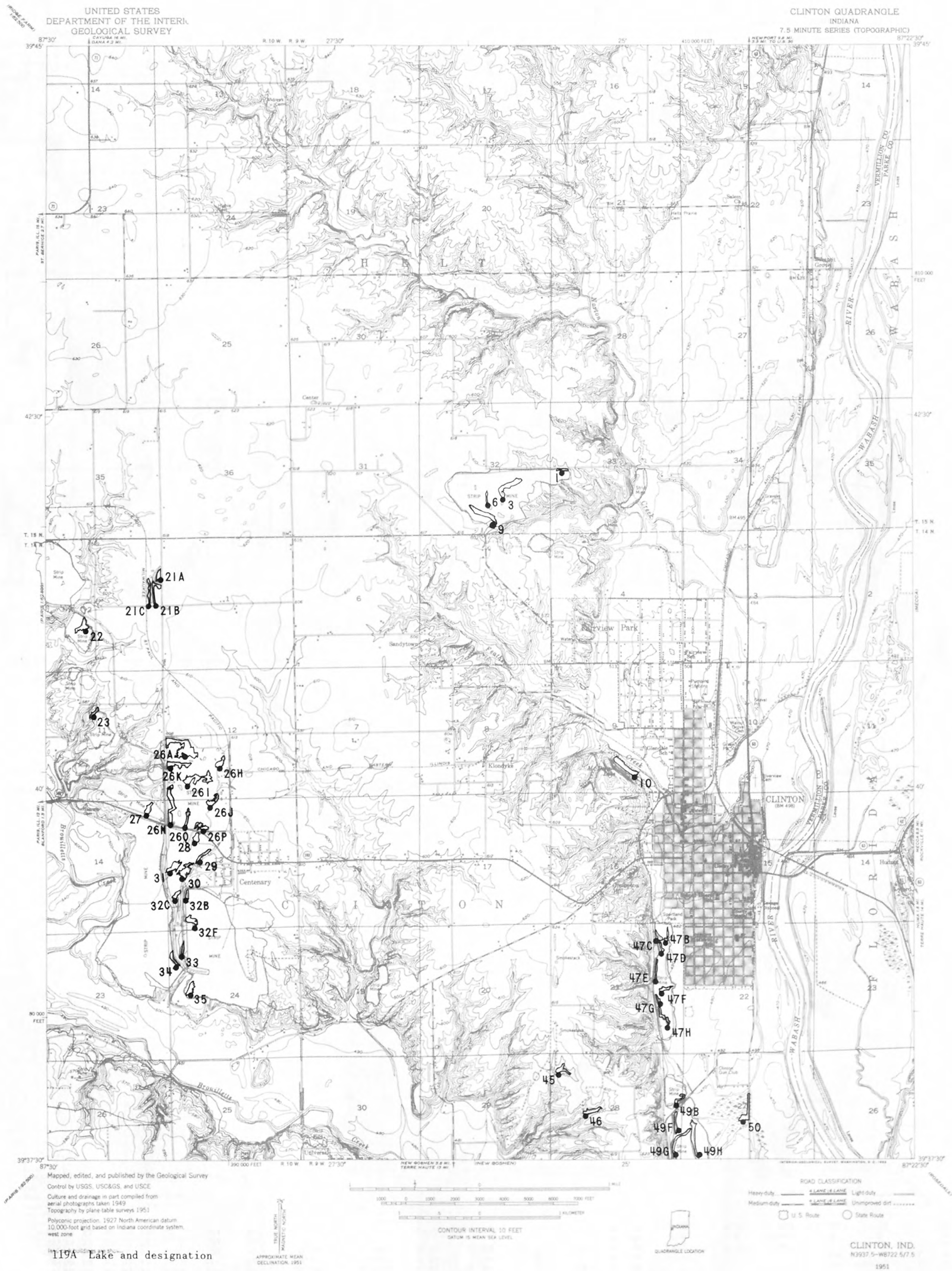


Figure 12.-- Coal-mine lakes within the Clinton Quadrangle.





TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

COAL CITY 146B																							
LAT			LONG			LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U							
39	14	18	87	07	04	1	21	BR	0.34	0.019	0.97	4.36	3.3	159	N	N	6/78	7.5	935	G	TG	M	B
39	14	51	87	04	10	10	21	BR	0.23	0.055	1.10	8.42	2.7	66	Y	Y		6/78	7.8				
39	13	42	87	03	42	19	21	IR	0.21	0.035	0.56	4.86	1.8	149	N	N							B
39	13	39	87	03	55	19-D	21	SR	0.10	0.028	0.26	1.96	1.3	151	N	N							B
39	13	39	87	03	43	19-E	21	SR	0.09	0.015	0.22	0.96	1.6	94	N	N							B
39	08	44	87	01	32	39-A	119	SR	0.14	0.014	0.31	1.38	1.8	113	N	N						L	B
39	08	38	87	01	43	39-B	119	SR	0.14	0.020	0.29	1.89	1.5	1	N	N						L	B
39	14	03	87	05	07	5-H	21	TD	0.10	0.008	0.22	0.60	2.0	90	N	N	6/78	8.0	391	G	TG		B
39	14	39	87	03	56	11	21	IR							N	N	6/78	6.8	2068	G	T		B
39	14	33	87	04	20	12	21	IR							N	N	6/78	7.7	702	G	TG		B

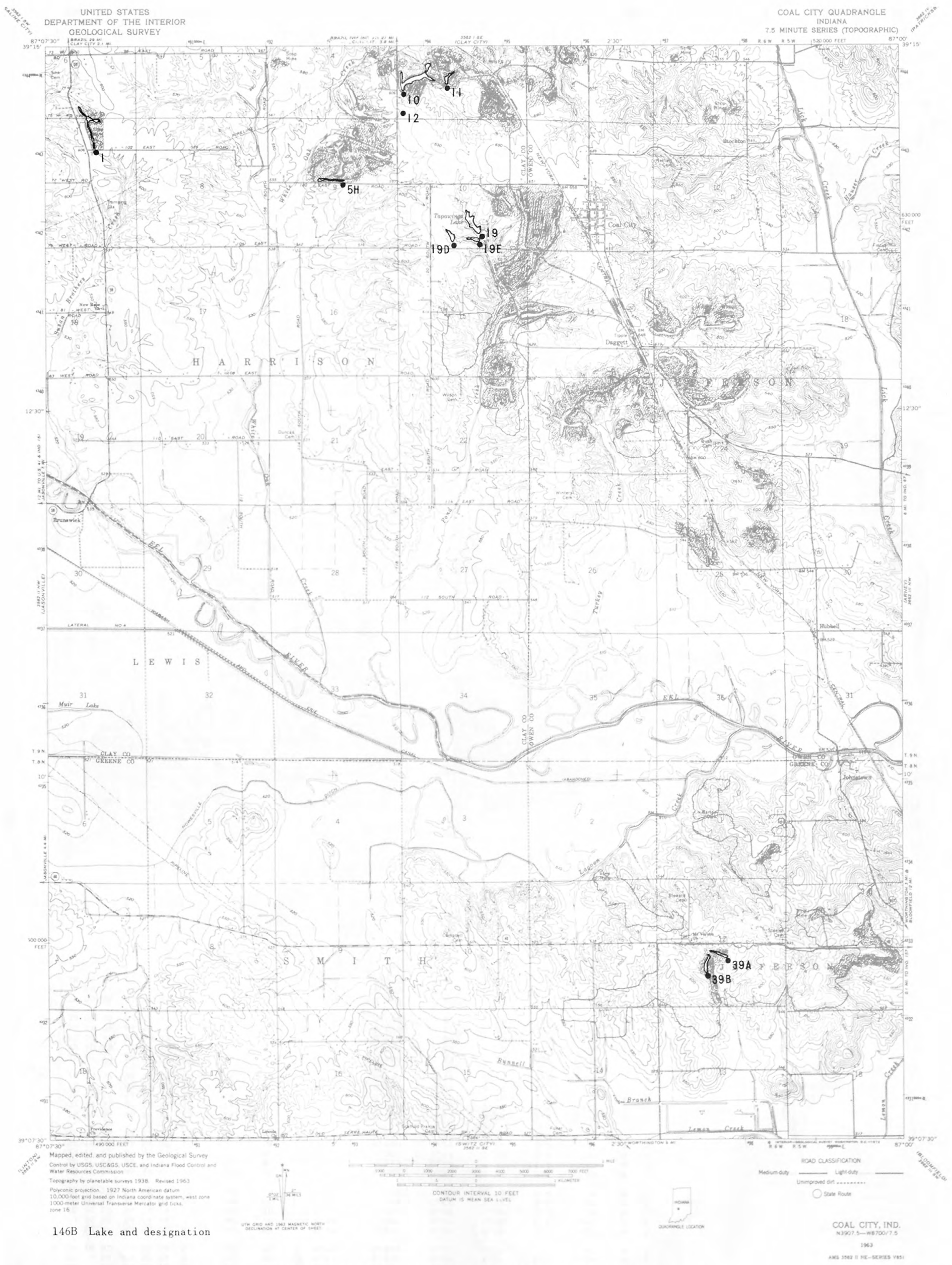


Figure 13.-- Coal-mine lakes within the Coal City Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

DALE 196A																			
LAT D M S	LONG D M S	LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
38 10 46	86 54 21	1	147	IR	0.05	0.011	0.14	0.42	1.6	176	Y	N							
38 10 41	86 54 15	2	147	SR	0.03	0.006	0.07	0.15	1.4	137	N	N							
38 10 45	86 54 10	3	147	R	0.05	0.009	0.13	0.33	1.6	136	N	N							
38 10 36	86 53 50	4	147	BR	0.17	0.012	0.50	1.39	3.0	124	Y	N							
38 10 42	86 53 46	5	147	TR	0.04	0.015	0.11	0.39	1.3	41	N	N							
38 10 31	86 54 02	6	147	BR	0.08	0.014	0.24	0.74	2.0	127	N	N							
38 10 30	86 54 04	7	147	TO	0.04	0.009	0.09	0.25	1.3	143	N	N							
38 10 17	86 54 14	8	147	IR	0.12	0.017	0.38	1.38	2.3	35	N	N							
38 10 15	86 54 01	9	147	BR	0.13	0.014	0.56	1.21	3.6	22	N	N							
38 10 17	86 53 56	10	147	TR	0.08	0.023	0.22	1.20	1.4	9	N	N							
38 10 16	86 53 45	11	147	BR	0.08	0.022	0.38	1.24	2.4	80	N	N							
38 10 17	86 53 43	12	147	SR	0.03	0.013	0.08	0.26	1.1	52	N	N							
38 10 11	86 53 51	13	147	R	0.06	0.007	0.13	0.30	1.6	49	N	N							
38 10 07	86 54 09	14	147	SR	0.13	0.008	0.28	0.76	2.3	62	Y	N							
38 09 36	86 53 27	15	147	R	0.04	0.007	0.11	0.21	1.7	17	N	N							
38 09 35	86 53 19	16	147	R	0.04	0.007	0.11	0.22	1.6	74	N	N							
38 09 31	86 53 26	17	147	R	0.03	0.006	0.08	0.16	1.5	119	N	N							
38 09 15	86 53 18	18	147	R	0.08	0.008	0.20	0.50	2.0	21	N	N							
38 08 58	86 53 32	19	147	IR	0.11	0.010	0.28	0.78	2.2	9	N	N							
38 08 57	86 53 29	20	147	TO	0.05	0.007	0.11	0.26	1.5	168	N	N							
38 09 12	86 54 09	21	147	BR	0.08	0.008	0.22	0.50	2.2	36	N	N							
38 08 56	86 54 10	22	147	SR	0.10	0.007	0.22	0.51	2.2	156	N	N							
38 08 47	86 54 13	23	147	IR	0.05	0.011	0.14	0.38	1.6	51	N	N							
38 08 29	86 55 04	24	147	R	0.05	0.006	0.11	0.23	1.7	110	N	N							
38 08 05	86 55 49	25	147	L	0.03	0.008	0.09	0.21	1.4	141	N	N							
38 08 05	86 56 09	26	147	TO	0.06	0.008	0.13	0.35	1.6	178	Y	Y							
38 08 11	86 56 10	27	147	R	0.11	0.008	0.22	0.59	2.0	97	N	N							
38 08 11	86 56 28	28	147	IR	0.03	0.008	0.09	0.16	1.5	101	N	N							

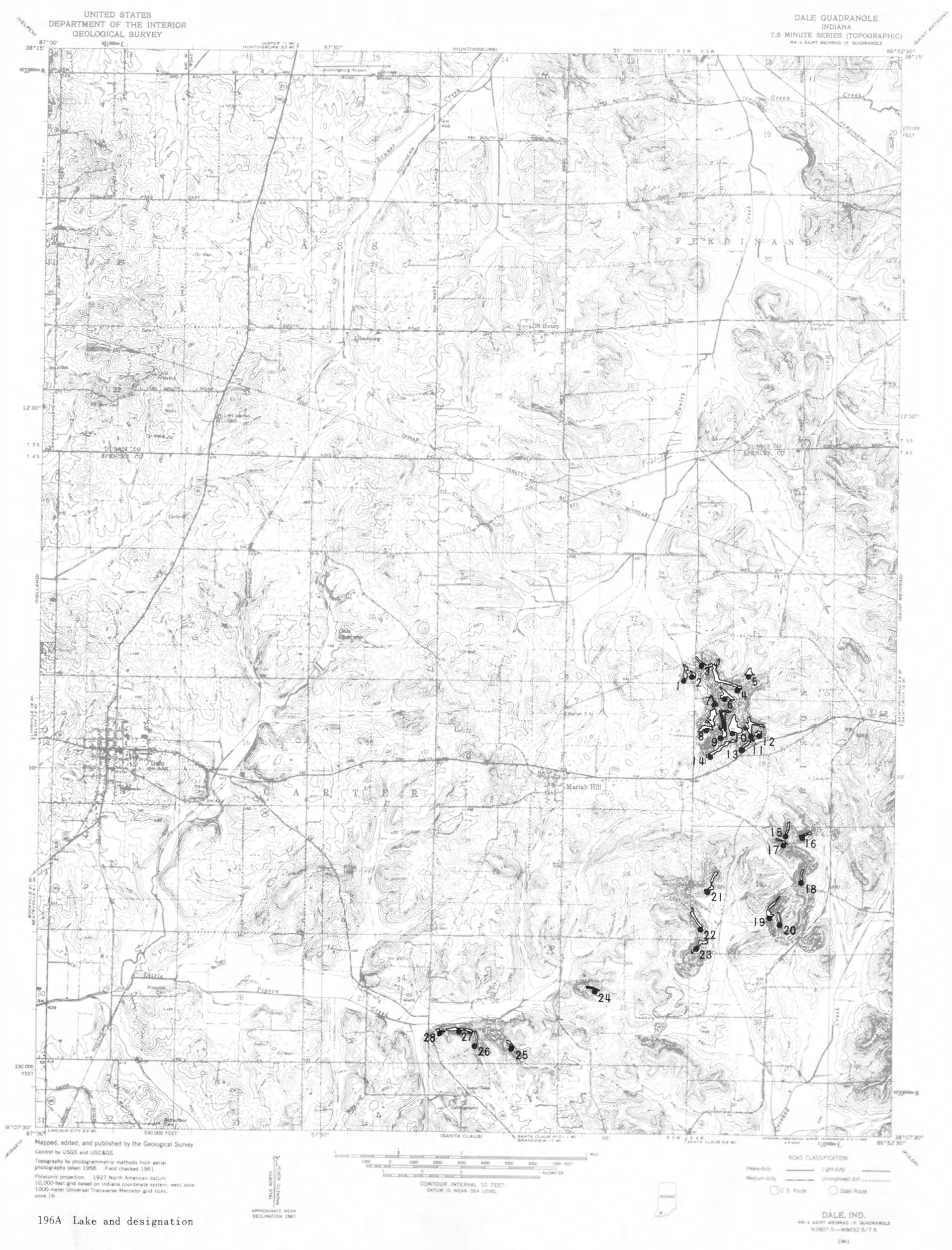


Figure 14.-- Coal-mine lakes within the Dale Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

DE GONIA														1950									
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	06	13	87	13	16	4-A	173	TO	0.15	0.013	0.32	1.30	2.0	51	N	N							
38	03	34	87	14	47	8-A	173	BR	0.24	0.027	0.97	4.38	3.3	151	N	N							
38	04	04	87	14	53	8-B	173	TO	0.15	0.018	0.34	1.89	1.8	134	N	N							
38	03	56	87	14	57	8-C	173	SR	0.13	0.021	0.27	1.91	1.4	92	N	N							
38	03	12	87	14	41	8-D	173	IR	0.10	0.017	0.30	1.17	1.9	114	N	N							
38	01	23	87	14	38	11-A	173	R	0.27	0.012	0.59	2.19	2.8	163	N	N							
38	01	23	87	14	42	11-B	173	TO	0.10	0.015	0.23	1.04	1.6	141	N	N							
38	00	18	87	13	45	12	173	SR	0.20	0.022	0.46	3.03	1.8	139	N	N							

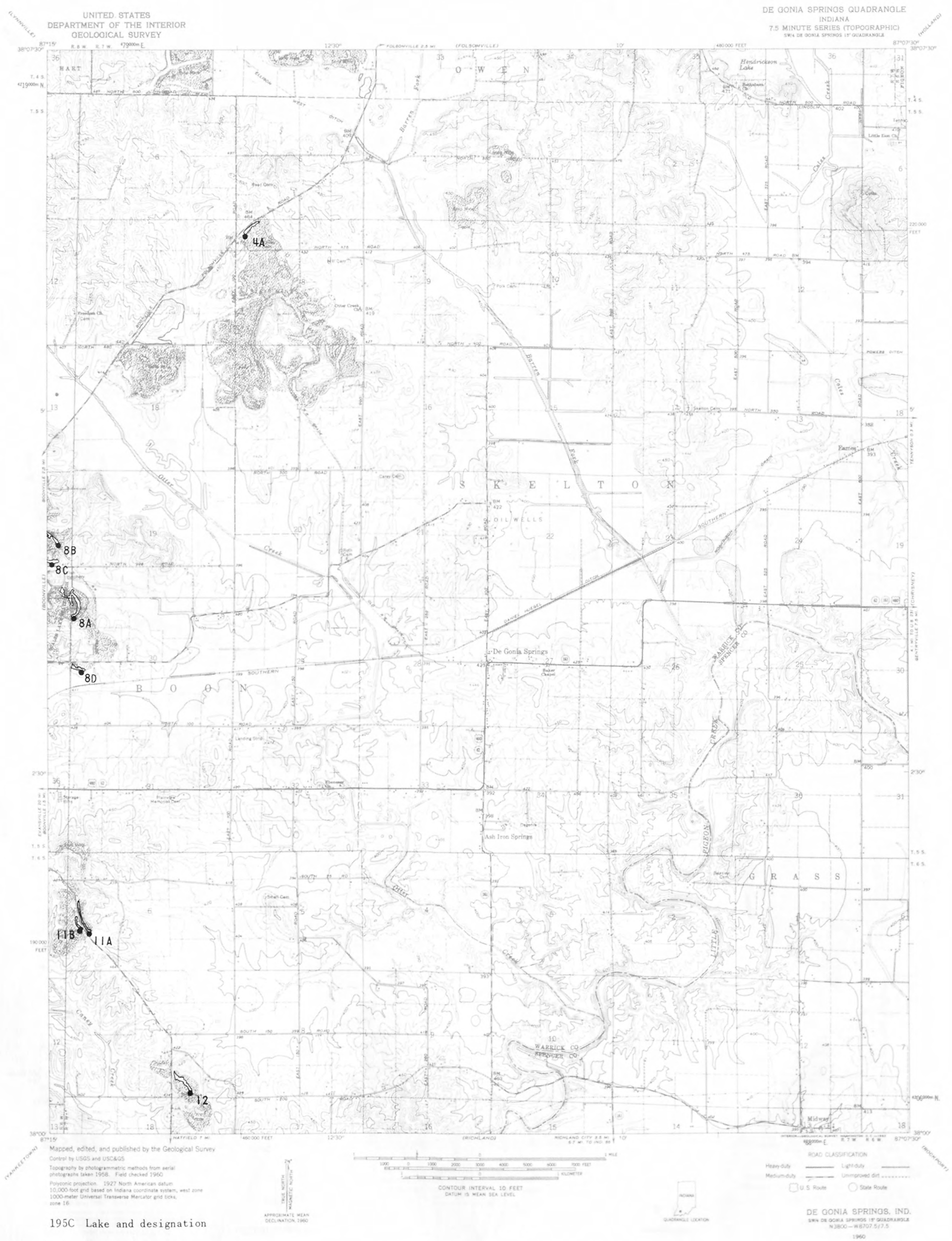


Figure 15.-- Coal-mine lakes within the De Gonia Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

DENNISON														131B									
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	29	00	87	30	37	1	167	IR	0.12	0.032	0.41	2.61	1.8	113	Y	Y							
39	28	52	87	30	29	2	167	IR	0.15	0.033	0.37	3.26	1.4	139	Y	Y							
39	24	05	87	30	35	3	167	IR	0.08	0.009	0.17	0.52	1.7	60	N	N							
39	23	24	87	30	04	4	167	IR	0.16	0.023	0.37	2.48	1.6	57	N	N							
39	23	07	87	30	50	5	167	IR	0.09	0.018	0.21	1.13	1.4	85	N	N							





TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

DUGGER 145D																						
LAT		LONG		LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM	
D	M S	D	M S																			
39	04 45	87	18 43	15-C	153	IR	0.18	0.030	0.43	3.55	1.6	173	Y	Y								
39	04 32	87	18 45	45-D	153	IR	0.22	0.048	0.67	6.96	1.8	11	Y	Y						S	P	
39	04 12	87	18 52	59-A	153	IR	0.22	0.076	0.82	11.18	1.7	148	Y	Y						S	P	
39	02 07	87	15 21	62-A	153	L	0.37	0.030	1.23	7.28	3.2	154	Y	N	6/78	7.0	1578	G	TGB	S	P	
39	02 20	87	15 15	62-B	153	IR	0.19	0.025	0.60	3.14	2.4	98	N	N						S	P	
39	02 09	87	15 13	63-A	153	R	0.35	0.029	0.81	6.67	2.2	51	N	N	6/78	8.0	3046	G	TGW	S	P	
39	02 02	87	15 06	63-C	153	IR	0.13	0.023	0.42	2.02	2.1	148	Y	N						S	P	
39	01 54	87	15 16	63-D	153	R	0.28	0.023	0.64	4.17	2.2	94	Y	N						S	P	
39	01 56	87	15 26	64-C	153	IR	0.11	0.031	0.37	2.34	1.7	115	Y	Y	6/78	7.9	752		BR	S	P	
39	01 39	87	15 21	65-B	153	BR	0.19	0.026	0.61	3.35	2.3	130	N	N						S	P	
39	01 28	87	15 24	65-D	153	IR	0.09	0.016	0.20	1.02	1.4	64	N	N						S	P	
39	01 26	87	15 13	65-E	153	BR	0.21	0.037	0.91	5.04	2.9	179	N	N	6/78	8.0	1354	G	N	S	P	
39	00 51	87	15 09	66-C	153	BR	0.44	0.017	1.07	4.94	3.4	134	N	N	6/78	7.3	2248	G	TGB	S	P	
39	00 59	87	15 06	66-D	153	R	0.31	0.020	0.64	4.03	2.3	105	N	N						S	P	
39	01 05	87	15 15	66-E	153	IR	0.12	0.029	0.42	2.45	1.9	3	N	N						S	P	
39	01 13	87	15 08	66-F	153	R	0.24	0.028	0.53	4.43	1.8	72	Y	N								



Figure 17.-- Coal-mine lakes within the Dugger Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

EPSOM										158D									
LAT	LONG	LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID		(MILES)	(MILES)	(DEGS)	N	U			COND				
38 48 18	87 02 47	1	27	IR	0.09	0.029	0.36	1.82	1.9	129	N	N							
38 48 03	87 02 20	2	27	IR	0.25	0.049	0.77	7.98	1.9	51	N	N							
38 47 41	87 02 21	3	27	BR	0.23	0.058	0.75	8.66	1.8	178	N	N							
38 47 24	87 03 50	4	27	L	0.10	0.143	1.39	9.85	3.1	67	N	N							
38 46 28	87 05 05	5	27	BR	0.51	0.041	2.06	13.78	3.9	61	N	N							
38 46 24	87 05 51	6	27	BR	0.40	0.052	1.54	13.61	2.9	24	N	N							
38 46 06	87 05 29	7	27	BR	0.34	0.040	1.06	8.91	2.5	82	N	N							



Figure 18.-- Coal-mine lakes within the Epsom Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

FOLSOMVILLE 195A																							
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	12	51	87	10	51	1	173	R	0.05	0.008	0.12	0.31	1.6	0	N	N						5	P
38	12	52	87	10	45	2	173	IR	0.06	0.018	0.18	0.75	1.4	156	N	N						5	P
38	12	44	87	10	58	3	173	SR	0.05	0.007	0.10	0.25	1.4	103	N	N						5	P
38	12	42	87	10	45	4	173	IR	0.05	0.017	0.18	0.64	1.6	122	N	N							
38	11	59	87	11	09	5	173	BR	0.09	0.008	0.25	0.49	2.5	49	N	N						5	P
38	11	34	87	11	07	6	173	IR	0.06	0.015	0.19	0.60	1.8	120	N	N						5	P
38	11	55	87	12	03	7	173	BR	0.08	0.008	0.23	0.48	2.3	56	N	N						5	P
38	11	30	87	11	34	8	173	IR	0.06	0.017	0.19	0.75	1.5	127	N	N						5	P
38	11	24	87	11	37	9	173	IR	0.09	0.014	0.23	0.84	1.8	147	N	N						5	P
38	08	17	87	12	08	10	173	IR	0.04	0.018	0.14	0.56	1.3	85	N	N						5	P
38	08	12	87	12	05	11	173	SR	0.06	0.014	0.14	0.58	1.3	9	N	N						5	P
38	07	57	87	12	01	12	173	BR	0.07	0.031	0.33	1.45	1.9	43	N	N						5	P
38	07	58	87	12	08	13	173	SR	0.04	0.015	0.11	0.47	1.1	171	N	N						5	P
38	07	51	87	12	13	14	173	BR	0.06	0.010	0.16	0.47	1.7	45	N	N						5	P
38	07	36	87	12	16	15	173	SR	0.08	0.013	0.20	0.71	1.7	121	N	N						5	P
38	07	33	87	12	15	16	173	R	0.03	0.010	0.08	0.24	1.2	81	N	N						5	P

