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1958

PETROLEUM INDUSTRY IN ILLINOIS IN 1956

Part I. Oil and Gas Developments
Part II. Waterflood Operations

Alfred H. Bell
Virginia Kline
Donald A. Pierre

BULLETIN 83

ILLINOIS STATE GEOLOGICAL SURVEY
JOHN C. FRYE, *Chief*
URBANA, ILLINOIS

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PETROLEUM INDUSTRY IN ILLINOIS, 1956

ALFRED H. BELL, VIRGINIA KLINE, and DONALD A. PIERRE

PART I

OIL AND GAS DEVELOPMENTS

ABSTRACT

Illinois produced 82,314,000 barrels of oil in 1956, a slight increase over the 1955 total of 81,131,000, marking the third consecutive year of increased production after a 13-year decline. Increased secondary recovery by waterflooding was the most important contributing factor. The 3,640 wells completed in 1956 represent a decrease of about 6 percent from wells drilled in 1955. Forty-five percent were successful completions. Seventeen new oil pools, one gas pool, 81 extensions to pools, and 19 new pays were discovered in 1956.

The greatest activity was in the northern part of the productive area of the state. Details of development and production are discussed by counties with special attention to noteworthy areas. Reserves are estimated at 701.6 million barrels.

INTRODUCTION

The brief account of developments in the oil and gas industry in Illinois during 1956, which appeared in "Statistics of Oil and Gas Development and Production," issued annually by the American Institute of Mining, Metallurgical, and Petroleum Engineers, is herein expanded to provide a more detailed discussion of the Illinois petroleum industry. Developments are discussed by county, with special attention given to noteworthy areas.

We gratefully acknowledge the cooperation of the many oil companies and individuals who contributed basic data for this report. The section on estimated petroleum reserves was prepared by Lester L. Whiting and Margaret Oros of the Illinois State Geological Survey's Oil and Gas Section and that on gas and gas products by Whiting and Wayne F. Meents of the same section. James Garrett and Jutta Anderson, both of the Survey staff, also assisted in preparing the report.

Compilation of the statistical data and maps on waterflood operations in 1956 are largely the work of Donald A. Pierre of the Petroleum Engineering Section. They are based on data furnished by the operators through the Illinois Secondary Recovery and Pressure Maintenance Study Committee of the Interstate Oil Compact Commission.

PRODUCTION AND VALUE

Oil production in Illinois in 1956 was 82,314,000 barrels, a slight increase over the 81,131,000 barrels produced in 1955. The 1956 production was the highest for any year since 1943. Peak production was attained in 1940, after which production gradually declined to a low of 59,025,000 barrels in 1953. In 1954 the trend was reversed and daily production increased rapidly to a new but lower peak in June 1955. During the last half of 1955 and throughout 1956, daily production remained nearly constant (fig. 1 and table 1).

The upward trend in oil production was caused by a big increase in secondary recovery operations and a big increase in drilling. Early in 1955 the Eldorado Consolidated pool contributed much to the high production rate. During the last few months of 1955 and throughout 1956 fewer wells were drilled; the percentage of producing wells fell off and initial productions were smaller.

Nevertheless, the continuing expansion of secondary recovery operations was sufficient to maintain the rate of production throughout 1956, but cannot be expected to do so indefinitely. The number of well completions for 1956 (3,640) was the third highest in Illinois history, but was 245 fewer than in 1955 (3,885). The decrease in number of producing wells was from

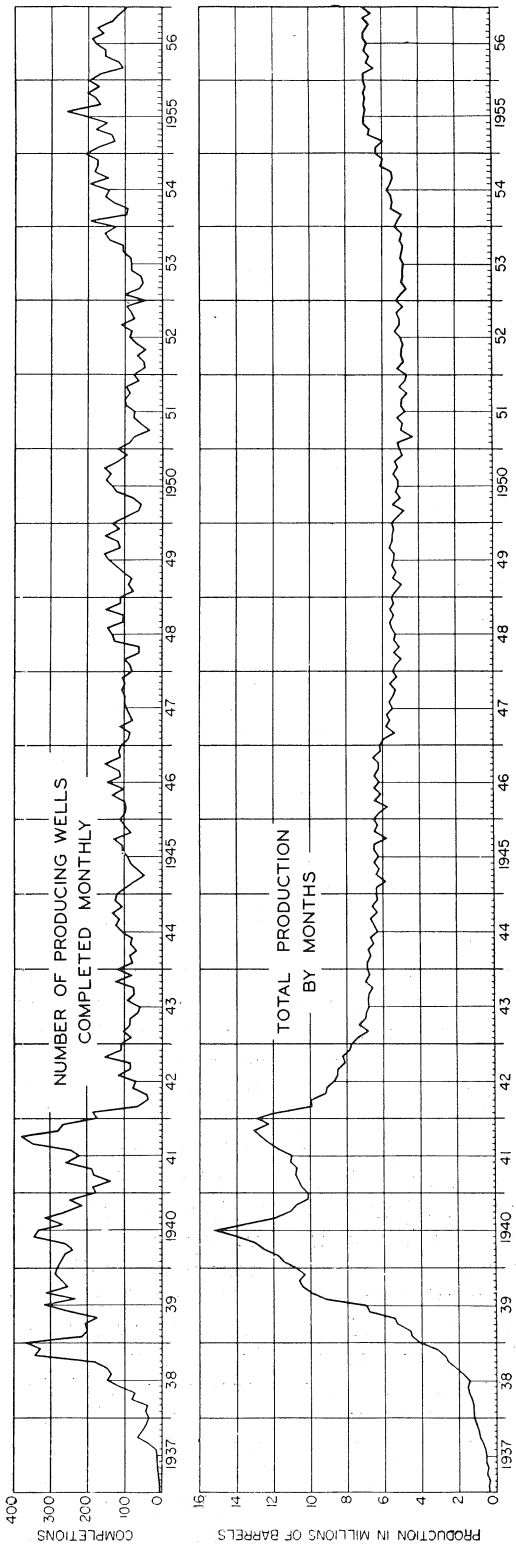


Fig. 1. — Oil production in Illinois, 1937-1956.

TABLE 1.—ILLINOIS COMPLETIONS AND PRODUCTION SINCE JANUARY 1, 1936

Period of time	Number of completions[a]	Number of producing wells	Production (M bbls.)[b]		
			New fields	Old fields[c]	Total
1936	93	52			4,445
1937	449	292	2,884	4,542	7,426
1938	2,536	2,010	19,771	4,304	24,075
1939	3,617	2,970	90,908	4,004	94,912
1940	3,755	3,080	142,969	4,678	147,647
1941	3,807	2,925	128,993	5,145	134,138
1942	2,017	1,179	101,837	4,753	106,590
1943	1,791	1,090(20)[d]	77,581	4,675	82,256
1944	1,991	1,229(12)	72,946	4,467	77,413
1945	1,763	1,094(15)	70,839	4,371	75,210
1946	2,362	1,387(17)	70,174	5,123	75,297
1947	2,046	1,102(22)	61,455	5,004	66,459
1948	2,489	1,316(21)	59,623	5,185	64,808
1949	2,741	1,447(32)	58,571	5,930	64,501
1950	2,894	1,328(23)	55,794	6,234	62,028
1951	2,383	947(23)	54,147	6,097	60,244
1952	2,077	854(35)	53,727	6,344	60,071
1953	2,161	1,161(88)	51,924	7,101	59,025
1954	3,254	1,896(107)	59,130	7,810	66,940
1955	3,885	2,164(62)	72,016	9,115	81,131
1956					
January	315	163(11)	6,206	880	7,086
February	191	104(6)	5,599	829	6,428
March	237	115(4)	5,962	905	6,867
April	318	152(4)	5,827	866	6,693
May	319	151(10)	6,000	903	6,903
June	402	179(6)	5,912	860	6,772
July	365	189(8)	6,102	880	6,982
August	315	159(7)	6,154	888	7,042
September	394	184(7)	5,891	825	6,716
October	293	135(9)	6,154	906	7,060
November	257	115(7)	5,790	830	6,620
December	234	96(6)	6,048	1,097	7,145
	3,640	1,742(85)	71,645	10,669	82,314

[a] Includes only oil and gas producers and dry holes.
[b] Production figures based on Illinois Basin Scout Association's Pipe Line Production Report.
[c] Includes Devonian production at Sandoval and Bartelso.
[d] Figures in parentheses refer to number of producing wells included in totals which had previously been completed as dry holes.

2,164 in 1955 to 1,742 in 1956, a drop of 422 new producers. There were many good wells in 1956 which had initial productions of several hundred barrels, but none to compare with the 3000- and 4000-barrel wells in the Eldorado Consolidated pool in 1955.

Illinois continued to rank eighth in oil production in the United States in 1955. Daily average production for the year was almost 226,000 barrels. It is shown below by months.

Month	*M. bbls.*	*Month*	*M. bbls.*
Jan.	229	July	225
Feb.	222	Aug.	227
March	222	Sept.	224
April	223	Oct.	228
May	223	Nov.	221
June	226	Dec.	230

At the beginning of 1956, most of the crude oil in Illinois was selling at $3.00 per barrel. During June and July, 10-cent cuts were made by all of the major pipeline companies, bringing the price down to $2.90 per barrel for the second half of

TABLE 2.—SUMMARY OF DRILLING AND INITIAL PRODUCTION BY COUNTIES, 1956[a]

County	Number of wells drilled						Total initial production		Footage drilled	
	Total completions	Total producing		Total dry holes			Oil (bbls.)	Gas (Mmcf.)	Producing wells	Total
		Oil	Gas	In pools	Wildcat near[b]	Wildcat far[c]				
Adams	9	0	4	1	1	3	0	2.615	2,060	5,093
Alexander	1	0	0	0	0	1	0	0	0	453
Bond	126	42	0	41	28	15	5,237	0	73,593	242,625
Brown	2	0	0	0	0	2	0	0	0	1,490
Cass	1	0	0	0	0	1	0	0	0	2,311
Champaign	6	0	0	0	0	6	0	0	0	5,631
Christian	84	29	0	16	7	32	4,982	0	56,644	167,393
Clark	64	26	0	17	14	9	1,257	0	29,048	77,777
Clay	124	66	0	46	12	0	3,414	0	180,464	355,066
Clinton	99	27	2	23	31	16	6,041	1.820	62,741	209,865
Coles	266	140	6	63	33	24	20,578	100.039	267,939	478,971
Crawford	203	105	2	83	9	4	5,925	2.602	128,164	270,868
Cumberland	11	0	0	4	3	4	0	0	0	19,412
Douglas	248	102	5	52	52	37	16,740	33.840	200,995	443,289
Edgar	34	5	0	19	6	4	29	0	2,684	26,675
Edwards	70	28	0	31	10	1	2,000	0	87,738	222,654
Effingham	38	13	0	11	6	8	663	0	30,649	95,973
Fayette	29	9	0	8	4	8	98	0	14,374	55,159
Franklin	84	40	0	23	18	3	6,616	0	115,523	257,743
Fulton	1	0	0	0	0	1	0	0	0	1,100
Gallatin	131	68	0	43	13	7	5,318	0	181,767	360,814
Greene	1	0	0	0	0	1	0	0	0	715
Hamilton	161	80	0	58	20	3	17,309	0	258,605	537,458
Hancock	3	0	0	1	0	2	0	0	0	1,844
Jackson	4	1	0	1	0	2	4	0	875	4,434
Jasper	124	62	0	30	28	4	5,794	0	155,793	315,807
Jefferson	93	39	0	31	13	10	3,288	0	102,662	252,709
Jersey	1	0	0	0	0	1	0	0	0	1,455
Johnson	1	0	0	0	0	1	0	0	0	2,450
Kendall	1	0	0	0	0	1	0	0	0	455

Lawrence	163	110	0	46	7	0	4,937	0	185,677	288,224
Logan	2	0	0	0	0	2	0	0	0	3,397
McDonough	5	1	0	1	0	3	2	0	426	2,812
Macon	13	1	0	2	3	7	38	0	2,307	27,015
Macoupin	15	1	0	3	3	8	9	0	651	15,827
Madison	42	3	1	8	5	25	14	0.145	2,584	57,078
Marion	59	30	0	16	8	5	2,063	0	81,239	166,432
Massac	2	0	0	0	0	2	0	0	0	2,187
Menard	1	0	0	0	0	1	0	0	0	1,887
Montgomery	31	0	0	1	4	26	0	0	0	60,286
Morgan	6	0	1	1	1	3	0	1.678	1,513	4,552
Moultrie	22	0	0	1	1	20	0	0	0	48,749
Peoria	1	0	0	0	0	1	0	0	0	1,902
Perry	24	1	0	2	11	10	14	0	1,160	38,319
Piatt	2	0	0	0	0	2	0	0	0	3,208
Pike	48	0	38	2	5	3	0	16.258	18,701	24,232
Pope	2	0	0	0	0	2	0	0	0	3,760
Pulaski	1	0	0	0	0	1	0	0	0	1,756
Randolph	5	0	0	0	1	4	0	0	0	7,933
Richland	77	40	0	23	12	2	2,023	0	116,490	231,103
St. Clair	3	0	0	1	0	2	0	0	0	3,774
Saline	220	107	0	58	40	15	23,427	0	313,017	652,819
Sangamon	22	0	0	3	4	15	0	0	0	37,767
Schuyler	5	0	0	0	0	5	0	0	0	2,723
Shelby	18	1	0	0	3	14	12	0	1,930	40,207
Tazewell	1	0	0	0	0	1	0	0	0	660
Wabash	176	89	0	77	10	0	7,736	0	196,364	410,938
Washington	135	45	2	41	21	26	1,687	2.575	89,700	249,298
Wayne	236	137	0	69	29	1	11,237	0	435,094	767,420
White	262	148	0	88	25	1	14,584	0	419,951	786,274
Williamson	19	0	0	0	3	16	0	0	0	52,795
	3,640	1,596	61	1,045	504	434	173,076	161.572	3,819,172	8,414,023

[a] Does nor include input wells, salt-water disposal wells, or old wells worked over.
[b] Wells drilled between one-half mile and two miles from production.
[c] Wells drilled more than two miles from production.

the year. Value (at the wells) of crude oil produced in Illinois in 1956 was about $242,825,000. To this should be added the value of natural gasoline and liquefied petroleum gases extracted from Illinois natural gas, estimated at $4,150,000, making a total of $246,975,000.

DRILLING AND DEVELOPMENT

A total of 3,640* wells were drilled for oil and gas in Illinois in 1956, (tables 1 and 2) a decrease of 6 percent from the wells drilled in 1955. Of the 3,640 wells completed, 1,596 were oil wells and 61 were gas wells. Most of the gas wells were in the Fishhook pool and were capped when completed.

The successful wells completed in 1956 were about 45.5 percent of all wells drilled, almost 10 percent less than in 1955. The decreased percentage of successful wells is attributed to the increase in wildcat drilling in 1956. Although the total number of wells drilled in 1956 decreased by 245, the number of wildcat wells increased by 182.

Pool Development

Wells were drilled in 61 counties in 1956; pool development drilling was done in 41 counties, and the other 20 counties had only wildcat drilling (table 3).

There was no concentration of drilling comparable to that in 1955, when White County had 478 wells and Saline County 355. In 1956 Coles County led with 266 completions, followed by White, Douglas, Wayne, Saline, and Crawford counties. About 70 percent of the drilling was done in 14 counties each of which had more than 100 well completions.

Since 1942, when intensive drilling of the Louden, Salem, and Centralia pools ended, heaviest drilling has normally been in the southern part of the structural basin. The only exception was in 1946 when development of the Mattoon pool resulted in Coles County occupying first place in drilling in the state for the first time. Douglas County, in third place, had its first producing well completed in 1955. The Coles-Douglas County area is discussed on p. 13.

Although the total number of well completions decreased in 1956, the distribution was similar to that shown in 1955. For the most part counties in the deeper and better developed area of the basin showed larger decreases than the over-all 6 percent drop for the state; some of the decreases exceeded 25 percent. Counties that had major decreases in drilling activity include White, Gallatin, Saline, Hamilton, Clay, Marion, and Lawrence.

Most of the marginal counties, on the other hand, showed large increases, most notable being Douglas County, which had 12 completions in 1955 and 248 in 1956. Other counties that had major increases in drilling activity include Edgar, Coles, Moultrie, Shelby, Montgomery, Madison, Clinton, Washington, Perry, Franklin, Williamson, and one deep-basin county, Wabash. In many of these counties, production is confined to a small geographic area, and most of the increased drilling was due to increased wildcat drilling.

Pools with the most producing wells completed during the year were Cooks Mills Consolidated with 190, Clay City Consolidated with 180, and Main Consolidated (Crawford County) with 102.

Several small pools (Oak Point in Clark and Jasper counties, Harco in Saline County, Gards Point in Wabash County, and Germantown East in Clinton County) showed promise during the year, but drilling in all of them tapered off before the close of the year. When the year ended, drilling and development had both slowed down, and there was, at least temporarily, no new area which exhibited especially good prospects. As a result, wildcat drilling was widespread.

Depths of producing wells drilled in 1956 ranged from about 400 feet to 4000 feet, averaging about 2,365 feet; average depth of all wells drilled in 1956 was about 2,145 feet.

* Well completion figures given in this bulletin are based on reports received from the Illinois Basin Scout Association. An undetermined number of additional wells are completed annually in the old fields of Clark, Crawford, Cumberland, Lawrence, and adjacent counties, for the most part in waterflooded areas.

In fields discovered since January 1, 1937, there were 22,201 wells producing oil or gas at the end of 1956; in older fields the number was approximately 9,086, or a total for Illinois of about 31,287 wells producing at the end of 1956.

Cooks Mills—Bourbon Area

The Cooks Mills pool in northern Coles County was discovered in 1941. One producing well was completed that year and another the following year. Both produced from the Rosiclare sandstone, had low initial productions, and were soon depleted. The pool was abandoned in 1947, with a total production of less than 6,000 barrels of oil from the two wells.

In 1946 a third producing well was completed. This, the discovery well of the Cooks Mills North pool, was a non-commercial well which produced less than 500 barrels of oil from the Rosiclare before it was abandoned in 1950.

The next producing well in the area was drilled three years later, in 1953. This, too, was a small Rosiclare well. The following year two more producers were completed, one in the Rosiclare and the other in the Aux Vases sandstone. The three wells produced about 2,500 barrels of oil in 1954. In the same year Cooks Mills East was discovered, the discovery well being the only completion before the end of the year.

In 1955 a drilling "boom" began which resulted in the discovery of one more pool in 1955, three pools in 1956, and the production of 1,725,000 barrels of oil in the area in 1956.

In July 1955, a Cypress gas well was completed between the old Cooks Mills and Cooks Mills North pools. This, the discovery well of the Cooks Mills Gas pool, was soon offset by oil wells and incorporated into the Cooks Mills Consolidated pool. During 1955, 17 Rosiclare, one McClosky, and one Aux Vases-Rosiclare oil wells, and one Aux Vases and three Cypress gas wells were completed in an area extending from the old Cooks Mills North pool to south of the old Cooks Mills pool. The wells were scattered over an area 3½ miles long by a mile wide, and infill drilling progressed rapidly.

In January 1956, Cooks Mills East crossed the Coles-Douglas County line, giving Douglas County its first commercial production. Early in the year Cooks Mills East was absorbed by Cooks Mills Consolidated, which is now made up of Cooks Mills, Cooks Mills North, Cooks Mills Gas, and Cooks Mills East.

Early in the year the Bourbon pool was discovered about six miles north of Cooks Mills Consolidated, and a few weeks later Bourbon North was discovered a little more than a mile northwest of Bourbon. Later, the Chesterville pool was discovered between Cooks Mills Consolidated and Bourbon.

Bourbon is one of the biggest pools discovered in the last few years. By the end of 1956 it had produced almost half a million barrels of oil from about 50 wells. Chesterville (five wells) and Bourbon North (two wells) were comparatively unimportant.

By the end of 1956 the Cooks Mills—Bourbon area consisted of about 260 oil wells which had produced 1,725,000 barrels of oil during the year; 90,000 barrels had been produced in the preceding 14 years. About 250 oil wells were producing in the four pools. Of this number all but three were completed in the Rosiclare sandstone, the exceptions being in the Cypress, Aux Vases, and McClosky pays.

Fifteen gas wells have been drilled in the Cooks Mills Consolidated pool: seven were completed in the Cypress, one in the Aux Vases, four in the Rosiclare, and three as dual completions in the Cypress-Rosiclare. All were capped at the end of the year, but plans were being developed for a gas storage project in the pool.

The Cooks Mills-Bourbon area is the northernmost Mississippian production in the state, although Pennsylvanian sands have produced a little oil to the northeast, and several good Devonian and Silurian pools lie to the northwest. As in the Mattoon pool, two miles to the south, the Rosiclare is the most important pay. Unlike

Mattoon, where the Cypress is also an important pay, in the Cooks Mills-Bourbon area only one oil well has been completed in the Cypress, which more commonly carries gas. The Aux Vases and McClosky are unimportant pays in both areas, and other possible pays are thus far unproductive.

As a result of the successful drilling in the Cooks Mills-Bourbon area, there was abundant and widespread wildcat drilling in Douglas and Coles counties in 1956. Occasionally shows of oil or gas were encountered, and one Pennsylvanian pool, Ashmore East, was discovered in Coles County. By the end of 1956 the Cooks Mills-Bourbon area seemed to be almost completely drilled up, and wildcat drilling in Coles and Douglas counties was tapering off.

Exploratory Drilling and Discoveries

Wildcat wells were drilled in all of the 61 counties in which drilling was done in 1956. New pools (18 in number) were discovered in 11 counties. Douglas and Jefferson counties each had three new pools; Bond, Clinton and Saline counties each had two, and Christian, Coles, Franklin, Macoupin, Perry, and Wayne each had one.

Of the 3,640 wells drilled in 1956, 1,028 (about 28 percent) were wildcats, an increase of about 12 percent in number of wildcat completions over the number completed in 1955 and in contrast to the 6 percent decrease in total completions.

Of the wildcat wells drilled in 1956, 445 located more than two miles from production (table 3) discovered 11 new pools, or were about 2.5 percent successful. The 583 wildcats drilled between half a mile and two miles from production discovered seven new pools and 72 extensions to pools. Nine additional extensions were discovered by reworking old wells that had previously been completed as dry holes.

Table 3.—Wildcat Wells Drilled in 1956

Category	Total	Producers	Percentage successful
Wildcat Near[a] . .	583	79	13.5
Wildcat Far[b]. . .	445	11	2.5
Total. . . .	1028	90[c]	8.8

[a] From ½ to 2 miles from production.
[b] More than 2 miles from production.
[c] Nine of the discovery wells listed in Table 4 were originally completed as dry holes and later worked over.