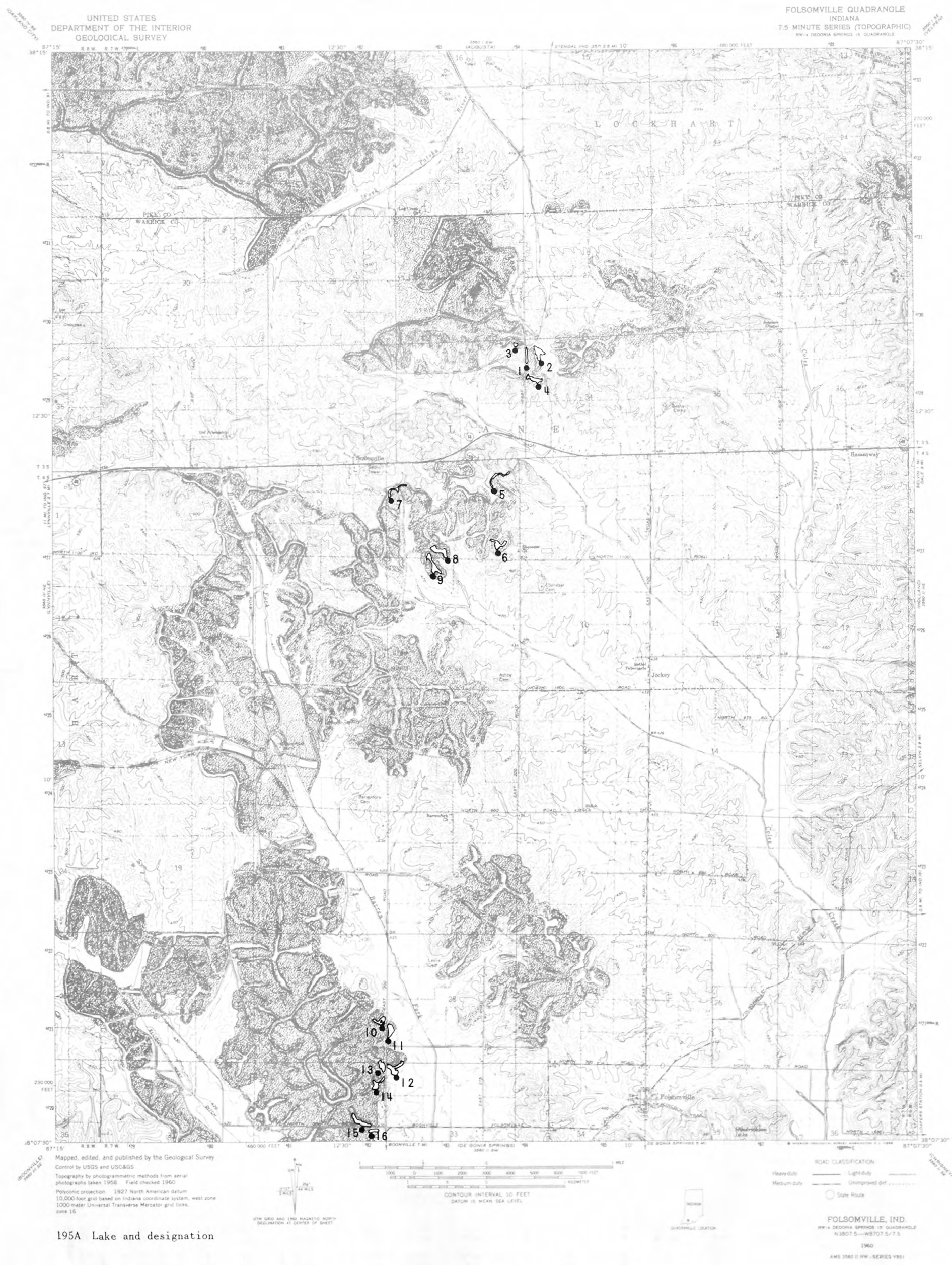


Figure 19.-- Coal-mine lakes within the Folsomville Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

FRANCISCO														182C					
LAT	LONG	LAKE	CD	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
38 15 58	87 22 44	1-A	51	TO	0.19	0.015	0.43	1.95	2.2	104	N	N							
38 19 18	87 23 15	11-A	51	L	0.32	0.010	0.80	3.74	2.9	23	N	N							
38 19 10	87 23 02	11-G	51	TO	0.40	0.020	0.88	5.32	2.7	91	N	N							
38 19 17	87 23 00	11-H	51	TO	0.45	0.030	1.01	9.34	2.3	42	N	N							
38 19 09	87 22 45	11-J	51	IR	0.07	0.016	0.18	0.84	1.4	93	N	N							
38 18 58	87 22 56	11-K	51	TO	0.18	0.010	0.39	2.35	1.8	179	N	N	8/78	3.0	1459	A	N		
38 18 56	87 22 45	11-L	51	TO	0.09	0.000	0.22	0.39	2.5	88	N	N							

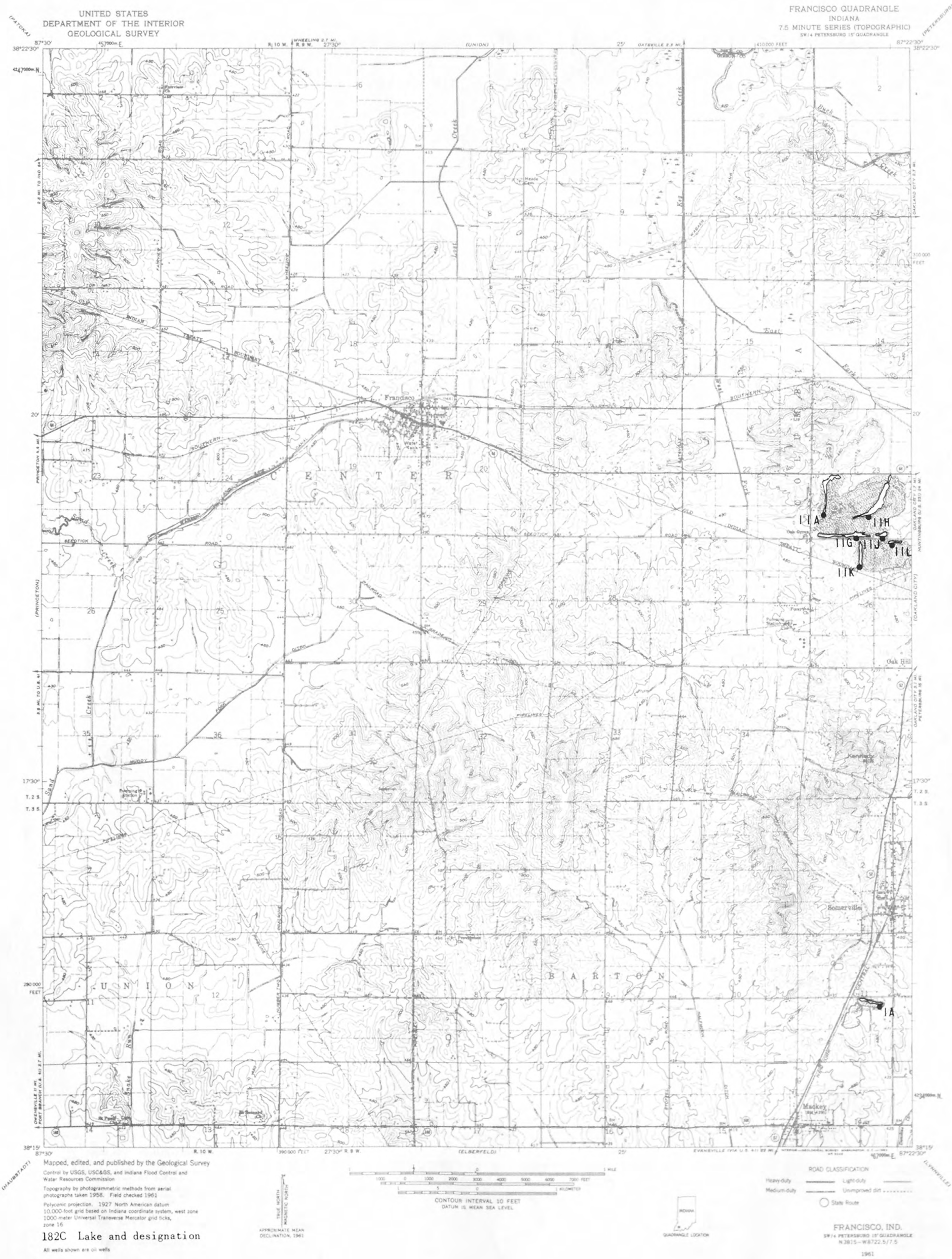


Figure 20 .-- Coal mine-lakes within the Francisco Quadrangle .



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

FRITCHTON 169A																							
LAT			LONG			LAKE	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID																	
38	44	12	87	25	14	1-A	83	R	0.17	0.047	0.43	5.28	1.3	154	Y	Y							
38	43	29	87	24	56	1-C	83	L	0.21	0.042	0.66	5.69	1.9	18	N	N							

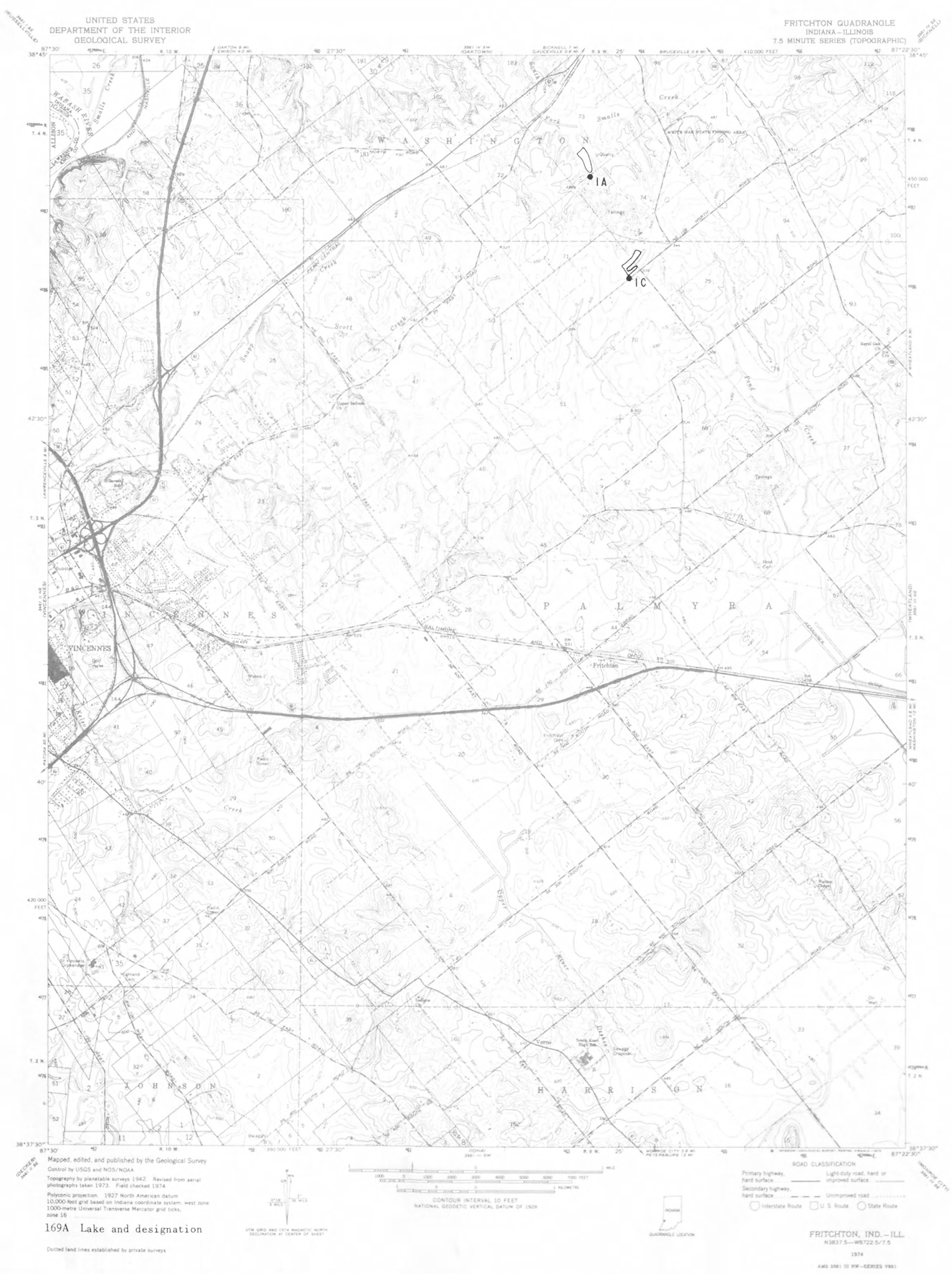


Figure 21.-- Coal-mine lakes within the Fritchton Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

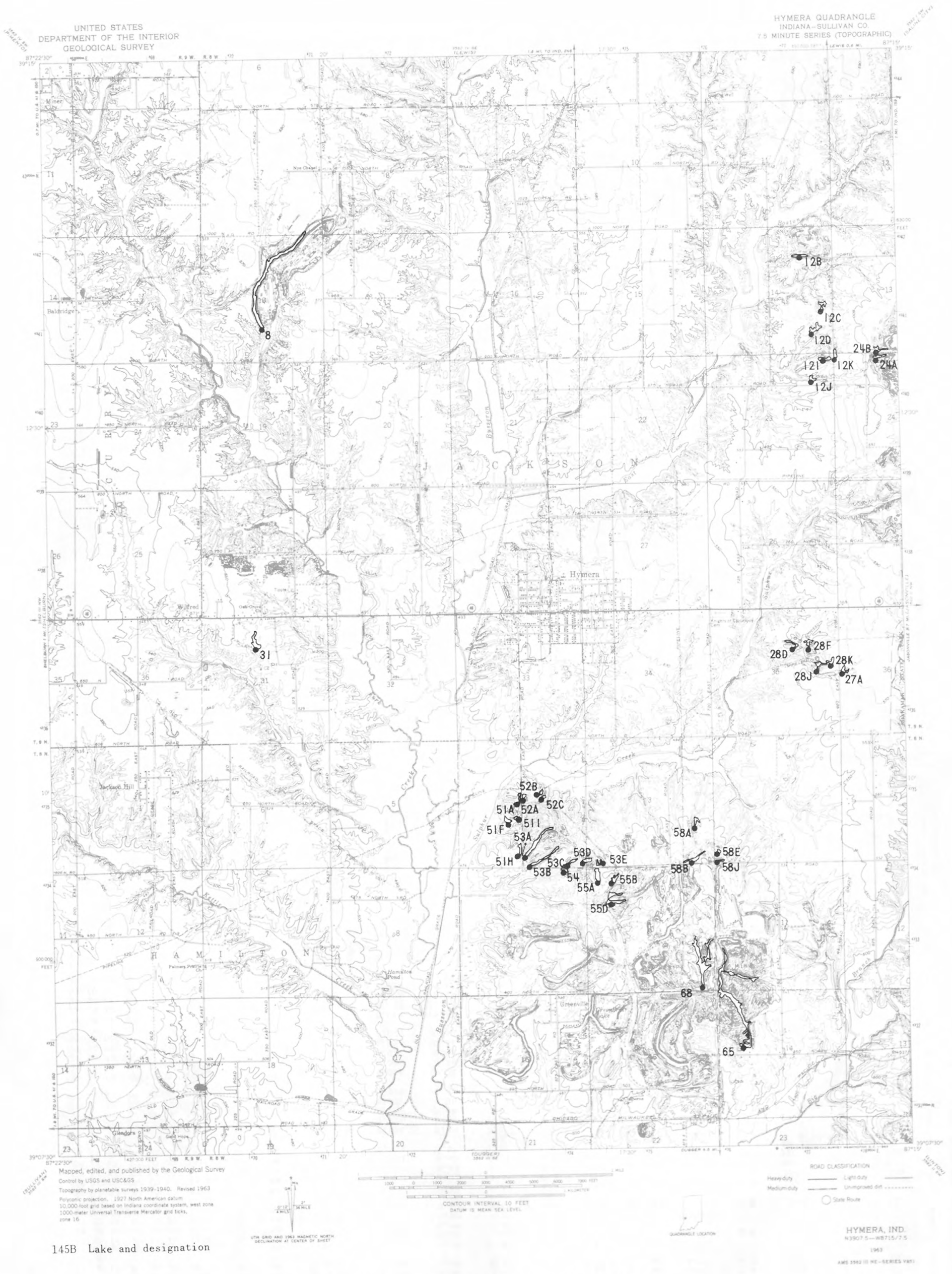
HOLLAND										1958													
LAT			LONG			LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
38	09	05	87	00	37	1	147	BR	0.27	0.013	0.72	2.30	3.4	63	N	N							





TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

HYMERA										145B									
LAT	LONG	LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U							
39 13 09	87 20 34	8	153	SR	0.83	0.023	1.98	12.49	4.0	25	Y	N						7	D
39 13 35	87 15 49	12-B	153	TO	0.12	0.010	0.26	0.90	1.9	92	N	N						5	P
39 13 13	87 15 39	12-C	153	BR	0.07	0.023	0.27	1.16	1.7	27	N	N						5	P
39 13 04	87 15 45	12-D	153	BR	0.09	0.026	0.32	1.61	1.8	56	N	N						5	P
39 12 53	87 15 33	12-K	153	SR	0.06	0.013	0.14	0.55	1.3	3	N	N						5	P
39 12 52	87 15 38	12-I	153	SR	0.08	0.011	0.22	0.66	1.9	85	N	N						5	P
39 12 44	87 15 46	12-J	153	L	0.04	0.025	0.18	0.80	1.5	148	N	N						5	P
39 12 56	87 15 10	24-B	153	IR	0.10	0.015	0.25	1.06	1.7	88	N	N						5	P
39 12 53	87 15 12	24-A	153	SR	0.11	0.015	0.22	1.14	1.4	76	N	N						5	P
39 10 44	87 15 32	27-A	153	BR	0.05	0.018	0.17	0.69	1.4	79	Y	N						5	P
39 10 47	87 15 39	28-K	153	IR	0.06	0.015	0.16	0.63	1.4	25	N	N						5	P
39 10 53	87 15 50	28-F	153	IR	0.08	0.017	0.28	0.93	2.0	3	N	N						5	P
39 10 54	87 15 58	28-D	153	BR	0.10	0.014	0.29	0.97	2.1	108	N	N						5	P
39 10 45	87 15 45	28-J	153	BR	0.07	0.027	0.29	1.24	1.8	16	N	N						5	P
39 10 58	87 20 39	31	153	IR	0.14	0.029	0.37	2.66	1.6	166	N	N							D
39 09 52	87 18 24	51-A	153	IR	0.08	0.013	0.20	0.70	1.7	5	N	N	8/77	6.8	610	G	TG		D
39 09 43	87 18 29	51-F	153	SR	0.05	0.032	0.20	1.18	1.3	132	N	N	8/77	3.5	1800	A	TWGB		D
39 09 46	87 18 23	51-I	153	IR							N	N							D
39 09 30	87 18 23	51-H	153	SR	0.09	0.018	0.23	1.20	1.5	7	N	N	8/77	6.4	1550	G	TGB		D
39 09 53	87 18 21	52-A	153	SR	0.03	0.020	0.11	0.46	1.1	13	N	N	8/77	6.5	910	G	TG		D
39 09 55	87 18 11	52-B	153	R	0.05	0.015	0.13	0.55	1.2	12	N	N	8/77	7.5	760	G	TW		D
39 09 54	87 18 12	52-C	153	SR	0.04	0.010	0.09	0.30	1.2	59	N	N	8/77	7.5	890	G	TW		D
39 09 30	87 18 20	53-A	153	TO	0.31	0.016	0.67	3.37	2.6	44	N	N	8/77	6.3	1340	G	TGW		D
39 09 26	87 18 19	53-B	153	TO	0.27	0.017	0.58	3.17	2.3	57	N	N	8/77	7.0	680	A	TGW		D
39 09 27	87 17 58	53-C	153	SR	0.09	0.017	0.18	1.02	1.3	57	N	N	8/77			BR	TG		D
39 09 27	87 17 50	53-D	153	SR	0.06	0.027	0.19	1.22	1.2	87	N	N	8/77	7.1	1050	G	TG		D
39 09 26	87 17 42	53-E	153	L	0.02	0.032	0.20	0.56	1.9	98	N	N							D
39 09 24	87 17 59	54	153	SR	0.05	0.012	0.12	0.42	1.3	111	N	N	8/77	7.7	450	G	TG		D
39 09 19	87 17 42	55-A	153	R	0.11	0.028	0.26	2.11	1.3	172	N	N	8/77	7.7	290	G	TG		D
39 09 18	87 17 35	55-B	153	IR	0.08	0.016	0.27	0.93	1.9	29	N	N							D
39 09 10	87 17 38	55-D	153	L	0.09	0.053	0.61	3.07	2.5	15	N	N							D
39 09 41	87 16 51	58-A	153	IR	0.07	0.022	0.22	1.04	1.5	12	N	N							D
39 09 27	87 16 57	58-B	153	IR	0.17	0.017	0.37	1.99	1.9	65	N	N	8/77	8.7	130	G	TG		D
39 09 30	87 16 40	58-E	153	IR	0.04	0.009	0.09	0.27	1.2	66	N	N	8/77	8.3	260	BR	TG		D
39 09 27	87 16 41	58-J	153	TO	0.07	0.004	0.14	0.22	2.1	90	N	N	8/77	8.1	270	G	TG		D
39 08 53	87 16 53	68	153	BR	0.39	0.038	1.39	9.51	3.2	172	Y	N							D
39 08 10	87 16 26	65	153	BR	0.03	0.935	2.99	18.29	5.0	150	N	N	8/77	8.0	1950	G	G		D



145B Lake and designation

Figure 23 -- Coal-mine lakes within the Hymera Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

JASONVILLE 146A																							
LAT			LONG			LAKE	CD	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
39	13	55	87	10	56	1-A	21	BR	0.11	0.014	0.26	1.04	1.8	46	N	N						3	S
39	13	44	87	10	40	1-D	21	SR	0.10	0.016	0.25	1.14	1.6	176	N	N	12/77	8.4	401	A	TG	3	S
39	13	38	87	10	54	1-G	21	TO	0.11	0.017	0.28	1.21	1.8	71	N	N	12/77			A	TG	3	S
39	13	32	87	11	02	1-H	21	BR	0.14	0.022	0.36	2.11	1.7	56	N	N	12/77	7.4	739	G	T	3	S
39	12	17	87	12	25	10	21	BR	0.33	0.040	1.05	8.52	2.5	90	N	N	11/77	6.3	1177	A	TW	4	L
39	11	59	87	11	55	11-B	21	SR	0.12	0.019	0.27	1.57	1.5	83	N	N						4	L
39	12	00	87	11	46	11-D	21	IR	0.07	0.026	0.23	1.23	1.4	19	N	N	11/77	6.8	661	G	TW	4	L
39	12	07	87	10	39	12-C	21	BR	0.13	0.028	0.49	2.51	2.2	37	N	N						3	S
39	12	04	87	10	38	12-E	21	IR	0.21	0.030	0.58	4.27	2.0	59	Y	Y						3	S
39	11	57	87	10	44	12-F	21	IR	0.14	0.062	0.41	5.69	1.2	97	N	N	11/77	6.8	948	BR	GW	3	S
39	11	57	87	10	23	12-I	21	BR	0.09	0.044	0.40	2.64	1.7	142	N	N	11/77	6.4	1750	G	TGWB	3	S
39	11	48	87	10	42	14-B	21	IR	0.26	0.081	1.23	13.69	2.3	96	N	N	11/77	6.6	1682	G	TGW	3	S
39	11	52	87	10	09	14-G	21	IR	0.23	0.021	0.62	3.14	2.5	104	N	N	11/77	2.3	1541	A	G	3	S
39	11	49	87	10	20	14-F	21	IR	0.26	0.031	0.63	5.24	1.9	117	N	N	11/77	6.9	1984	G	TGBW	3	S
39	11	44	87	10	01	14-H	21	BR	0.11	0.026	0.37	1.89	1.9	6	N	N	11/77	2.5	1273	A	TW	3	S
39	11	36	87	10	00	14-I	21	IR	0.12	0.025	0.39	2.01	1.9	2	N	N	11/77	6.0	984	G	TW	3	S
39	11	33	87	10	03	14-J	21	L	0.08	0.026	0.22	1.40	1.3	23	N	N	11/77	5.3	1140	A	TW	3	S
39	11	21	87	10	14	14-U	21	SR	0.20	0.019	0.44	2.47	2.0	110	N	N						3	S
39	11	32	87	11	02	14-C	21	IR	0.10	0.037	0.36	2.57	1.6	45	N	N						3	S
39	11	23	87	10	50	14-D	21	SR	0.16	0.020	0.40	2.19	1.9	134	N	N							
39	11	12	87	09	39	13	21	TO	0.08	0.018	0.21	0.98	1.5	0	Y	N						3	S
39	11	09	87	12	21	22	21	IR	0.15	0.025	0.36	2.46	1.6	32	N	N	12/77	7.5	99	G	TG	4	L
39	10	06	87	12	47	24	21	R	0.14	0.067	0.41	6.51	1.1	175	Y	N							
39	10	42	87	11	26	25	21	IR	0.25	0.016	0.56	2.72	2.4	22	N	N	12/77	8.3	397	A	TG	4	L
39	10	55	87	10	02	27-A	21	IR	0.16	0.022	0.42	2.46	1.9	101	L	N						4	L
39	10	44	87	10	18	27-D	21	TR	0.06	0.014	0.14	0.61	1.2	173	N	N						4	L
39	10	38	87	10	21	27-F	21	IR	0.09	0.037	0.42	2.39	1.9	153	N	N	12/77	8.0	242	A	T	4	L
39	10	41	87	10	39	27-K	21	IR	0.17	0.026	0.57	2.92	2.4	103	N	N						4	L
39	10	51	87	09	40	30-B	21	TO	0.18	0.024	0.41	2.93	1.7	85	Y	Y						3	S
39	10	52	87	09	15	30-C	21	BR	0.19	0.023	0.51	3.01	2.0	133	N	N						3	S
39	10	37	87	09	51	31	21	IR	0.17	0.039	0.42	4.33	1.4	111	N	N	11/77	6.3	225	G	TGW	4	L
39	10	34	87	09	48	32-B	21	IR	0.05	0.027	0.22	0.98	1.5	69	N	N						4	L
39	10	32	87	09	51	32-C	21	IR	0.04	0.026	0.18	0.71	1.5	17	N	N						4	L
39	10	31	87	10	02	33	21	TO	0.09	0.013	0.19	0.81	1.5	178	N	N							
39	09	20	87	09	32	41	21	IR	0.14	0.021	0.35	1.89	1.8	51	N	N	12/77	7.3	359	G	G	3	S
39	09	21	87	11	31	42	21	IR	0.22	0.058	0.67	8.53	1.6	146	N	N						4	L
39	10	06	87	13	13	45	21	BR	0.11	0.040	0.42	2.88	1.8	28	N	N							
39	10	33	87	14	42	23	55	BR	0.62	0.153	3.78	61.83	3.4	15	Y	Y	11/77	7.2	305	BR	TGBW	3	S
39	10	04	87	14	19	43	55	IR	0.70	0.096	2.11	43.37	2.2	94	Y	Y	11/77	7.5	276	BR	TGBW	3	S
39	09	12	87	13	55	44	55	IR	0.11	0.019	0.23	1.41	1.3	52	N	N						4	L
39	08	08	87	13	54	70	55	IR	0.35	0.090	0.93	20.30	1.4	60	Y	Y						4	L
39	07	52	87	14	04	74	55	TO	0.37	0.019	0.78	4.62	2.6	117	N	N						5	P
39	07	30	87	11	12	59-A	55	R	0.01	0.070	0.14	0.76	1.1	117	N	N	12/77	6.8	1510	G	TG		
39	07	28	87	11	10	59-B	55	R	0.05	0.009	0.12	0.36	1.5	11	N	N	12/77	7.7	2080	G	G		