The one gas pool and 17 oil pools discovered in 1956 are listed in table 4 and shown in figure 2; the 81 extensions are listed in table 5, and the 19 new pays in table 6. One of the new pools, Sorento South, was lost by consolidation with Sorento before the end of the year.

Most of the 1956 new pools, as shown in figure 2, are marginal pools. The locations of the 1955 new pool discoveries were greatly influenced by the 1954 developments, nine new pools being grouped around Eldorado Consolidated and five around Mt. Auburn Consolidated. The 1956 discoveries show the same influence, but to a lesser degree.

Three of the new pools (Ashmore East in Coles County, Cravat East in Jefferson County, and Hornsby South in Macoupin County) produce from Pennsylvanian sandstones. At the end of 1956 each consisted of a single small well without prospects for future development. Only one new Pennsylvanian pay was discovered in 1956. At the end of the year one Pennsylvanian sandstone well was completed in the Sorento Consolidated pool (previously all Devonian production). This well is less than four miles from Old Ripley, a good Pennsylvanian pool, so it may indicate the presence of an oil-bearing Pennsylvanian sandstone lens in the Sorento area.

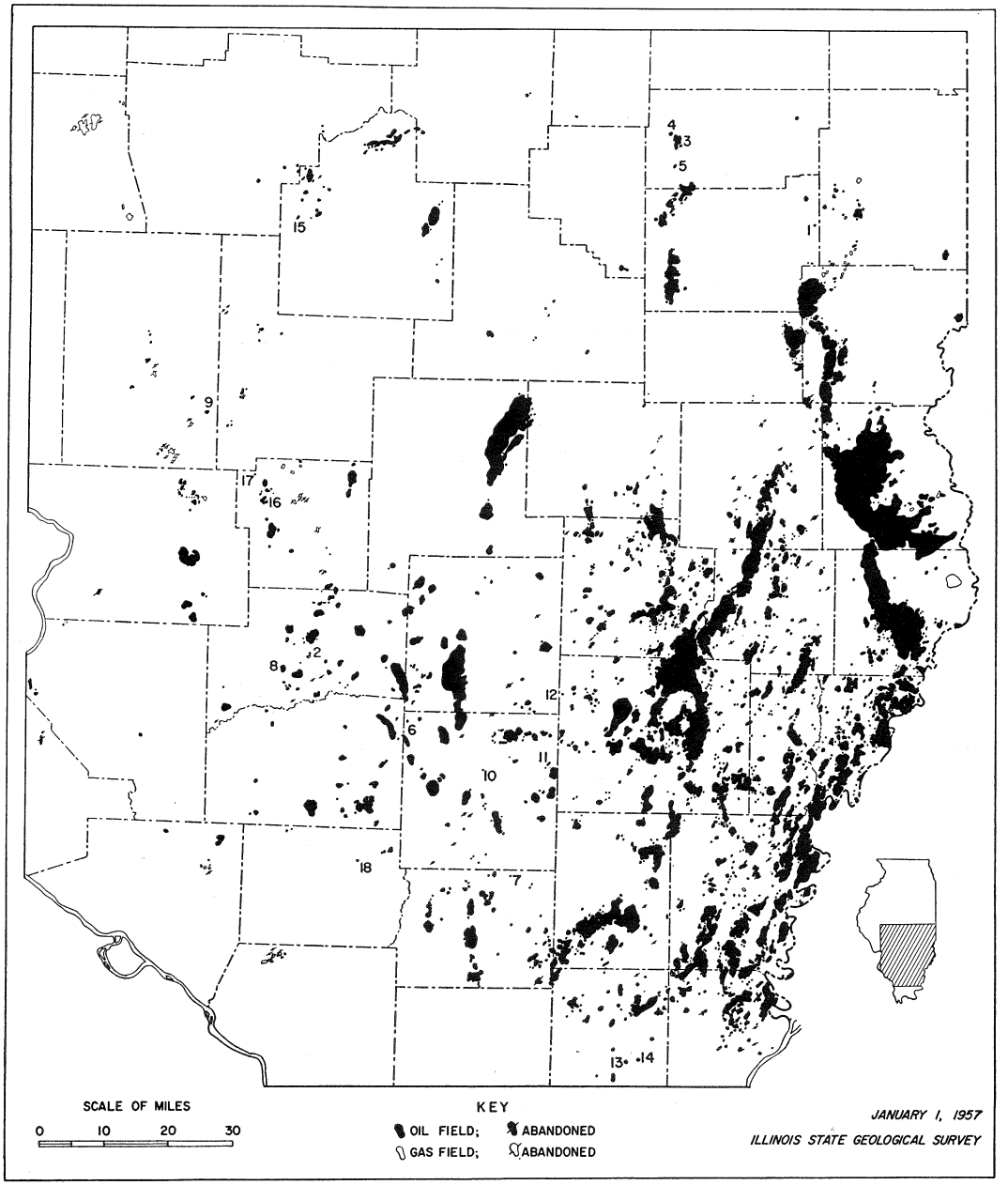


Fig. 2. — Oil pools discovered in Illinois, 1956.

1. Ashmore East
2. Beckemeyer (Gas)
3. Bourbon
4. Bourbon North
5. Chesterville
6. Cravat West
7. Ewing West
8. Germantown East
9. Hornsby South
10. Mt. Vernon North
11. Oakdale
12. Orchardville North
13. Pankeyville
14. Pankeyville East
15. Sicily
16. Sorento South
17. Sorento West
18. Tamaroa West

TABLE 4.—DISCOVERY WELLS OF NEW POOLS, 1956

Line No.	Pool	County	Company and farm	Location	Total depth (ft.)	Producing formation	Depth to top (ft.)	Initial production (bbls.)[a]	Date of completion	No. wells producing in pool 12/31/56
1	Ashmore East	Coles	W. W. Henigman #1 E. H. Washburn	16–13N–14W	445; PB 424	Pennsylvanian	413	4; 30	4–24	1
2	Beckemeyer (Gas)	Clinton	W. Imming #1 Ackman	27–2N–3W	1100	Cypress	1080	shut in	6–26	3
3	Bourbon	Douglas	C. B. Earnest #1 H. Pflum	11–15N–7E	1677	Rosiclare	1654	155	4–10	51
4	Bourbon North	Douglas	M. H. Richardson #1 W. C. Taylor	3–15N–7E	1674	Rosiclare	1651	58; 42	5–15	2
5	Chesterville	Douglas	Arnett Drlg. #1 M. Miller	35–15N–7E	1829	Rosiclare	1805	37	8–7	5
6	Cravat West	Jefferson	L. Dare #1 Bates	7–1S–1E	1103; PB 1085	Pennsylvanian	1035	3	10–30	1
7	Ewing East	Franklin	K. M. Bayer #2 Falgar Pearce	1–5S–3E	3043	Ohara	3008	50; 18	4–24	1
8	Germantown East	Clinton	National Associated Pet. #1 M. Holtgrave	1–1N–4W	2505; PB 2460	Silurian	2363	177; 107	7–17	21
9	Hornsby South	Macoupin	J. C. Nickerson #1 E. W. Hartke	14–8N–6W	651	Pennsylvanian	615	9; 9	11–20	1
10	Mt. Vernon North	Jefferson	C. E. Brehm #1 Holman Comm.	18–2S–3E	2726; PB 2690	McClosky	2674	48	7–10	1
11	Oakdale	Jefferson	The Texas Co. #1 Green	11–2S–4E	3070; PB 2880	Aux Vases	2858	105; 32	2–14	6
12	Orchardville North	Wayne	E. C. Reeves #1 Donoho	18–1N–5E	3020; PB 2700	Paint Creek	2654	45; 3	5–8	1
13	Pankeyville	Saline	Breuer & Robison #1 McCarty	25–9S–6E	2747; PB 2290	Cypress	2240	50	1–10	2
14	Pankeyville East	Saline	Skiles Oil #2 W. F. Johnson, et al.	20–9S–7E	2604; PB 2397	Cypress; Bethel	2249; 2365	15; 80	7–24	1
15	Sicily	Christian	M. Fesser #1 Orlandini	13–13N–4W	1870	Silurian	1854	25; 4	9–4	3
16	Sorento South	Bond	F. L. Strickland #3 Eisworth	33–6N–4W	1923	Devonian	1921	65; 150	5–1	[b]
17	Sorento West	Bond	Murvin & Steber #1 Ackerman	7–6N–4W	2706; PB 1940	Devonian	1870	12; 30	5–1	1
18	Tamaroa West	Perry	J. F. Dunnill #1 M. Stein	25–4S–2W	1600; PB 1160	Cypress	1099	14	7–10	1

[a] Oil and water.
[b] Consolidated with Sorento.

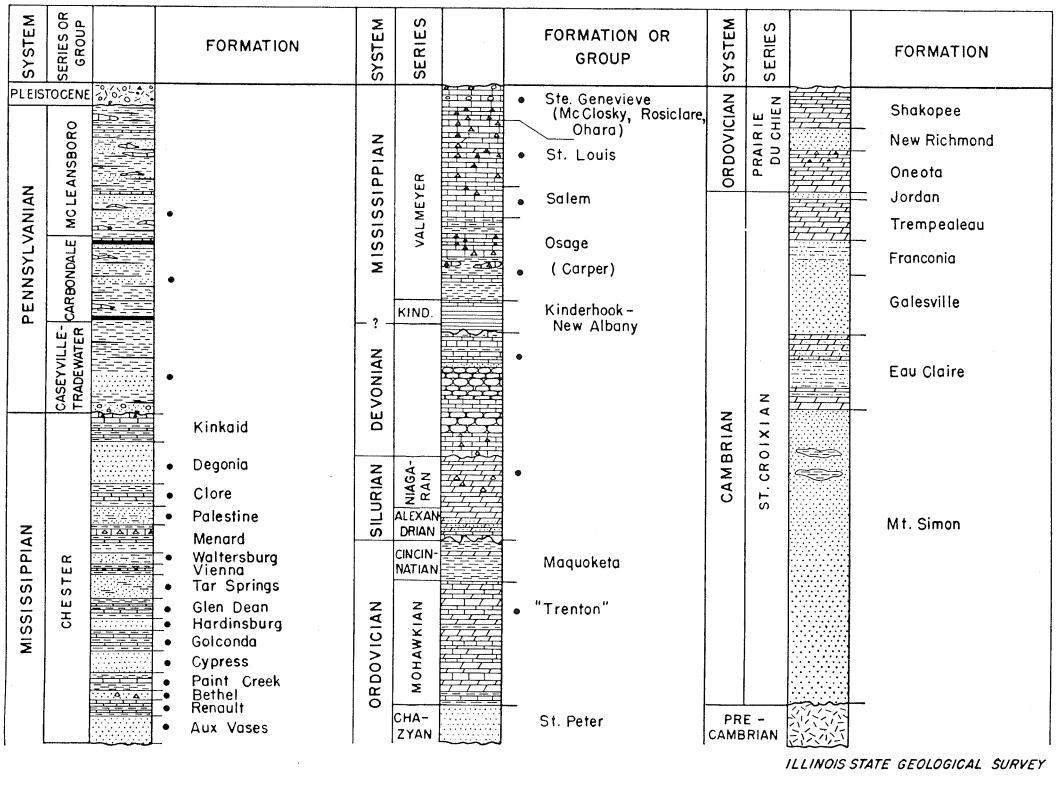


Fig. 3. — Generalized geologic column for the southern Illinois oil region. Black dots identify oil-producing strata.

Four Devonian or Silurian pools were discovered. The best of them, Germantown East in Clinton County, had 21 wells at the end of the year. Sicily, in Christian County, had three producing wells completed, and other wells were being drilled. The other two pools, both in Bond County, were Sorento West which was abandoned at the end of the year and Sorento South which was consolidated with Sorento. The Silurian was also opened up as a new deep pay in the Huey South pool in Clinton County.

The Trenton was opened up as a new pay in the Patoka and Irvington pools. At the end of the year not enough Trenton wells had been completed in either pool to make possible an evaluation of the pay.

The remaining 11 new pools and 17 new pays were all in rocks of Mississippian age.

A generalized geologic column for the southern Illinois oil region indicating principal producing strata, is shown in figure 3.

A selected list of unsuccessful deep tests in pools is given in table 7.

No gravity meter or magnetometer work was done in Illinois in 1956. Data on geophysical and core-drilling crews operating throughout the year, by months and methods, is given in table 8.

TABLE 5.—DISCOVERY WELLS OF EXTENSIONS TO POOLS, 1956

Line No.	Pool	County	Company and farm	Location	Total depth (ft.)	Producing formation	Depth to top (ft.)	Initial production (bbls.)[a]	Date of completion
1	Ab Lake West	Gallatin	Sun Oil #1 L. L. Miller "B"	1–9S–9E	2880; PB 2769	Aux Vases	2751	25; 40	9–18
2	Akin	Franklin	Perrine & Perrine #1 Westbrook	34–6S–4E	3214; PB 3108	Ohara	3079	200; 8	10–2
3	Albion East	Edwards	Noah Pet. #1 C. Cowling	16–2S–14W	3101; PB 3036	Ohara	3020	102	1–17
4	Barnhill	Wayne	P. J. McIntyre #1 Gardner Hrs.	15–3S–8E	3550; PB 3470	Ohara; McClosky	3436; 3456	200	8–7
5	Benton North	Franklin	Nat. Assoc. Pet. #1 W. T. Lawson	30–5S–3E	2948; PB 2648	Paint Creek	2622	55	10–23
6	Bone Gap Consol.	Edwards	Caliente #1 H. H. Howell Comm.	30–1S–14W	2905	Bethel	2897	55; 20	6–19
7	Bourbon	Douglas	M. H. Richardson #1 D. E. Otto	11–15N–7E	1650	Rosiclare	1629	434	5–29
8	Bourbon	Douglas	M. H. Richardson #1 E. Selle	12–15N–7E	1631	Rosiclare	1616	150	5–8
9	Bungay Consol.	Hamilton	Collins Bros. #1 Foley Comm.	35–4S–7E	3295	Aux Vases	3279	120	4–17
10	Chesterville	Douglas	L. G. Ewart #1 N. Applegate	26–15N–7E	1757	Rosiclare	1747	10; 50	12–18
11	Clay City Consol.	Clay	J. W. Rudy #1 Wraase	30–3N–8E	3120; PB 3112	McClosky	3105	63	6–5
12	Clay City Consol.	Jasper	Don Slape #1 P. H. Grove	16–5N–10E	2922; PB 2800	Aux Vases	2784	6; 80	4–17
13	Clay City Consol.	Wayne	Davis & Johnson #1 Hancock	10–2S–8E	3333; PB 3235	Aux Vases	3206	30; 30	6–5
14	Clay City Consol.	Wayne	Inglis Oil #1 Simmons	29–1N–7E	3269	Ohara	3184	50; 5	1–24
15	Cooks Mills Consol.	Coles	T. C. Rappe #1 Beckman	4–13N–7E	1885; PB 1864	Rosiclare	1844	35; 100	7–10
16	Cooks Mills Consol.	Coles	Rappe & Vest #1 J. H. Caton, et al.	9–13N–7E	1885; PB 1880	Rosiclare	1861	236	3–6
17	Cooks Mills Consol.	Coles	Rappe & Vest #1 G. Taylor	8–13N–7E	1975	Rosiclare	1952	36; 44	3–27
18	Cooks Mills Consol.	Coles	E. V. Richardson #1 J. Wallace	2–13N–7E	1864; PB 1836	Rosiclare	1819	22; 55	2–7
19	Cooks Mills Consol.	Coles	J. R. Covington #1 E. Bergfield	15–13N–7E	1872; PB 1855	Rosiclare	1846	60; 40	5–1
20	Cooks Mills Consol.	Coles	Partlow & Cochonour #1 B. Kuhn	16–13N–7E	1864; PB 1850	Rosiclare	1838	231	4–17
21	Cooks Mills Consol.	Coles	J. E. Wheeler #1 A. Ebardt	9–13N–7E	1874; PB 1855	Rosiclare	1834	147; 4	3–20
22	Cooks Mills Consol.	Coles	Ashland #1 F. E. Hartford "B"	20–14N–8E	1835; PB 1805	Rosiclare	1795	220; 50	6–12
23	Cooks Mills Consol.	Coles	Kuykendall #1 M. E. Herschberger	3–13N–7E	1892; PB 1852	Rosiclare	1828	32; 18	7–31
24	Cooks Mills Consol.	Douglas	J. P. Potsch #1 E. H. Schrock	13–14N–7E	1830	Cypress	1580	14,500,000 cu. ft.	2–21
25	Cooks Mills Consol.	Douglas	E. E. Spencer, et al. #1 E. E. Schrock	17–14N–7E	1807	Rosiclare	1770	96	5–22
26	Cooks Mills Consol.	Douglas	M. H. Richardson #1 R. Logan	13–14N–7E	1796; PB 1790	Rosiclare	1775	155; 5	3–20
27	Crossville	White	Nat. Assoc. Pet. #1 V. Sturm	14–4S–10E	3220; PB 3110	Bethel	2913	13; 150	5–15
28	Crossville West	White	Calvert #1 Z. Shepard	15–4S–10E	3252; PB 3215	McClosky	3184	26; 40	1–24
29	Dale Consol.	Hamilton	R. Pledger #1 Lightner	3–7S–5E	3275; PB 3226	Aux Vases	3204	75; 150	1–10
30	Dale Consol.	Hamilton	C. E. Brehm #1 M. L. Moore	29–6S–5E	3288	Aux Vases	3242	250	5–1

31	Dale Consol. . . .	Hamilton	Slagter #1 C. C. Cottingham	16–6S–6E	3271; PB 3265	Aux Vases; McClosky	3092; 3236	32; 10	10–2
32	Divide South . . .	Jefferson	Niagara Oil #1 Mulch-Hall et al. Comm.	2–2S–3E	2854	McClosky	2846	172; 8	5–29
33	Divide West . . .	Jefferson	Higgins & Whittinghill #1 J. O. Campbell	15–1S–3E	2837; PB 2784	Rosiclare	2746	510	7–17
34	Dubois	Washington	Cullum & Lawhead #1 Szramkowski	24–3S–2W	1370; PB 1215	Cypress	1208	8; 14	10–9
35	Edinburg South . .	Christian	H. C. Herring #1 Hoover	27–14N–3W	1876; PB 1841	Devonian	1792	20; 3	1–31
36	Eldorado West . .	Saline	J. Carter & E. Rue #1 Stricklin	23–8S–6E	2981; PB 2000	Palestine	1941	75; 30	1–17
37	Ellery Consol. . .	Edwards	Calvert #1 N. Everett	29–2S–10E	3346; PB 3219	Aux Vases	3178	83; 50	11–27
38	Fishhook Gas . . .	Adams	Western Oil #1 F. P. Hahn	26–3S–5W	520	Silurian	479	46,000 cu. ft.	11–27
39	Fishhook Gas . . .	Pike	S. & S. Oil #1 Hillman	2–4S–4W	489	Silurian	450	73,400 cu. ft.	12–11
40	Fishhook Gas . . .	Pike	W. Vette #1 Engleman	5–4S–4W	558	Silurian	487	673,000 cu. ft.	6–19
41	Fishhook Gas . . .	Pike	W. Vette #1 W. T. Stauffer	6–4S–4W	618	Silurian	579	41,800 cu. ft.	10–2
42	Fishhook Gas . . .	Pike	W. Vette #1 L. Martin	28–3S–4W	530	Silurian	509	232,000 cu. ft.	3–27
43	Fishhook Gas . . .	Pike	S. & S. Oil #1 Conkright	4–4S–4W	516	Silurian	490	740,000 cu. ft.	8–7
44	Fishhook Gas . . .	Pike	M. & N. Oil #1 W. Lahnman	34–3S–4W	451	Silurian	409	431,000 cu. ft.	10–9
45	Fishhook Gas . . .	Pike	R. F. Starr #1 Riley Still	5–4S–4W	480	Silurian	472	212,000 cu. ft.	10–2
46	Fishhook Gas . . .	Pike	A. Beach #1 C. Gray	20–3S–4W	473	Silurian	463	45,000 cu. ft.	8–7
47	Gards Point . . .	Wabash	Saber Oil #1 C. R. Seals	26–1N–14W	3010; PB 2900	Ohara	2883	35	1–10
48	Goldengate Consol. .	White	Nation Oil #1 Pollard	20–3S–9E	3520; PB 3455	Rosiclare	3437	8; 14	3–6
49	Harco	Saline	Lauderdale Oil #1 J. B. Duty	28–8S–5E	3110; PB 2950	Ohara	2930	40	9–25
50	Harco	Saline	Calvert-King-Stevenson #1 Bennett	14–8S–5E	3045; PB 2898	Aux Vases	2838	25; 7	8–7
51	Harco	Saline	V. S. & S. Drlg. #1 Wilson-Teachers Ret. Bd.	8–8S–5E	3109; PB 2970	Aux Vases	2924	60; 10	6–5
52	Harco	Saline	J. Inglis #1 B. Keelin	11–8S–5E	3125; PB 3030	Aux Vases	2929	14; 5	12–11
53	Harco	Saline	Calvert #1 Brown Hrs.	22–8S–5E	3126; PB 3113	Hardinsburg; Aux Vases	2332; 2948	54; 14	9–4
54	Herald Consol. . .	Gallatin	Collins Bros. #1 R. Sanders	34–7S–9E	3084; PB 2650	Tar Springs; Cypress	2305; 2612	18; 60	4–3
55	Herald Consol. . .	White	Calvert-Beeler #1 Cutting	9–7S–10E	3032; PB 2872	Aux Vases	2851	120	6–19
56	Hord	Clay	Calvert #1 W. Stortzum	12–5N–6E	2804	Rosiclare	2794	300; 30	9–25
57	Hord South . . .	Clay	G. T. Ronk #1 D. McKnelly	28–5N–6E	2823; PB 2700	Aux Vases	2675	5; 50	8–28
58	Huey South . . .	Clinton	Kapp & Imming #1 H. Prasuhn	31–2N–2W	2629; PB 2616	Silurian	2585	32; 5	5–8
59	Ingraham	Clay	Texas #1 G. M. Buerster	3–4N–8E	3132; PB 3028	McClosky	3014	24; 11	8–28
60	Iuka West	Marion	R. Fletcher #1 E. Wiehle	18–2N–4E	2830; PB 2727	McClosky	2705	17	4–10

[a] Oil and water.