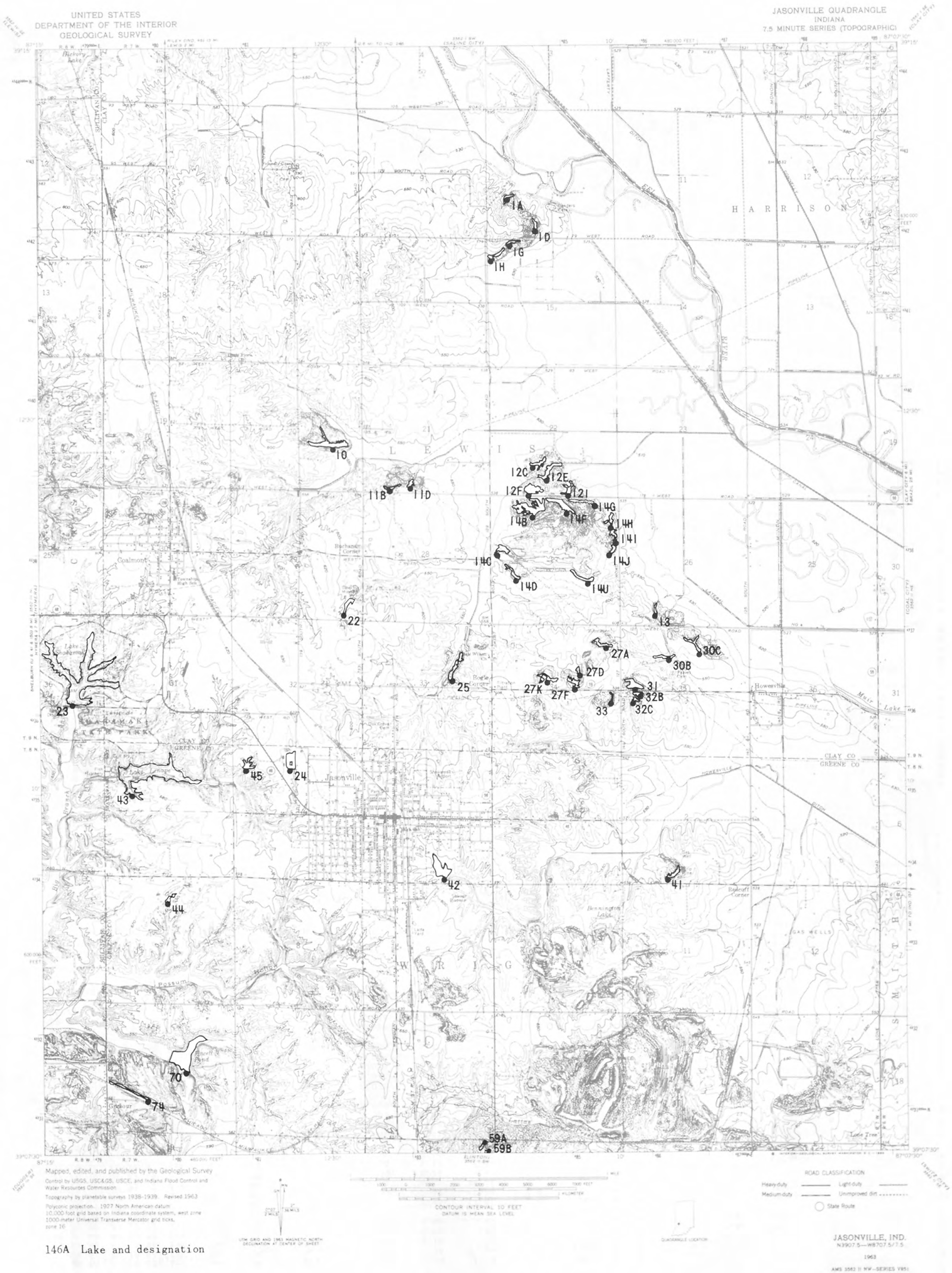


Figure 24.-- Coal-mine lakes within the Jasonville Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

LEWIS																							132D									
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM									
D	M	S	D	M	S																											
39	21	58	87	18	49	1-B	167	IR	0.56	0.082	2.15	29.95	2.8	131	N	N	6/78	7.9	986	G	G		P									
39	21	20	87	18	47	1-C	167	IR	0.34	0.241	1.51	52.74	1.4	8	N	N							P									
39	21	49	87	19	01	1-D	167	TO	0.11	0.014	0.24	1.05	1.6	134	N	N							P									
39	21	54	87	18	55	1-E	167	SR	0.14	0.023	0.31	2.11	1.5	146	N	N							P									
39	21	41	87	19	09	1-F	167	TO	0.30	0.028	0.67	5.67	2.0	160	N	N	6/78	7.6	1993	G	TGBW		P									
39	21	44	87	18	53	1-J	167	IR	0.10	0.017	0.24	1.14	1.6	143	N	N							P									
39	21	41	87	18	56	1-K	167	IR	0.12	0.019	0.34	1.60	1.9	135	N	N							P									
39	21	50	87	18	35	1-P	167	E	0.06	0.028	0.18	1.23	1.1	0	N	N							P									
39	21	43	87	18	30	1-R	167	IR	0.10	0.042	0.42	2.93	1.7	63	N	N	6/78	7.5	2019	G	TGBW		P									
39	21	29	87	19	12	1-T	167	TO	0.20	0.026	0.48	3.42	1.8	16	N	N	6/78	7.5	2154	A	TGBW		P									
39	19	56	87	21	49	2	167	SR	0.63	0.033	1.46	13.60	2.8	20	N	N							P									
39	19	06	87	21	44	3-A	167	SR	0.90	0.032	2.02	18.68	3.3	7	N	N							P									
39	18	44	87	21	12	3-B	167	BR	0.97	0.061	4.49	38.15	5.1	16	N	N							P									
39	18	48	87	21	14	3-C	167	TO	0.33	0.030	0.71	6.44	2.0	17	N	N							P									
39	18	37	87	20	52	3-E	167	BR	0.36	0.031	1.17	7.44	3.0	21	N	N	6/78	7.9	1720	A	G		P									
39	18	37	87	20	36	3-F	167	IR	0.17	0.028	0.42	3.09	1.7	89	N	N	6/78			G	G		P									
39	19	04	87	22	20	3-D	167	BR	0.98	0.046	3.01	29.26	3.9	167	N	N							P									
39	18	38	87	20	32	3-I	167	BR	0.46	0.024	1.34	7.16	3.5	73	N	N	6/78			A	G		P									
39	18	46	87	19	58	3-J	167	IR	0.13	0.023	0.34	2.02	1.7	72	N	N	6/78			A	G		P									
39	19	57	87	22	15	4	167	IR	0.41	0.086	1.74	23.03	2.5	167	N	N							P									
39	21	36	87	20	29	5-A	167	IR	0.11	0.028	0.38	2.03	1.9	82	N	N	6/78	8.2	1185	G	BG		P									
39	21	02	87	20	22	5-C	167	IR	0.60	0.040	1.71	15.75	3.0	161	N	N							P									
39	21	35	87	21	04	5-B	167	SR	0.30	0.032	0.69	6.36	1.9	81	N	N	6/78	8.0	772	G	TG		P									
39	21	16	87	20	56	5-D	167	IR	0.36	0.035	1.05	8.38	2.6	149	N	N							P									
39	20	49	87	20	52	5-E	167	IR	0.48	0.030	1.77	9.51	4.1	174	N	N							P									
39	20	49	87	20	40	5-F	167	IR	0.10	0.024	0.27	1.69	1.4	86	N	N	6/78			A	TG		P									
39	20	57	87	20	31	5-G	167	BR	0.12	0.031	0.46	2.47	2.0	106	N	N							P									
39	20	53	87	20	20	5-H	167	TO	0.13	0.021	0.27	1.86	1.4	169	N	N							P									
39	20	58	87	20	14	5-J	167	IR	0.42	0.057	1.14	15.54	2.0	76	N	N	6/78	8.0	666	G	GB		P									
39	20	48	87	19	32	6	167	IR	0.63	0.059	1.77	24.20	2.5	178	N	N	6/78	7.9	271	G	G		P									
39	20	25	87	20	05	9-A	167	IR	0.81	0.129	4.80	67.15	4.1	88	N	Y	6/78	8.3	1525	A	TG		P									
39	20	21	87	19	59	9-B	167	IR	0.39	0.057	1.11	14.27	2.1	146	Y	Y	6/78	8.5	249	G	G		P									
39	20	26	87	20	08	9-C	167	IR	0.28	0.030	0.73	5.53	2.2	172	Y	Y							P									
39	21	00	87	18	57	11-A	167	IR	0.33	0.050	0.99	10.82	2.1	143	Y	N	6/78	8.6	271	G	TGB		P									
39	20	49	87	19	06	11-B	167	TO	0.36	0.023	0.74	5.43	2.2	157	N	N	6/78	8.0	761	G	TGB		P									
39	20	13	87	18	45	12-C	167	IR	0.71	0.033	2.13	15.17	3.9	154	N	N	6/78			G	TG		P									
39	20	14	87	18	44	12-K	167	IR	0.14	0.018	0.36	1.73	1.9	44	N	N	6/78			G	TG		P									
39	20	14	87	18	33	19-A	167	TO	0.09	0.024	0.20	1.52	1.1	173	N	N	6/78	7.7	1633	G	TGB		P									
39	19	55	87	18	31	19-C	167	IR	0.54	0.062	2.38	21.76	3.6	44	N	N							P									
39	21	28	87	17	33	13-A	167	BR	0.23	0.048	1.14	7.12	3.0	163	N	N	6/78	7.7	1162	G	TGBW		P									
39	21	30	87	17	18	13-B	167	IN	0.14	0.018	0.29	1.68	1.5	110	N	N							P									
39	21	41	87	17	32	13-C	167	BR	0.14	0.023	0.43	2.14	2.0	178	N	N	6/78	7.7	983	G	TG		P									
39	22	00	87	17	28	13-D	167	IR	0.16	0.049	0.52	5.33	1.6	85	N	N							P									
39	22	00	87	17	04	13-E	167	IR	0.17	0.022	0.38	2.58	1.7	122	Y	N							P									
39	20	48	87	17	48	15	167	BR	0.50	0.030	1.49	9.94	3.3	23	N	N	6/78	7.4	2219	G	TGB		P									
39	21	03	87	17	14	16-A	167	IR	0.10	0.034	0.30	2.36	1.4	126	N	N	6/78	7.3	2908	G	TG		P									
39	21	00	87	17	26	16-B	167	BR	0.10	0.026	0.24	1.80	1.2	8	N	N	6/78	7.6	1309	G	TG		P									
39	20	48	87	17	19	16-D	167	IR	0.14	0.029	0.37	2.64	1.6	90	N	N	6/78	6.8	2487	A	T		P									
39	20	34	87	17	25	17	167	IR	0.25	0.026	0.62	4.35	2.1	171	Y	N	6/78	5.8	2505	G	T		P									
39	20	41	87	17	54	18-C	167	SR	0.29	0.023	0.66	4.46	2.2	76	N	N	6/78	3.6	2586	A	T		P									
39	20	33	87	17	30	18-F	167	SR	0.16	0.018	0.32	1.96	1.6	127	N	N	6/78	6.5	2879	LG	G		P									
39	20	34	87	17	41	18-G	167	IR	0.12	0.031	0.32	2.44	1.4	106	N	N							P									
39	20	15	87	17	47	18-H	167	IR	0.32	0.030	0.75	6.33	2.1	169	N	N	6/78	8.0	405	G	TB		P									
39	20	06	87	17	38	18-K	167	IR	0.25	0.089	0.81	14.88	1.5	175	N	N	6/78	7.8	1004	G	TG		P									
39	20	09	87	17	32	18-L	167	IR	0.11	0.022	0.28	1.70	1.5	158	N	N							P									
39	19	50	87	18	18	21-A	167	IR	0.69	0.145	6.32	65.34	5.5	83	Y	N	6/78	7.7	1591	G	TGBW		P									
39	19	30	87	18	06	21-B	167	TO	0.11	0.027	0.27	1.95	1.4	131	N	N							P									
39	19	25	87	17	57	21-D	167	IR	0.15	0.038	0.33	3.85	1.2	157	N	N							P									
39	19	34	87	17	37	21-H	167	IR	0.18	0.031	0.70	3.74	2.5	152	N	N	6/78	7.7	1530	G	TG		P									
39	19	21	87	17	31	21-J	167	IR	0.10	0.020	0.26	1.37	1.6	2	N</																	

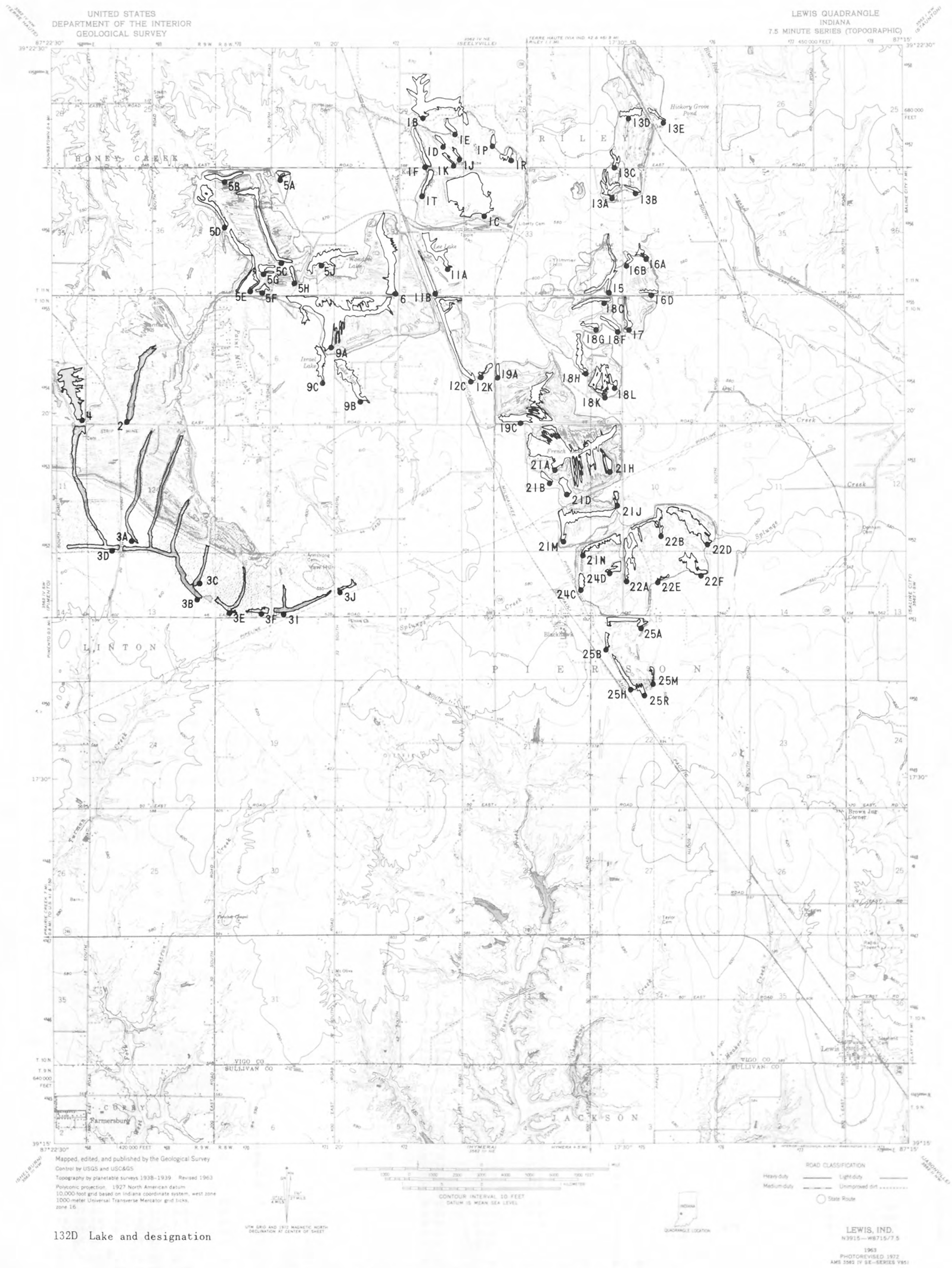




TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

LINTON														146C									
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	07	25	87	13	50	1	55	IR	0.10	0.014	0.26	1.00	1.8	27	N	N							D
39	07	13	87	14	01	2	55	IR	0.19	0.023	0.49	3.00	2.0	9	N	N							D
39	07	04	87	14	25	3-A	55	SR	0.08	0.020	0.22	1.13	1.4	2	N	N							D
39	07	00	87	14	13	3-I	55	IR	0.29	0.031	1.06	5.95	3.1	36	Y	N							D
39	06	36	87	14	25	4	55	IR	0.09	0.022	0.25	1.39	1.5	175	N	N							D
39	05	59	87	13	57	6	55	IR	0.21	0.032	0.48	4.34	1.6	7	Y	Y							
39	06	10	87	12	32	7	55	TO	0.11	0.007	0.19	0.49	2.0	0	N	N	6/78			G	TGBW		D
39	05	54	87	12	56	8-A	55	SR	0.29	0.023	0.65	4.41	2.2	93	N	N	6/78	7.6	1678	G	TGBW		D
39	05	53	87	12	35	8-B	55	TO	0.09	0.018	0.22	1.11	1.5	97	N	N	6/78			G	TGBW		D
39	05	56	87	12	27	8-D	55	IR	0.21	0.018	0.48	2.55	2.1	66	N	N	6/78			G	TGBW		D
39	05	02	87	12	17	11	55	SR	0.17	0.019	0.38	2.16	1.8	152	N	N							
39	05	15	87	13	05	12-E	55	IR	0.22	0.022	0.53	3.13	2.1	99	N	N							D
39	04	45	87	13	27	21	55	BR	0.11	0.021	0.34	1.59	1.9	73	N	N	6/78	7.9	1380	G	TG		D
39	04	21	87	13	07	24-A	55	IR	0.26	0.028	0.66	4.75	2.1	47	N	N							D
39	04	05	87	13	19	24-B	55	IR	0.30	0.016	0.67	3.34	2.6	16	N	N	6/78			G	TG		D
39	03	52	87	12	19	29	55	SC	0.06	0.040	0.36	1.59	2.0	176	N	N							
39	03	37	87	12	19	30-A	55	IR	0.08	0.023	0.19	1.28	1.2	131	N	N							
39	03	34	87	12	09	30-B	55	IR	0.18	0.027	0.43	3.28	1.7	124	N	N							
39	03	34	87	11	52	31-A	55	IR	0.08	0.044	0.34	2.43	1.5	135	Y	N							
39	03	36	87	11	46	31-B	55	IR	0.08	0.022	0.20	1.24	1.3	65	N	N							
39	02	17	87	13	17	33-A	55	IR	0.19	0.026	0.48	3.41	1.8	176	N	N	6/78			G	TGBW		P
39	02	03	87	13	22	33-D	55	IR	0.09	0.008	0.18	0.56	1.7	4	N	N	6/78	3.8	813	A	TGBW		P
39	02	10	87	12	58	33-J	55	IR	0.22	0.019	0.49	2.83	2.0	15	N	N							P
39	02	59	87	14	15	34-A	55	IR	0.12	0.041	0.32	3.21	1.2	173	Y	N							D
39	02	52	87	14	18	34-B	55	IR	0.21	0.013	0.42	1.81	2.2	163	N	N							D
39	03	36	87	14	58	35-A	153	IR	0.17	0.013	0.37	1.52	2.1	77	N	N							D
39	03	29	87	14	42	35-C	153	IR	0.08	0.018	0.17	0.99	1.2	18	N	N							D
39	03	11	87	14	50	36-A	153	IR	0.09	0.013	0.18	0.83	1.4	63	N	N							D
39	03	04	87	14	33	36-B	153	IR	0.16	0.013	0.35	1.36	2.1	115	N	N							D
39	02	53	87	14	47	36-D	153	IR	0.13	0.010	0.29	0.92	2.1	159	N	N							D
39	02	44	87	14	43	36-G	153	IR	0.32	0.022	0.88	4.59	2.9	122	Y	N	6/78	7.3	3478	R	TGBW		D
39	02	35	87	14	33	37	153	IR	0.21	0.018	0.45	2.53	2.0	129	N	N	6/78	7.4	3120	G	TGBW		D
39	02	20	87	14	34	38-C	153	IR	0.46	0.034	1.45	10.32	3.2	136	N	N	6/78	7.6	2941	G	TGBW		D
39	01	59	87	13	57	39	55	C	0.39	0.274	1.97	69.51	1.6	131	N	N							
39	01	52	87	14	46	40	153	TO	0.23	0.017	0.49	2.65	2.1	92	Y	N	6/78	6.7	1159	G	TGBW		D
39	01	40	87	14	29	41	153	IR	0.14	0.013	0.30	1.28	1.9	92	N	N	6/78	8.0	2041	G	TGBW		D
39	01	38	87	14	19	43	55	IR	0.13	0.052	0.50	4.65	1.6	116	N	N	6/78	7.7	1435	G	TGBW		
39	01	39	87	13	39	45	55	IR	0.20	0.016	0.39	2.10	1.9	152	N	N							
39	01	06	87	13	18	48	55	IR	0.28	0.086	0.92	15.98	1.6	178	N	N	6/78	8.4	1512	G	TGBW		
39	01	04	87	14	03	49-A	55	TO	0.14	0.012	0.28	1.18	1.8	84	N	N							
39	01	04	87	13	42	49-B	55	TO	0.14	0.015	0.30	1.47	1.7	100	N	N	6/78	8.0	1835	G	TGBW		P
39	01	05	87	13	39	49-C	55	IR	0.17	0.026	0.38	2.93	1.6	70	N	N	6/78	8.0	2136	G	TGBW	5	P
39	01	18	87	14	19	50	55	IR	0.21	0.035	0.70	4.76	2.3	60	N	N	6/78	7.9	680	G	TGBW		
39	01	22	87	14	37	51-B	153	SR	0.31	0.011	0.69	2.27	3.3	93	Y	N	6/78	7.7	2406	BR	TGBW		D
39	01	11	87	14	58	51-D	153	IR	0.38	0.171	1.27	42.25	1.3	119	Y	N	6/78	7.0	345	BR	TGBW		D
39	00	58	87	14	43	51-F	153	BR	0.26	0.031	0.84	5.20	2.6	98	Y	N	6/78	7.2	1658	G	TGBW		D
39	00	54	87	13	52	54	55	IR	0.68	0.031	1.45	13.72	2.7	163	Y	N	6/78	7.6	1675	A	TG		
39	00	40	87	14	09	56-A	153	IR	0.17	0.021	0.38	2.44	1.7	1	N	N	6/78	7.3	1964	G	TG		D
39	00	47	87	14	12	56-B	55	BR	0.09	0.024	0.26	1.55	1.5	106	N	N	6/78	7.7	508	G	TGBW		D
39	00	54	87	14	32	57-A	153	IR	0.05	0.033	0.23	1.27	1.4	50	N	N							D
39	00	39	87	14	40	57-B	153	IR	0.23	0.027	0.54	4.15	1.9	113	N	N							D
39	00	33	87	14	56	57-D	153	IR	0.18	0.019	0.43	2.35	2.0	1	N	N							
39	00	01	87	14	10	59	55	R	0.17	0.027	0.40	3.12	1.6	162	N	N							D
39	00	00	87	13	43	61	55	IR	0.34	0.009	1.73	2.17	8.4	49	N	N							
38	59	59	87	13	00	63	55	IR	0.12	0.108	0.99	8.96	2.3	156	N	N							
39	01	12	87	10	40	64	55	IR	0.18	0.047	0.61	5.74	1.8	48	N	N							P
39	00	42	87	11	12	65	55	IR	0.70	0.056	3.26	25.44	4.6	43	N	N							P
38	59	59	87	14	37	58A	55	IR	0.24	0.072	1.43	11.60	3.0	178	N	Y	6/78	3.0	2439	R	TGBW		





TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

LOOGOOTEE										171A									
LAT	LONG	LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
38 37 48	86 59 51	1	27	IR	0.18	0.020	0.43	2.44	1.9	31	N	N							
38 37 49	86 59 40	2	27	IR	0.18	0.009	0.39	1.09	2.6	4	N	N							

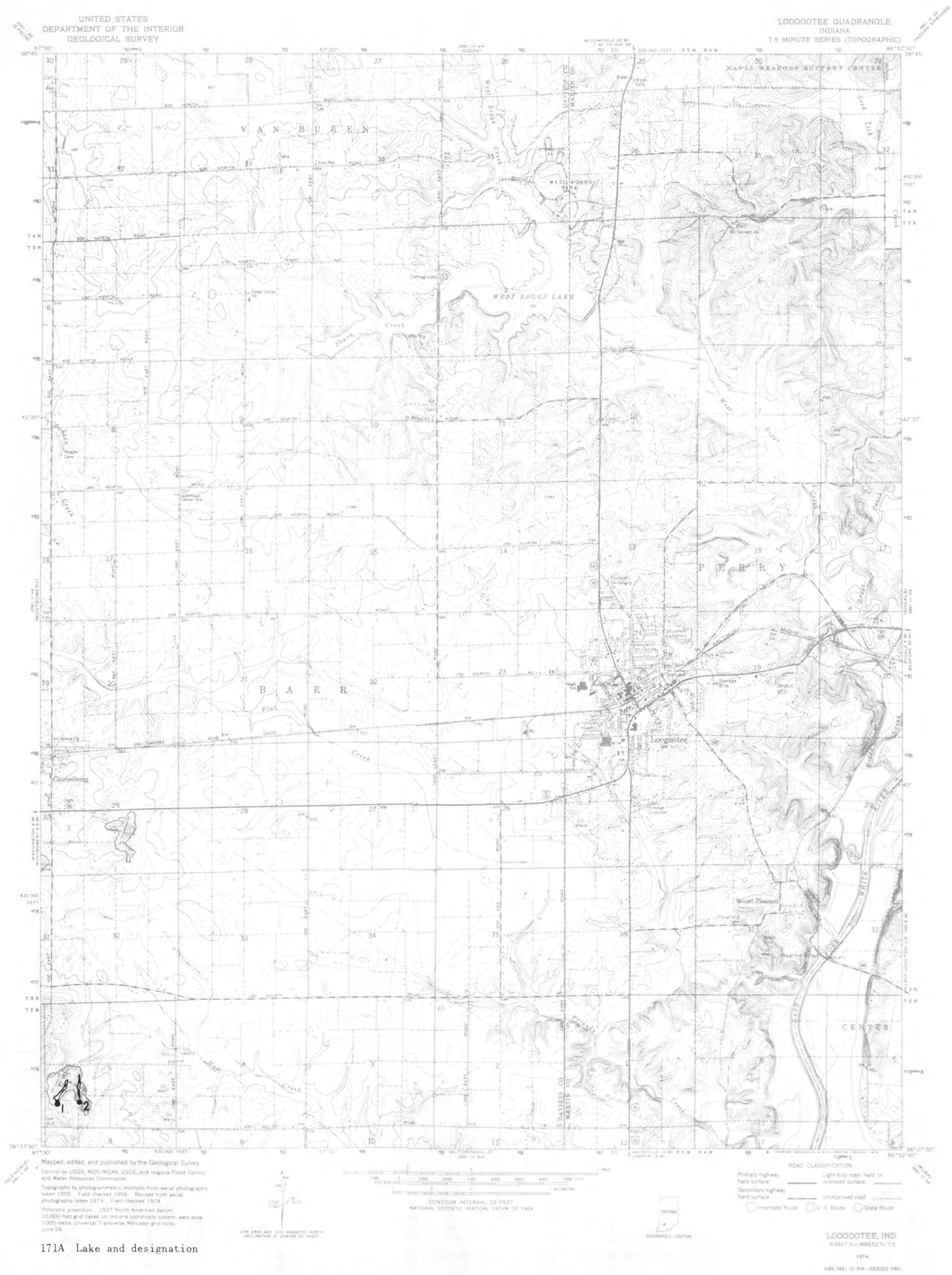


Figure 27.-- Coal-mine lakes within the Loogootee Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

LYNNVILLE														1948									
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	10	47	87	16	46	1	173	IR	0.07	0.007	0.24	0.37	2.8	173	Y	N							
38	10	43	87	17	05	2	173	TO	0.25	0.006	0.53	1.03	3.7	172	N	N						5	P
38	11	11	87	17	32	3	173	IR	0.06	0.021	0.22	0.89	1.7	26	N	N						5	P
38	11	16	87	17	41	4	173	L	0.04	0.012	0.13	0.34	1.6	157	N	N						5	P
38	11	29	87	17	22	5	173	IR	0.29	0.020	1.41	3.90	5.1	37	N	N						5	P
38	10	05	87	18	28	6	173	IR	0.32	0.020	1.20	4.19	4.1	134	Y	N						5	P
38	08	19	87	17	57	7	173	IR	0.45	0.027	2.27	8.12	5.6	3	N	N						5	P
38	08	16	87	16	49	8	173	IR	0.16	0.009	0.44	0.94	3.2	153	N	N						5	P

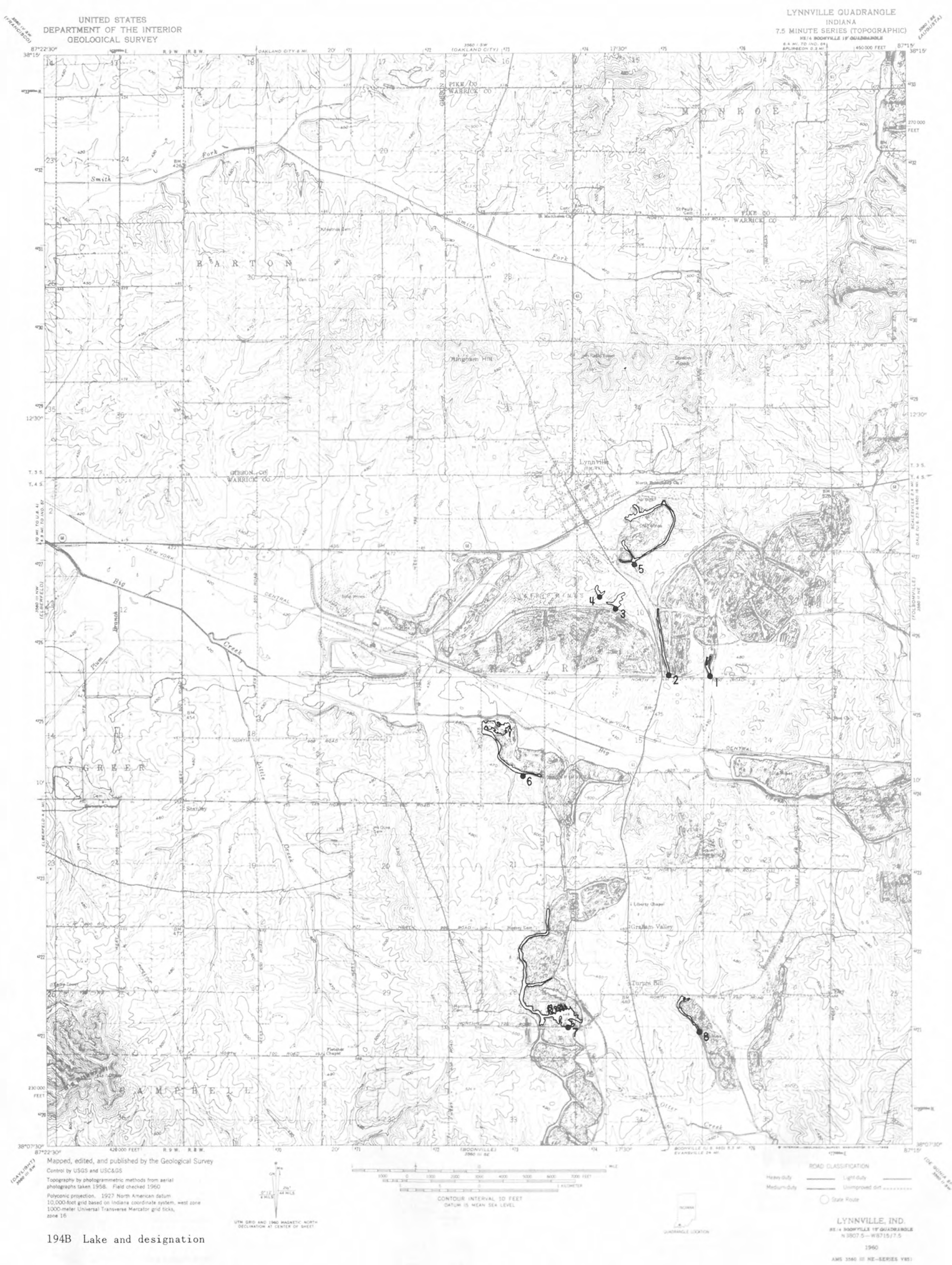


Figure 28.-- Coal-mine lakes within the Lynnville Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

NEW GOSHEN										119C													
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	37	23	87	24	31	1	165	SR	0.19	0.022	0.47	2.81	2.0	164	N	N							P
39	37	08	87	24	27	2	165	BR	0.28	0.031	0.71	5.81	2.1	164	N	N							P
39	31	00	87	25	12	49	167	R	0.30	0.172	0.92	33.98	1.1	92	Y	Y							P
39	30	56	87	22	35	45	167	IR	0.25	0.110	0.71	18.18	1.2	93	N	N							P
39	30	32	87	22	38	46	167	IR	0.19	0.075	0.66	9.27	1.5	34	N	N							P



Figure 29.-- Coal-mine lakes within the New Goshen Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

OAKLAND CITY 182D																									
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM		
D	M	S	D	M	S																				
38	20	56	87	17	20	7	125	BR	0.40	0.060	1.83	15.89	3.2	89	N	N	8/77	7.0	2260	G	TC	5	P		
38	18	33	87	15	31	17	125	IR	0.18	0.021	0.39	2.51	1.7	33	N	N	8/77			G	TC	5	P		
38	18	44	87	15	19	18-A	125	TO	0.22	0.006	0.48	0.96	3.5	40	N	N	8/77			G	TC	5	P		
38	18	08	87	15	11	19-A	125	IR	0.12	0.012	0.27	1.03	1.9	85	N	N	8/77			G	TB	5	P		
38	17	53	87	17	01	23-C	125	BR	0.24	0.029	0.63	4.55	2.1	56	N	N	8/77			G		5	P		
38	17	29	87	17	08	23-M	125	SR	0.11	0.027	0.32	2.00	1.6	73	N	N		7.1	480	G	GW	5	P		
38	17	23	87	17	00	23-P	125	SR	0.06	0.018	0.19	0.75	1.5	83	N	N	8/77					G	G	5	P
38	17	23	87	18	08	24-A	125	IR							N	N	8/77					A	G	5	P
38	17	21	87	17	52	24-Y1	125	E							N	N	8/77					G	G	5	P
38	17	18	87	17	56	24-Y2	125	E							N	N	8/77					G	G	5	P
38	17	20	87	17	49	24-Y3	125	L							N	N	8/77	4.7	1985	G	G	5	P		
38	17	19	87	18	03	24-Y4	125	BR							N	N	8/77			G	G	5	P		
38	17	23	87	17	31	23-P1	125	SR							N	N	8/77			LG	G	5	P		
38	17	20	87	17	34	23-P2	125	SR							N	N	8/77			G	TC	5	P		
38	17	41	87	20	59	26	51	TO	0.26	0.014	0.56	2.42	2.6	129	N	N	8/77			G		5	P		

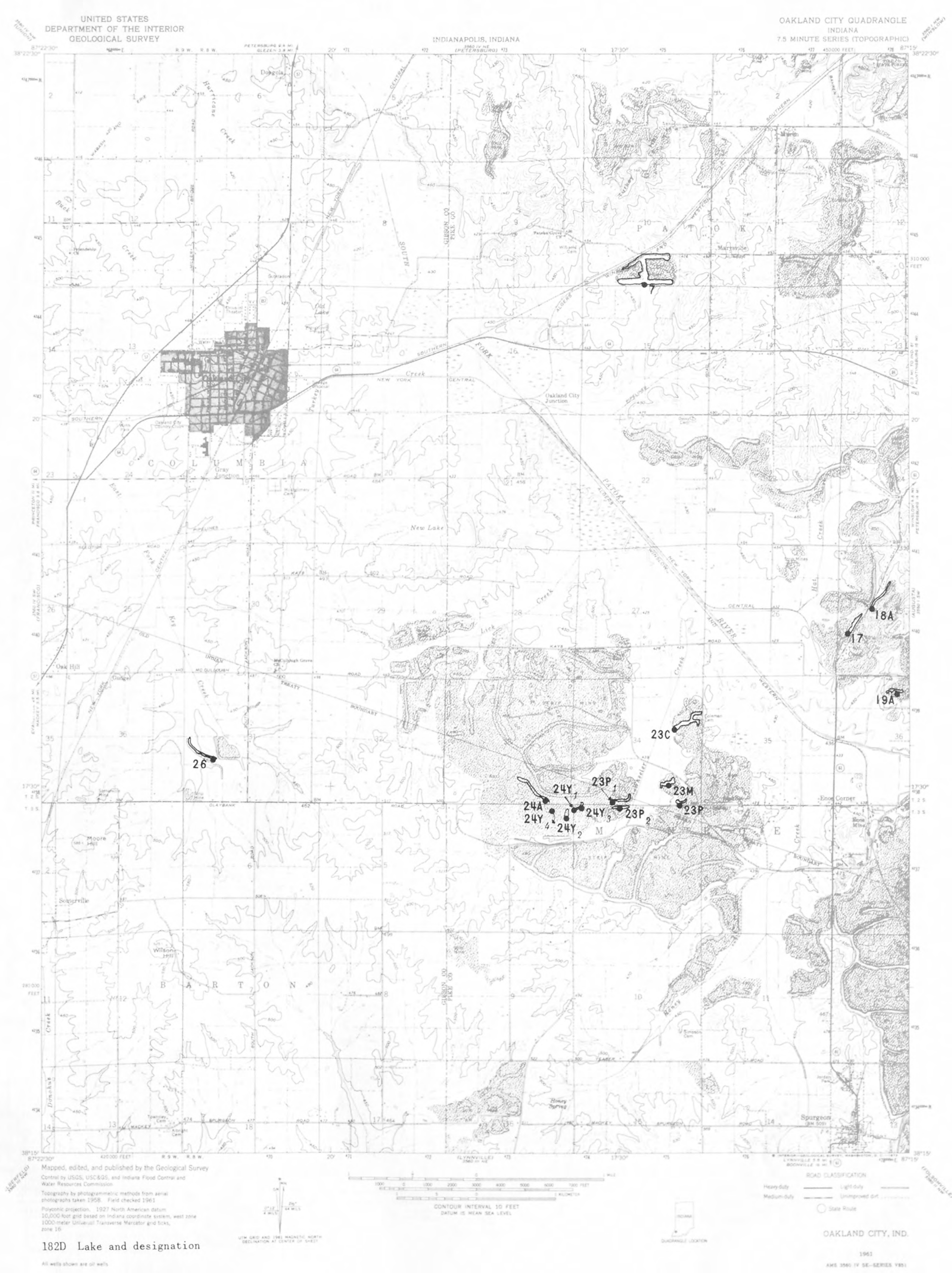


Figure 30.-- Coal-mine lakes within the Oakland City Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

ODON 159C																							
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	48	55	86	55	18	1	27	IR	0.28	0.027	0.75	4.90	2.4	5	N	N							

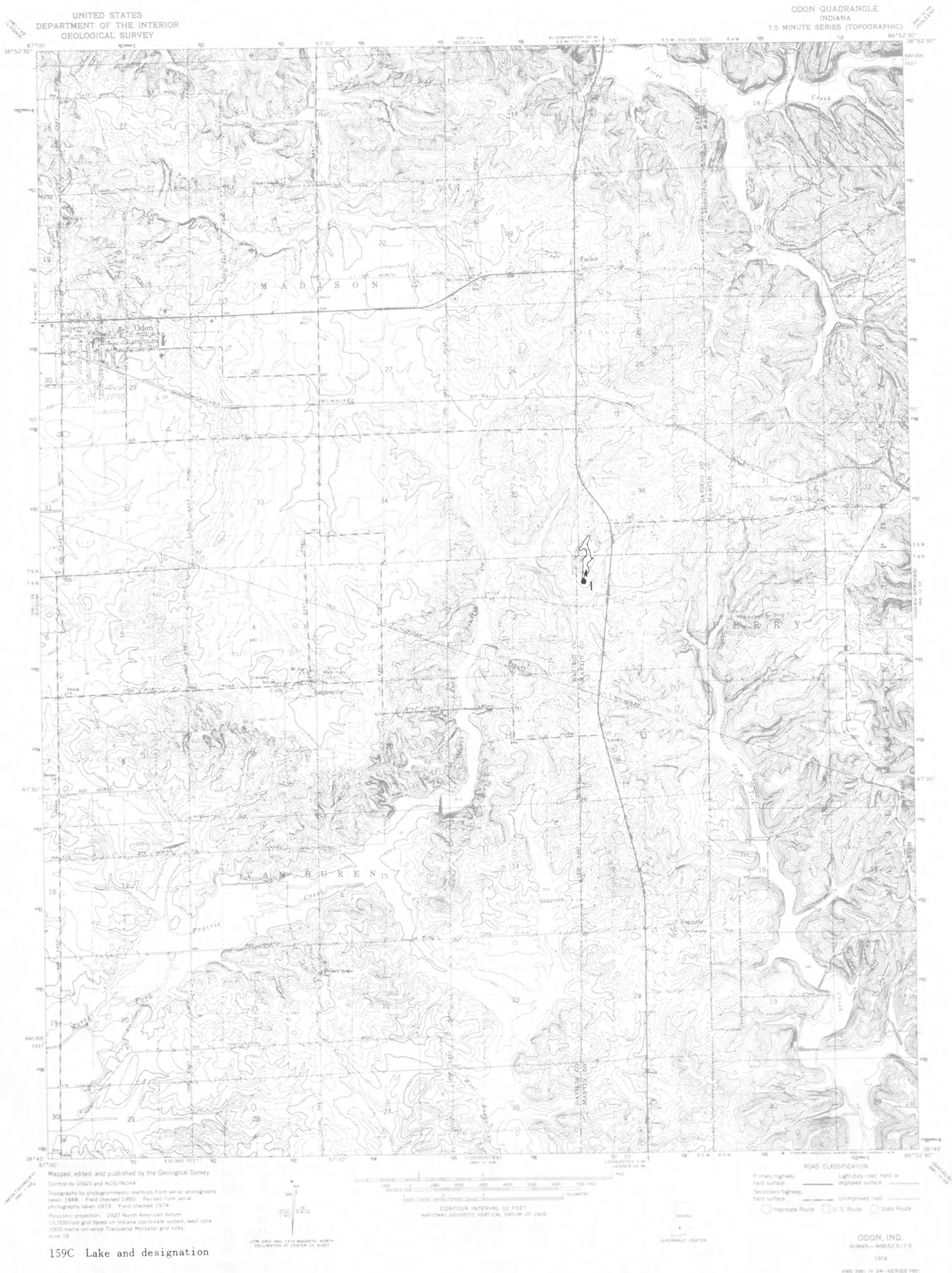


Figure 31.-- Coal-mine lakes within the Odon Quadrangle .



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

PATRICKSBURG										134C													
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	18	59	86	56	45	2-A	21	IR	0.19	0.011	0.41	1.38	2.5	171	N	N						L	B
39	18	54	86	56	49	2-C	21	SR	0.08	0.010	0.15	0.56	1.5	13	N	N						L	B
39	18	29	86	56	55	4-A	21	IR	0.08	0.014	0.22	0.75	1.8	175	N	N						L	B
39	18	30	86	56	52	4-B	21	IR	0.07	0.015	0.18	0.75	1.5	119	N	N						L	B
39	18	20	86	56	55	4-D	21	BR	0.09	0.020	0.22	1.23	1.4	162	N	N						L	B
39	18	33	86	57	12	5	21	TO	0.10	0.012	0.23	0.83	1.8	105	N	N						L	B
39	18	09	86	57	09	6-B	21	L	0.09	0.016	0.24	1.01	1.7	37	N	N						L	B
39	18	08	86	57	12	6-C	21	IR	0.14	0.015	0.39	1.48	2.2	122	N	N						L	B
39	17	44	86	57	18	7-A	21	IR	0.07	0.015	0.20	0.79	1.6	3	N	N						L	B
39	17	40	86	57	17	7-B	21	IR	0.06	0.009	0.14	0.43	1.6	161	N	N						L	B
39	17	28	86	57	31	7-C	21	SR	0.11	0.014	0.24	1.04	1.7	52	N	N						L	B
39	17	30	86	57	33	7-D	21	BR	0.21	0.013	0.48	1.88	2.5	51	N	N						L	B
39	17	33	86	57	17	7-E	21	TO	0.07	0.012	0.15	0.61	1.4	162	N	N						L	B
39	18	23	86	59	57	12	21	L	0.06	0.022	0.22	1.00	1.6	161	N	N						L	B
39	16	50	86	58	38	9-B	21	IR	0.06	0.013	0.17	0.53	1.7	57	N	N						L	B
39	16	37	86	58	23	9-H	21	L	0.10	0.021	0.27	1.41	1.6	19	N	N						L	B

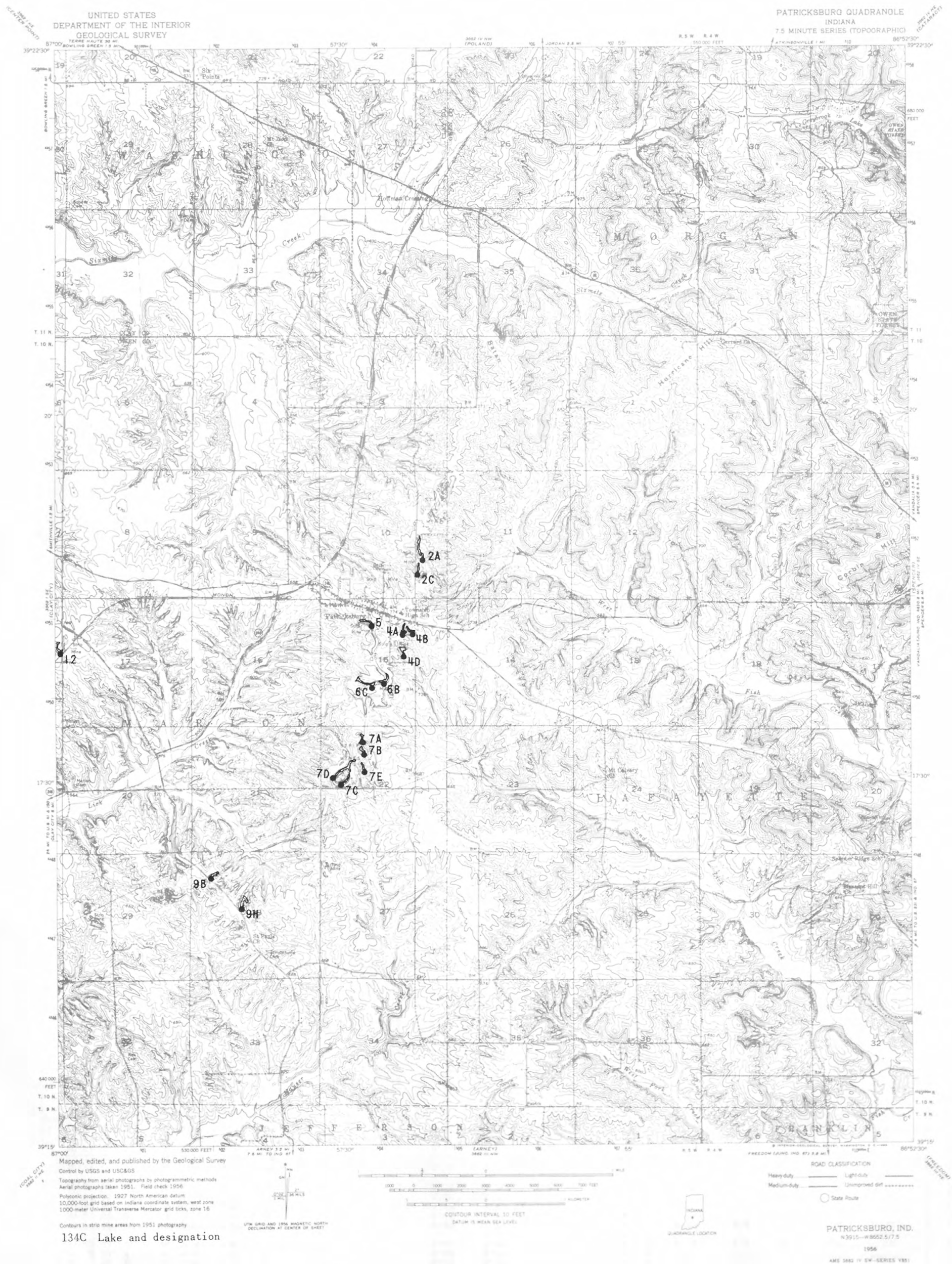


Figure 32.-- Coal-mine lakes within the Patricksburg Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

PETERSBURG																			1826				
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	26	52	87	18	23	4-A	125	IR	0.07	0.013	0.15	0.60	1.4	139	N	N	8/77	7.8	310	G	G	5	P
38	26	51	87	18	18	4-B	125	IR	0.24	0.013	0.48	2.10	2.4	102	N	N						5	P
38	26	45	87	18	02	4-C	125	BR	0.07	0.019	0.33	0.99	2.4	157	N	N						5	P
38	26	33	87	18	00	4-D	125	R	0.27	0.021	0.58	3.78	2.1	61	Y	N						5	P
38	25	23	87	21	36	8-A	125	IR	0.05	0.013	0.11	0.44	1.1	167	N	N	8/78	6.7	3140	G	TG	5	P
38	23	57	87	17	02	10-A	125	BR	0.14	0.018	0.34	1.74	1.8	155	N	N	8/77	8.6	510	G	TG	5	P
38	23	57	87	17	14	10-B	125	BR	0.16	0.014	0.41	1.55	2.3	95	N	N						5	P
38	23	56	87	16	10	11-A	125	TO	0.06	0.011	0.12	0.45	1.3	87	N	N						5	P
38	23	40	87	16	28	11-B	125	IR	0.36	0.021	0.83	5.05	2.6	37	N	N						5	P
38	23	37	87	16	15	11-C	125	IR	0.12	0.027	0.35	2.20	1.7	0	N	N						5	P
38	24	14	87	15	30	12-A	125	IR	0.10	0.049	0.38	3.25	1.5	48	N	N						5	P
38	23	51	87	15	41	12-B	125	IR	0.11	0.020	0.26	1.42	1.5	164	N	N						5	P
38	24	05	87	15	48	12-E	125	IR	0.11	0.017	0.26	1.27	1.6	178	Y	N						5	P
38	23	58	87	15	46	12-F	125	BR	0.32	0.023	0.81	4.91	2.6	87	N	N	8/77	8.6	1320	G	TG	5	P
38	23	49	87	15	03	12-H	125	IR	0.17	0.034	0.48	3.89	1.7	42	Y	N	8/77	8.1	2390	G	TGW	5	P
38	23	39	87	15	06	12-I	125	TO							Y	Y	8/77	8.2	1715	G	GW	5	P
38	23	40	87	15	14	12-J	125	IR	0.32	0.028	0.75	5.85	2.2	163	N	N	8/77	8.0	2615	G	TG	5	P
38	23	36	87	15	20	12-K	125	IR	0.42	0.053	1.10	14.40	2.0	158	N	N	8/77	8.2	2150	G	TG	5	P
38	24	06	87	15	13	12-M	125	SR	0.18	0.015	0.42	1.83	2.2	88	N	N						5	P
38	22	46	87	15	52	19	125	SR	0.10	0.021	0.24	1.38	1.4	149	N	N						5	P
38	22	29	87	15	51	19-B	125	IR	0.25	0.036	0.74	5.94	2.1	174	N	N						5	P
38	22	21	87	15	44	19-C	125	IR	0.30	0.043	0.87	8.46	2.1	7	N	N						5	P
38	22	39	87	16	23	20-A	125	IR	0.35	0.035	0.80	8.05	2.0	176	N	N						5	P
38	22	29	87	16	25	20-B	125	IR	0.38	0.052	1.28	13.12	2.5	45	N	N						5	P

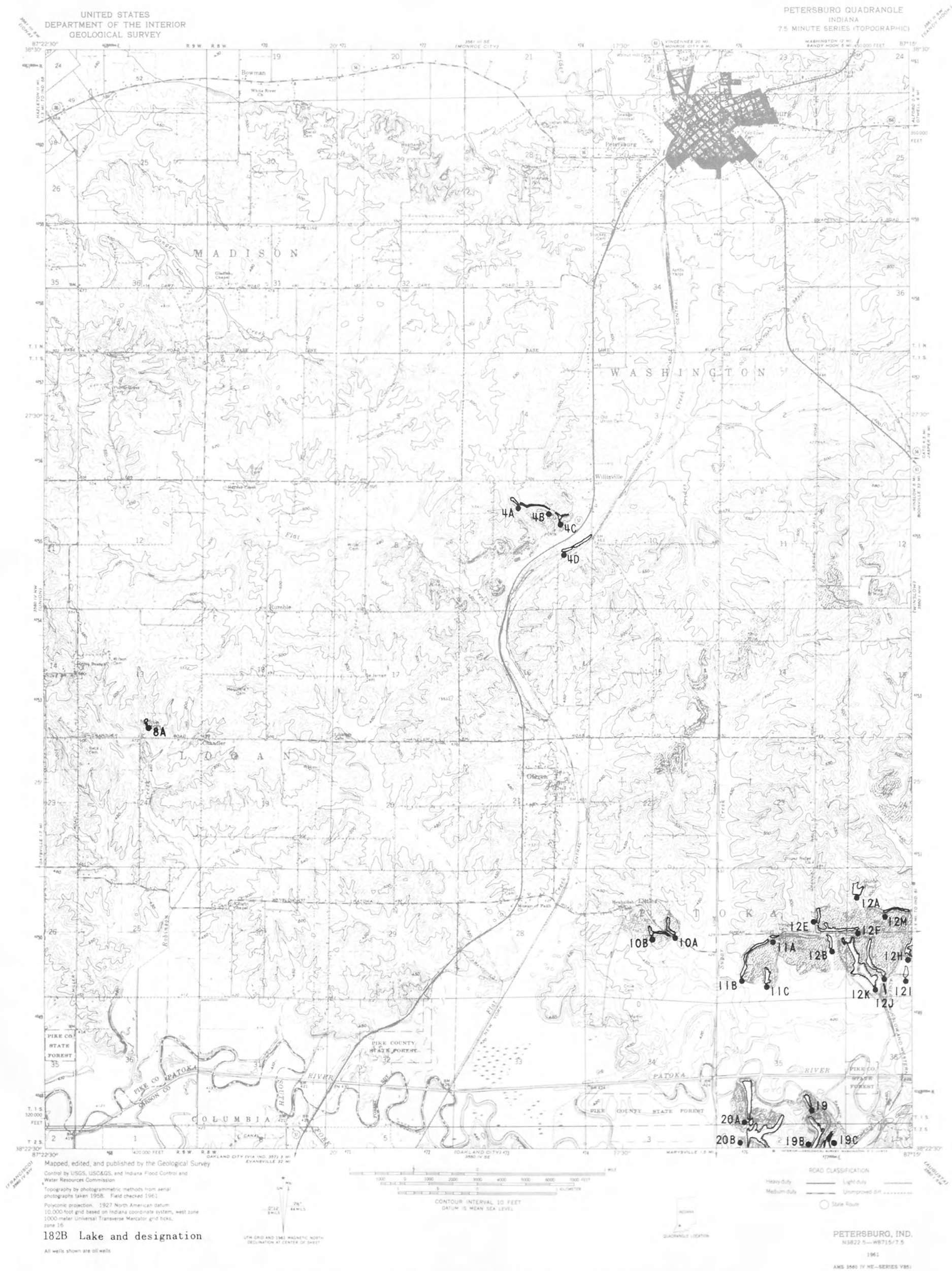


Figure 33.-- Coal-mine lakes within the Petersburg Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