TABLE 5.—Continued

Line No.	Pool	County	Company and farm	Location	Total depth (ft.)	Producing formation	Depth to top (ft.)	Initial production (bbls.)[a]	Date of completion
61	Kinmundy	Marion	Ohio Oil #1 O. E. Garrett	19–4N–3E	2479; PB 2458	Salem	2376	11; 20	10–30
62	Maplegrove Consol.	Wayne	Pure Oil #1 P. M. Weber	22–1N–9E	3225; PB 3210	Aux Vases	3167	172; 43	8–7
63	Mattoon	Coles	R. F. Anderson #1 Opal Arthur	2–12N–7E	1953	Rosiclare	1927	12	5–1
64	New Bellair	Crawford	F. L. Beard #1 Sellars	20–8N–13W	1300	Aux Vases	1277	8; 12	5–29
65	New Harmony Consol.	Wabash	Kingwood #1 E. Summers	4–1S–13W	2720; PB 2601	Aux Vases	2587	10; 1	9–4
66	New Memphis South	Washington	Collins Bros. #1 Huelskoetter Comm.	16–1S–5W	2134	Silurian	1994	5; 30	5–1
67	Oak Point	Jasper	Partlow & Cochonour #1 McCash-Freeland	4–8N–14W	1199	Aux Vases	1182	30; 10	1–10
68	Oakdale	Jefferson	Eastern Pet. #1 P. D. Hughes	14–2S–4E	3100; PB 3003	McClosky	2999	15; 35	12–28
69	Okawville	Washington	Texas #1 W. Reichmann	4–1S–4W	2375; PB 2288	Devonian	2222	46; 556	6–19
70	Olney Consol.	Richland	D. Slape #1 G. P. Koertge	33–4N–10E	3105; PB 3058	McClosky	3050	5	6–19
71	Olney South	Richland	H. & H. Oil #1 O. Maas	14–3N–10E	3232; PB 3187	McClosky	3163	5	5–8
72	Olney South	Richland	D. Slape #1 C. Jennings	21–3N–10E	3155	Rosiclare	3127	9; 120	3–27
73	Parkersburg Consol.	Richland	D. Lambert & Butler #1 V. Heckler	22–3N–14W	3268; PB 3108	Aux Vases	3071	90; 80	1–17
74	Roland Consol.	White	Calvert #1 H. G. Bayley	4–6S–9E	3250; PB 2090	Degonia	2064	29; 15	1–24
75	Sailor Springs Consol.	Clay	Partlow & Cochonour #1 Bible Grove-Dueker	8–5N–7E	2540	Cypress	2490	20; 30	7–3
76	Sailor Springs East	Clay	J. B. Murvin #1 Keyner	33–4N–8E	3105	McClosky	3091	7; 30	7–3
77	Sorento Consol.	Bond	F. L. Strickland #1 Eiswirth "B"	28–6N–4W	1876	Lingle	1858	460	9–18
78	Sorento Consol.	Bond	Dickinson Oil #1 Vogel	29–6N–4W	1947	Lingle	1936	38; 20	7–3
79	Stanford South	Wayne	J. W. Steele #1 B. E. Hale	19–2N–7E	3201; PB 3125	Rosiclare	3105	2	7–24
80	Sumpter South	White	W. C. McBride #1 J. B. Jacobs	34–4S–9E	3224; PB 3040	Tar Springs; Bethel	2548; 3025	17; 22	12–11
81	West Frankfort	Franklin	R. McClement #1–A. S. Boner	31–7S–3E	2899; PB 2880	Aux Vases	2751	30	6–5

[a] Oil and water.

TABLE 6.—DISCOVERY WELLS OF NEW PAYS IN POOLS, 1956

Line No.	Pool	County	Company and farm	Location	Total depth (ft.)	Producing formation	Depth to top (ft.)	Initial production (bbls.)[a]	Date of completion
1	Ab Lake West	Gallatin	Coy Oil #1 E. Wathen	31–8S–10E	2766	Waltersburg	2008	103[b]	8–21
2	Akin	Franklin	C. E. Brehm #1 Westbrook Tr. et al. "B"	35–6S–4E	3246; PB 3120	Ohara	3108	150	1–10
3	Crossville	White	Nat. Assoc. Pet. #1 Ridenour "C"	10–4S–10E	3139	Aux Vases	3012	23; 210[c]	5–8
4	Crossville West	White	Calvert #1 Z. Shepard	15–4S–10E	3252; PB 3215	McClosky	3184	26; 40	1–24
5	Dahlgren	Hamilton	Athene Dev. #1 C. L. Scrivener	27–3S–5E	5299; PB 4161	Warsaw	4045	11; 90	11–27
6	Divide West	Jefferson	D. F. Herley #1 Shafer	27–1S–3E	2843	St. Louis	2778	80; 4	1–10
7	Eldorado West	Saline	J. Carter & E. Rue #1 Stricklin	23–8S–6E	2981; PB 2000	Palestine	1941	75; 30	1–17
8	Harco	Saline	Calvert #1 Brown Hrs.	22–8S–5E	3126; PB 3113	Hardinsburg	2332	54; 14[b]	9–4
9	Harco East	Saline	Sun Oil #2 J. Reynolds	26–8S–5E	3002; PB 2890	Aux Vases	2875	50	1–10
10	Huey South	Clinton	Kapp & Imming #1 H. Prasuhn	31–2N–2W	2629	Silurian	2585	32; 5	5–8
11	Irvington	Washington	Gulf #10 Stanton	26–1S–1W	4399	Trenton	4272	72; 12	2–14
12	Oakdale	Jefferson	Texas #1 Wood Unit	11–2S–4E	3767; PB 3080	McClosky	2976	32; 38	10–2
13	Patoka	Marion	Sun Oil #1–T. Pugh	29–4N–1E	4056; PB 4010	Trenton	3952	139; 22	3–8
14	Rural Hill North	Hamilton	V. R. Gallagher #1 H. Moore	34–5S–5E	3426; PB 2970	Cypress	2934	42	11–27
15	Shawneetown	Gallatin	H. D. Atha #2 T. O. Logsden	13–9S–9E	2840; PB 2426	Cypress	2374	81; 30[b]	5–8
16	Sorento Consol.	Bond	Stewart Prod. #4 Donk Bros. "A"	33–6N–4W	612	Pennsylvanian	598	5; 32	11–8
17	Toliver South	Clay	J. Zink et al. #1 C. O. Smith "A"	1–4N–6E	2889	McClosky	2880	59; 20	1–24
18	Whittington West	Franklin	Kewanee Oil #1 Plains	11–5S–2E	3284; PB 2725	Renault	2673	360	11–20
19	Woburn Consol.	Bond	Murvin & Steber #4 Nilson	9–6N–2W	1064	Aux Vases	1054	30; 80	6–5

[a] Oil and water.
[b] Dual completion.
[c] Producing from 4 pays.

TABLE 7.—SELECTED LIST OF UNSUCCESSFUL DEEP TESTS IN POOLS, 1956

Line No.	Pool	County	Company and farm	Location	Total depth (ft.)	Deepest formation	Depth to top (ft.)	Date of completion
1	Beaver Creek	Bond	Skiles Oil #1 H. Wrone	36–4N–3W	2558	Silurian	2488	12–18
2	Belle Prairie	Hamilton	Skiles Oil #1 R. Smith	2–4S–6E	5483	Devonian	5295	11–6
3	Colmar-Plymouth	Hancock	D. R. Woltz #1 Roberts	24–4N–5W	815	St. Peter	790	2–14
4	Cooks Mills Consol.	Coles	H. J. Adams #8 D. Andres	16–13N–7E	3059	Devonian	2996	9–18
5	Germantown East	Clinton	Nat'l Assoc. Pet. #1 E. Becker et al.	1–1N–4W	3310	Trenton	3260	10–2
6	Grandview	Edgar	M. L. Livingood #1 Babcock	4–12N–13W	2694	Trenton	2606	4–3
7	Gillespie-Benld Gas	Macoupin	M. Mazzarino #1 Kwados	20–8N–6W	2277	Trenton	2152	5–15
8	Livingston South	Madison	F. Suhre #3 Suhre	4–5N–6W	1752	Silurian	1736	11–27
9	New Memphis	Clinton	N. Friederich #1 Broeckling	4–1S–5W	2900	Trenton	2784	2–14
10	Panama	Bond	J. H. Miskell #1 R. Harwood	36–7N–4W	2160	Silurian	2131	7–10
11	Raymond	Montgomery	Richardson #1 W. Paul	13–10N–5W	2010	Silurian	1987	7–17
12	Siggins	Cumberland	J. Gambill #1 L. Lacy	24–10N–10E	2069	Devonian	2024	7–17

TABLE 8.—NUMBER OF GEOPHYSICAL AND CORE DRILLING CREWS ACTIVE IN ILLINOIS DURING 1956 BY MONTHS

Month	Seismograph	Gravity meter	Magnetometer	Core drilling
Jan.	0	0	0	12
Feb.	0	0	0	15
Mar.	0	0	0	15
Apr.	0	0	0	12
May	0	0	0	13
June	8	0	0	12
July	8	0	0	8
Aug.	12	0	0	4
Sept.	11	0	0	15
Oct.	12	0	0	12
Nov.	12	0	0	9
Dec.	8	0	0	4

PRODUCTIVE ACREAGE

The area of proved production in Illinois, including abandoned pools, at the end of 1956 was 539,315 surface acres for oil and 28,795 for gas. Of this, 375,780 oil acres and 16,460 gas acres were in pools discovered since January 1, 1937. During 1956, 6,640 gas acres were added by 61 gas wells, most of which are capped. In pools discovered since January 1, 1937, about 16,690 surface acres for oil were added in 1956. Most of the drilling in the old pools (discovered before 1937) was development of new pays in old producing areas; little surface acreage was added to the old pools.

ESTIMATED PETROLEUM RESERVES

The Illinois State Geological Survey estimates that on January 1, 1957, Illinois oil reserves that can be produced from wells now in existence, by methods now in use, total 701.6 million barrels. This represents an increase of 0.3 million barrels over the estimate for January 1, 1956. The factors in this change are shown in the following table:

	Millions of bbls.
Estimated reserves, Jan. 1, 1956	701.3
Withdrawal by 1956 production	82.3
	619.0
Added by new drilling in 1956	47.4
	666.4
Added by upward revision	35.2
Estimated reserves, Jan. 1, 1957	701.6

The 1,694 oil producing wells, including workover wells, completed during 1956 added an estimated oil reserve of 47.4 million barrels, an average of about 27,878 barrels per well.

Of this 47.4 million barrels of added reserves, it is estimated that 2.0 percent is in Pennsylvanian sandstone, 81.3 percent in Mississippian sandstones and limestones, and 15.8 percent in Devonian-Silurian limestones and sandstones. New reserves credited to the Ordovician totaled less than 1 percent.

The most important pay zones for which new reserves were added by 1956 drilling are the Ste. Genevieve limestones and sandstone with 31.6 percent of the new reserves, the Aux Vases sandstone with 30.1 percent, and the Devonian-Silurian limestones and sandstones with 15.8 percent. Other important pay zones are the Cypress sandstone with 9.1 percent, and the Bethel sandstone with 5.6 percent. Pennsylvanian sandstones contributed 2.0 percent, and Mississippian pays other than those listed above contributed 5.0 percent.

The Devonian-Silurian formations with 15.8 percent new reserves in 1956 have materially increased in importance during the last three years. The percentage figures for these formations were 5.9 in 1954 and 9.6 in 1955.

The reserves added by the 17 new oil fields discovered during 1956 are estimated at 5,209,000 barrels of oil. A breakdown of this total by pays shows Devonian-Silurian formations in the lead with 60.8 percent, followed by the Ste. Genevieve formation with 32.0 percent, Aux Vases with 5.2 percent, and the Cypress with 1.0 percent. The other 1.0 percent is scattered among the remaining pays in the Chester and Pennsylvanian formations.

The principal changes indicated are in the Devonian-Silurian for which the new pool reserves rose from 49 percent of the total in 1955 to 61 percent in 1956. This was mainly at the expense of the Chester series for which new pool reserves dropped from 21 percent in 1955 to 7 percent in 1956.

The four Devonian-Silurian discoveries are all in R. 4 W. They extend from T. 1 N., in Clinton County, to T. 13 N. in Christian County. The Rosiclare sandstone discoveries, which account for 30 percent of the 32 percent new reserves attributed to the Ste. Genevieve formation, are all in Douglas County. Jefferson County had three new pools, with production from Pennsylvanian and Aux Vases sandstone and the McClosky limestone.

On January 1, 1957, Illinois had about 380 producing oil pools. Three of these (Clay City Consolidated, Louden, and Salem Consolidated) had estimated reserves of 378.6 million barrels or 54 percent of the 701.6 million barrels reserves.

Ten pools, including the above three, had estimated reserves of more than 10 million barrels each, for a total of 521.8 million barrels, or 74.3 percent of the total oil reserves.

Approximately 320 pools had reserves of less than one million barrels each. Their total estimated reserves of 43.1 million barrels was approximately 6 percent of the total reserves.

PROSPECTS FOR NEW POOLS

An average of 25 to 35 new pools has been discovered in Illinois annually for about 20 years. In 1956 only 18 new pools were discovered, and the number may continue to be smaller than in the past. As productive areas are drilled up, discovery wells are more apt to be extensions of pools rather than discovery wells of new pools.

Figure 4 is a map of the state that classifies oil and gas possibilities by areas. The map is slightly modified after a similar classification map prepared by the Survey in 1930, seven years before oil was discovered in the deep part of the basin (outlined by the dashed line in fig. 4).

From 1937 to 1954 most of the new pools discovered were in the deeper part of the basin and produced from Pennsylvanian and Mississippian pays. Outstanding exceptions include two marginal pools, Marine with Devonian-Silurian production

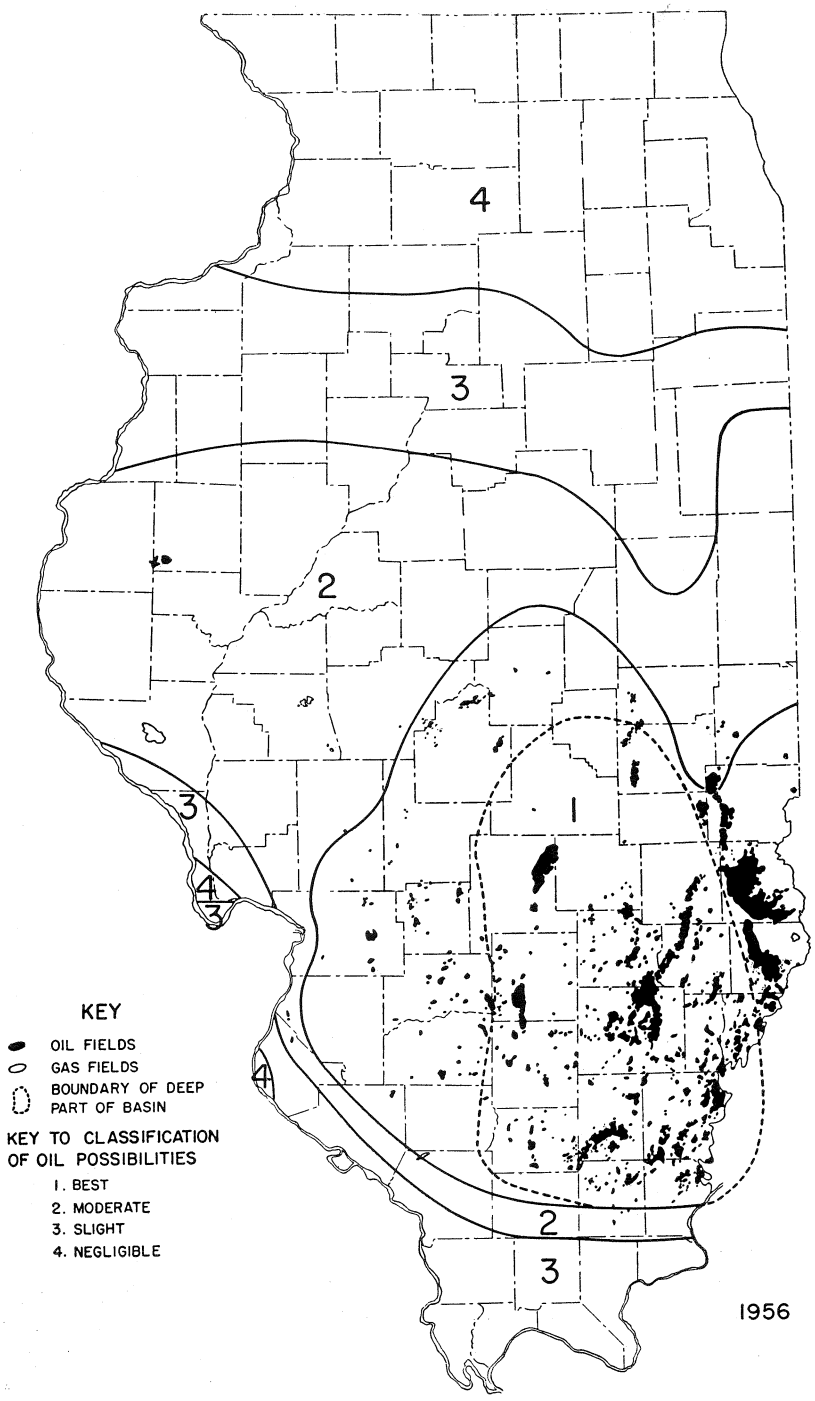


Fig. 4. — Oil and gas possibilities in Illinois, December 31, 1956.

and St. Jacob, a Trenton pool, and, in the deep part of the basin, the Devonian and Trenton in the Salem Consolidated and Centralia pools. In these two latter pools, however, Mississippian pays were first discovered and developed and the deeper pays were found by deepening wells within the pools.

Many of the counties in the deeper part of the basin, such as Wabash, Wayne, White, and Edwards, have been developed to an extent allowing little possibility for finding new pools. Only one of the 1956 new pools was in this area. In 1954, 1955, and 1956 most of the new pools were near the margin, or outside the deeper part of the basin. In these three years there has been a great increase in number and relative importance of new Devonian and Silurian pools.

At the end of 1956 new Trenton pays were discovered in the Irvington and Patoka pools, both fairly close to the good Trenton production in Salem Consolidated and Centralia. Tests of the Trenton and Devonian are rare in deeper parts of the basin. In most counties testing of the Salem and St. Louis limestones has also been limited to only a few wells.

In the past all but a very small percentage of Illinois' oil production has come from Pennsylvanian and upper Mississippian rocks. Results of drilling in the last three years suggest that pre-Mississippian rocks warrant further testing.

GAS AND GAS PRODUCTS

An estimated 32 billion cubic feet of gas was produced from Illinois oil wells during 1956, either as solution gas or in separate gas reservoirs in the oil areas.

Most of the 110.7 million cubic feet of dry gas marketed in Carmi and Eldorado was obtained from dry gas wells within oil fields. An additional 683.1 million cubic feet of dry gas from oil wells was delivered to gas pipe lines for distribution throughout the state. Details are shown in the chart given below.

About 7.2 billion cubic feet of solution gas from Illinois oil wells was processed during 1956 by the three principal operating companies, with the resultant production of 1,660,000 barrels of natural gasoline and allied products. This figure does not include natural gasoline and allied products produced at one plant in Illinois which processes gas from outside the state. Data furnished by the companies indicate that approximately 469.1 million cubic feet of dry residue gas was returned to the producing formations, the remainder being used as plant or lease fuel. The amount of plant residue gas flared was insignificant.

In addition to the 7.2 billion cubic feet of metered solution gas processed, a somewhat smaller amount of unmetered gas was used largely for lease fuel. Between 20 and 25 billion cubic feet of gas was flared during the year, principally in the Saline County area.

Sixty-one new gas wells located in eight different pools in nine different counties were completed during 1956. None of the gas has been marketed for use away from the producing area.

Two of the eight pools in which this gas is found are the Fishhook pool in Pike and Adams counties, which has produced only gas to date, and the Cooks Mills Consolidated pools in Coles and Douglas counties, which produces both gas and oil. One of the major gas suppliers to the northern part of the state is currently installing pipelines in this field for the dual purpose of using the presently available gas and eventually using the structure as a storage reservoir.

GAS PRODUCED IN ILLINOIS AND MARKETED IN 1956

Field, County	*Market*	*Amount Used*
Eldorado, Saline	Eldorado	29,628,000
Herald Consolidated, White-Gallatin	Carmi	81,137,000
Eldorado, Saline	Pipe Lines	606,183,000
Harco, Saline	Pipe Lines	76,927,000
		793,875,000

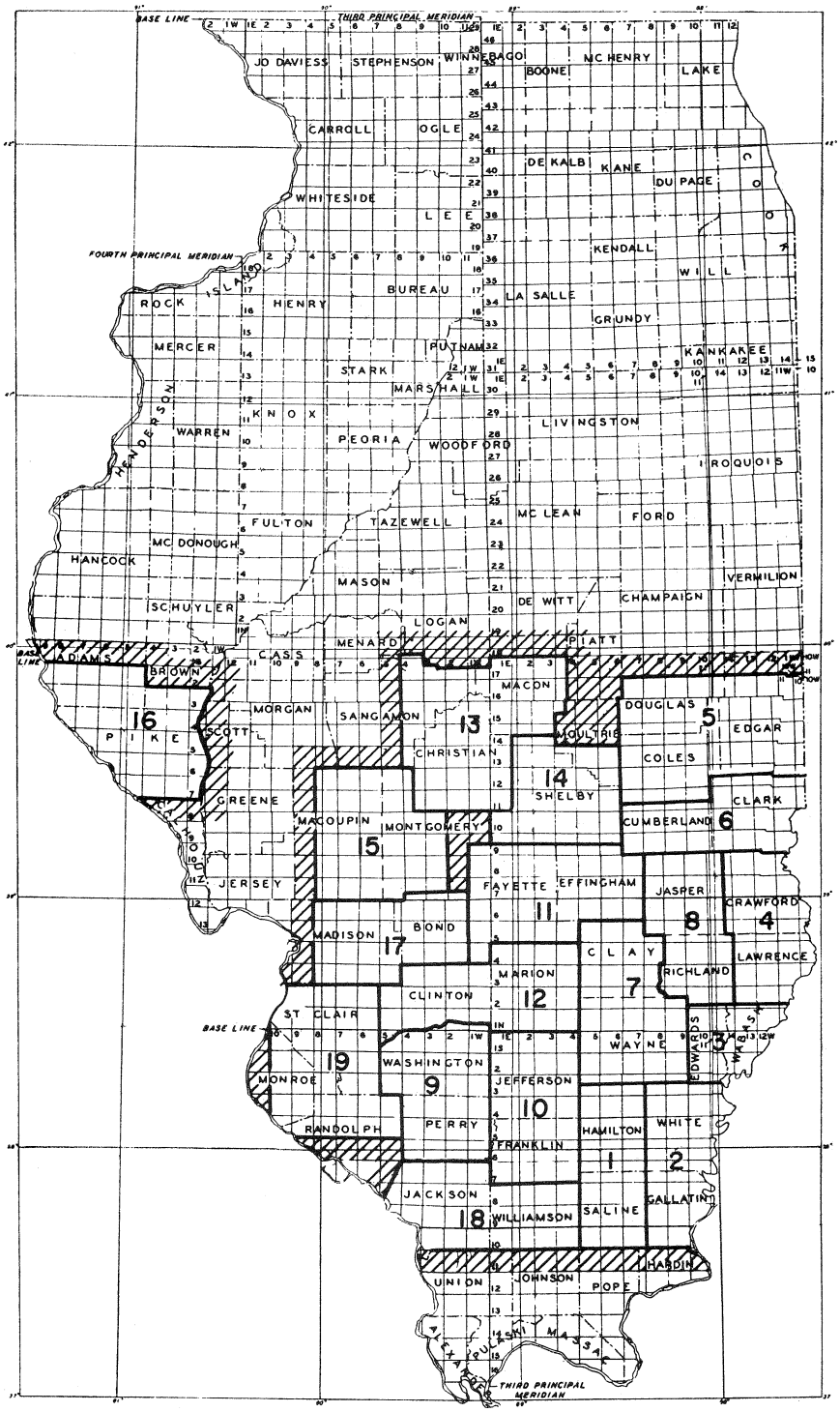


Fig. 5. — Index map to areas and counties covered in this report. See detail maps, figures 6-24. County reports, arranged alphabetically, begin on page 47.