REELSVILLE										121C									
LAT	LONG	LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
39 31 18	86 59 25	1	14	IR	0.09	0.045	0.45	2.87	1.8	0	N	N						L	B
39 36 46	87 00 01	2	14	IR	0.18	0.056	0.65	6.67	1.8	51'	N	N						L	B

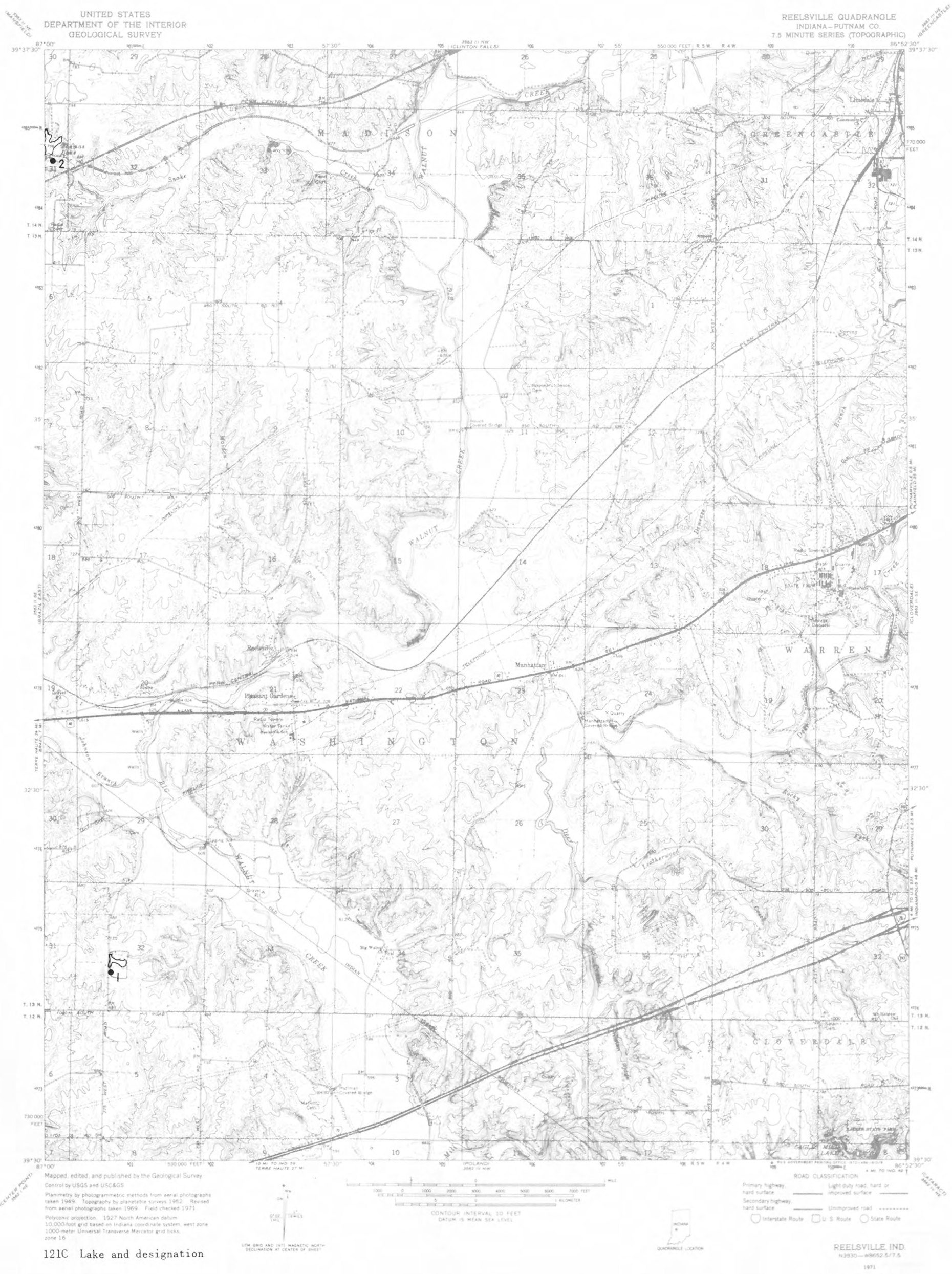


Figure 34 -- Coal-mine lakes within the Reelsville Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

RICHLAND CITY																			206A				
LAT			LONG			LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
37	59	49	87	12	53	1	173	IR	0.11	0.013	0.25	0.96	1.8	111	N	N							
37	59	49	87	13	24	9	173	IR	0.04	0.014	0.13	0.43	1.4	24	N	N							

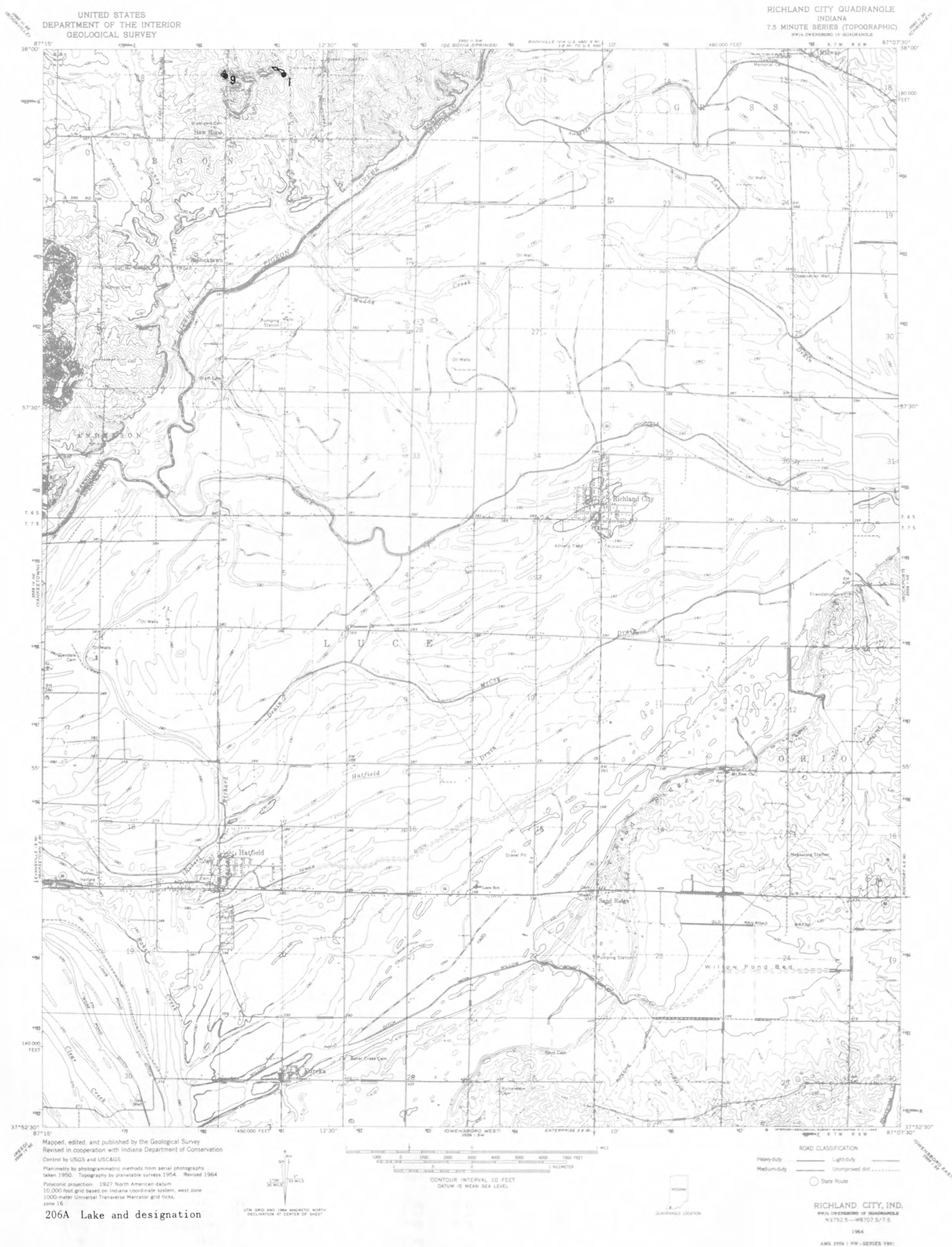


Figure 35.-- Coal-mine lakes within the Richland City Quadrangle .



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

ROSEDALE										119D													
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	33	26	87	15	49	1	167	IR	0.16	0.026	0.40	2.80	1.7	40	N	N							
39	33	31	87	15	34	2	167	TO	0.22	0.027	0.53	4.04	1.9	79	N	N							
39	33	33	87	15	22	3	167	BR	0.08	0.020	0.21	1.13	1.4	117	N	N							
39	32	38	87	17	18	4	167	IR	0.18	0.011	0.52	1.38	3.2	61	Y	N							
39	31	45	87	15	02	11	167	IR	0.18	0.020	0.45	2.32	2.1	82	Y	N							
39	31	32	87	15	13	12	167	IR	0.16	0.025	0.37	2.65	1.6	177	N	N							
39	31	43	87	15	30	13	167	IR	0.40	0.022	0.87	5.94	2.5	93	Y	N							
39	31	27	87	20	32	14	167	IR	0.17	0.065	0.58	7.31	1.5	174	N	N							

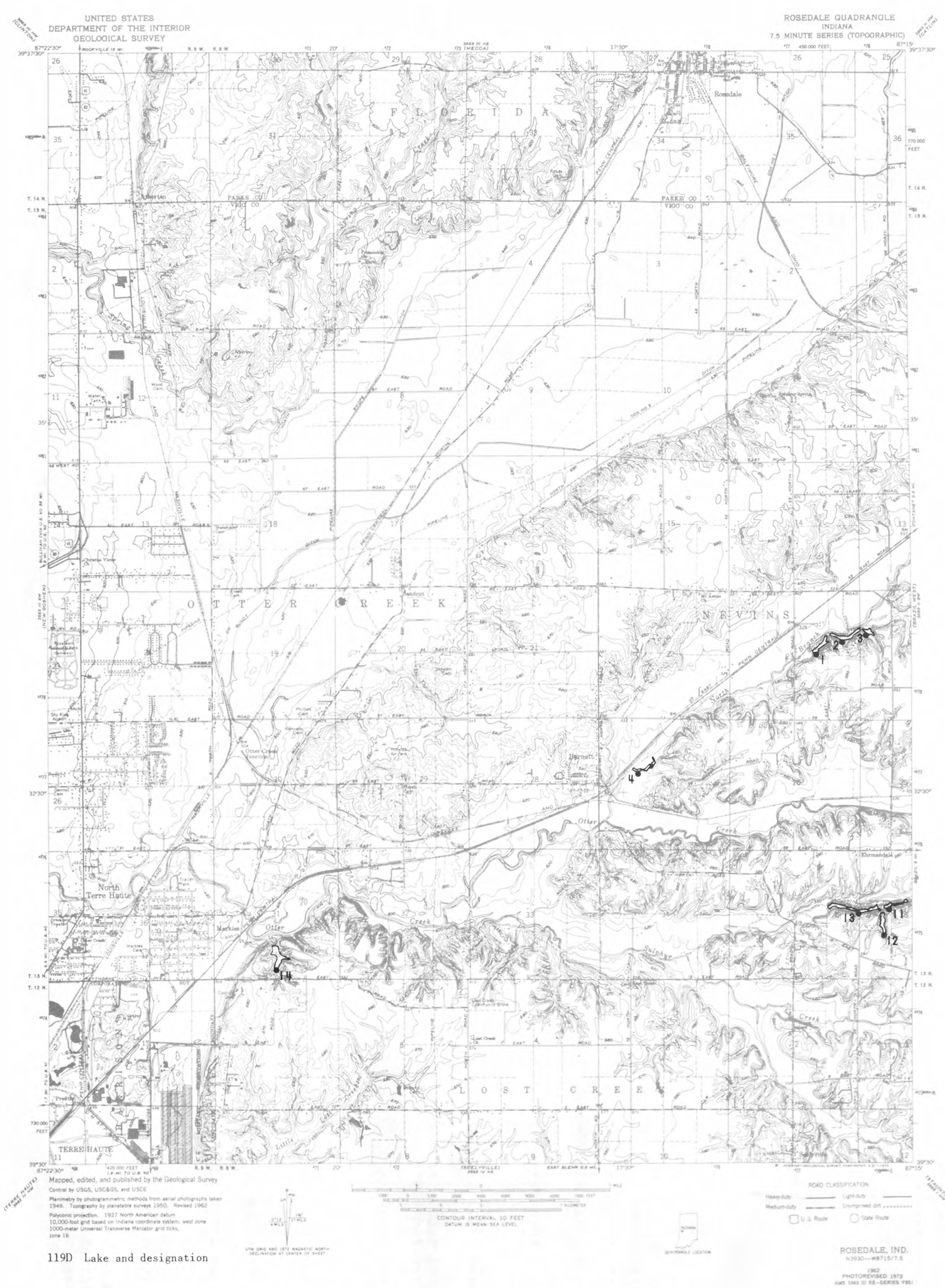


Figure 36.-- Coal-mine lakes within the Rosedale Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SAINT BERNICE										118B													
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	41	53	87	30	31	1	165	L	0.11	0.020	0.38	1.48	2.2	11	N	N						5	P
39	41	56	87	30	43	2	165	BR	0.10	0.018	0.31	1.18	2.0	53	N	N						5	P
39	41	41	87	30	12	3	165	SR	0.18	0.009	0.39	1.07	2.7	123	N	N						5	P
39	41	24	87	29	59	4	165	SR	0.08	0.008	0.18	0.44	2.0	4	N	N						5	P
39	41	30	87	30	20	5	165	SR	0.14	0.007	0.32	0.75	2.6	122	N	N						5	P
39	41	18	87	30	31	6	165	BR	0.17	0.009	0.45	1.14	3.0	152	N	N						5	P
39	41	08	87	30	34	7	165	SR	0.12	0.013	0.27	1.12	1.8	108	N	N						5	P
39	39	44	87	30	32	8	165	R	0.04	0.005	0.09	0.16	1.7	99	N	N						5	P
39	39	24	87	30	29	9	165	SR	0.23	0.008	0.52	1.26	3.3	11	N	N						5	P
39	38	59	87	30	22	10	165	BR	0.24	0.012	0.62	1.97	3.1	168	N	N						5	P
39	38	01	87	30	27	11	165	R	0.07	0.007	0.15	0.33	1.8	136	N	N						5	P
39	38	14	87	31	06	12	165	SR	0.04	0.007	0.09	0.19	1.6	103	N	N						5	P
39	38	09	87	31	17	13	165	IR	0.05	0.011	0.14	0.42	1.5	86	N	N						5	P

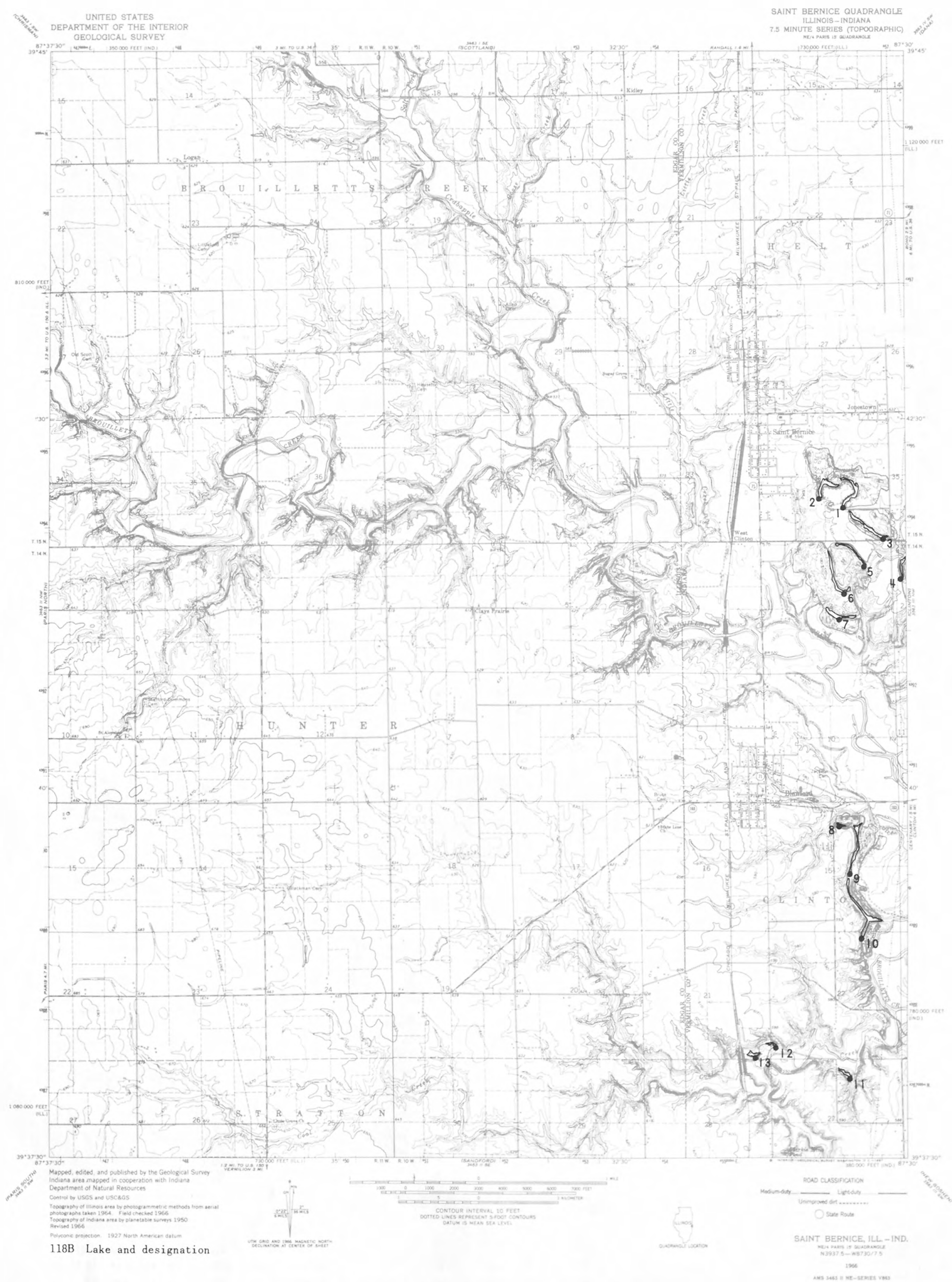


Figure 37 -- Coal-mine lakes within the Saint Bernice Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SALINE CITY 133C																								
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM	
D	M	S	D	M	S																			
39	15	27	87	13	40	1	153	L	0.04	0.008	0.13	0.28	1.8	119	N	N							L	B
39	15	27	87	13	14	2	153	R	0.03	0.004	0.08	0.10	1.8	123	N	N							L	B
39	15	21	87	13	17	3	153	SR	0.05	0.005	0.12	0.19	2.0	25	N	N							L	B
39	15	05	87	12	27	4	153	BR	0.06	0.010	0.25	0.45	2.6	85	N	N							L	B
39	15	08	87	12	12	5	153	SR	0.08	0.009	0.20	0.53	2.0	138	N	N							L	B
39	15	01	87	12	03	6	153	BR	0.08	0.008	0.19	0.46	2.0	138	N	N							L	B

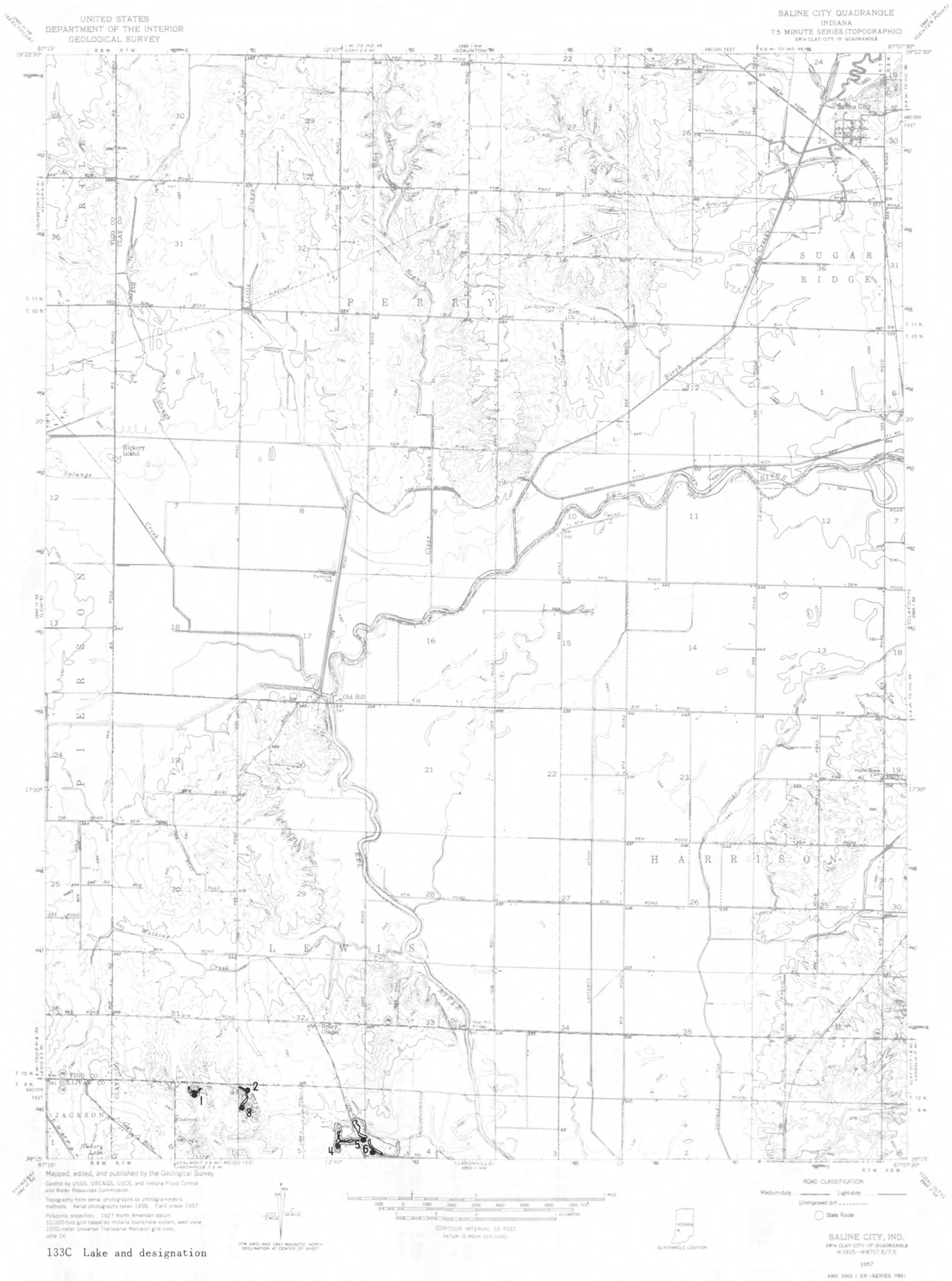


Figure 38.-- Coal-mine lakes within the Saline City Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SANDBORN										158A																			
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM						
D	M	S	D	M	S																			D	M	S			
38	59	53	87	14	38	1	153	IR	0.08	0.046	0.25	2.51	1.1	174	N	N	6/78	7.7	355	G	TGBW		D						
38	59	41	87	14	53	2	153	TO	0.18	0.010	0.40	1.22	2.6	172	N	N	6/78	7.9	2200	G	TGBW		D						
38	59	41	87	14	51	3	153	IR	0.11	0.010	0.26	0.75	2.1	58	N	N	6/78	7.2	1226	G	TGBW		D						
38	59	26	87	14	57	4	153	R	0.12	0.006	0.26	0.48	2.6	17	N	N	6/78	7.4	2747	G	TGBW		D						
38	59	28	87	14	42	5	153	IR							N	N	6/78	7.5	3630	G	G		D						
38	58	48	87	14	55	6	153	IR	0.43	0.023	1.25	6.57	3.5	49	N	N							D						
38	58	36	87	15	00	7	153	R	0.42	0.017	0.93	4.81	3.0	55	N	N	6/78	8.2	1842	G	TGBW		D						
38	58	17	87	13	55	8	55	BR	0.08	0.007	0.19	0.37	2.2	74	N	N	6/78	7.8	2226	G	BC		D						
38	58	18	87	14	17	9	55	IR							N	N	6/78	8.0	2130	G	TGW		D						
38	58	18	87	14	33	10	153	IR							N	N	6/78	7.7	2926	G	TG		D						
38	57	56	87	14	19	11	55	BR	0.06	0.012	0.18	0.55	1.7	169	N	N							D						
38	57	54	87	13	59	12	55	R	0.04	0.012	0.10	0.36	1.2	88	N	N							D						
38	57	51	87	14	30	13	153	L	0.03	0.005	0.07	0.11	1.5	36	N	N							D						
38	57	04	87	15	00	14	153	IR	0.31	0.014	0.87	2.93	3.6	39	N	N													
38	56	38	87	14	52	15	153	R	0.06	0.008	0.12	0.32	1.6	7	N	N													
38	59	50	87	12	54	16	55	L	0.04	0.010	0.11	0.31	1.4	162	N	N													
38	59	35	87	10	09	17	55	BR	0.06	0.007	0.14	0.30	1.8	117	N	N													
38	59	23	87	09	48	18	55	IR	0.11	0.042	0.32	3.24	1.2	155	N	N													
38	59	35	87	10	00	19	55	TO	0.04	0.005	0.08	0.16	1.5	2	N	N													
38	59	43	87	09	55	20	55	BR	0.29	0.017	0.93	3.38	3.6	89	N	N													
38	59	55	87	09	13	21	55	IR	0.04	0.011	0.11	0.34	1.4	167	N	N													
38	59	52	87	09	06	22	55	R	0.05	0.009	0.12	0.32	1.5	110	N	N													
38	59	47	87	08	53	23	55	R	0.06	0.005	0.13	0.23	1.9	114	N	N													
38	59	49	87	08	32	24	55	IR	0.15	0.012	0.34	1.25	2.1	171	N	N													
38	59	41	87	08	26	25	55	IR	0.12	0.011	0.31	0.88	2.4	125	N	N													
38	59	28	87	08	23	26	55	IR	0.10	0.009	0.26	0.61	2.3	165	N	N													
38	59	32	87	08	43	27	55	TO	0.07	0.011	0.17	0.56	1.6	155	N	N	6/78	7.6	3630	G	G		D						