OIL PRODUCING STRATA OF ILLINOIS

(SEE FIG. 3, PAGE 17)

Oil production from sandstones in the upper two groups of Pennsylvanian age, the McLeansboro and Carbondale groups, is very minor; Tradewater and Caseyville sandstones have yielded about one-sixth of the state's oil. The original low gas content of many Pennsylvanian oils resulted in rather low primary recovery and together with shallow depth makes the Pennsylvanian reservoirs particularly attractive for secondary recovery. Despite the fact that little oil has been found in the Pennsylvanian in the last few years, Pennsylvanian production has been increasing, owing to the development of secondary recovery projects.

Chester sandstones have to date produced more than one-half of Illinois' oil and the proportion is mounting. The higher sandstones, the Degonia, Clore, and Palestine, are of little consequence and are productive only in the region of the lower Wabash Valley. The middle sandstones, Waltersburg, Tar Springs, and Hardinsburg, are more productive with some very prolific pools, but significant accumulations are confined to a relatively small area in the southern and eastern oil counties.

The lower Chester sandstones in general, and the Cypress and Aux Vases in particular, are productive nearly throughout the oil country.

The high water content of the Aux Vases makes oil more difficult to recognize than in other sandstones, and Aux Vases production was sometimes passed by during the earlier stages of exploration. Fine-grained reservoirs react spectacularly to hydraulic fracturing. Although the Aux Vases has produced less oil in the past than the Benoist (Bethel) and Cypress sands, it is probably leading in current production and is by far the most important single horizon in current development.

The most prolific reservoirs in the lower Mississippian rocks are oolitic limestones, which have produced one-fifth of Illinois' oil. Most important is the McClosky zone, which consists of porous lenses of oolitic limestone in the Fredonia member of the Ste. Genevieve formation. The oolitic Ohara pay zone in the Levias member of the Ste. Genevieve is quite similar to the McClosky, as are oolites in the St. Louis and Salem formations. Hydraulic fracturing of the oolitic reservoirs is not particularly helpful, but in most instances productivity can be increased greatly by acidizing. Waterflooding is simple, but as primary recovery is generally high, less oil is left for secondary recovery than in the sandstone reservoirs.

The Rosiclare zone is a typical oolite in the southern and eastern oil counties, with occasional sand grains accompanying the oolites. Toward the northwest the sand grains become more numerous and production is obtained from a slightly limy sandstone, a bit coarser than the average Chester sandstone.

Devonian production comes from sandstones, limestones, dolomites, and cherts, and is difficult to characterize briefly.

Silurian production, approaching one percent of Illinois' total, is from two quite different types of rock. Much Silurian dolomite in the southern part of Illinois is too fine-grained for production, but occasional streaks, generally purer, are coarse enough to approach the lower limit of productive dolomite rock. As might be expected, this fine-grained rock reacts favorably to fracturing but poses problems in waterflooding. Silurian "coral" reefs in the northern part of Illinois are dolomitized, porous, and very permeable. In the oil area the reefs are limestone with very low porosity but have a few vugs and an extensive fracture system that may contain oil. Silurian reef rock produces oil from Marion County westward.

The Trenton limestone has produced less than one percent of Illinois' oil. The limestone generally is quite dense. Porosity and permeability increase westward across the western part of the oil area, and fractures are of considerable importance in the westernmost pools. Acidizing is a common completion practice, and it seems likely that hydraulic fracturing will be of relatively little help.

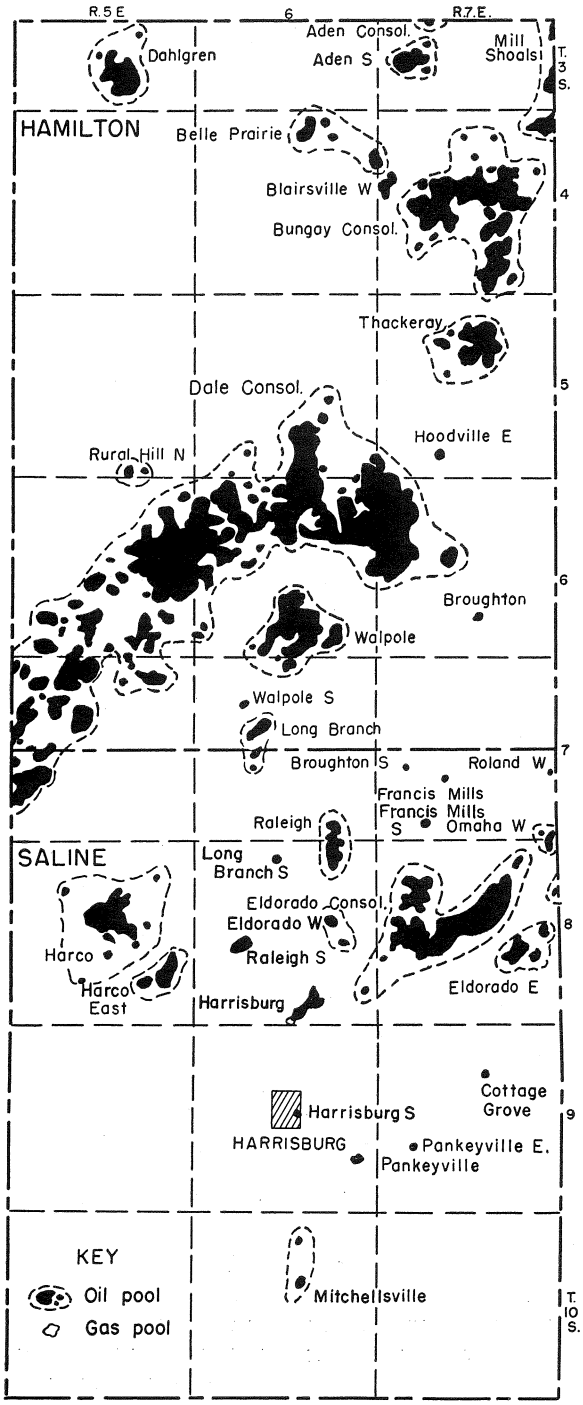


Fig. 6. — Area 1: Hamilton and Saline counties.

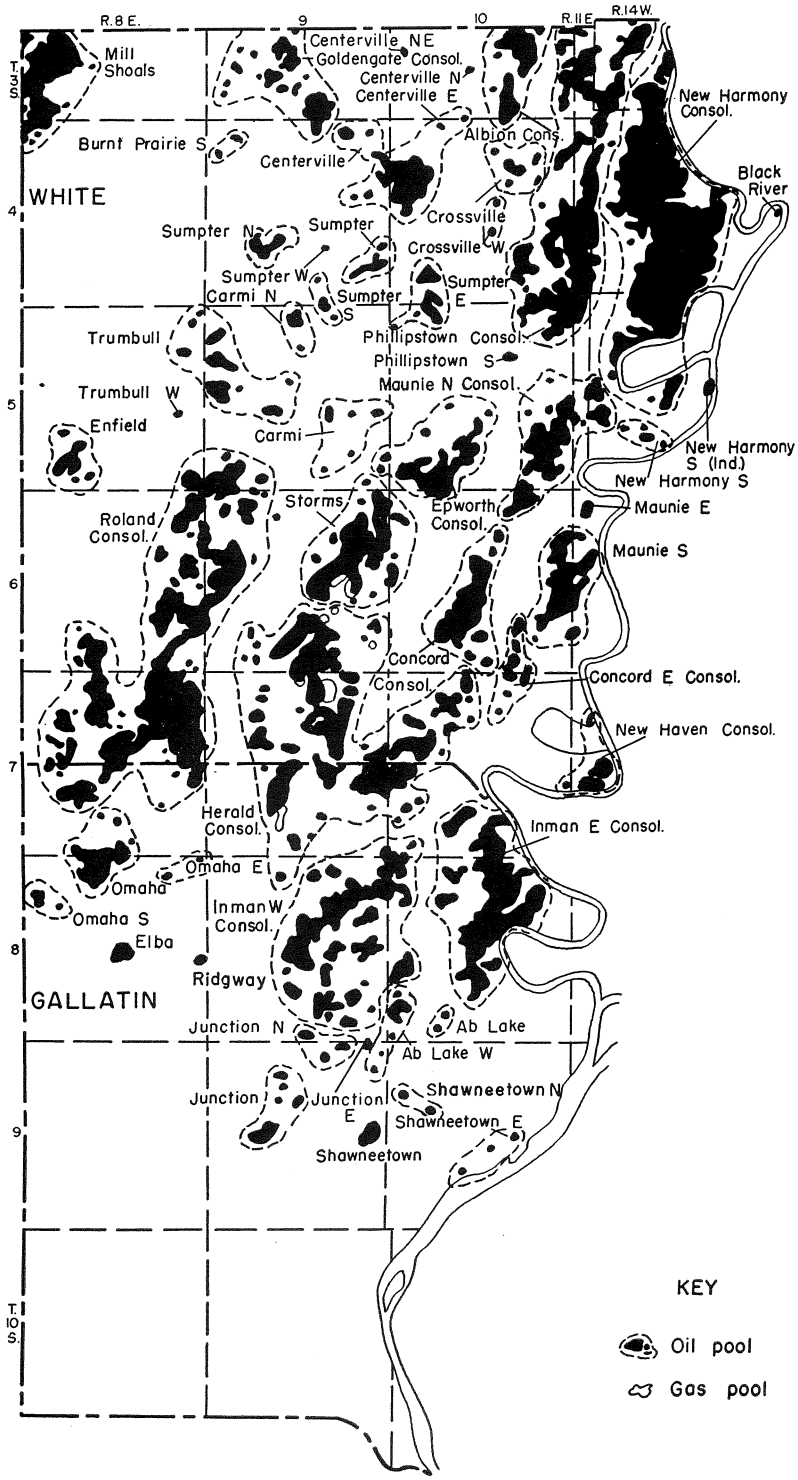


Fig. 7. — Area 2: White and Gallatin counties.

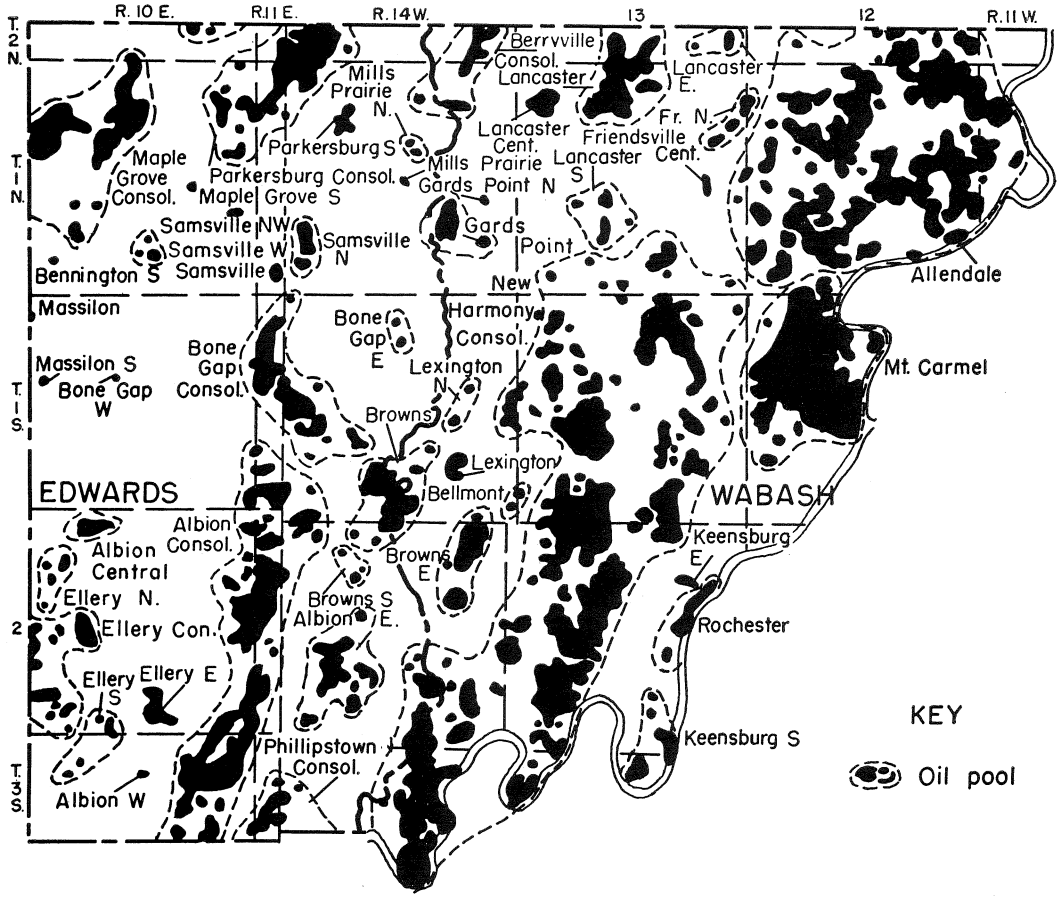


Fig. 8. — Area 3: Wabash and Edwards counties.

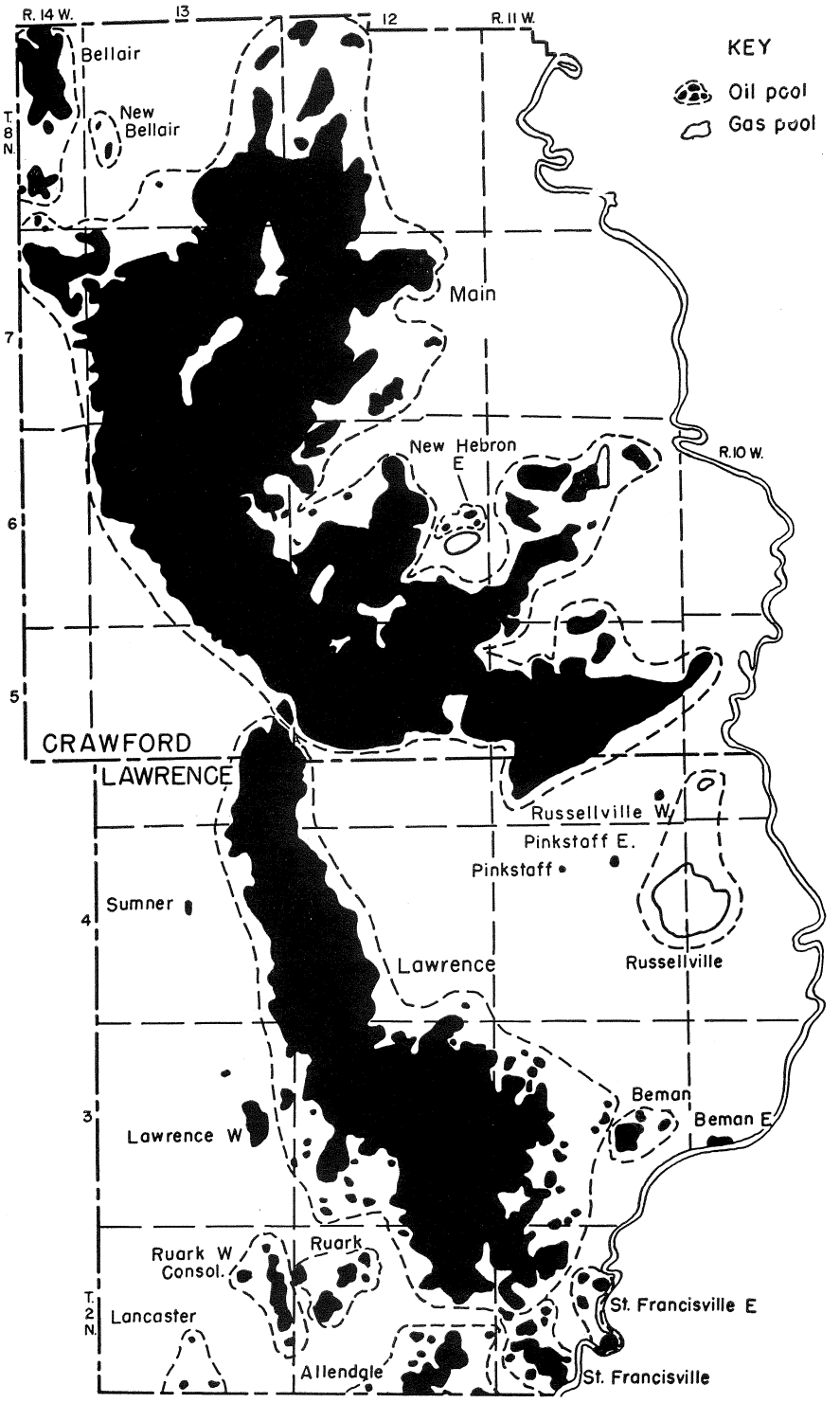


Fig. 9. — Area 4: Crawford and Lawrence counties.

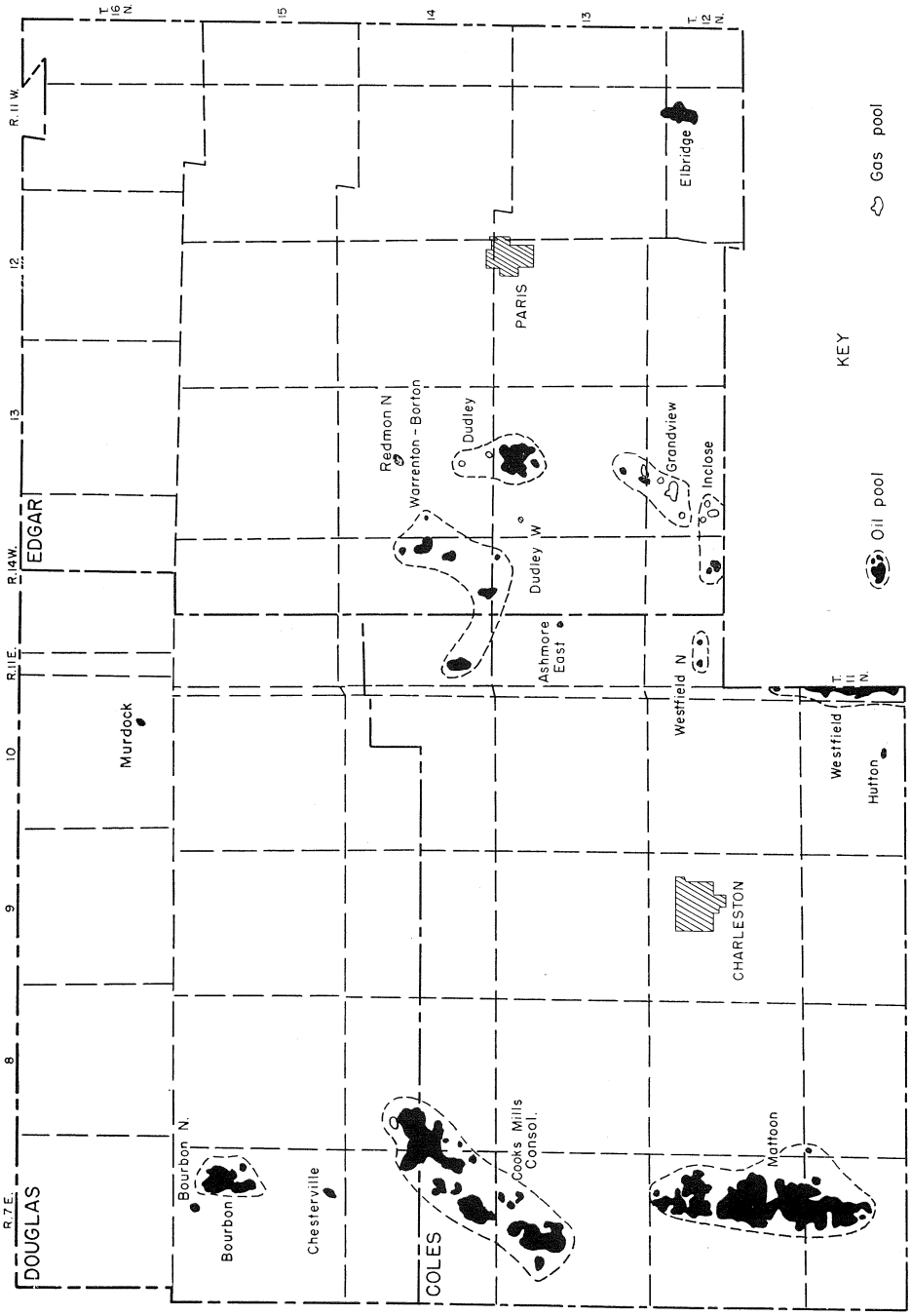


Fig. 10. — Area 5: Coles, Douglas, and Edgar counties.

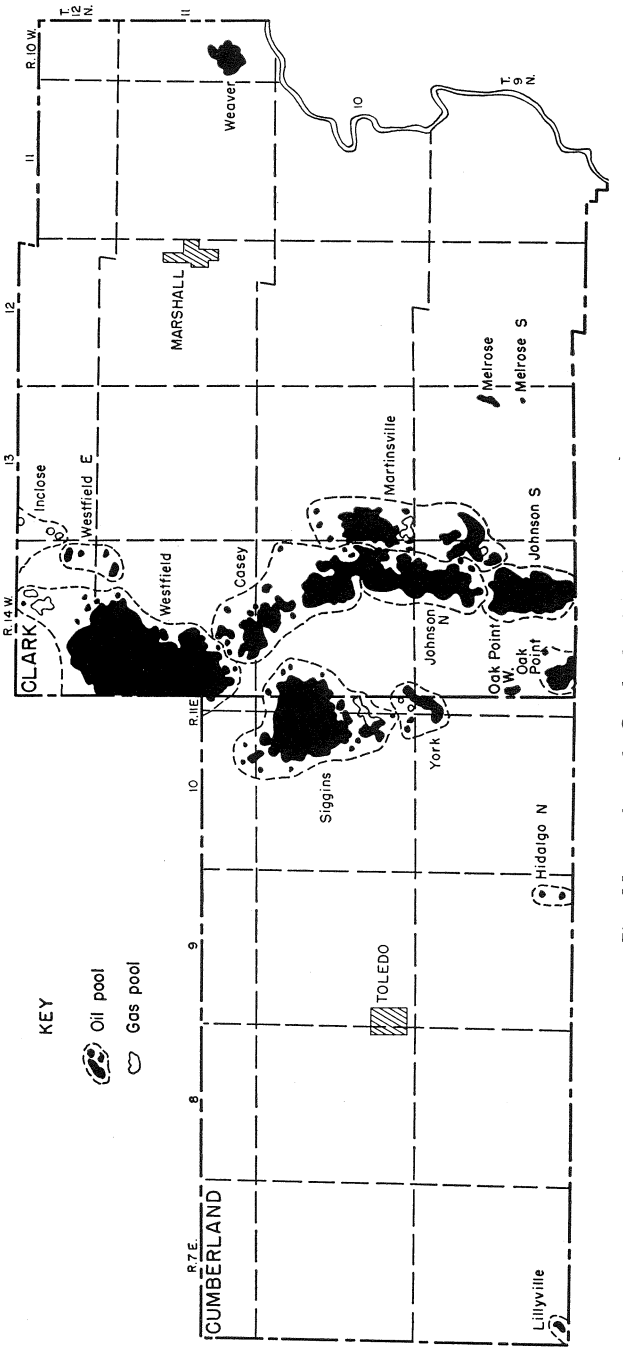


Fig. 11. — Area 6: Cumberland and Clark counties.

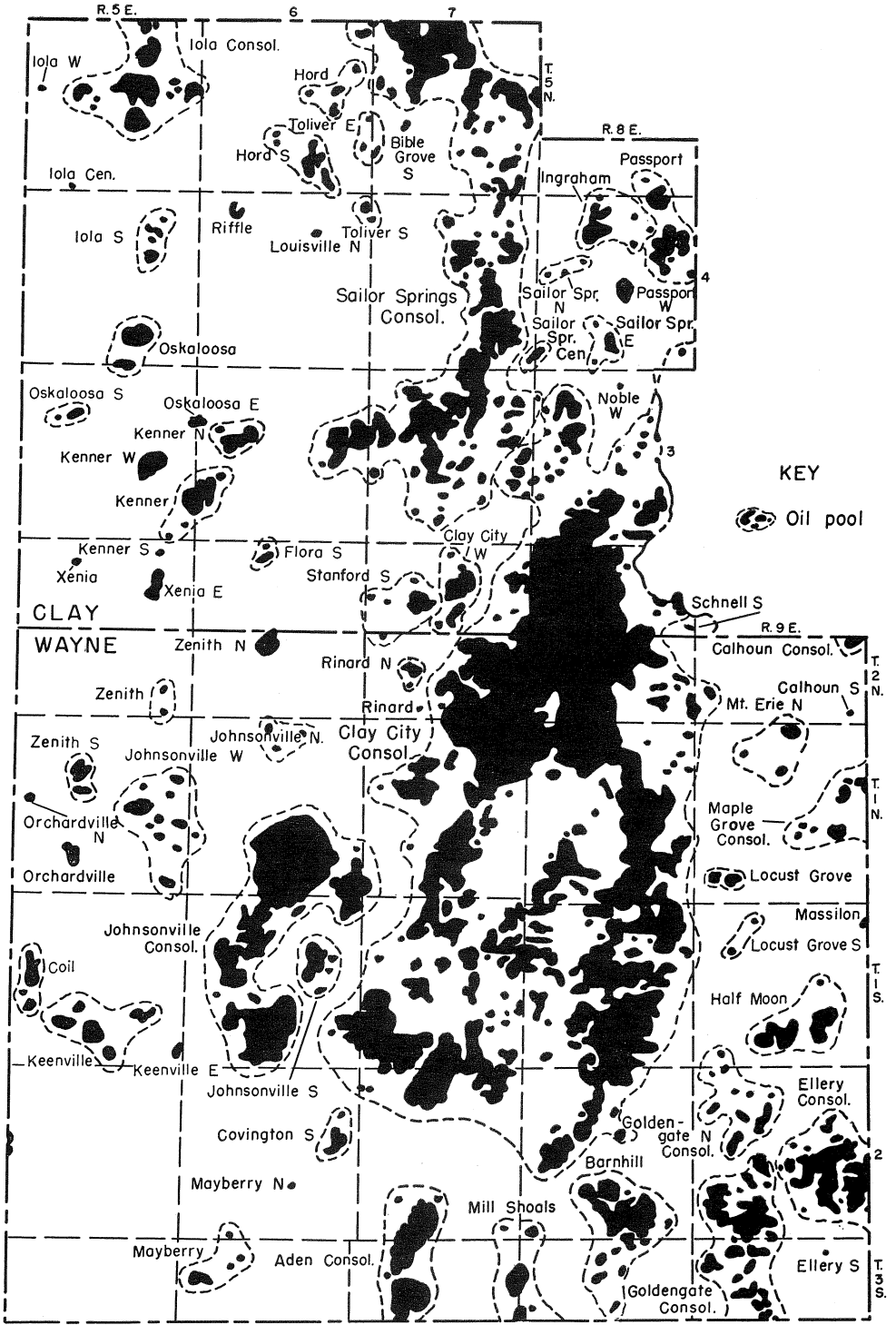


Fig. 12. — Area 7: Clay and Wayne counties.

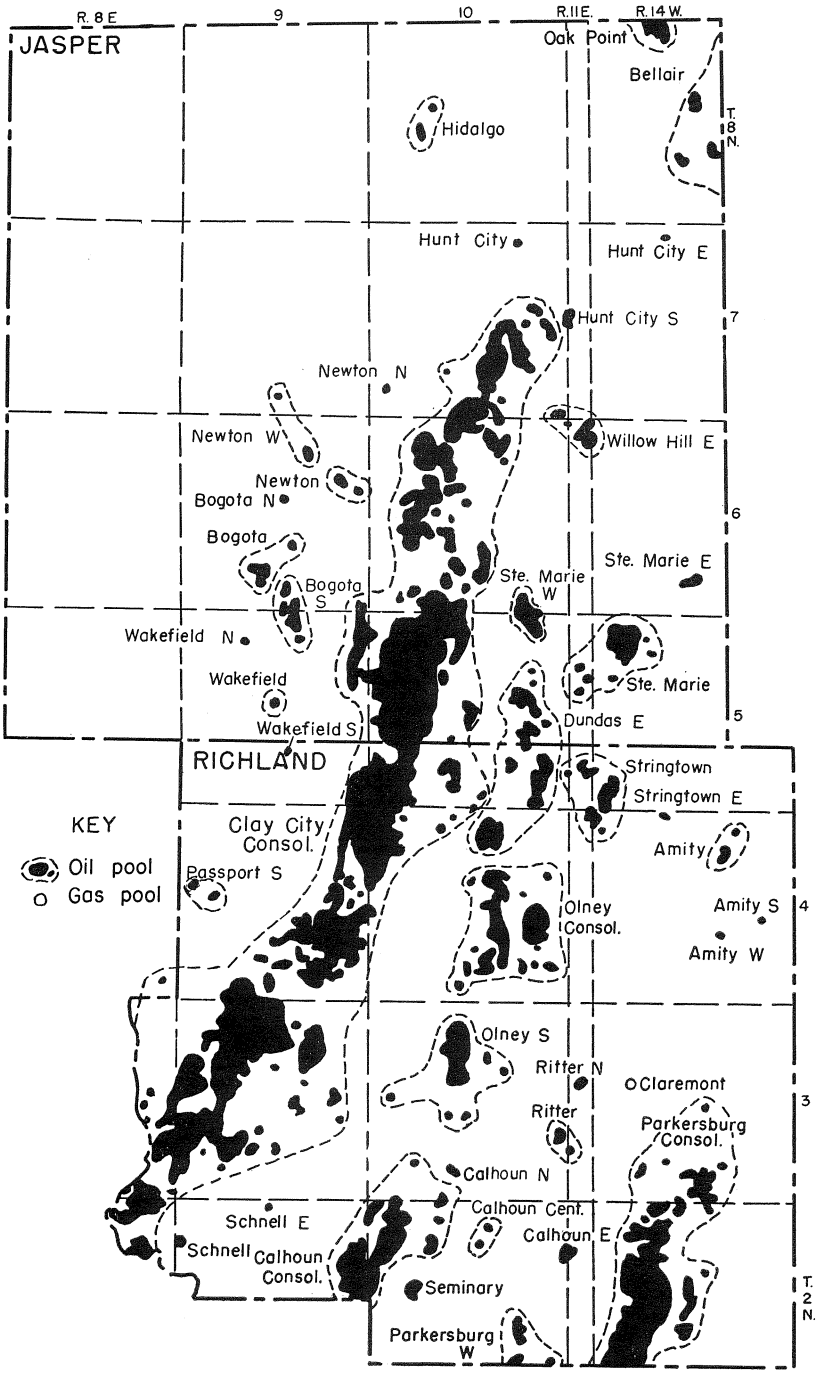


Fig. 13. — Area 8: Jasper and Richland counties.

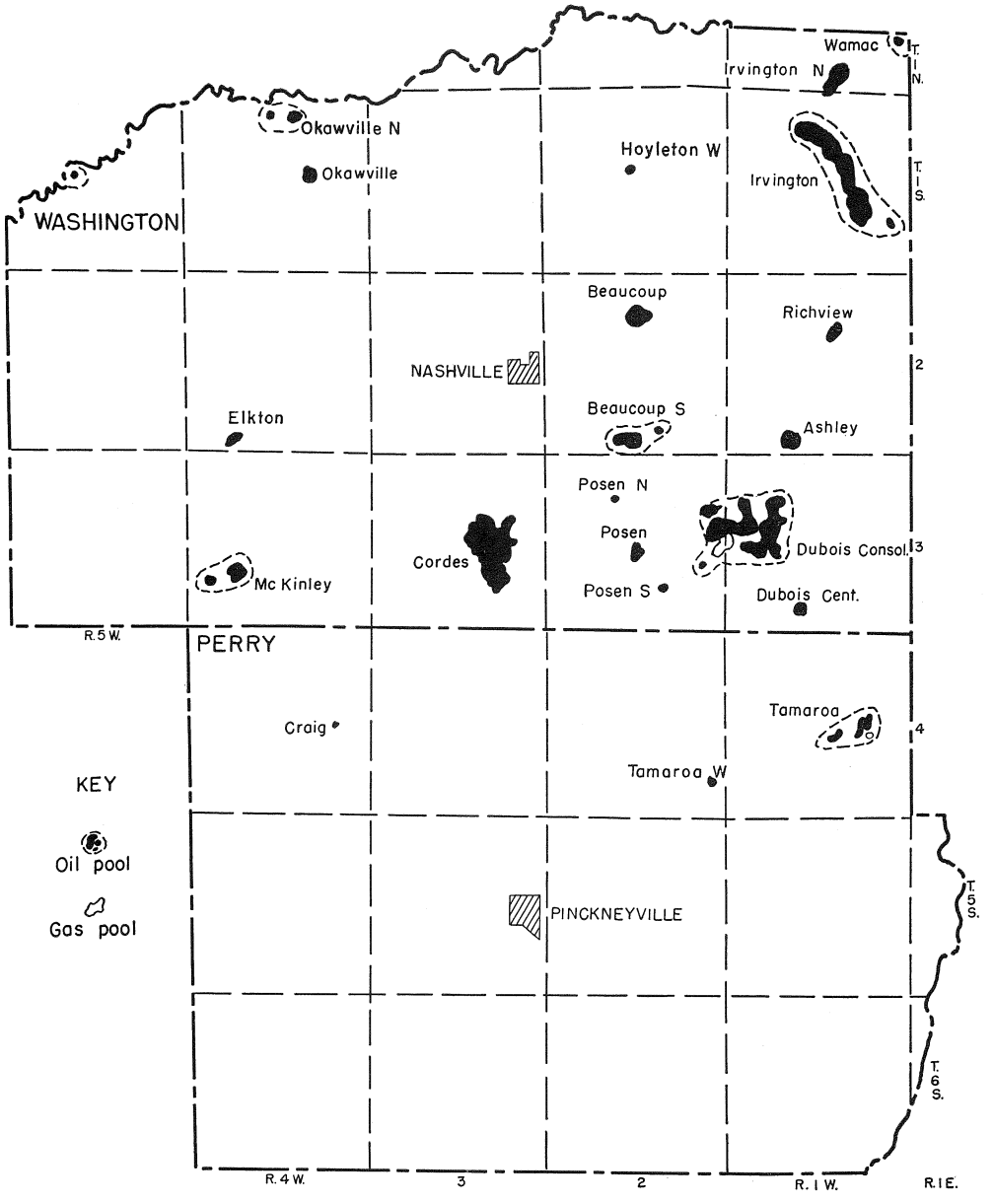


Fig. 14. — Area 9: Washington and Perry counties.

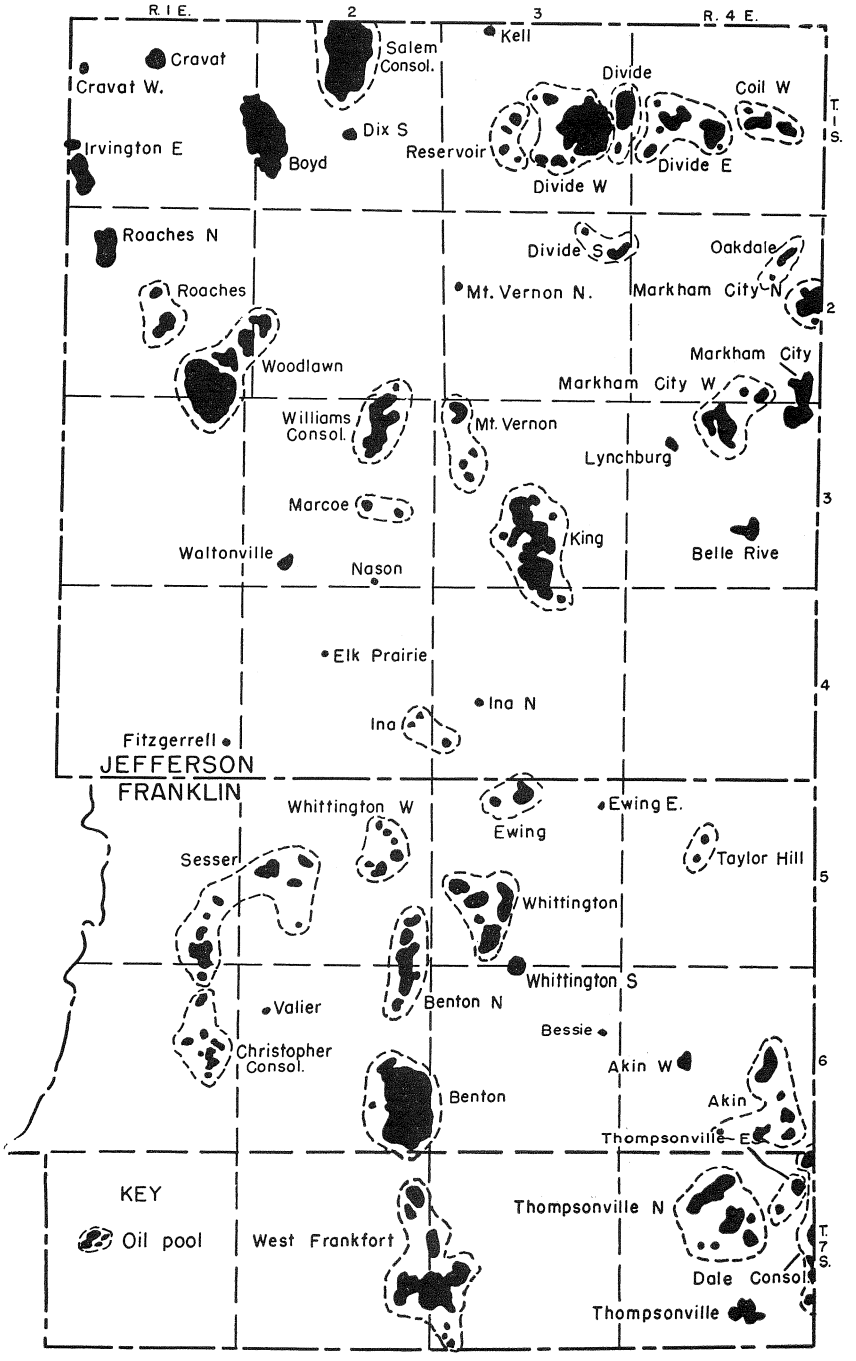


Fig. 15. — Area 10: Jefferson and Franklin counties.

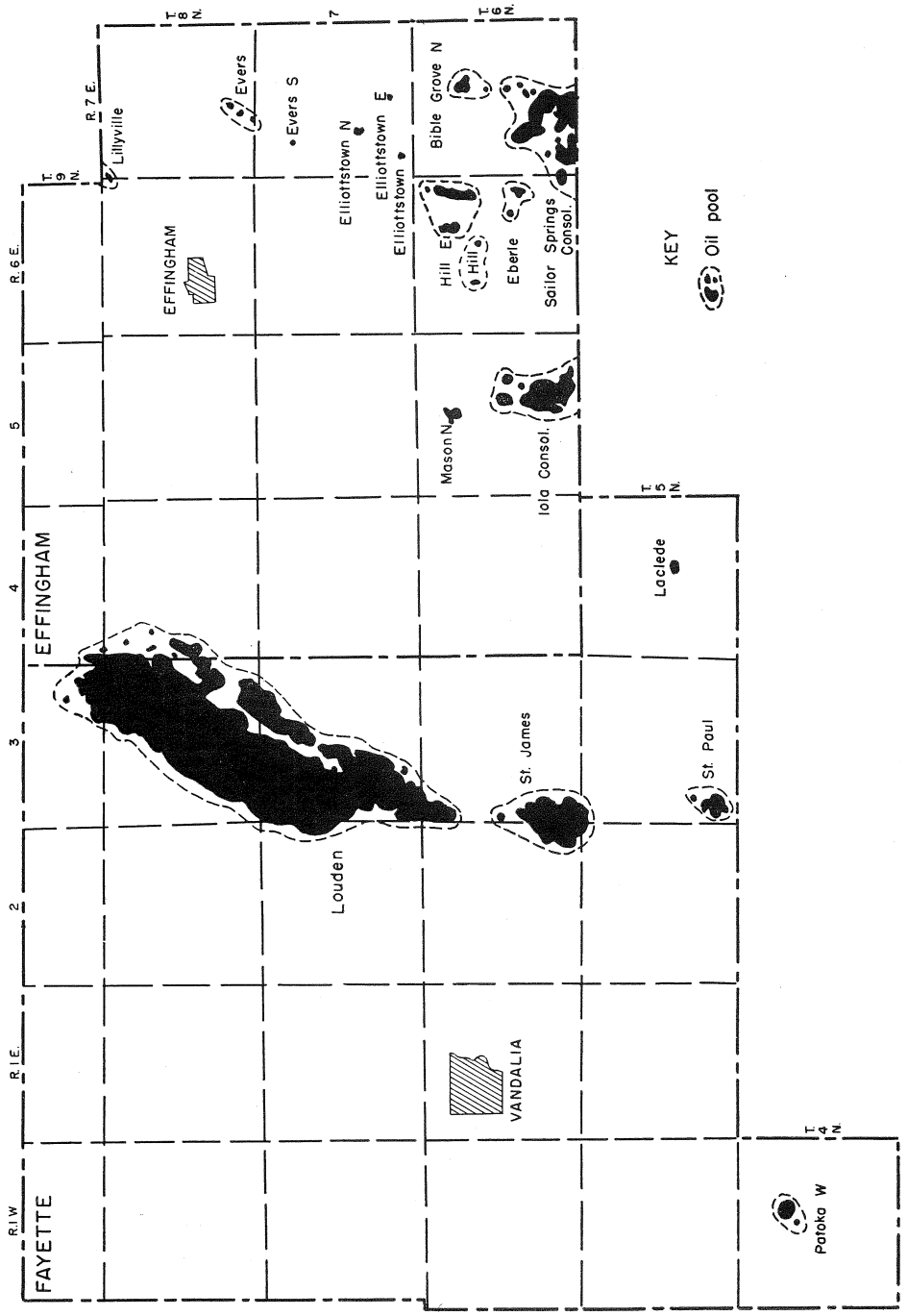


Fig. 16. — Area 11: Fayette and Effingham counties.