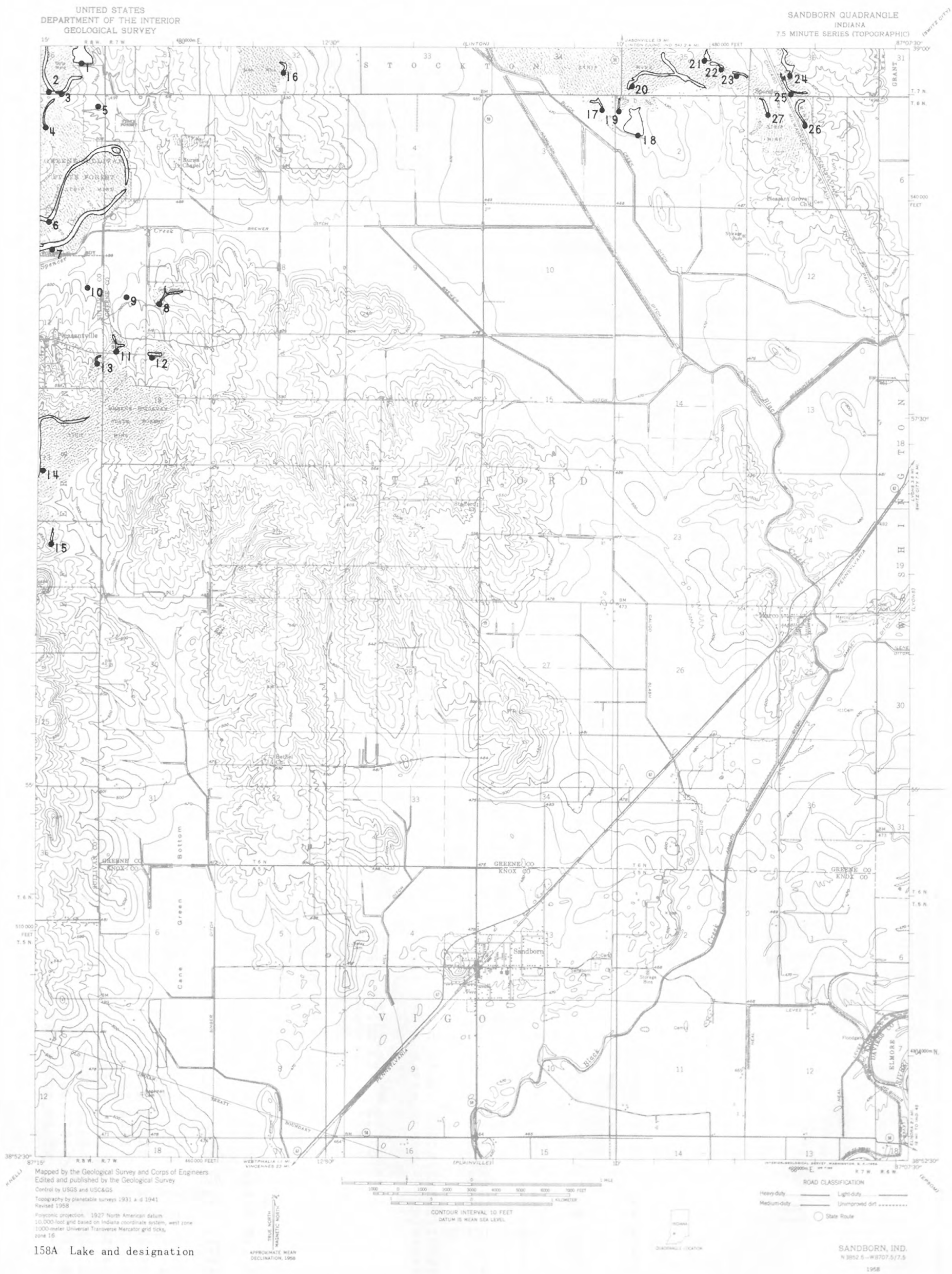


Figure 39.-- Coal-mine lakes within the Sandborn Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SANTA CLAUS 1960																							
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	06	47	86	58	25	1-A	147	IR	0.35	0.034	1.03	7.79	2.6	154	Y	Y							B
38	06	32	86	58	32	1-E	147	SR	0.43	0.020	0.95	5.74	2.8	168	N	N							B
38	06	30	86	58	23	1-F	147	SR	0.07	0.015	0.17	0.76	1.4	51	N	N							B
36	06	33	86	58	18	1-G	147	R	0.06	0.013	0.14	0.55	1.3	73	N	N							B
38	06	33	86	58	09	1-H	147	SR	0.09	0.017	0.21	1.11	1.4	69	N	N							B
38	06	22	86	58	21	4-I	147	IR	0.21	0.019	0.47	2.67	2.0	62	N	N							B
38	06	19	86	58	38	2	147	L	0.15	0.021	0.45	2.12	2.2	118	N	N							B
38	06	12	86	58	20	3	147	R	0.09	0.017	0.21	1.09	1.4	146	N	N							B
38	05	52	86	58	22	4	147	N	0.11	0.022	0.31	1.65	1.7	146	N	N							B
38	06	05	86	58	55	5	147	IR	0.17	0.023	0.44	2.61	1.9	2	N	N							B
38	05	13	86	58	51	7-A	147	BR	0.20	0.044	0.86	5.80	2.5	92	N	N							B
38	05	02	86	58	52	7-B	147	BR	0.21	0.031	0.69	4.34	2.3	147	N	N							B
38	05	11	86	58	25	8-A	147	SR	0.07	0.016	0.18	0.82	1.4	169	N	N							B
38	04	59	86	58	28	8-B	147	SR	0.19	0.018	0.41	2.35	1.9	7	N	N							B
38	04	52	86	58	21	9	147	R	0.12	0.020	0.28	1.66	1.5	136	N	N							B
38	04	30	86	59	06	11-A	147	IR	0.08	0.011	0.19	0.60	1.7	106	N	N							B
38	04	24	86	58	50	11-C	147	BR	0.24	0.016	0.63	2.64	2.7	155	Y	Y							B
38	03	53	86	58	38	12-B	147	SR	0.22	0.020	0.49	2.92	2.0	18	N	N							B
38	04	00	86	58	45	12-C	147	SR	0.11	0.008	0.24	0.62	2.1	130	N	N							B
38	03	49	86	58	46	12-E	147	SR	0.26	0.019	0.62	3.32	2.4	153	N	N							B
38	03	53	86	58	43	12-F	147	IR	0.09	0.016	0.21	0.98	1.5	164	N	N							B
38	03	53	86	58	14	13	147	BR	0.11	0.017	0.28	1.29	1.7	63	N	N							B
38	03	30	86	59	00	14-A	147	IR	0.12	0.029	0.35	2.43	1.6	156	N	N							B
38	03	32	86	58	49	14-B	147	SR	0.08	0.017	0.20	0.97	1.4	31	N	N							B
38	03	40	86	59	09	15	147	SR	0.09	0.015	0.22	0.92	1.4	163	N	N							B
38	03	27	86	59	34	16-A	147	IR	0.12	0.019	0.30	1.57	1.7	14	N	N							B
38	03	23	86	59	24	16-B	147	L	0.06	0.038	0.26	1.63	1.4	59	N	N							B
38	03	18	86	59	17	16-C	147	SC	0.08	0.028	0.29	1.64	1.6	149	N	N							B
38	03	15	86	59	12	16-D	147	IR	0.08	0.016	0.18	0.86	1.4	164	N	N							B
38	03	14	86	59	23	16-F	147	BR	0.09	0.017	0.29	1.09	1.9	169	N	N							B
38	02	13	86	58	09	18-A	147	IR	0.07	0.026	0.19	1.21	1.2	6	N	N							B
38	02	04	86	58	14	18-B	147	IR	0.18	0.022	0.49	2.62	2.1	31	N	N							B
38	02	12	86	57	55	19-A	147	BR	0.24	0.030	0.75	4.72	2.4	38	N	N							B
38	02	05	86	57	53	19-B	147	BR	0.20	0.032	0.72	4.13	2.5	64	N	N							B
38	01	54	86	57	01	20	147	SR	0.09	0.013	0.19	0.82	1.5	173	N	N							B

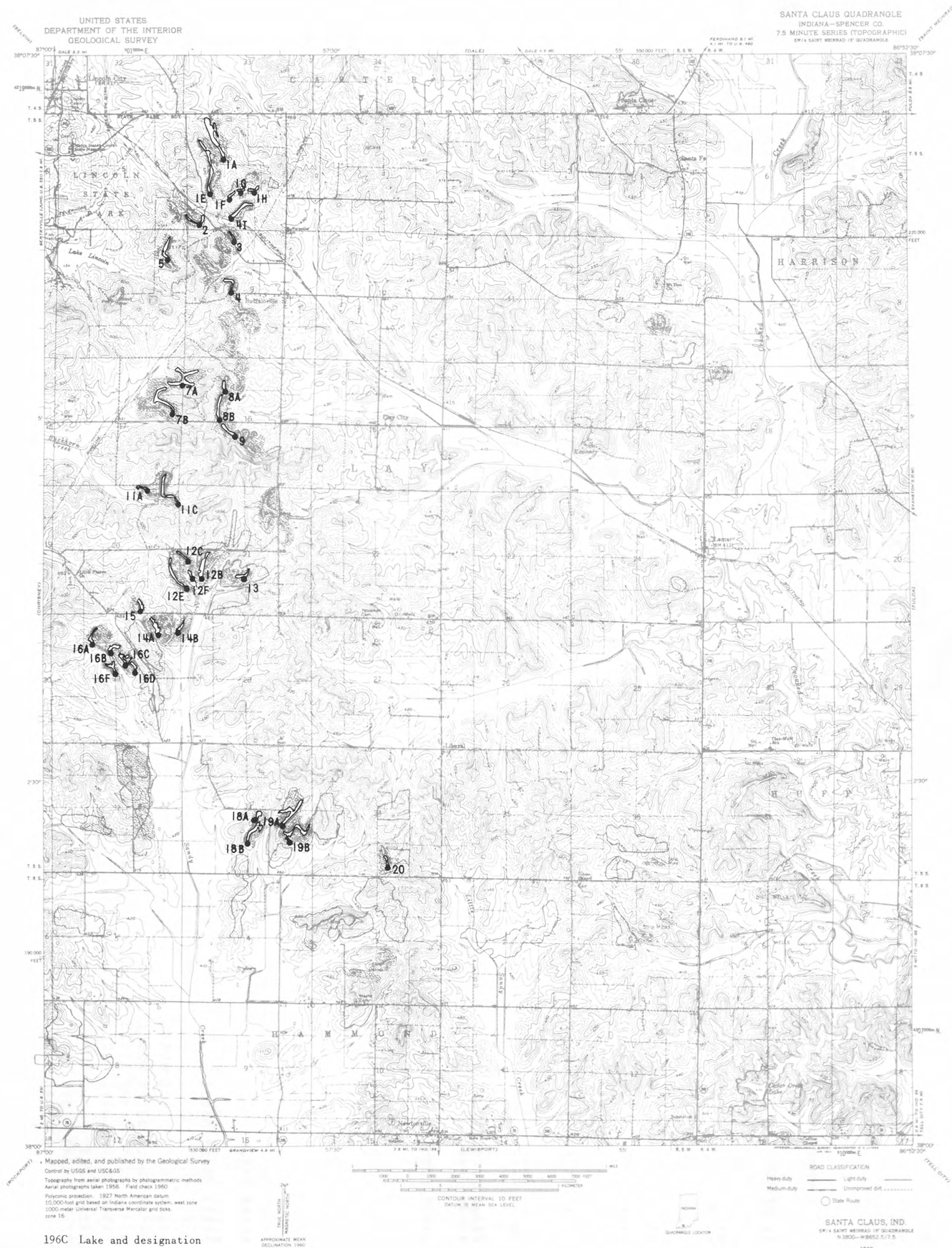


Figure 40.-- Coal-mine lakes within the Santa Claus Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SEELYVILLE																			
132B																			
LAT	LONG	LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D M S	D M S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
39 29 42	87 15 21	1	167	IR	0.08	0.023	0.22	1.22	1.4	137	N	N						3	S
39 29 21	87 16 01	2	167	SR	0.23	0.023	0.52	3.63	1.9	91	Y	N	4/78	8.2	361	BR	G	3	S
39 29 10	87 16 15	3	167	IR	0.26	0.068	1.24	11.38	2.6	40	Y	Y						3	S
39 29 09	87 15 56	4	167	BR	0.09	0.035	0.36	2.23	1.7	28	N	N	4/78	8.1	316	G	G	3	S
39 29 02	87 15 48	5	167	IR	0.20	0.021	0.52	2.79	2.2	113	N	N						3	S
39 28 54	87 15 36	6	167	IR	0.32	0.047	0.95	9.94	2.1	15	N	N	4/78	9.0	373	G	TG	3	S
39 28 55	87 15 54	7	167	IR	0.18	0.032	0.50	3.83	1.8	163	N	N	4/78	8.4	487	G	TG	3	S
39 28 58	87 16 04	8	167	IR	0.10	0.019	0.19	1.26	1.2	2	N	N						3	S
39 28 52	87 16 25	9	167	SR	0.20	0.014	0.42	1.87	2.2	45	N	N	4/78	8.2	723	G	TG	3	S
39 28 50	87 16 04	10	167	SR	0.07	0.016	0.13	0.74	1.1	6	N	N	4/78	8.0	784	G	G	3	S
39 28 44	87 16 08	11	167	IR	0.09	0.018	0.23	1.09	1.5	76	N	N	4/78	8.5	292	G	TG		
39 28 45	87 16 02	12	167	IR	0.06	0.013	0.12	0.51	1.2	79	N	N	4/78	8.1	753	G	TG	4	L
39 28 38	87 15 33	13	167	BR	0.35	0.038	1.12	8.79	2.7	132	N	N	4/78	8.0	433	G	TGB	4	L
39 28 46	87 15 41	14	167	R	0.08	0.010	0.17	0.55	1.6	39	N	N	4/78	8.1	241	G	TGB	4	L
39 28 46	87 15 38	15	167	SR	0.06	0.014	0.15	0.57	1.4	22	N	N	4/78	8.1	375	G	TGB	4	L
39 28 51	87 15 12	16	167	IR	0.14	0.039	0.44	3.73	1.6	50	Y	N	4/78	8.1	311	G	TGB	3	S
39 28 55	87 15 06	17	167	IR	0.18	0.032	0.44	3.94	1.5	50	N	N						3	S
39 28 37	87 16 19	18	167	SR	0.07	0.022	0.23	1.13	1.5	85	N	N	4/78	8.2	552	G	TG	4	L
39 28 27	87 16 05	19	167	BR	0.21	0.025	0.54	3.57	2.0	142	N	N	4/78	8.4	412	G	TG	4	L
39 28 24	87 16 00	20	167	BR	0.45	0.041	1.41	12.00	2.9	63	N	N	4/78	8.4	404	G	TG	4	L
39 28 17	87 16 24	21	167	BR	0.46	0.045	1.50	13.70	2.9	107	N	N	4/78	7.9	1200	G	TG	4	L
39 28 27	87 16 53	22	167	IR	0.18	0.025	0.43	2.93	1.7	10	N	N	4/78	8.0	868	G	TG	4	L
39 28 12	87 16 39	23	167	BR	0.34	0.029	0.97	6.47	2.7	123	N	N						4	L
39 28 11	87 16 21	24	167	IR	0.13	0.019	0.33	1.66	1.8	131	N	N						4	L
39 28 17	87 17 05	25	167	TO	0.36	0.009	0.73	2.18	3.5	108	Y	N						4	L
39 27 52	87 16 31	26	167	TO	0.41	0.008	0.80	2.28	3.7	160	N	N						4	L
39 27 59	87 16 20	27	167	IR	0.29	0.026	0.70	5.00	2.2	29	N	N						4	L
39 27 55	87 15 59	28	167	BR	0.31	0.035	0.88	7.10	2.3	131	N	N						4	L
39 27 48	87 16 03	29	167	IR	0.63	0.053	1.63	21.88	2.4	97	N	N	4/78	8.4	423	G	TG	4	L
39 27 49	87 15 34	30	167	IR	0.14	0.012	0.33	1.17	2.1	120	N	N	4/78	8.1	1000	G	TG	4	L
39 27 47	87 15 34	31	167	IR	0.24	0.017	0.50	2.64	2.2	111	N	N	4/78	8.2	812	G	TG	4	L
39 27 25	87 15 32	32	167	SR	0.27	0.023	0.59	4.03	2.1	6	N	N	4/78	7.7	1302	BL	TG	4	L
39 27 21	87 15 26	33	167	IR	0.10	0.013	0.19	0.90	1.4	163	N	N	4/78	8.2	964	G	G	4	L
39 27 11	87 15 45	34	167	IR	0.08	0.019	0.21	1.07	1.4	31	N	N						4	L
39 26 56	87 15 27	35	167	IR	0.11	0.023	0.35	1.73	1.9	134	N	N	4/78			G	TG	4	L
39 26 57	87 16 30	36	167	IR	0.16	0.030	0.42	3.24	1.6	148	N	N						4	L
39 28 10	87 18 41	37	167	IR	0.31	0.067	0.96	13.57	1.8	151	Y	N						4	
39 27 43	87 19 06	38	167	IR	0.03	0.041	0.17	1.02	1.2	61	N	N						4	L
39 27 36	87 19 28	39	167	IR	0.11	0.018	0.24	1.34	1.4	10	N	N						4	L
39 24 46	87 18 57	40	167	IR	0.30	0.034	0.76	6.70	2.0	158	N	N						5	P
39 24 29	87 19 06	41	167	SR	0.31	0.015	0.65	3.12	2.6	11	N	N	4/78	7.9	755	G	TG	5	P
39 24 28	87 19 00	42	167	IR	0.12	0.011	0.25	0.96	1.8	38	N	N	4/78	8.0	850	G	TG	5	P
39 24 16	87 19 15	43	167	IR	0.22	0.055	0.69	7.94	1.7	136	Y	Y	4/78	7.9	1310	G	TG	5	P
39 24 11	87 19 05	44	167	SR	0.15	0.014	0.30	1.39	1.8	62	N	N						5	P
39 24 07	87 16 52	45	167	TO	0.15	0.008	0.30	0.91	2.2	162	N	N						5	P
39 24 04	87 19 00	46	167	IR	0.07	0.015	0.20	0.72	1.7	69	N	N						5	P
39 24 01	87 18 53	47	167	IR	0.09	0.013	0.19	0.81	1.5	11	N	N						5	P
39 23 54	87 19 16	48	167	IR	0.12	0.019	0.28	1.62	1.6	7	N	N	4/78	7.6	1064	G	TG	5	P
39 23 48	87 19 09	49	167	IR	0.09	0.023	0.24	1.34	1.5	178	N	N						5	P
39 23 57	87 19 35	50	167	IR	0.14	0.042	0.54	3.82	1.9	63	N	N	4/78	7.5	2157	G	TG	5	P
39 23 49	87 19 28	51	167	IR	0.02	0.212	0.26	3.09	1.0	90	N	N	4/78	7.8	963	A	TG	5	P
39 23 47	87 19 41	52	167	SR	0.13	0.022	0.29	1.95	1.5	20	N	N	4/78	5.6	560	G	TGB	5	P
39 23 37	87 19 36	53	167	IR	0.20	0.019	0.41	2.56	1.8	158	N	N						5	P
39 23 27	87 19 36	54	167	R	0.16	0.020	0.37	2.23	1.7	152	N	N						5	P
39 23 32	87 19 22	55	167	IR	0.21	0.028	0.50	3.90	1.8	59	N	N	4/78	7.9	1760	G	TGB	5	P
39 23 25	87 19 20	56	167	BR	0.20	0.033	0.58	4.34	1.9	138	N	N	4/78	7.5	1740	G	TGB	5	P
39 23 26	87 18 58	57	167	SR	0.25	0.016	0.52	2.63	2.3	16	N	N	4/78			G	TG	5	P
39 23 27	87 18 49	58-A	167	IR	0.18	0.038	0.65	4.58	2.1	6	N	N	4/78	6.5	396	G	TG	5	P
39 23 27	87 18 43	58-B	167	IR	0.07	0.016	0.18	0.74	1.5	9	N	N							
39 23 00	87 19 25	59	167	IR	0.45	0.024	0.96	7.19	2.5	8	N	N	4/78	8.1	1745	G	TGB	5	P
39 22 40	87 18 39	60	167	IR	0.72	0.041	1.52	19.33	2.4	112	N	N	4/78	3.8	1925	A	T	5	P
39 23 00	87 18 11	61	167	IR	0.15	0.019	0.44	1.93	2.2	148	N	N	4/78			G	TG	5	P
39 23 00	87 18 06	62	167	IR	0.12	0.019	0.28	1.65	1.5	177	Y	N						5	P
39 23 05	87 16 08	63	167	SR	0.12	0.017	0.30	1.38	1.8	156	N	N						5	P
39 22 59	87 16 19	64	167	BR	0.22	0.030	0.76	4.38	2.6	92	N	N						5	P
39 22 50	87 16 28	65	167	IR	0.23	0.020	0.58	2.97	2.4	75	Y	N						5	P

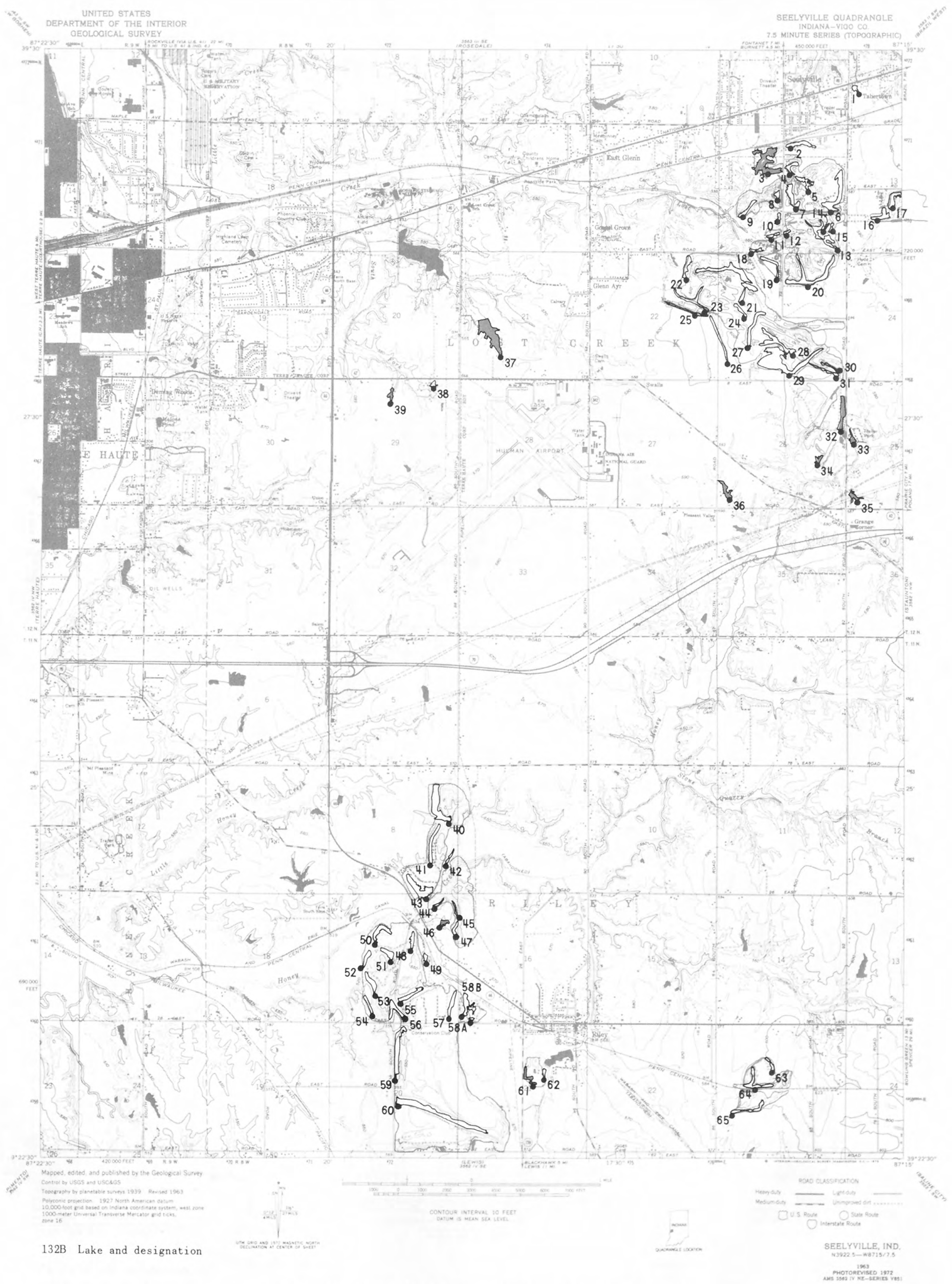


Figure 41.-- Coal-mine lakes within the Seelyville Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SHELBURN 145A																							
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	08	42	87	23	16	1	153	IR	0.11	0.035	0.36	2.68	1.5	173	Y	N							
39	08	27	87	23	01	2	153	IR	0.13	0.068	0.52	5.88	1.5	173	Y	N							
39	08	14	87	23	15	3	153	IR	0.37	0.047	0.84	11.48	1.7	179	N	N							
39	12	58	87	25	27	4	153	IR	0.87	0.181	3.52	101.19	2.4	55	Y	Y							
39	12	29	87	24	52	5	153	TR	0.15	0.132	0.60	12.93	1.1	161	Y	N							

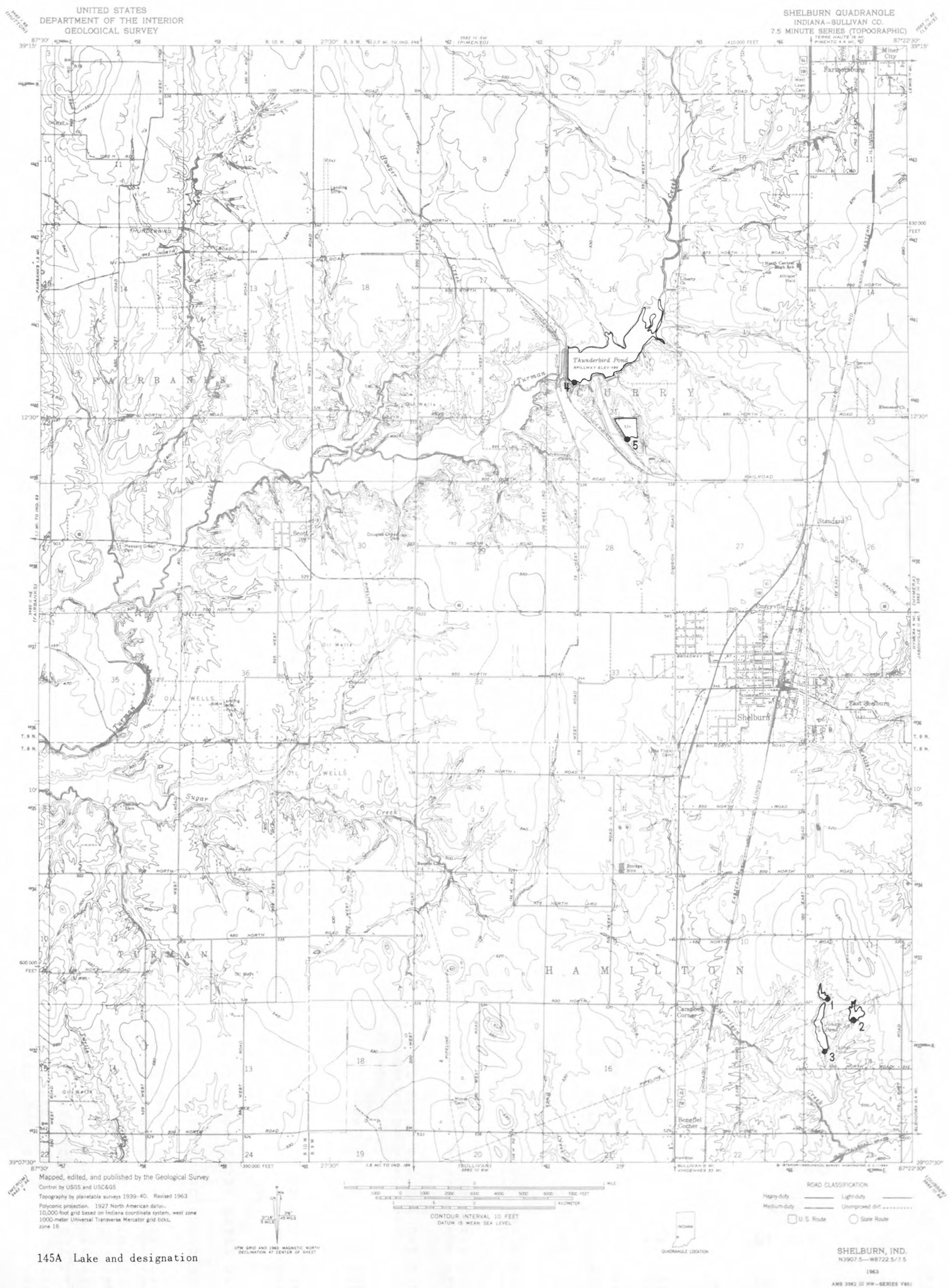


Figure 42.-- Coal-mine lakes within the Shelburn Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