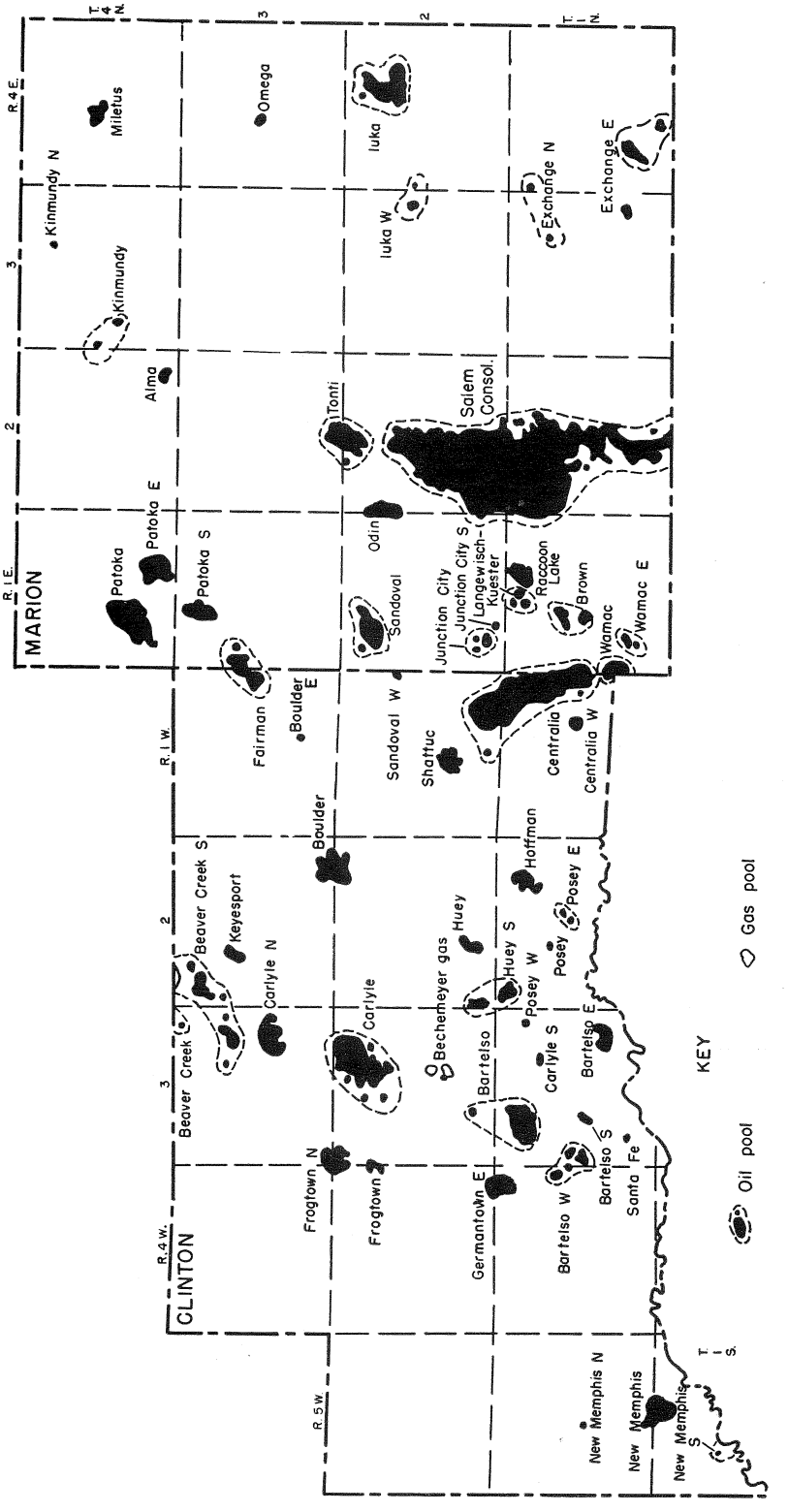


Fig. 17. — Area 12: Clinton and Marion counties.

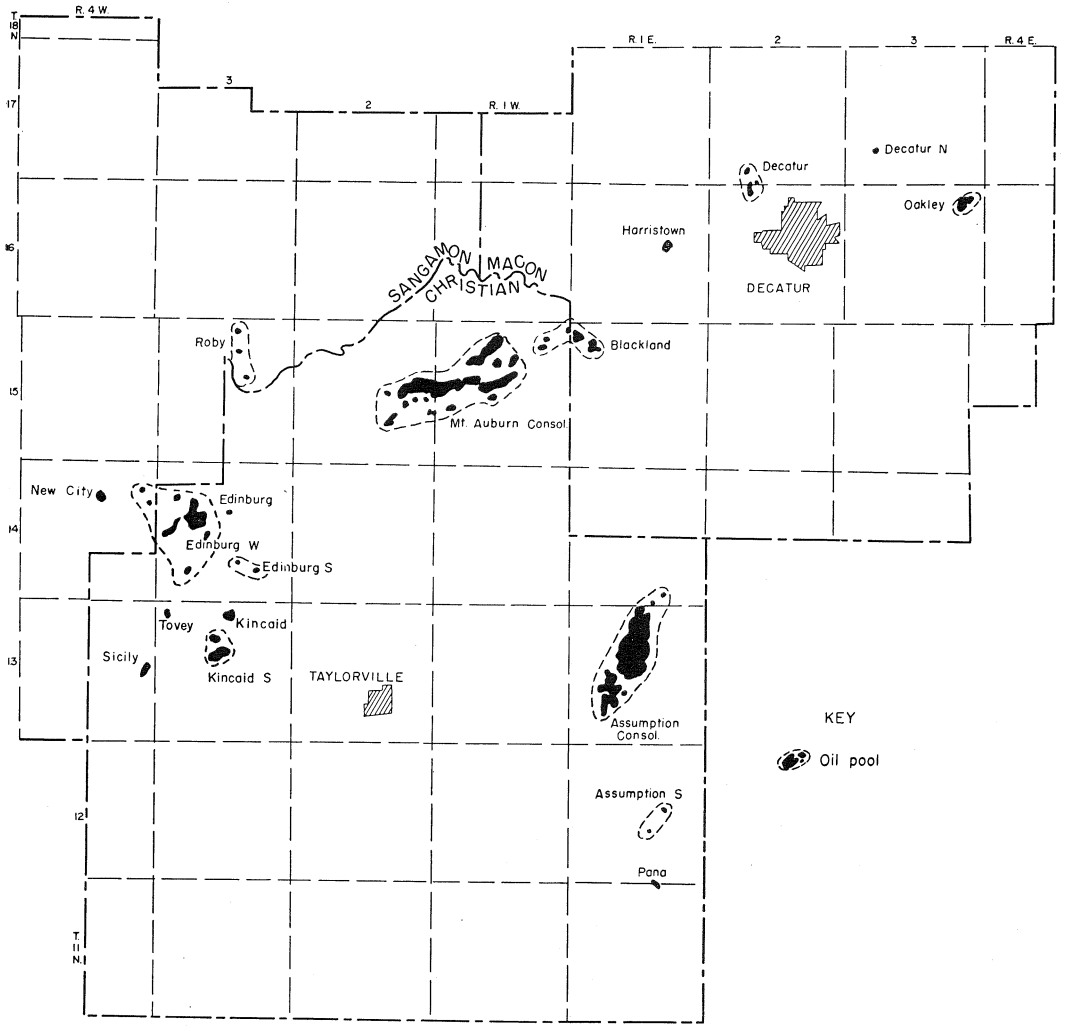


Fig. 18. — Area 13: Sangamon, Macon, and Christian counties.

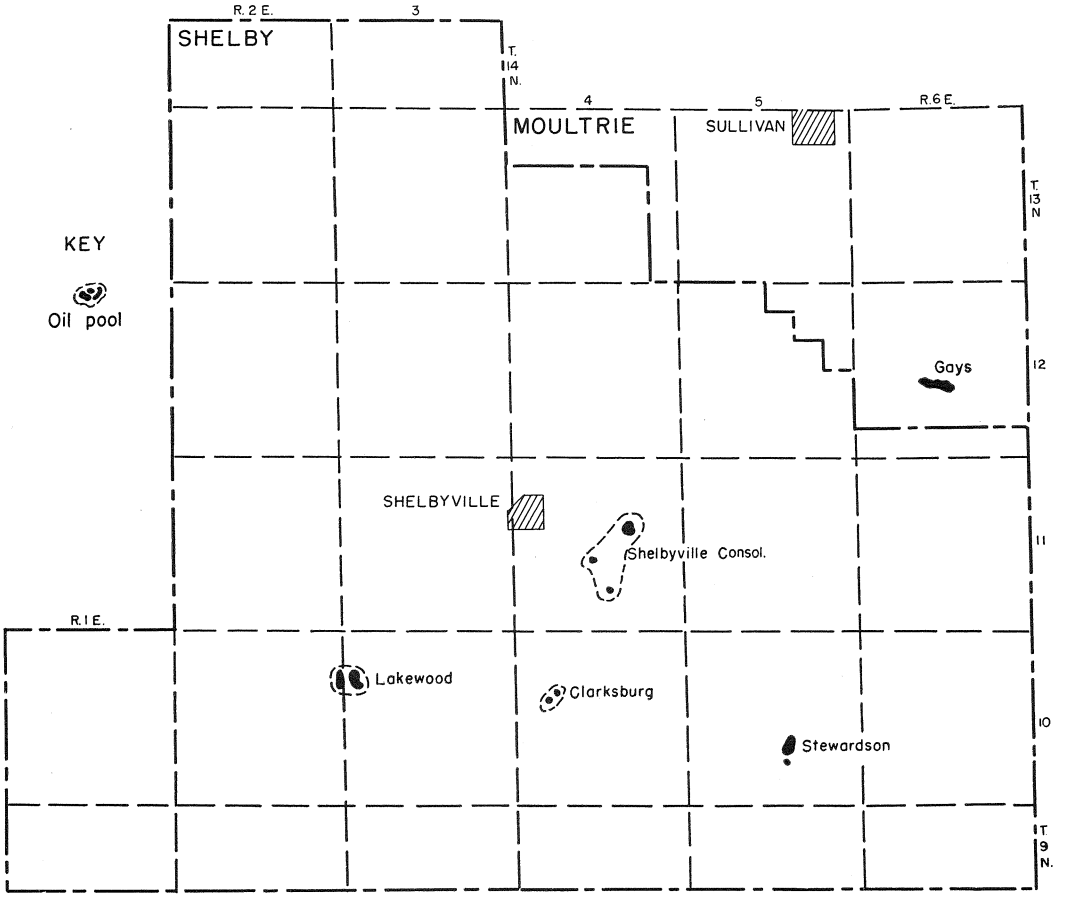


Fig. 19. — Area 14: Shelby and Moultrie counties.

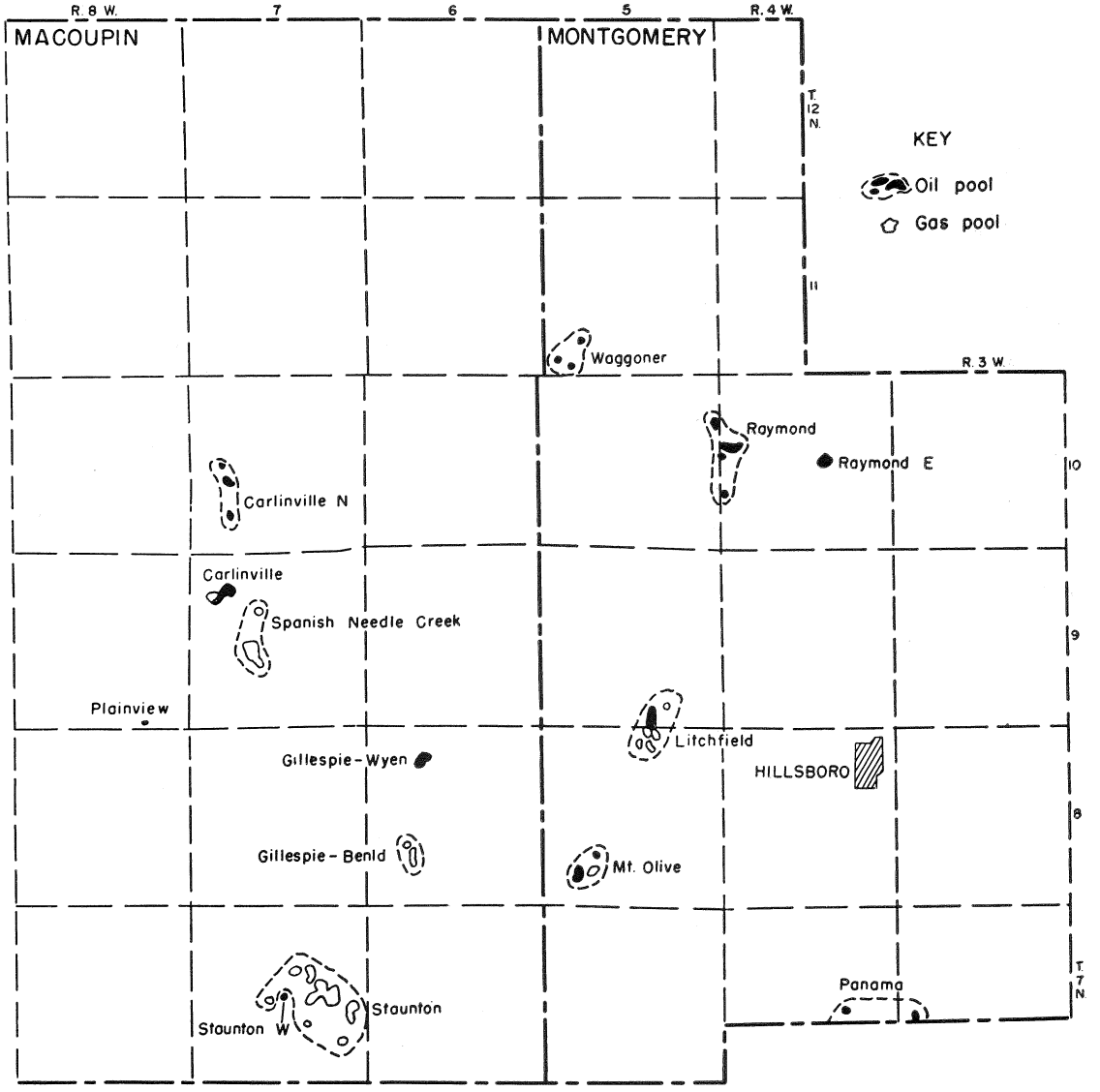


Fig. 20. — Area 15: Macoupin and Montgomery counties.

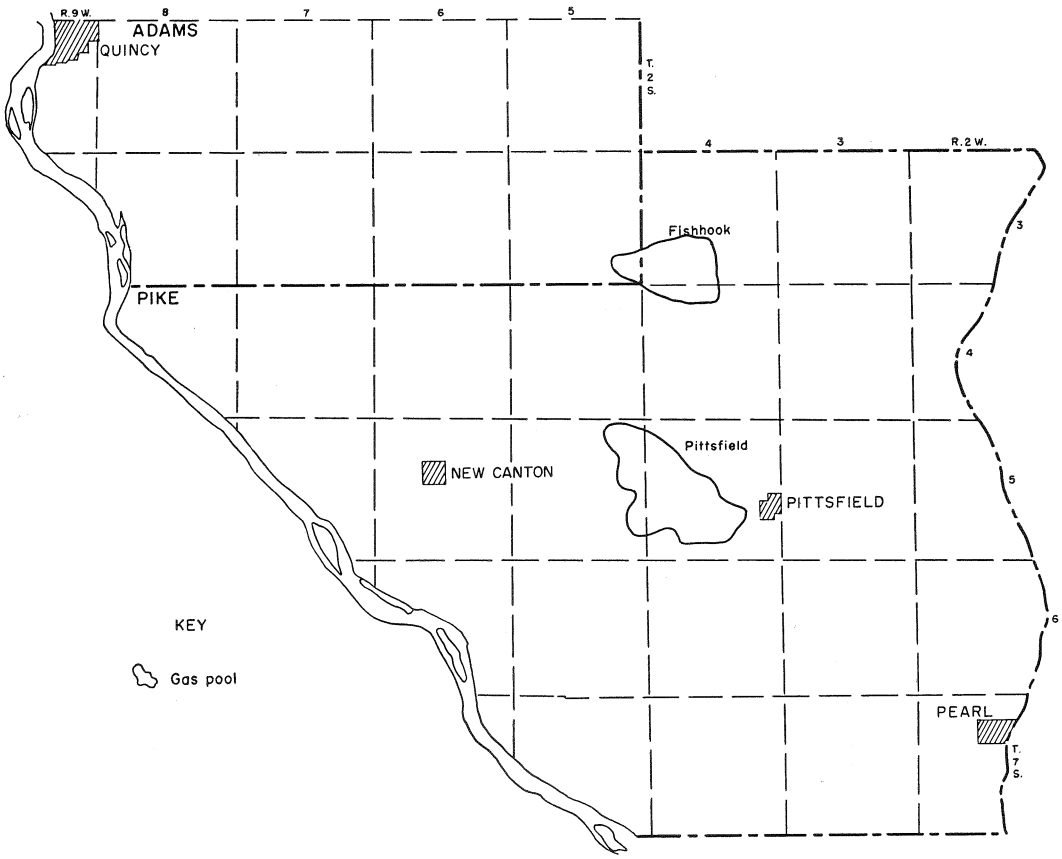


Fig. 21. — Area 16: Pike and Adams counties.

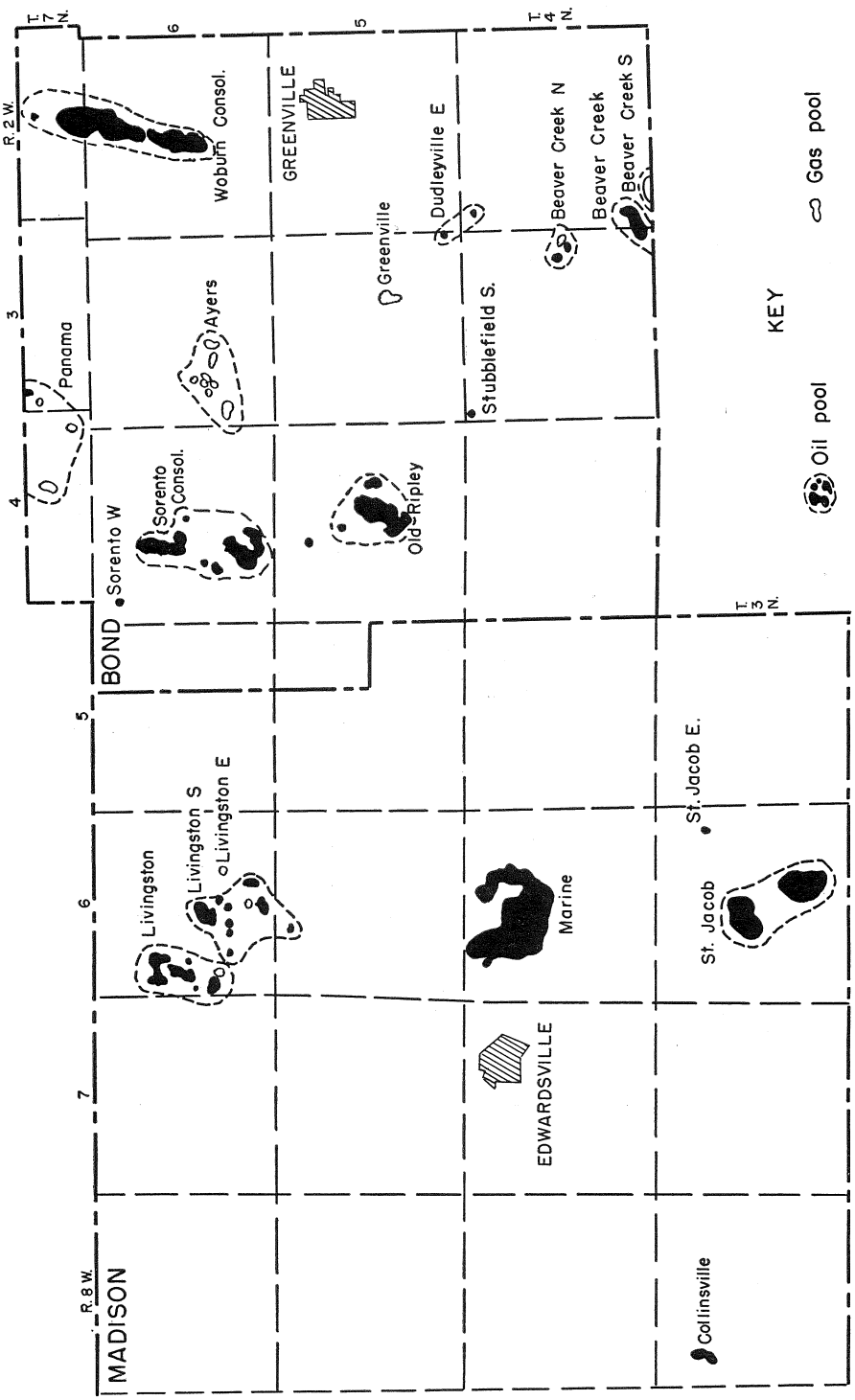


Fig. 22. — Area 17: Madison and Bond counties.

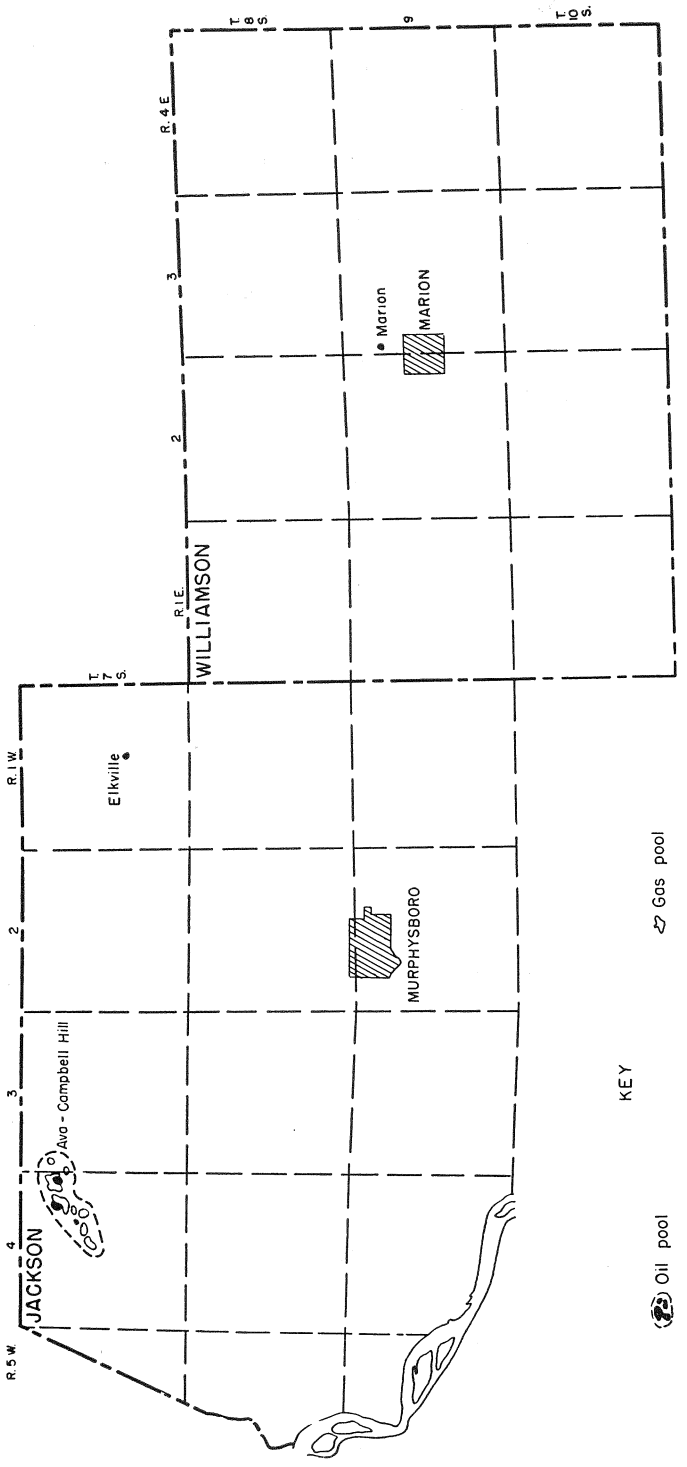


Fig. 23. — Area 18: Jackson and Williamson counties.

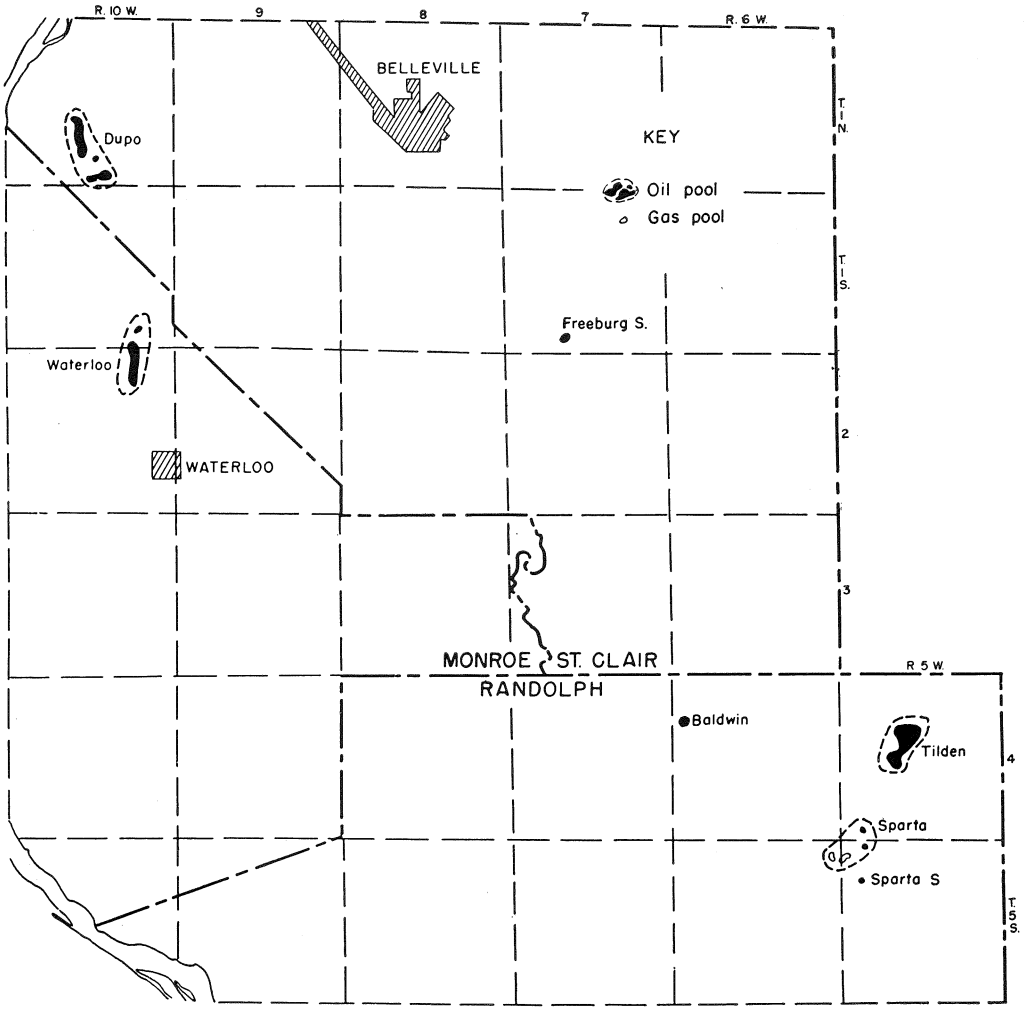


Fig. 24. — Area 19: Monroe, St. Clair, and Randolph counties.

COUNTY REPORTS

Adams County

Fig. 21, Area 16

Year	Total wells	Oil wells	Gas wells	Dry holes
1937	0	0	0	0
1938	0	0	0	0
1939	2	0	0	2
1940	1	0	0	1
1941	5	0	0	5
1942	2	0	0	2
1943	1	0	0	1
1944	0	0	0	0
1945	0	0	0	0
1946	1	0	0	1
1947	0	0	0	0
1948	0	0	0	0
1949	1	0	0	1
1950	3	0	0	3
1951	2	0	0	2
1952	0	0	0	0
1953	0	0	0	0
1954	0	0	0	0
1955	2	0	1	1
1956	9	0	4	5
	29	0	5	24

Adams County has had no commercial production of oil or gas. The first producing well in the county was a small gas well completed in 1955 in the Fishhook pool. In 1956 four more gas wells were completed; initial open flow capacities ranged from 46,000 cu. ft. daily to 2,000,000. These wells are in a Silurian limestone about 500 feet deep. They are in the Fishhook pool, most of which lies to the east in Pike County. All wells in the pool have been capped. The Fishhook pool may be used for gas storage.

The five dry holes drilled in 1956 included one dry hole in the Fishhook pool and four wildcats. No successful oil well has yet been drilled in Adams County.

Bond County

Fig. 22, Area 17

As shown in the table, Bond County produced more oil in 1956 than in any previous year, in fact 1956 production was almost a third of the total production to date for the county. Most of the producing wells drilled in 1955 were completed near the end of the year and still had comparatively high production rates in the early months of 1956. Most of the producing wells drilled in 1956 were completed early in the year and production had declined by the end of the year. Unless drilling results are better in 1957 than in 1956, production for 1957 will probably be less than in 1956.

In number of wells drilled, 1956 was second only to 1955 and far surpassed the third best year, 1950. However, only a third of the wells drilled in 1956 were completed as producers. Of the 84 dry holes completed, 41 were in pools and 43 were wildcats. Of the wells drilled in pools, 50 percent were dry, a very low success ratio.

Bond County was one of the counties which had an unusually high rate of wildcat drilling in 1956. Discoveries in pre-Mississippian pays during 1954 and 1955 increased interest in the possibilities of deep production in the counties along the western margin of the deep basin area. Two new pools discovered in 1956 are producing from a sandstone at the top of the Devonian. One, Sorento West, consisted of a single well which was abandoned at the end of the year. The second, Sorento South, expanded rapidly and was consolidated with Sorento before the end of 1956.

Bond County

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	5	0	1	4	0
1938	12	1	1	10	350
1939	7	0	0	7	400
1940	54	26	1	27	96,000
1941	21	4	0	17	164,000
1942	16	3	1	12	89,000
1943	13	0	1	12	63,000
1944	18	7	0	11	65,000
1945	3	0	0	3	52,000
1946	12	0	1	11	46,000
1947	19	9	0	10	73,000
1948	15	2	0	13	87,000
1949	23	11	1	11	86,000
1950	58	27	1	30	114,000
1951	39	4	0	35	107,000
1952	25	2	0	23	92,000
1953	14	0	0	14	80,000
1954	31	11	0	20	79,000
1955	163	90	2	71	993,000
1956	126	42	0	84	1,090,000
	674	239	10	425	3,378,000

Two new pays were discovered in Bond County in 1956. In Sorento Consolidated Pennsylvanian sandstone production was opened up, and in Woburn Consolidated two Aux Vases wells were completed, the first Aux Vases production reported in the county.

Although Bond County has had 11 oil or gas pools, as shown on the county map, most of the oil has come from two pools: Woburn Consolidated, which produced 614,000 barrels in 1956 for a total of 2,455,000 barrels, and Sorento Consolidated, which produced 419,000 barrels for a total of 639,000 barrels.

Only three other pools had production reported for 1956. Old Ripley produced 48,000 barrels to make a total of 102,000; Beaver Creek, 8,000 barrels for a total of 179,000, and Dudleyville East, a few hundred barrels for the year and a total production of about 2,000 barrels.

Bond County has one secondary recovery project. A small waterflood in the Bethel in the Woburn Consolidated pool, begun in 1951, has produced about 11,000 barrels of oil. A pressure maintenance project, begun in 1953, is credited with 14,000 barrels of oil produced in the Beaver Creek pool.

Christian County

Fig. 18, Area 13

Drilling activity in Christian County in 1956 was a little less than in 1955, but remained higher than average for the county. Most of the new producing wells were in the Mt. Auburn—Kincaid—Edinburg West area. One new pool, Sicily, was discovered during the year; three producing wells were completed in it.

The percentage of successful wells for the county was low because of the large number of wildcat wells drilled. Twenty-nine producing wells and 16 dry holes were drilled in pools, a success ratio of about 2 to 1. Unsuccessful wildcats numbered 39.

Production for the year set a new record. Eleven pools produced a total of 1,846,000 barrels of oil. Biggest producer was the Kincaid South pool, which made 810,000 barrels for the year, giving it a total production of 885,000 barrels. Assumption Consolidated was second for the year, producing 342,000 barrels; it has a cumulative total of 5,384,000 barrels. Three other pools each produced 200,000 to 235,000 barrels, and the remaining six pools had a combined total production of 32,000 barrels.

Christian County

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	3	0	0	3	0
1938	4	0	0	4	0
1939	4	0	0	4	0
1940	1	0	0	1	0
1941	3	0	0	3	0
1942	2	0	0	2	0
1943	4	1	0	3	3,000
1944	0	0	0	0	4,000
1945	1	1	0	0	4,000
1946	7	1	0	6	8,000
1947	3	1	0	2	6,000
1948	5	2	0	3	11,000
1949	172	130	0	42	1,099,000
1950	18	7	0	11	1,219,000
1951	27	10	0	17	820,000
1952	22	4	0	18	528,000
1953	34	20	0	14	487,000
1954	152	84	0	68	751,000
1955	95	43	0	52	1,608,000
1956	84	29	0	55	1,846,000
	641	333	0	308	8,395,000

Secondary recovery has been important in maintaining production in Christian County. The first waterflood project in the county was in the Benoist sandstone in the Assumption Consolidated pool. In general the Benoist wells in the pool were not as good as the Rosiclare wells, and were much more restricted in area than the Devonian wells.

Waterflooding began in 1950; by the end of 1956 it had produced 858,000 barrels from the Benoist sand, more than 10 percent of all of the oil produced in the county. In 1955 waterflooding of the Rosiclare sandstone and Devonian limestone was begun. Only a small amount of secondary recovery oil has so far been produced from these two pays. However, in 1956, 188,000 barrels of the 342,000 barrels produced in the Assumption Consolidated pool was attributed to secondary recovery, mainly from the Benoist. Total secondary recovery pro-

duction for the pool is 925,000 barrels, more than 10 percent of the total production for the county. If results of flooding the Rosiclare and Devonian are comparable to the Benoist flood, secondary recovery should become extremely important.

Clark County

Fig. 11, Area 6

Year	Total wells	Oil wells	Gas wells	Dry holes	New pool production
1937	5	0	1	4	0
1938	24	7	3	14	0
1939	20	4	0	16	0
1940	15	5	0	10	0
1941	20	7	1	12	0
1942	11	1	0	10	0
1943	6	2	0	4	0
1944	22	9	0	13	0
1945	5	1	0	4	0
1946	8	2	0	6	0
1947	46	10	0	36	0
1948	37	10	0	27	0
1949	50	16	0	34	28,000
1950	105	39	4	62	199,000
1951	57	26	0	31	266,000
1952	59	22	0	37	236,000
1953	41	9	0	32	187,000
1954	34	10	0	24	151,000
1955	67	33	0	34	152,000
1956	64	26	0	38	233,000
	696	239	9	448	1,450,000

Cumberland County

Fig. 11, Area 6

Year	Total wells	Oil wells	Gas wells	Dry holes	New pool production
1937	0	0	0	0	0
1938	5	0	0	5	0
1939	11	0	0	11	0
1940	1	0	0	1	0
1941	0	0	0	0	0
1942	5	0	0	5	0
1943	10	0	0	10	0
1944	6	1	0	5	0
1945	3	0	0	3	0
1946	50	26	0	24	10,000
1947	19	4	0	15	85,000
1948	16	7	0	9	52,000
1949	6	0	0	6	29,000
1950	9	2	0	7	19,000
1951	16	3	0	13	13,000
1952	5	1	0	4	12,000
1953	9	2	0	7	8,000
1954	18	3	0	15	9,000
1955	10	0	0	10	10,000
1956	11	0	0	11	7,000
	210	49	0	161	255,000

Clark and Cumberland Counties — Old Pools

Year	Old pool production	Year	Old pool production
1937	462,000	1947	795,000
1938	193,000	1948	1,136,000
1939	283,000	1949	1,450,000
1940	335,000	1950	1,694,000
1941	394,000	1951	1,660,000
1942	374,000	1952	1,517,000
1943	365,000	1953	1,448,000
1944	386,000	1954	1,589,000
1945	451,000	1955	1,886,000
1946	734,000	1956	1,880,000
			70,482,000*

* Includes 51,080,000 barrels of oil produced before 1937.

Clark and Cumberland were among the early oil producing counties, production dating back to 1904. It is impossible to break down the old production accurately between the two counties, so they must be treated as a unit. Many of these old pools are being waterflooded. Wells drilled in the waterflood areas are not included in the above tables.

Clark County has two good pools discovered since 1937, Weaver and Oak Point. Twelve of the producers drilled in 1956 were in the Oak Point pool. The 38 dry holes include 15 in pools and 23 wildcats.

Most of the Cumberland County "new pool" production comes from the Lillyville pool. There were no producing wells drilled in Cumberland County in 1956 outside of waterflood projects. The 11 dry holes included four in pools and seven wildcats.

Secondary recovery is very important in maintaining the level of production in the old pools of Clark and Cumberland counties. In 1956, 1,587,000 barrels of oil out of the 1,880,000 barrels produced were the result of waterflooding. Some of the projects are new, and others are being developed.

Clay County

Fig. 12, Area 7

Clay County had no new pool and no important new pay in 1956. Forty of the 66 producing wells completed were in the Sailor Springs Consolidated pool, and the

CLAY COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	91	75	0	16	1,522,000
1938	153	141	0	12	3,922,000
1939	159	136	0	23	4,159,000
1940	37	23	0	14	4,687,000
1941	93	59	0	34	1,785,000
1942	137	74	0	63	2,165,000
1943	201	148	0	53	4,158,000
1944	176	135	0	41	4,138,000
1945	105	63	0	42	4,005,000
1946	186	108	0	78	4,317,000
1947	196	125	0	71	4,407,000
1948	310	183	0	127	5,868,000
1949	167	101	0	66	4,475,000
1950	130	70	0	60	3,719,000
1951	150	61	0	89	5,004,000
1952	92	25	0	67	3,888,000
1953	119	58	0	61	3,543,000
1954	225	125	0	100	4,945,000
1955	199	113	0	86	4,212,000
1956	124	66	0	58	4,403,000
	3,050	1,889	0	1,161	79,322,000*

* Estimated in part and subject to revision.

other 26 about equally divided between Clay City Consolidated and the rest of the pools in the county. Forty-six of the dry holes were drilled in pools and 12 were wildcats.

Clay is one of the counties which showed the biggest decreases in drilling in 1956, a much bigger decrease than that for the state as a whole. There has never been a period of intensive drilling in the county, but it has annually ranked among the top dozen or so in number of completions. As a result, it is one of the most extensively drilled counties, and new pools of consequence are not apt to be found. However, only a few wells have tested pre-Mississippian strata in the county. The best hope for the future in Clay County lies in the discovery of profitable deep pays.

Secondary recovery projects are in operation in five pools in Clay County. All are small or quite recent. The Ingraham pool flood was begun in 1956, and had not shown any results at the end of the year. The other four pools with waterflood projects (Clay City Consolidated, Kenner West, Sailor Springs Consolidated, and Stanford South) produced 408,000 barrels of secondary recovery oil, less than 10 percent of the county's production for 1956. Cumulative secondary recovery oil production is about 1,037,000 barrels.

CLINTON COUNTY

Fig. 17, Area 12

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	29	15	0	14	84,000
1938	444	398	0	46	2,909,000
1939	62	35	0	27	2,756,000
1940	450	369	0	81	10,163,000
1941	64	25	1	38	4,215,000
1942	59	28	0	31	3,114,000
1943	44	9	2	33	2,520,000
1944	19	1	0	18	2,381,000
1945	27	11	0	16	2,409,000
1946	53	22	0	31	2,354,000
1947	46	21	0	25	1,964,000
1948	42	24	0	18	1,663,000
1949	103	71	0	32	2,188,000
1950	165	81	1	83	1,769,000
1951	120	41	0	79	1,756,000
1952	84	22	0	62	1,819,000
1953	68	11	0	57	1,659,000
1954	121	49	1	71	1,788,000
1955	93	31	2	60	1,678,000
1956	99	27	2	70	2,318,000
	2,192	1,291	9	892	54,932,000*

* Estimated in part and subject to revision. Includes 3,424,000 barrels of oil produced before 1937.

Two new pools were discovered in Clinton County in 1956. One, Germantown East, was the second best discovery of the year according to drilling and production by the end of the year; only Bourbon in Douglas County surpassed it. By the end of the year the 21 completed wells had produced 329,000 barrels of oil from the Devonian, and other wells were being drilled. Clinton County is in the part of the state where the Devonian, Silurian, and Trenton pays have produced the most oil. It should be possible to discover more new pools like Germantown East.

The second new pool was Beckemeyer Gas. Two gas wells and one oil well were completed by the end of the year. The two gas wells were capped and the oil well had not sold any oil. All three were Cypress sandstone wells.

Twenty-four of the 29 producing wells drilled in 1956 were in the two new pools,

23 of the 70 dry holes were pool dry holes, and the other 47 were wildcats.

Secondary recovery projects are in operation in two pools in Clinton County. The first project began in 1952 in the Bartelso pool. In 1956 the three floods operating in that pool produced 217,000 of the 356,000 barrels produced from the pool. Waterflooding was begun in the Centralia pool in 1956 and produced 136,000 barrels of oil in the first year. About 800,000 barrels of oil has been produced in Clinton County by secondary recovery operations.

Crawford County

Fig. 9, Area 4

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	20	13	0	7	1,632,000
1938	19	7	1	11	1,597,000
1939	7	2	0	5	1,063,000
1940	13	1	0	12	1,226,000
1941	5	1	0	4	1,398,000
1942	16	3	0	13	1,352,000
1943	7	0	0	7	1,305,000
1944	5	1	1	3	1,282,000
1945	7	4	0	3	1,281,000
1946	10	3	0	7	1,328,000
1947	19	8	0	11	1,278,000
1948	18	5	2	11	1,299,000
1949	27	14	0	13	1,398,000
1950	53	15	1	37	1,527,000
1951	56	30	0	26	1,518,000
1952	72	45	2	25	1,715,000
1953	74	28	0	46	2,055,000
1954	219	94	3	122	2,427,000
1955	233	133	1	99	2,599,000
1956	203	105	2	96	2,953,000
	1,083	512	13	558	172,623,000*

* Includes 140,390,000 barrels produced before 1937.

Although few Illinois counties have produced as much oil as Crawford County, most of the drilling and production occurred during the 30 years preceding 1937. During that period about 9,000 producing wells were drilled and 140,390,000 barrels of oil were produced as compared with 525 oil and gas wells drilled in the past 20 years, and 32,233,000 barrels of oil produced.

When the deep basin was opened up in 1937, there had been little drilling in Crawford County for 10 years, and production was dropping. In 1954 several new pays were opened up in the old producing areas, and Crawford County has been one of the most active drilling counties for the past three years.

Secondary recovery by means of both gas and water has been tried in Crawford County, but water injection has proved more satisfactory than gas. The steady increase in production since 1950 must be attributed to secondary recovery. In 1956, 1,887,000 barrels, or two-thirds of the production for the year, resulted from waterflooding.

Coles County

Fig. 10, Area 5

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	0
1938	7	0	0	7	0
1939	17	3	0	14	0
1940	9	1	0	8	9,000
1941	8	1	0	7	9,000
1942	12	1	0	11	8,000
1943	8	1	0	7	11,000
1944	14	10	0	4	28,000
1945	93	60	0	33	446,000
1946	378	299	0	79	4,272,000
1947	38	21	0	17	2,058,000
1948	49	26	1	22	1,295,000
1949	22	2	0	20	779,000
1950	18	0	0	18	597,000
1951	19	4	0	15	464,000
1952	9	0	0	9	392,000
1953	10	1	0	9	379,000
1954	12	3	0	9	415,000
1955	49	22	4	23	542,000
1956	266	140	6	120	1,636,000
	1,039	595	11	433	13,340,000

As shown in the table, 1956 was the second biggest year for oil well drilling in Coles County, due to the development of the Cooks Mills area. This development is discussed on page 13. The biggest year of drilling was 10 years earlier when the Mattoon pool was being developed. Outside of these two pools, Coles County has no significant production. Westfield North produced less than 1,000 barrels before it was abandoned. Ashmore East, a one-well Pennsylvanian sandstone pool discovered in 1956, had had no pipeline runs at the end of the year. Two old pools are mainly in other counties, and their production is

assigned to those counties. They are Warrenton-Borton, which is included in Edgar County production, and Westfield, included with Clark County.

Until 1956 the Mattoon pool produced almost all of the Coles County oil. It has produced a total of 12,248,000 barrels of the 13,340,000 barrels produced in the county. Waterflooding was begun in 1950 in the Rosiclare sandstone, and a second project was begun in 1952 in the Cypress and Rosiclare pays. Secondary recovery is credited with a total of 551,000 barrels of oil, including 332,000 barrels of the 635,000 barrels produced in 1956.

The Cooks Mills Consolidated pool produced 1,001,000 barrels of oil in Coles County in 1956, bringing its total production up to 1,092,000 barrels.

Douglas County

Fig. 10, Area 5

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	0	0	0	0	0
1939	2	0	0	2	0
1940	2	0	0	2	0
1941	2	0	0	2	0
1942	0	0	0	0	0
1943	1	0	0	1	0
1944	2	0	0	2	0
1945	0	0	0	0	0
1946	0	0	0	0	0
1947	1	0	0	1	0
1948	1	0	0	1	0
1949	3	0	0	3	0
1950	3	0	0	3	0
1951	4	0	0	4	0
1952	4	0	0	4	0
1953	0	0	0	0	0
1954	1	0	0	1	0
1955	12	1	0	11	0
1956	248	102	5	141	724,000
	286	103	5	178	724,000

Prior to 1956 very little testing for oil or gas had been done in Douglas County. The nearest production of economic value was about 10 miles to the south in the Mattoon pool. A few producing wells had been drilled closer to the county line, but none had produced oil in commercial quantity. The Murdock pool in Douglas County, discovered in 1955, is a single Pennsylvanian sandstone well which has produced only a few barrels of oil.

Toward the end of 1955 good Rosiclare sandstone production was found in the Cooks Mills area in northern Coles County. Early in 1956 the Cooks Mills Consolidated pool was extended into Douglas County. Three more pools — Bourbon, Bourbon North, and Chesterville—were discovered in 1956, all of them a short distance north of Cooks Mills Consolidated in Douglas County. One of these pools, Bourbon, was the best pool discovered in 1956. It had 50 producing wells at the end of the year and had produced almost half a million barrels of oil. The Cooks Mills-Bourbon area is discussed in more detail on page 13.