STAUNTON 133A																							
LAT			LONG			LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND				
39	27	31	87	08	00	2	21	IR	0.18	0.037	0.48	4.47	1.6	57	N	N							
39	28	20	87	07	45	3-B	21	IR	0.18	0.018	0.42	2.15	2.0	105	N	N							LB
39	28	23	87	08	07	3-C	21	IR	0.19	0.036	0.62	4.39	2.1	46	N	N	4/78	7.3	852	BL	G		LB
39	28	04	87	08	09	3-F	21	IR	0.52	0.044	1.81	14.85	3.3	124	N	N	4/78	8.3	572	BR	TG		LB
39	28	11	87	07	38	3-K	21	IR	0.10	0.024	0.26	1.56	1.5	143	N	N							LB
39	27	57	87	07	37	3-L	21	IR	0.27	0.038	0.65	6.60	1.8	110	N	N							LB
39	27	49	87	07	35	3-M	21	SR	0.12	0.014	0.26	1.15	1.7	136	N	N	4/78	7.8	936	G	TG		
39	27	48	87	07	54	3-Q	21	SR	0.12	0.023	0.29	1.95	1.5	7	N	N							
39	27	39	87	08	03	3-W	21	IR	0.11	0.025	0.27	1.80	1.4	74	N	N							LB
39	27	43	87	08	13	3-X	21	IR	0.19	0.032	0.54	4.14	1.9	73	N	N							LB
39	27	48	87	08	17	3-Z	21	IR	0.20	0.015	0.50	2.02	2.5	29	N	N							LB
39	28	59	87	07	56	4-C	21	BR	0.44	0.025	1.33	7.32	3.5	167	N	N							
39	29	02	87	07	45	4-K	21	IR	0.09	0.036	0.27	2.22	1.3	178	N	N						4	L
39	28	53	87	07	55	4-P	21	IR	0.20	0.035	0.62	4.54	2.0	65	N	N						4	L
39	28	59	87	08	03	4-V	21	IR	0.20	0.024	0.43	3.21	1.7	150	N	N						4	L
39	26	52	87	11	36	20-U	21	IR	0.21	0.031	0.57	4.45	1.9	55	N	N	11/77	3.5	1650	A	B		
39	26	51	87	10	45	21-J	21	IR	0.08	0.029	0.22	1.62	1.2	159	N	N	11/77	8.0	765	A	TG		
39	26	50	87	10	27	21-H	21	IR	0.09	0.019	0.25	1.18	1.6	81	N	N							
39	26	44	87	10	33	21-A	21	IR	0.13	0.035	0.42	3.05	1.7	126	N	N	11/77			G	G		
39	26	12	87	10	52	21-B	21	IR	0.64	0.041	1.59	17.09	2.7	16	N	N							
39	29	24	87	08	36	6-C	21	IR	0.13	0.014	0.33	1.32	2.0	68	N	N	4/78	8.3	528	G	TG		
39	28	58	87	07	55	4-R	21	BR	0.22	0.012	0.70	1.75	3.8	167	N	N	4/78	8.4	330	G	TG		B
39	28	32	87	07	41	4-T	21	SR	0.03	0.019	0.11	0.44	1.2	141	N	N	4/78	6.4	440	G	TG		B
39	29	27	87	10	26	8-K	21	IR	0.08	0.010	0.19	0.55	1.8	79	N	N							

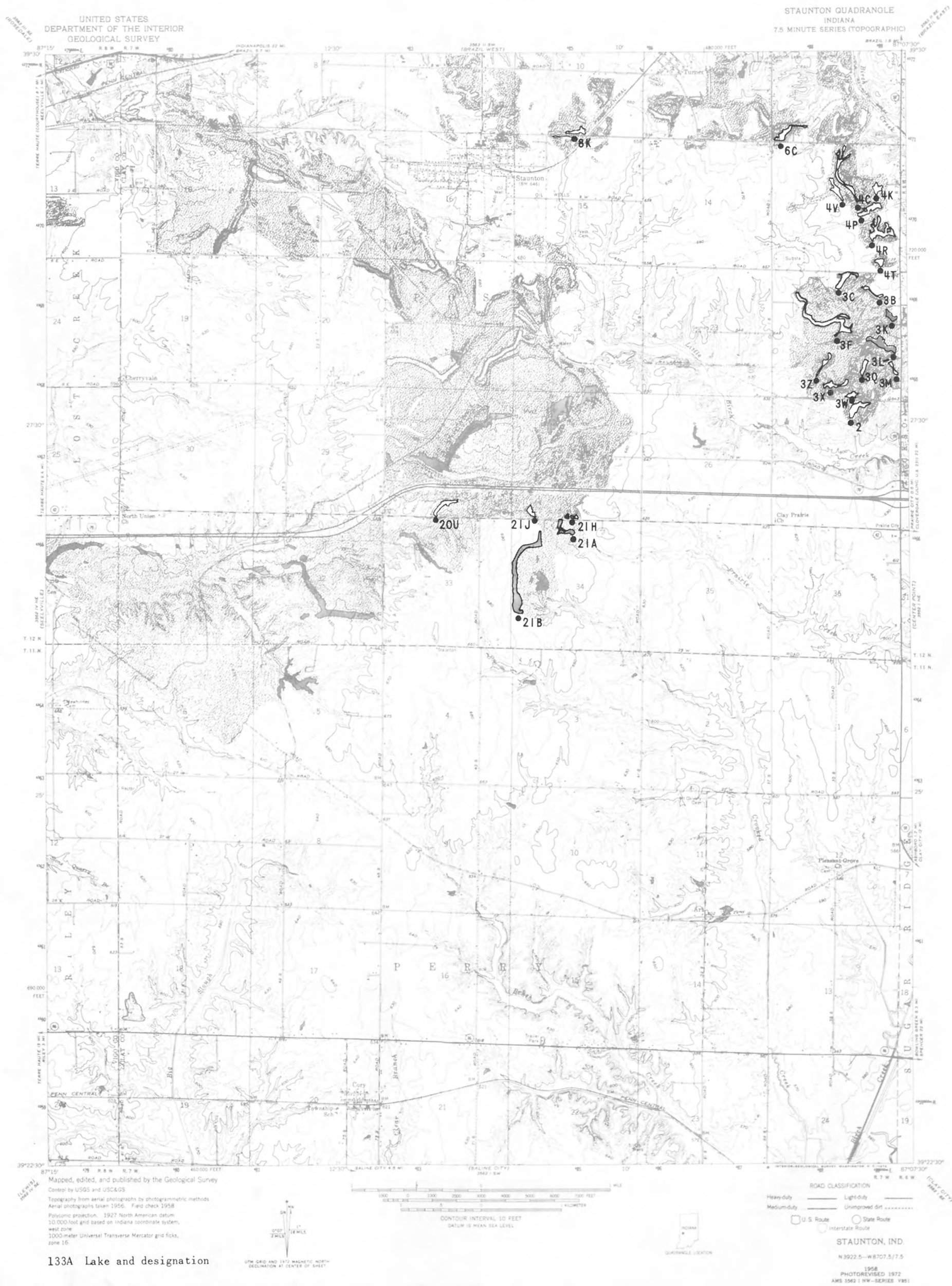


Figure 43.-- Coal-mine lakes within the Staunton Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SULLIVAN																			145C																		
LAT			LONG			LAKE	CO	SHAPE	LENGTH	WIDTH	SHORE	AREA	SHORE	ORIEN	I	O	SAMPLE	PH	SPEC	COLOR	VEG	CB	FM														
D	M	S	D	M	S	ID			(MILES)	(MILES)	(MILES)	(ACRES)	DEV	(DEGS)	N	U			COND																		
39	06	02	87	22	30	1	153	IR	1.86	0.288	11.42	344.18	4.3	163	Y	Y																					
39	07	05	87	23	28	2	121	IR	0.09	0.047	0.35	2.74	1.5	90	Y	N																					
39	06	40	87	24	01	3	121	IR	0.13	0.027	0.40	2.43	1.8	141	Y	N																					
39	06	39	87	24	04	4	121	IR	0.12	0.018	0.28	1.52	1.6	65	Y	N																					

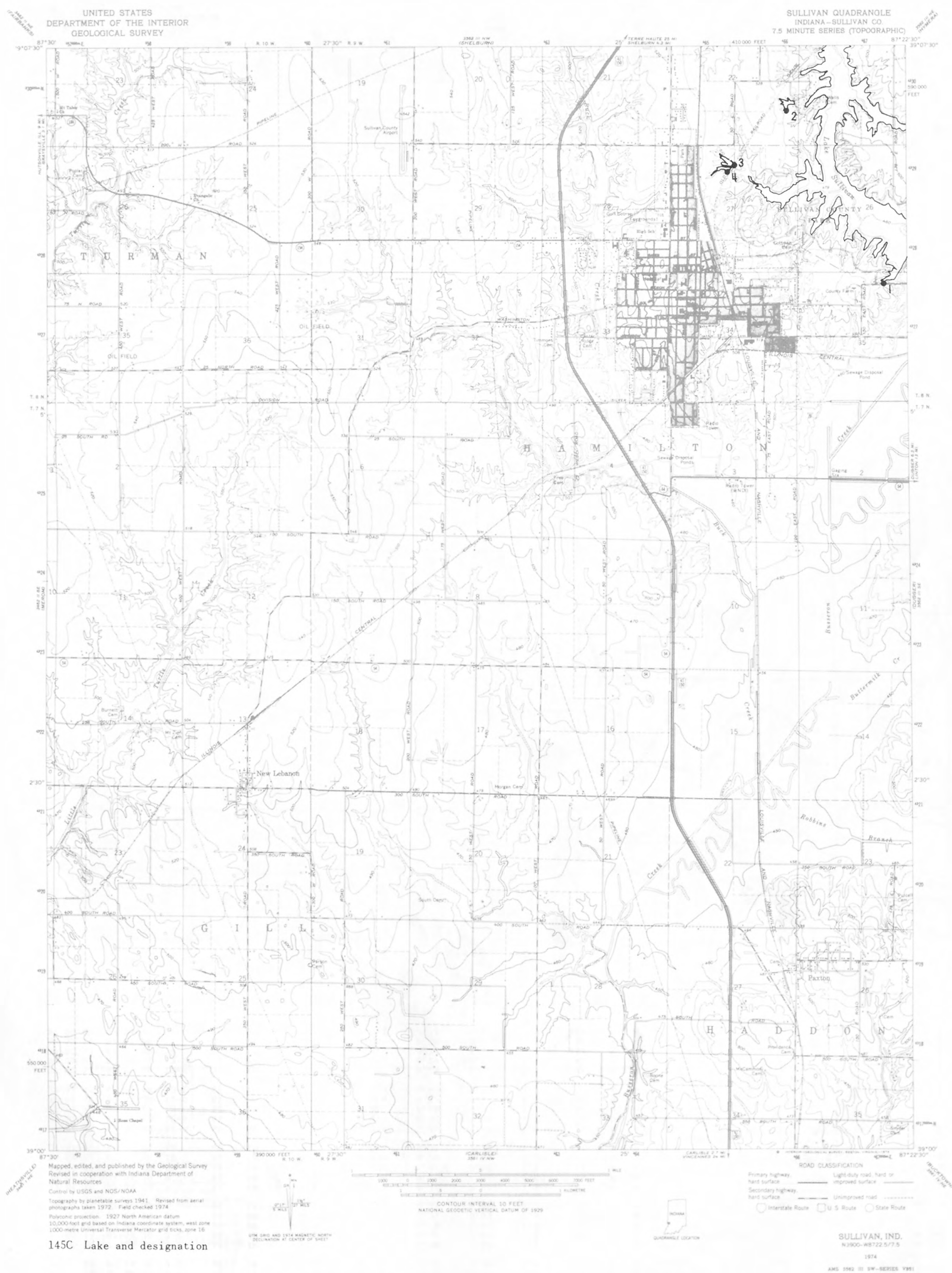


Figure 44.-- Coal-mine lakes within the Sullivan Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

SWITZ CITY 146D																							
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	00	55	87	05	03	1	55	IR	0.10	0.026	0.36	1.79	1.9	75	N	N	6/78			G	N	M	B
39	01	06	87	05	07	2	55	SR	0.15	0.016	0.34	1.65	1.9	55	Y	N					M	B	
39	01	04	87	04	43	3-A	55	IR	0.09	0.023	0.26	1.43	1.5	64	N	N	6/78			G	TCBW	M	B
39	01	00	87	04	43	3-B	55	IR	0.12	0.026	0.32	2.22	1.5	75	N	N	6/78	6.6	1486	G	TCBW	M	B
39	00	51	87	04	46	3-C	55	IR	0.14	0.033	0.35	3.14	1.4	151	N	N	6/78	7.9	2136	G	GW	M	B
39	00	50	87	04	32	3-D	55	IR	0.10	0.024	0.38	1.64	2.1	2	N	N						M	B
39	00	44	87	04	28	3-E	55	TO	0.10	0.015	0.21	1.04	1.5	148	N	N						M	B
39	01	20	87	04	08	4	55	IR	0.05	0.043	0.25	1.65	1.4	50	N	N							
39	01	17	87	04	05	5	55	BR	0.08	0.015	0.21	0.83	1.6	117	N	N							
39	01	32	87	04	39	6	55	IR	0.10	0.024	0.31	1.65	1.7	48	N	N	6/78	7.5	1369	G	TCBW	M	B
39	01	19	87	04	16	7	55	IR	0.18	0.022	0.44	2.61	1.9	153	N	N						M	B
39	01	15	87	04	28	8	55	TO	0.13	0.006	0.21	0.56	2.0	14	N	N						M	B
39	01	09	87	04	18	9	55	IR	0.18	0.020	0.41	2.45	1.8	156	N	N						U	B
39	00	59	87	04	18	10	55	IR	0.17	0.044	0.70	5.04	2.2	117	N	N	6/78	7.0	1475	G	TCB	U	B
39	01	01	87	04	03	11	55	IR	0.14	0.026	0.35	2.37	1.6	131	N	N						U	B
39	01	46	87	01	00	12-A	55	SR	0.16	0.015	0.36	1.59	2.0	175	N	N						L	B
39	01	37	87	01	11	12-B	55	IR	0.17	0.016	0.42	1.88	2.2	50	N	N							B
39	01	32	87	01	19	12-C	55	IR	0.20	0.030	0.48	4.03	1.7	152	N	N						U	B
39	01	41	87	01	28	12-D	55	SR	0.07	0.014	0.17	0.69	1.5	131	N	N						U	B
39	01	41	87	01	44	12-E	55	IR	0.15	0.029	0.42	2.93	1.7	99	N	N	6/78			A	TCBW	U	B
39	02	13	87	01	54	13-A	55	IR	0.10	0.020	0.24	1.42	1.4	39	N	N							B
39	02	07	87	02	01	13-B	55	IR	0.13	0.021	0.29	1.95	1.4	45	N	N							B
39	02	23	87	01	09	14	55	BR	0.11	0.015	0.25	1.10	1.7	152	N	N							B
39	02	10	87	01	20	15	55	BR	0.14	0.030	0.38	2.92	1.5	30	N	N	6/78	8.0	1413	G	TCBW		B
39	02	38	87	03	33	16	55	BR	0.10	0.022	0.30	1.45	1.8	127	N	N						M	B

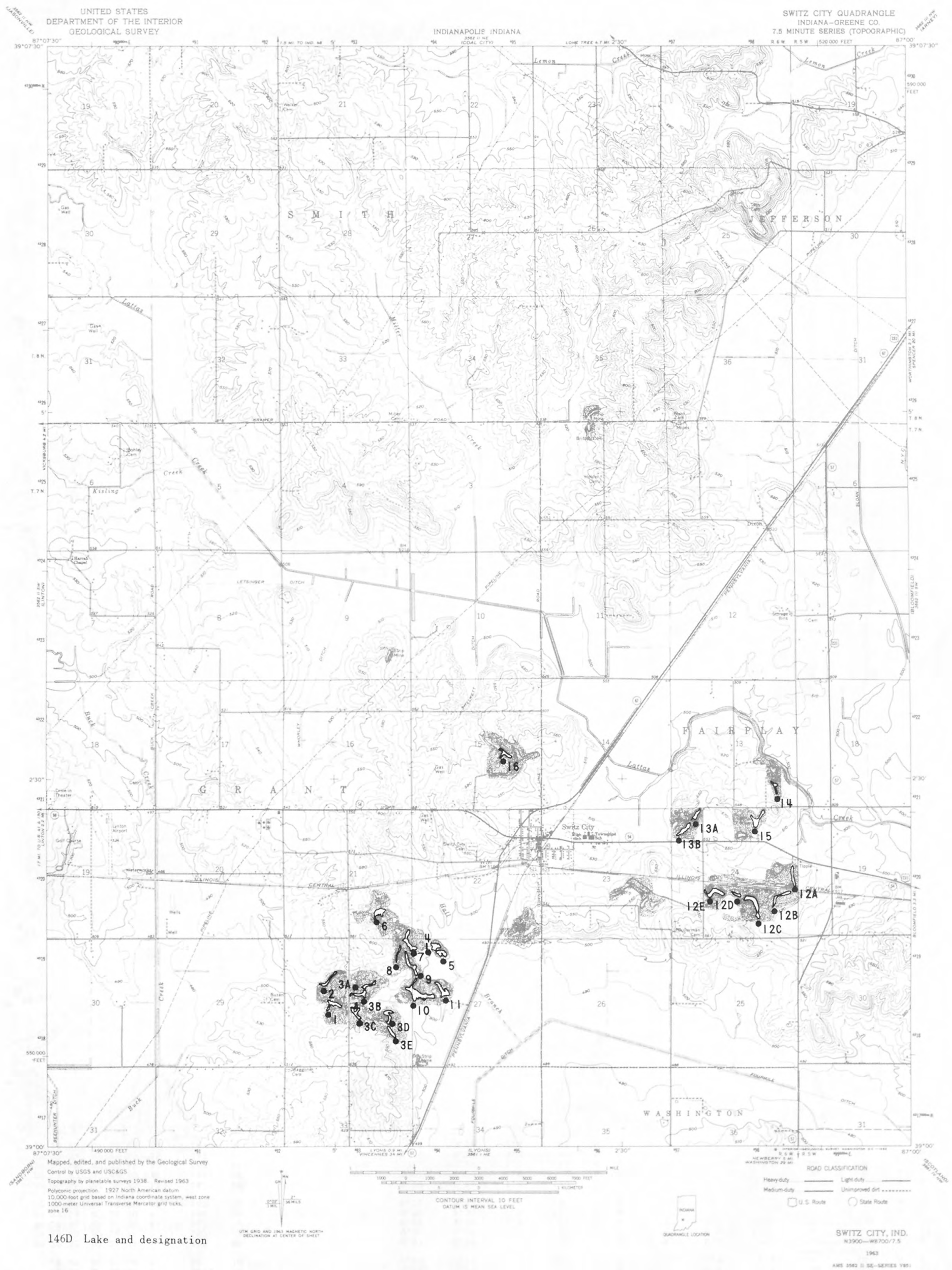


Figure 45.-- Coal-mine lakes within the Switz City Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

TERRE HAUTE 132A																							
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
39	28	11	87	27	30	1	167	IR	0.14	0.019	0.33	1.78	1.7	15	N	N	4/78	8.0	1114	G	TG	5	P
39	28	47	87	26	44	2	167	IR	0.18	0.066	0.53	8.05	1.3	40	N	N						4	L
39	28	46	87	26	22	3	167	IR	0.25	0.120	0.94	19.85	1.5	74	N	N	4/78	9.1	414	BR	TGB	4	L
39	28	15	87	26	47	4	167	IR	0.48	0.266	2.58	82.93	2.0	3	N	N	4/78	9.1	417	BR	TGB	4	L
39	29	39	87	27	56	5	167	IR	0.39	0.053	1.83	13.43	3.5	168	Y	N	4/78	7.4	273	G	TG	5	P
39	29	37	87	25	01	6	167	SR	0.38	0.023	0.87	5.89	2.5	25	N	N	4/78	5.6	692	G	TGB	4	L
39	29	53	87	26	26	7	167	SR	0.13	0.014	0.31	1.29	1.9	13	N	N	4/78	4.0	1628	A	TB		LP
39	29	45	87	26	30	8	167	TO	0.10	0.021	0.21	1.43	1.2	26	N	N	4/78	7.7	1465	G	TGB		LP
39	29	16	87	25	20	9	167	BR	0.28	0.035	0.93	6.52	2.5	155	N	N						4	L
39	29	16	87	25	25	10	167	TO	0.10	0.011	0.21	0.83	1.6	155	N	N						4	L
39	29	05	87	25	25	11	167	IR	0.11	0.028	0.29	2.06	1.4	140	N	N						4	L
39	26	49	87	27	35	13	167	TO	0.13	0.013	0.27	1.20	1.8	2	N	N	4/78			BR	TG	4	L
39	26	08	87	27	49	14	167	IR	0.75	0.090	1.66	43.79	1.7	15	N	N	4/78	9.0	497	BR	TG		
39	23	53	87	29	57	15	167	IR	0.23	0.008	0.52	1.28	3.3	41	N	N						5	P
39	23	25	87	30	03	16	167	SR	0.19	0.024	0.41	3.06	1.6	55	N	N						5	P

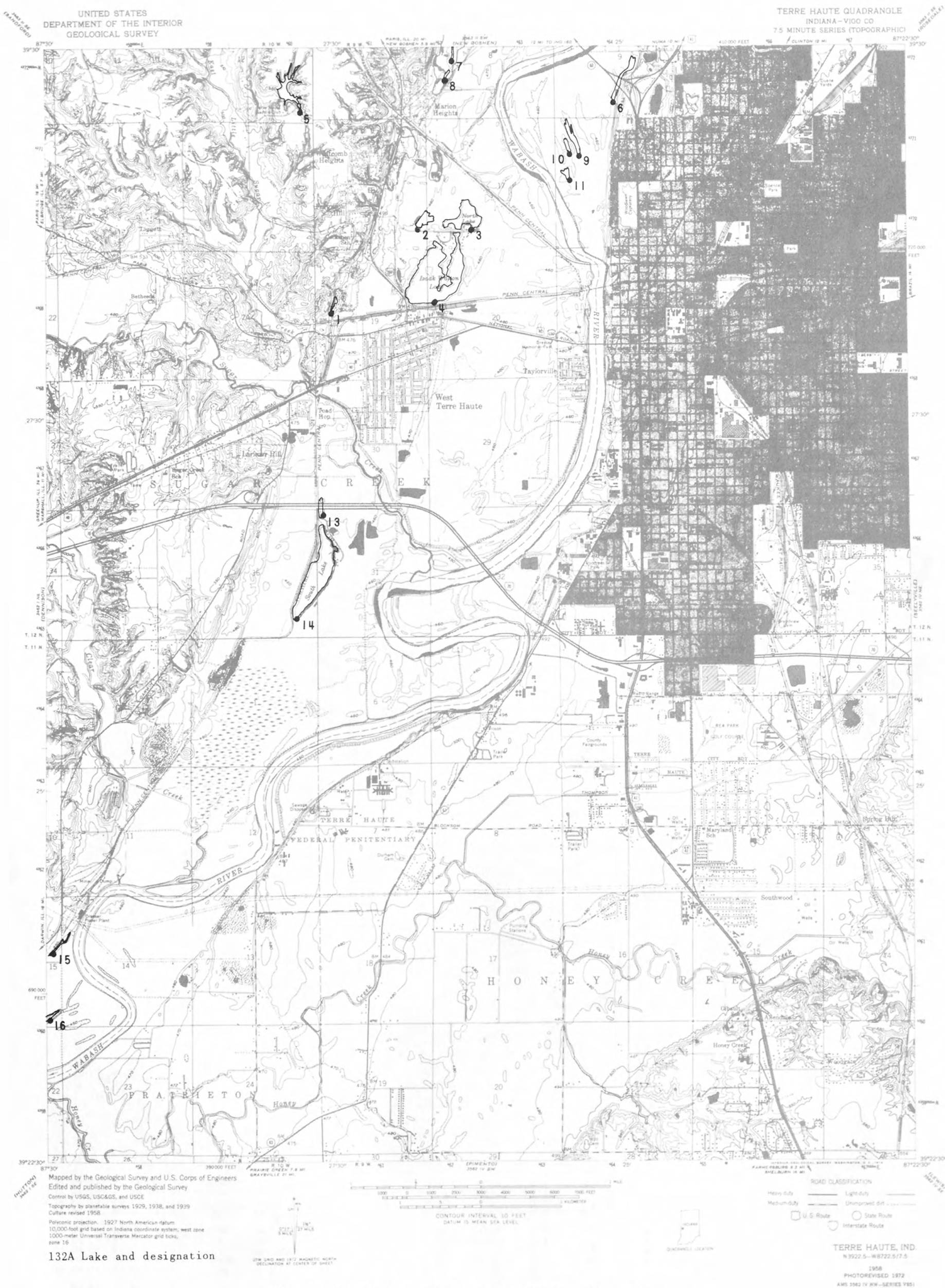


Figure 46 -- Coal-mine lakes within the Terre Haute Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

WALLACE										107A											
LAT	LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D M S	D	M	S																		
39 59 21	87	14	20	1	45	IR	0.17	0.038	0.45	4.39	1.5	127	N	N							
39 59 13	87	14	11	2	45	IR	0.31	0.066	1.04	13.40	2.0	68	N	N							
39 59 04	87	14	25	3	45	IR	0.17	0.031	0.45	3.50	1.7	22	N	N							
39 58 57	87	14	26	4	45	BR	0.11	0.025	0.29	1.90	1.5	57	N	N							
39 58 56	87	14	14	5	45	SR	0.09	0.036	0.25	2.29	1.2	97	N	N							
39 58 55	87	14	03	6	45	IR	0.19	0.038	0.50	4.94	1.6	123	N	N							
39 58 56	87	13	46	7	45	IR	0.17	0.027	0.36	3.02	1.5	88	N	N							
39 58 58	87	13	52	8	45	SR	0.30	0.025	0.63	4.95	2.0	166	N	N							
39 58 27	87	14	01	11	45	IR	0.57	0.087	1.97	32.14	2.4	32	N	N							
39 57 15	87	12	57	12	45	IR	0.12	0.018	0.28	1.45	1.6	2	N	N							
39 56 45	87	12	59	13	121	IR	0.14	0.030	0.45	2.89	1.9	157	N	N							
39 57 30	87	12	09	14	45	IR	0.40	0.037	1.40	9.80	3.2	90	Y	Y							
39 59 26	87	10	11	15	45	IR	0.33	0.086	1.13	18.60	1.8	158	Y	Y							
39 59 01	87	09	50	16	45	IR	0.16	0.082	0.49	8.78	1.1	107	Y	Y							





TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

WHEATLAND										169B														
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM	
D	M	S	D	M	S																			
38	44	47	87	17	53	1	83	TR	0.11	0.043	0.30	3.24	1.1	147	N	N							S	P
38	44	43	87	16	51	2	83	TO	0.49	0.021	1.00	6.87	2.7	46	N	N							S	P
38	44	31	87	17	00	3	83	SR	0.22	0.033	0.52	4.71	1.7	45	Y	N							S	P
38	44	13	87	16	47	4	83	IR	0.24	0.054	0.71	8.67	1.7	169	N	N							S	P
38	44	12	87	16	30	5	83	BR	0.18	0.018	0.48	2.20	2.3	107	N	N							S	P
38	44	02	87	16	46	6	83	SR	0.15	0.029	0.37	2.97	1.5	23	N	N							S	P
38	43	54	87	16	47	7	83	IR	0.14	0.030	0.35	2.76	1.5	34	N	N							S	P
38	43	51	87	16	41	8	83	IR	0.11	0.022	0.31	1.56	1.7	0	N	N							S	P
38	43	42	87	16	52	9	83	IR	0.23	0.026	0.54	3.97	1.9	22	N	N							S	P
38	39	53	87	16	56	10	83	SR	0.10	0.043	0.29	2.92	1.2	13	N	N							S	P



Figure 48 --- Coal-mine lakes within the Wheatland Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

WINSLOW										183A													
LAT			LONG			LAKE ID	CD	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM
D	M	S	D	M	S																		
38	26	08	87	12	35	5-B2	125	TO	0.43	0.022	0.94	6.45	2.6	90	N	N	12/77	8.0 3.4	1470 1070	G	TG	5	P
38	26	13	87	12	30	4-J	125	IR							N	N	12/77			G	G	5	P
38	26	49	87	09	55	3-I	125	TO	0.15	0.014	0.33	1.39	1.9	1	N	N	12/77			A	TG	5	P
38	26	51	87	10	16	3-J	125	SC	0.05	0.020	0.15	0.67	1.3	36	N	N	12/77			A	G	5	P
38	24	29	87	11	31	10-B	125	TO	0.39	0.011	0.84	2.94	3.5	28	N	N	12/77			A	G	5	P
38	23	53	87	14	05	17-A	125	TR	0.20	0.021	0.62	2.84	2.6	68	N	N	12/77			G	TG	5	P
38	23	25	87	12	21	13-A	125	TO	0.14	0.254	10.71	24.13	15.5	13	N	N	12/77			G	TG	5	P

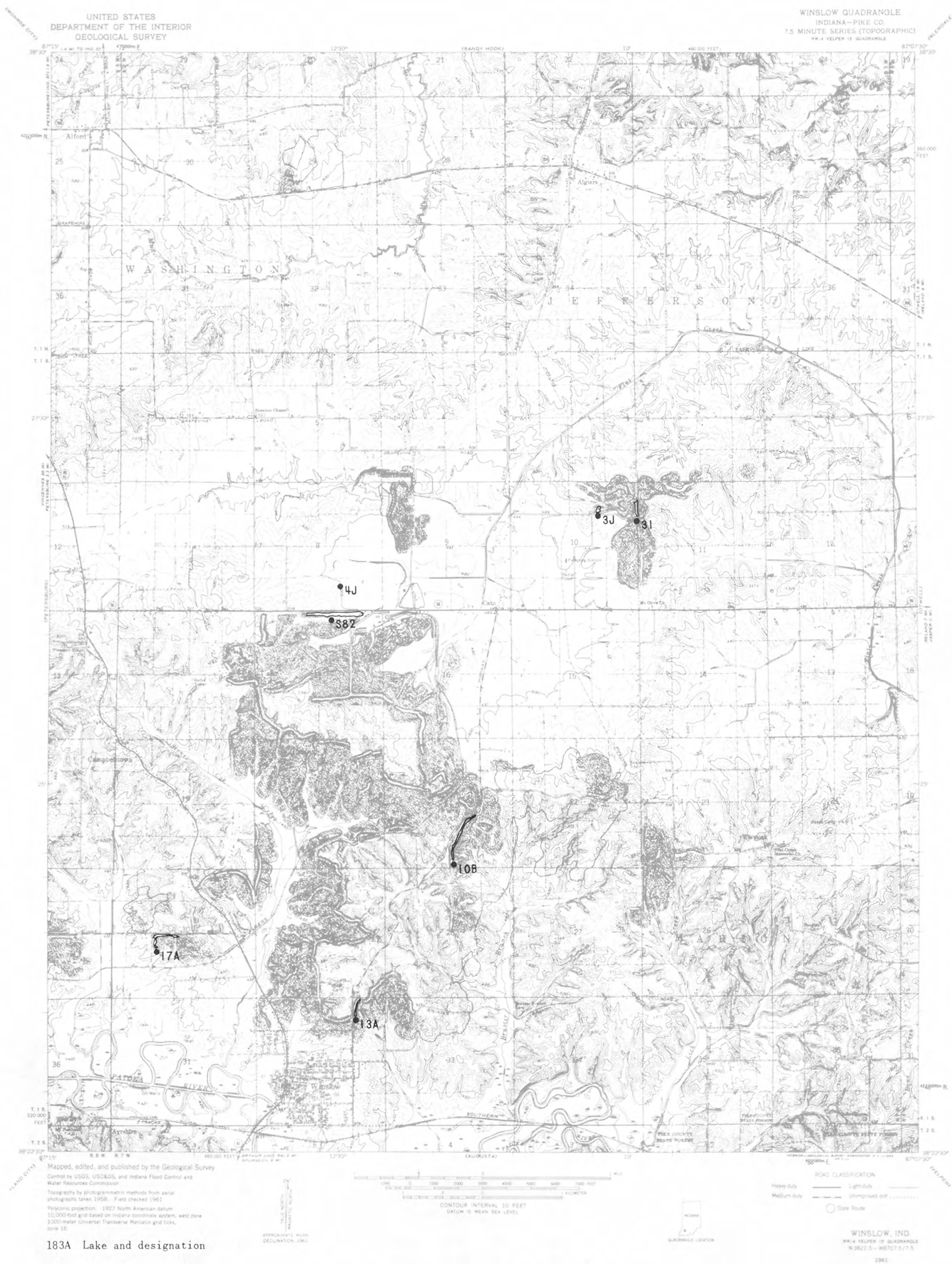


Figure 49.-- Coal-mine lakes within the Winslow Quadrangle.



TABLE 2-GAZETTEER DATA FOR COAL-MINE LAKES IN SOUTHWESTERN INDIANA

YANKEETOWN														205B										
LAT			LONG			LAKE ID	CO	SHAPE	LENGTH (MILES)	WIDTH (MILES)	SHORE (MILES)	AREA (ACRES)	SHORE DEV	ORIEN (DEGS)	I N	O U	SAMPLE	PH	SPEC COND	COLOR	VEG	CB	FM	
D	M	S	D	M	S																			
37	55	51	87	18	32	1	173	C	0.08	0.029	0.20	1.53	1.1	8	N	N							5	P
37	54	55	87	18	29	2	173	IR	0.19	0.077	0.57	9.88	1.2	151	Y	N							5	P
37	55	16	87	17	44	3	173	IR	0.14	0.034	0.37	3.24	1.4	141	Y	N							5	P
37	55	34	87	18	34	4	173	TR	0.09	0.030	0.23	1.79	1.2	168	Y	N							5	P
37	55	25	87	18	05	5	173	E	0.09	0.026	0.22	1.56	1.2	81	N	N							5	P
37	55	39	87	17	47	6	173	R	0.02	0.040	0.10	0.60	0.9	99	N	N							5	P

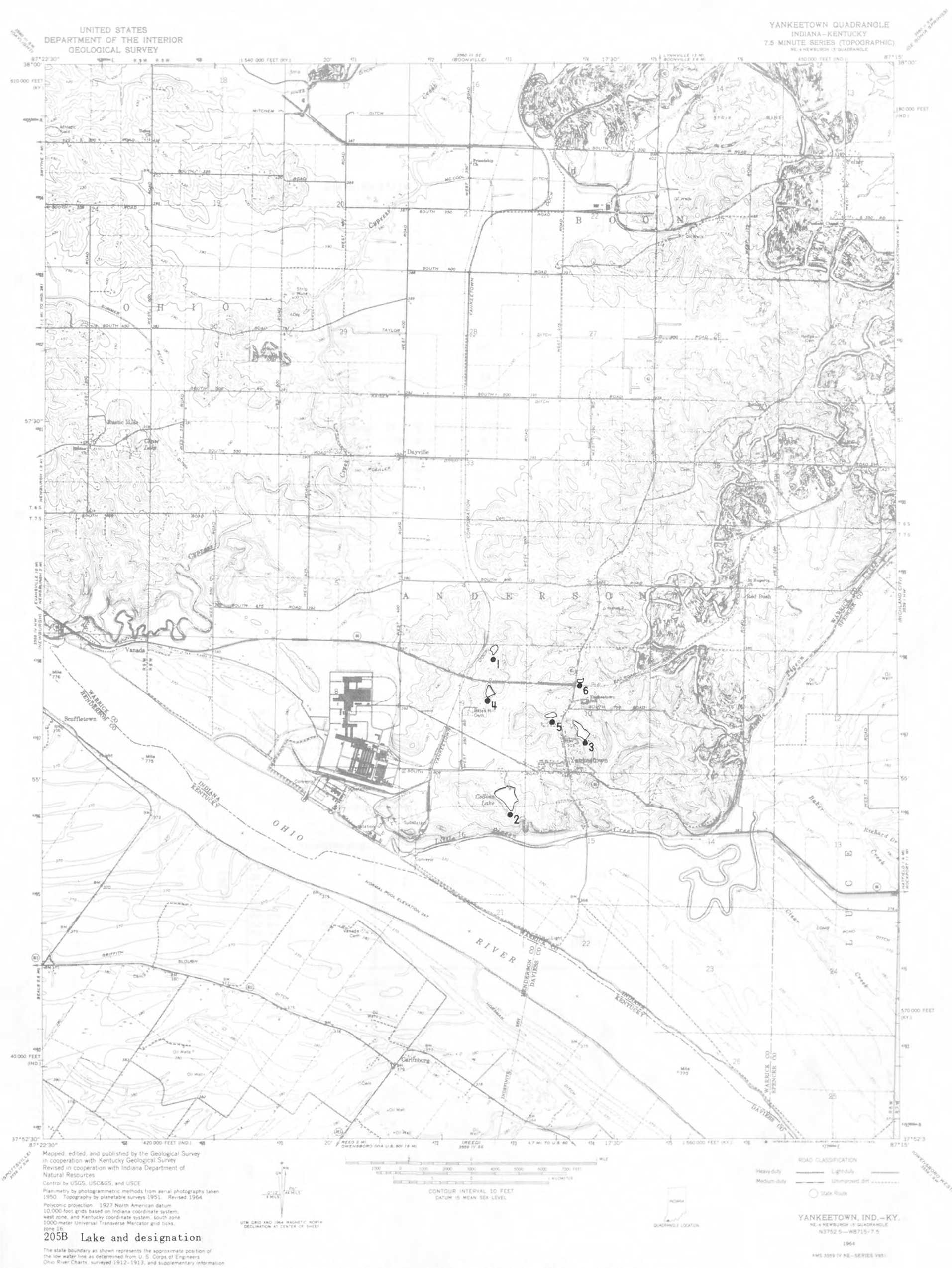
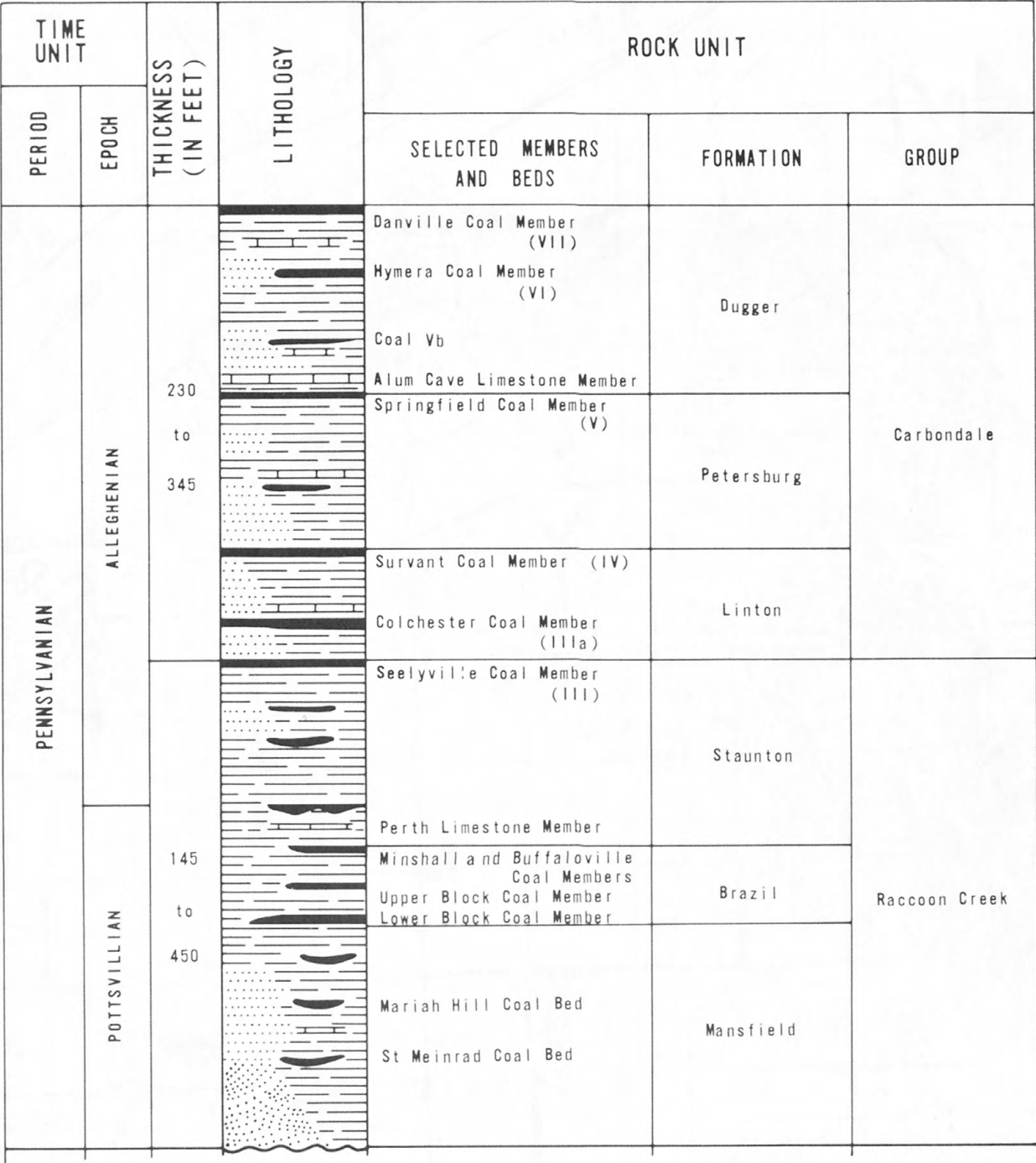


Figure 50.-- Coal-mine lakes within the Yankeetown Quadrangle.





The geologic names used in this report are accepted by Indiana Geological Survey, (Robert Shaver, Chairman, Geologic Names Committee, Indiana Geological Survey, oral commun., December 19, 1978), and differ somewhat from those accepted by the U.S. Geological Survey.

Figure 51.-- Generalized stratigraphic column showing the position of commercial coal beds and geologic formations within the Pennsylvanian system of Indiana (modified from Powell, 1972, p. 6, fig. 5)

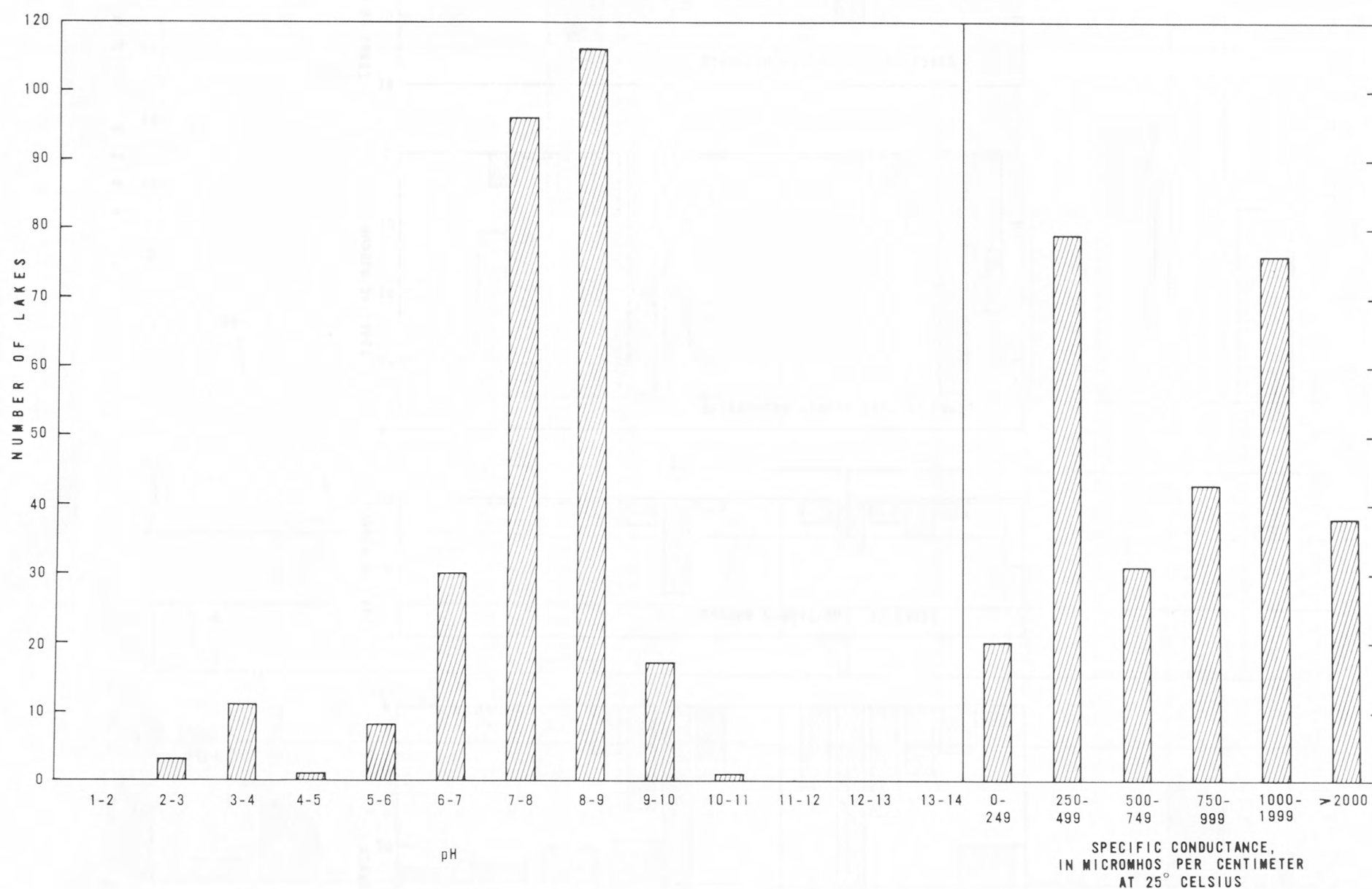


Figure 52.-- Distribution of pH and specific conductance of 287 Indiana coal-mine lakes.



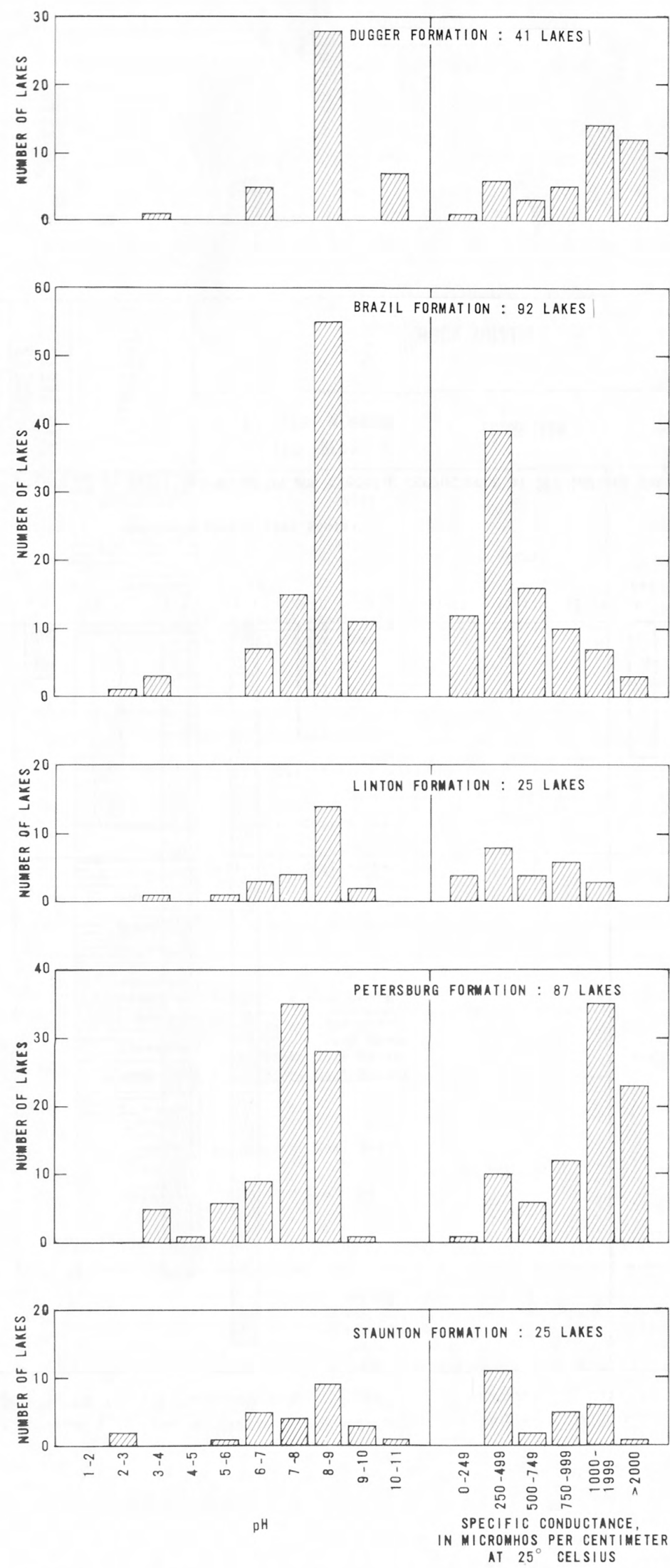


Figure 53.-- Distribution of pH and specific conductance of 270 Indiana coal-mine lakes in designated formations.

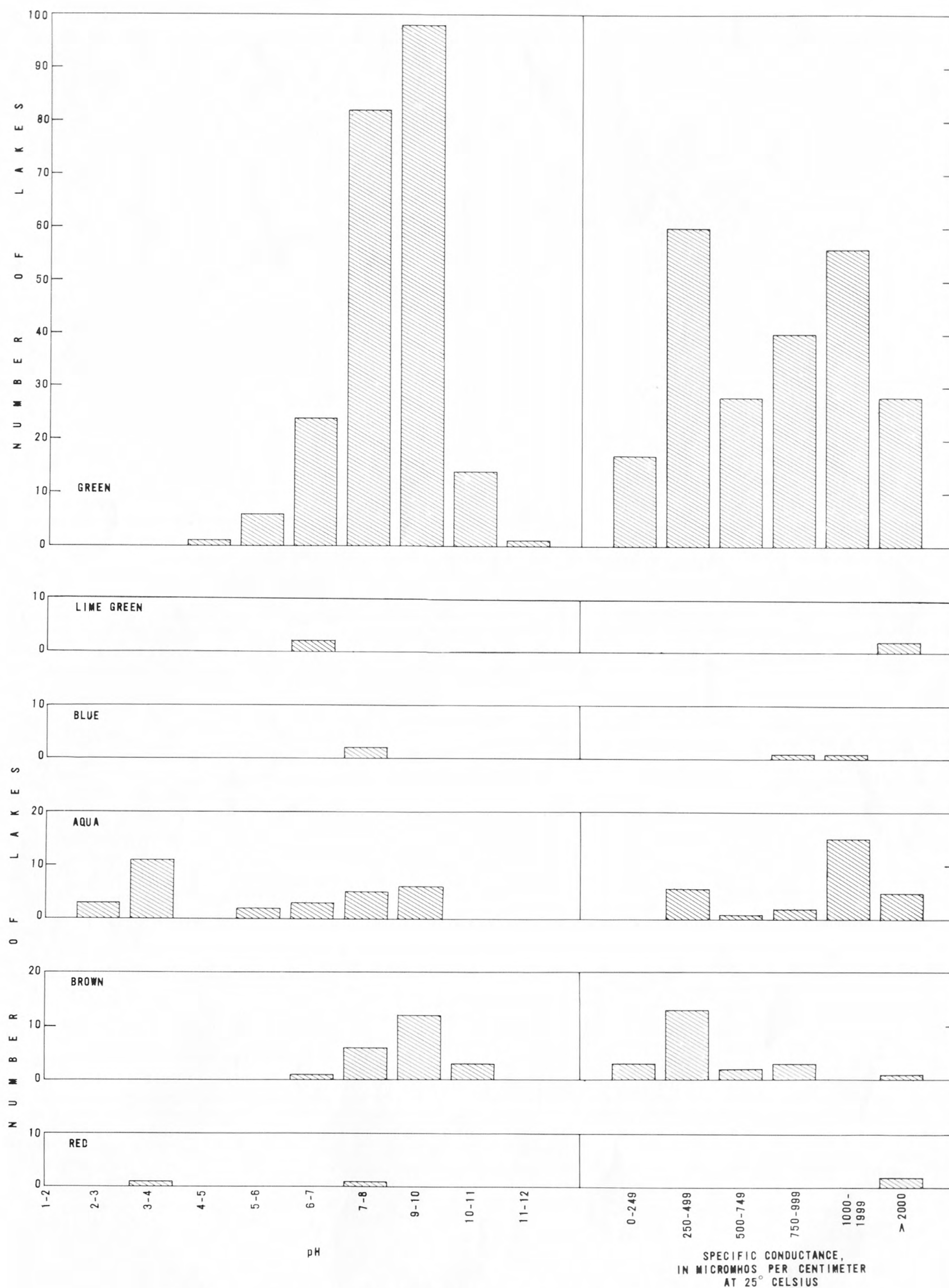


Figure 54.-- Distribution of pH and specific conductance by apparent color of 287 Indiana coal-mine lakes.



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