Of the 248 wells drilled in Douglas County in 1956, only 107 were successful. However, only 52 of the dry holes were in pools, giving a success ratio of 2 to 1 for pool drilling. The other 89 dry holes were wildcats. Some of them had fairly good shows of oil, but Bourbon lies close to the northern edge of the part of the state having the best possibilities for oil.

Edgar County

Fig. 10, Area 5

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	1,000
1938	5	0	0	5	500
1939	9	0	0	9	500
1940	10	0	0	10	500
1941	9	1	1	7	500
1942	3	0	0	3	0
1943	1	0	0	1	0
1944	0	0	0	0	0
1945	3	0	0	3	0
1946	7	0	2	5	0
1947	12	1	0	11	0
1948	5	1	0	4	0
1949	155	64	2	89	132,000
1950	113	40	5	68	596,000
1951	34	4	2	28	374,000
1952	20	2	0	18	270,000
1953	24	7	1	16	183,000
1954	20	3	0	17	133,000
1955	23	2	1	20	124,000
1956	34	5	0	29	116,000
	488	130	14	344	1,958,000*

* Includes 27,000 barrels of oil produced prior to 1937 from the Warrenton-Borton pool.

Edgar is one of the counties which had big increases in drilling in 1956 in contrast to the over-all decrease. Because of the county's proximity to the Cooks Mills—Bourbon area, an increase in wildcat drilling might have been expected. However, most of the drilling was in pools. Five small producing wells were completed, four in Grandview and one in Inclose, 19 dry holes were drilled in pools, and only 10 of the 34 wells drilled in 1956 were wildcats.

Oil produced during 1956 included 64,000 barrels from the Dudley pool, 50,000 from Elbridge, and insignificant amounts from Inclose, Grandview, and Warrenton-Borton pools.

Two pools, Redmon North and Dudley West, consist of one gas well each, and Grandview and Inclose are essentially gas pools. A few of the wells are being used, but no gas is being metered and none of the wells can be considered commercial.

EDWARDS COUNTY

Fig. 8, Area 3

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	0
1938	0	0	0	0	0
1939	34	17	0	17	55,000
1940	79	62	0	17	1,067,000
1941	52	36	0	16	1,466,000
1942	49	30	0	19	1,775,000
1943	68	37	0	31	1,355,000
1944	143	95	0	48	1,914,000
1945	145	105	0	40	2,855,000
1946	65	37	0	28	1,929,000
1947	77	33	0	44	1,538,000
1948	63	27	0	36	1,337,000
1949	70	31	0	39	1,207,000
1950	106	56	1	49	1,216,000
1951	103	39	0	64	1,544,000
1952	101	40	0	61	1,506,000
1953	119	68	0	51	1,565,000
1954	62	24	0	38	1,379,000
1955	84	43	0	41	1,462,000
1956	70	28	0	42	1,534,000
	1,491	808	1	682	26,704,000*

* Estimated in part and subject to revision.

Edwards is one of the most densely drilled counties. Unless new pays are opened up, the amount of future drilling will probably be small. In 1956 there was no area of concentrated drilling. The 28 new producing wells were distributed, for the most part, one or two to a pool; no pool had more than half a dozen. The 42 dry holes included 31 in pools and 11 wildcats.

Waterflooding and pressure maintenance are being used effectively in the Albion Consolidated pool. Waterflooding is also being used in Maplegrove Consolidated and Samsville North, and pressure maintenance in Bone Gap Consolidated. In 1956, 422,000 barrels of oil, more than one-fourth of the year's production, was recovered by secondary recovery operations. Over 2,000,000 barrels of the county's total production is attributed to secondary recovery.

EFFINGHAM COUNTY

Fig. 16, Area 11

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	4	0	0	4	0
1938	8	0	0	8	0
1939	13	0	0	13	0
1940	12	3	0	9	2,000
1941	32	17	0	15	173,000
1942	38	16	0	22	194,000
1943	44	29	0	15	365,000
1944	38	15	0	23	390,000
1945	88	55	0	33	980,000
1946	42	12	0	30	835,000
1947	39	19	0	20	577,000
1948	33	8	0	25	476,000
1949	23	12	0	11	453,000
1950	71	34	0	37	589,000
1951	48	20	0	28	440,000
1952	23	2	0	21	395,000
1953	19	4	0	15	326,000
1954	39	16	0	23	473,000
1955	58	24	0	34	545,000
1956	38	13	0	25	558,000
	710	299	0	411	7,768,000

As shown in the table, Effingham County has had no outstanding peaks or lows in drilling activity or oil production; variation in drilling from year to year has usually been no greater than that for the state as a whole. Most of the pools are small. About 70 percent of the production has come from the two biggest pools, Iola Consolidated and Sailor Springs Consolidated,

both of which have most of their wells and production in Clay County. A small area of the Louden pool extends from Fayette County into Effingham.

At present Iola Consolidated has the highest production rate in the county. Eleven of the 13 producing wells completed in 1956 were in the Iola Consolidated pool, which produced 188,000 barrels for the year, bringing its total production to 2,863,000 barrels.

Sailor Springs Consolidated produced only 98,000 barrels in 1956, but has a total production of 3,291,000 barrels. The only secondary recovery operations in Effingham County are in this pool. Four waterflood projects, all in the Rosiclare or McClosky, were begun in 1954 and 1955. In 1956, 33,000 barrels, about one-third of the year's production, was due to waterflooding. About 50,000 barrels of oil has so far been produced in this way.

Hill East, the largest pool lying wholly in Effingham County, had a 1956 production of 187,000 barrels, bringing its total up to 462,000 barrels.

Eleven of the dry holes drilled in 1956 were in pools and 14 were wildcats. No new pool or important new pay was discovered.

Fayette County

Fig. 16, Area 11

Fayette is one of the few counties in the state in which oil wells outnumber dry holes. During 1938, 1939, and 1940, when Louden and St. James pools were being developed, about 90 percent of all wells drilled were producers. Annual completions for the entire state usually show a majority of the holes to be dry. Fayette County had a second period of intensive drilling in 1950 during which an extension to the Louden pool was drilled up. Except for these two periods, Fayette has had few wells drilled and most of them have been unsuccessful. Of the 29 wells drilled in 1956, nine were producers, eight were dry holes in pools, and 12 were unsuccessful wildcats.

Fayette County

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	11	2	0	9	0
1938	575	509	1	65	1,940,000
1939	960	895	0	65	18,791,000
1940	577	515	0	62	28,281,000
1941	238	190	0	48	24,871,000
1942	69	47	0	22	19,499,000
1943	44	18	0	26	14,845,000
1944	19	1	0	18	12,234,000
1945	9	0	0	9	10,197,000
1946	24	4	0	20	8,930,000
1947	22	3	2	17	8,055,000
1948	12	6	0	6	7,255,000
1949	78	52	2	24	6,631,000
1950	173	114	0	59	7,718,000
1951	80	24	3	53	6,514,000
1952	36	7	6	23	6,016,000
1953	18	6	0	12	5,620,000
1954	14	7	0	7	6,668,000
1955	18	4	0	14	8,075,000
1956	29	9	0	20	10,369,000
	3,006	2,413	14	579	212,509,000

Three of the five pools in Fayette County are small. St. Paul, Patoka West, and Laclede had a combined production of about 25,000 barrels in 1956, and a total production of less than 1,000,000 barrels of oil.

A secondary recovery project by waterflooding was begun in the St. James pool in 1954. Only nine producing wells are included in the project, so the amount of oil produced by this method is comparatively small. Only 25,000 of the 406,000 barrels produced in 1957 are attributed to secondary recovery, and only 80,000 barrels of the pool's total production of about 13,743,000 barrels of oil is so classified.

Pressure maintenance was used in the Louden pool from early in the pool's development. In 1950 one waterflood project was begun. Others have been or are being started, including five new floods in 1956. Flooding has been confined to the Chester (Mississippian) sands; pressure maintenance is still used in the Devonian. In 1956, Louden produced 9,928,000 barrels of oil, of which 7,694,000 barrels were attributed to waterflooding or pressure maintenance. These same operations are credited with 30,950,000 barrels of the total production of 197,968,000 barrels of oil from the Louden pool.

Franklin County

Fig. 15, Area 10

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	6	0	0	6	0
1939	9	1	0	8	3,000
1940	20	16	0	4	79,000
1941	277	231	0	46	7,144,000
1942	65	23	0	42	5,588,000
1943	58	25	0	33	2,737,000
1944	50	23	0	27	2,129,000
1945	28	9	0	19	1,650,000
1946	10	1	0	9	1,301,000
1947	49	30	0	19	1,233,000
1948	127	78	0	49	1,776,000
1949	116	64	0	52	2,034,000
1950	77	39	0	38	1,687,000
1951	32	7	0	25	3,150,000
1952	20	6	0	14	3,310,000
1953	16	7	0	9	2,996,000
1954	36	21	0	15	2,386,000
1955	53	28	0	25	2,285,000
1956	84	40	0	44	2,075,000
	1,133	649	0	484	48,962,000

Franklin County is one of the few Illinois counties that showed an appreciable increase in drilling last year in contrast to the state's over-all decrease. Drilling was widespread; 12 of the 40 new oil wells completed were in the Akin pool, 11 were in the West Frankfort pool, and most of the others were distributed one or two to a pool.

Of the 44 dry holes, 23 were in pools and 21 were unsuccessful wildcats. One new pool was discovered, Ewing East, which had not run any oil at the end of the year.

The Benton pool produced 1,050,000 barrels of oil in 1956, slightly more than half of the production for the county. The total for the pool on January 1, 1957, was 32,708,000 barrels or about three fourths of the county's total production. Secondary recovery has probably been more important in the Benton pool than in any other pool in the state except possibly Salem Consolidated and Louden. In 1949 when waterflooding began, annual production had dropped to 511,000 barrels; in 1956 secondary recovery is credited with 734,000 barrels in Benton, which has had a total of 9,449,000 barrels of oil recovered by waterflooding.

Gallatin County

Fig. 7, Area 2

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	0	0	0	0	0
1939	19	6	0	13	25,000
1940	24	12	0	12	109,000
1941	96	62	0	34	878,000
1942	53	30	1	22	878,000
1943	49	39	0	10	1,052,000
1944	42	25	0	17	1,317,000
1945	31	15	0	16	967,000
1946	22	9	0	13	929,000
1947	88	45	1	42	859,000
1948	217	149	1	67	2,245,000
1949	194	112	1	81	3,057,000
1950	123	54	2	67	1,914,000
1951	78	31	1	46	1,632,000
1952	65	30	0	35	1,463,000
1953	83	47	0	36	1,456,000
1954	96	63	0	33	1,480,000
1955	200	118	0	82	2,675,000
1956	131	68	0	63	3,057,000
	1,611	915	7	689	25,992,000

Gallatin is one of the counties that had the biggest decrease in drilling in 1956, but drilling was so far above normal in 1955 that in spite of a decrease of more than 25 percent, 1956 was the fourth highest drilling year for the county.

Most of the new producing wells were in either Roland Consolidated (37 wells) or Inman East Consolidated (19 wells). Forty-three of the dry holes were drilled in pools, and 20 were wildcats.

Secondary recovery operations are widespread and successful. Four pools, Inman East Consolidated, Inman West Consolidated, Junction, and Roland Consolidated, have waterflood projects, and Omaha has pressure maintenance. More than half of the 1956 production (1,687,000 barrels) is the result of secondary recovery operations, and almost 20 percent of the county's total production (5,121,000 barrels).

Hamilton County

Fig. 6, Area 1

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	2	0	0	2	0
1938	1	0	0	1	0
1939	7	1	0	6	500
1940	92	78	0	14	680,000
1941	432	372	0	60	8,837,000
1942	256	185	0	71	9,964,000
1943	156	112	0	44	7,317,000
1944	111	66	0	45	5,887,000
1945	83	55	0	28	4,874,000
1946	84	40	0	44	3,956,000
1947	100	65	0	35	3,700,000
1948	111	70	0	41	3,587,000
1949	88	41	0	47	3,346,000
1950	207	116	0	91	3,887,000
1951	240	112	0	128	4,603,000
1952	117	47	0	70	4,104,000
1953	99	48	0	51	3,435,000
1954	77	32	0	45	3,311,000
1955	191	110	0	81	4,095,000
1956	161	80	0	81	4,252,000
	2,615	1,630	0	985	79,837,000

Most of the pool wells drilled in Hamilton County in 1956 were in the Dale Consolidated pool, and most of the new production is from the Aux Vases sandstone. A total of 57 producing wells, 51 of them in the Aux Vases, were completed in Dale Consolidated and 15 Aux Vases and six Renault wells in Bungay Consolidated. The 81 dry holes include 58 pool wells and 23 wildcats.

Secondary recovery operations are in effect in the two biggest pools in the county. Dale Consolidated, which has produced and is currently producing about three-fourths of the Hamilton County oil, has four small waterflood projects; their 1956 production was only 157,000 barrels out of 3,018,000 for the pool for the year.

In Bungay Consolidated an Aux Vases flood produced 202,000 barrels in 1956, or more than 25 percent of the pool's production for the year which amounted to 792,000 barrels.

Hancock and McDonough

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	17	12	0	5	148,000
1938	9	2	0	7	128,000
1939	10	2	0	8	136,000
1940	11	4	0	7	121,000
1941	11	3	0	8	114,000
1942	6	1	0	5	107,000
1943	1	0	0	1	97,000
1944	5	0	0	5	108,000
1945	9	4	0	5	107,000
1946	0	0	0	0	108,000
1947	5	0	0	5	101,000
1948	5	1	0	4	94,000
1949	5	1	0	4	76,000
1950	3	0	0	3	75,000
1951	3	0	0	3	74,000
1952	8	0	0	8	78,000
1953	6	1	0	5	72,000
1954	2	0	0	2	58,000
1955	15	2	0	13	71,000
1956	8	1	0	7	67,000
	139	34	0	105	4,080,000*

* Includes 2,140,000 barrels produced before 1937.

Oil production in Hancock and McDonough counties is from a single pool, Colmar-Plymouth, and cannot be divided. The pool was discovered in 1914. A total of 497 producing wells have been drilled in the two counties, 463 of them before 1937, and more than half of the oil produced was produced before 1937.

In the 20 years since the deep basin was opened up, there has been little drilling in Hancock or McDonough counties. The eight wells completed in 1956 include one oil well, one pool dry hole, and three wildcats in McDonough County and one pool dry hole and two wildcats in Hancock County.

Jackson County

Fig. 23, Area 18

Results of drilling in Jackson County have not been encouraging. Only two of the 55 wells drilled in the past 20 years have been completed as producing wells, and it is doubtful that either will be economically successful.

JACKSON COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	3	0	0	3	0
1939	1	0	0	1	0
1940	5	0	0	5	0
1941	10	1	0	9	500
1942	5	0	0	5	500
1943	2	0	0	2	500
1944	2	0	0	2	500
1945	2	0	0	2	500
1946	0	0	0	0	200
1947	1	0	0	1	0
1948	3	0	0	3	200
1949	3	0	0	3	200
1950	0	0	0	0	0
1951	0	0	0	0	500
1952	2	0	0	2	0
1953	3	0	0	3	0
1954	4	0	0	4	0
1955	5	0	0	5	0
1956	4	1	0	3	0
	55	2	0	53	4,000

Ava—Campbell Hill, older of the two pools in the county, was discovered in 1916 and abandoned in 1943. It had both oil and gas wells but produced little of either. In 1956 a Cypress oil well was completed, which revived the pool, but no production was reported for 1956.

The Elkville pool consists of a single well drilled in 1941 which has produced about 4,000 barrels of oil. No production has been reported since 1951.

JASPER COUNTY

Fig. 13, Area 8

No new pool was discovered in Jasper County in 1956, but the Oak Point pool expanded from Clark County into Jasper County, and the first production in Jasper County from Sailor Springs Consolidated was reported, from a well drilled in 1955.

Thirteen Aux Vases sandstone oil wells were completed in the Jasper County portion of Oak Point and eight McClosky wells in Ste. Marie West. Most of the other wells among the 62 producing wells completed in the county in 1956 were in Clay City Consolidated. The 62 dry holes include 30 in pools and 32 wildcats.

Four pools in the county have waterflood projects: Clay City Consolidated, Dundas East, Ste. Marie and Willow Hill East. The Ste. Marie waterflood began in 1948, one of the early ones in the deep basin. In 1956 secondary recovery projects produced 207,000 barrels of oil, about 10 percent of the county's production for the year. About 600,000 barrels of oil have been recovered by secondary recovery methods.

JASPER COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	3	0	0	3	0
1938	6	0	0	6	0
1939	8	1	0	7	0
1940	63	47	0	16	608,000
1941	176	140	0	36	3,887,000
1942	101	71	0	30	3,026,000
1943	26	11	0	15	1,499,000
1944	18	5	0	13	975,000
1945	40	18	0	22	1,055,000
1946	61	26	0	35	1,183,000
1947	97	46	0	51	1,373,000
1948	118	49	0	69	1,310,000
1949	77	33	0	44	1,374,000
1950	70	29	0	41	1,382,000
1951	32	9	0	23	1,479,000
1952	40	8	0	32	1,114,000
1953	30	8	0	22	613,000
1954	27	16	0	11	1,360,000
1955	165	117	0	48	2,104,000
1956	124	62	0	62	2,209,000
	1,282	696	0	586	26,551,000*

* Estimated in part. Subject to revision.

JEFFERSON COUNTY

Fig. 15, Area 10

Three new pools, Cravat West, Mt. Vernon North, and Oakdale, were discovered in Jefferson County in 1956. Cravat West had had no commercial production from its two Pennsylvanian wells at the end of the year. Mt. Vernon North was a one-well McClosky pool which produced about 5,000 barrels of oil. Oakdale had four Aux Vases and two McClosky wells which had produced 61,000 barrels of oil.

Divide West had more producing wells drilled in 1956 than any other pool in the county. Thirteen Ste. Genevieve and four

JEFFERSON COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	68	40	0	28	971,000
1939	73	36	0	37	
1940	33	16	0	17	960,000
1941	184	147	0	37	3,449,000
1942	84	32	0	52	3,922,000
1943	116	64	0	52	3,029,000
1944	142	88	0	54	2,743,000
1945	173	120	0	53	4,918,000
1946	76	46	0	30	4,449,000
1947	51	19	0	32	3,538,000
1948	89	39	0	50	3,222,000
1949	47	23	0	24	3,003,000
1950	50	17	0	33	2,477,000
1951	52	11	0	41	2,050,000
1952	63	26	0	37	1,995,000
1953	52	25	0	27	2,011,000
1954	98	52	0	46	2,271,000
1955	85	43	0	42	2,506,000
1956	93	39	0	54	2,832,000
	1,629	883	0	746	50,346,000

St. Louis wells were completed. The 54 dry holes included 31 in pools and 23 wildcats.

Waterfloods were begun in two Jefferson County pools in 1954 and in two more in 1955. Results are most apparent in the Boyd pool, where 353,000 barrels of the 936,000 barrels produced in 1956 are from waterflooded leases. Other secondary recovery projects have been in operation too short a time to have been very effective.

Pressure maintenance has been practised in the old Dix area of the Salem Consolidated pool for many years. In 1956 it was credited with 437,000 barrels of the 445,000 barrels produced in the Jefferson County part of the pool. Cumulative pressure maintenance production is 7,993,000 barrels of the total 8,435,000 barrels for the pool.

LAWRENCE COUNTY

Fig. 9, Area 4

Lawrence County has produced more oil than any other county except Marion. However, half a dozen counties are currently outproducing it and will probably pass it in the next few years. Oil was discovered in Lawrence County in 1906; in the following 30 years about 4/5 of the producing wells which have been drilled in the county were completed, and about 4/5 of the total oil production had been produced. Total production from the new pools is less than annual production from the old Lawrence pool.

LAWRENCE COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production	
					New Pools	Old Pools
1937	13	5	2	6	0	2,038,000
1938	36	10	15	11	0	1,751,000
1939	41	3	18	20	0	1,304,000
1940	28	6	9	13	500	1,528,000
1941	48	18	8	22	5,000	1,826,000
1942	58	37	5	16	42,000	1,733,000
1943	66	31	5	30	35,000	1,726,000
1944	57	20	3	34	28,000	1,615,000
1945	20	3	0	17	24,000	1,702,000
1946	51	25	0	26	54,000	1,865,000
1947	67	25	0	42	142,000	1,845,000
1948	35	12	0	23	84,000	1,760,000
1949	95	36	0	59	167,000	1,885,000
1950	184	62	0	122	700,000	2,030,000
1951	75	26	0	49	505,000	1,951,000
1952	133	70	0	63	539,000	2,224,000
1953	106	53	0	53	520,000	2,654,000
1954	141	74	0	67	364,000	2,878,000
1955	255	175	0	80	352,000	3,479,000
1956	163	110	0	53	313,000	4,553,000
	1,672	801	65	806	3,876,000	262,364,000*

* Includes approximately 220,000,000 barrels produced before 1937.

Ruark had eight new producing wells completed and Ruark West six in 1956. The remaining 96 were in the old Lawrence pool. Most of these were drilled to new pays in areas of old production. The 53 dry holes included 46 in pools and only seven wildcats.

Secondary recovery operations are an important factor in maintaining production in Lawrence County. Projects now in operation in the old Lawrence pool have produced 8,624,000 barrels of oil, including 2,526,000 barrels in 1956, 55 percent of the pool's production for the year.

MACON COUNTY

Fig. 18, Area 13

The Macon County drilling "boom" resulting from the discovery of the Blackland pool in 1953 seems to be ending. One

MACON COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	2	0	0	2	0
1939	2	0	0	2	0
1940	4	0	0	4	0
1941	0	0	0	0	0
1942	1	0	0	1	0
1943	0	0	0	0	0
1944	0	0	0	0	0
1945	0	0	0	0	0
1946	2	0	0	2	0
1947	1	0	0	1	0
1948	1	0	0	1	0
1949	10	0	0	10	0
1950	5	0	0	5	0
1951	6	0	0	6	0
1952	1	0	0	1	0
1953	6	1	0	5	0
1954	49	20	0	29	87,000
1955	17	1	0	16	104,000
1956	13	1	0	12	72,000
	120	23	0	97	263,000

MACOUPIN COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes
1937	0	0	0	0
1938	9	0	2	7
1939	4	0	3	1
1940	9	0	0	9
1941	8	3	0	5
1942	20	1	4	15
1943	2	0	0	2
1944	3	1	0	2
1945	3	2	0	1
1946	4	0	0	4
1947	3	0	0	3
1948	1	0	0	1
1949	15	0	0	15
1950	12	1	0	11
1951	11	0	0	11
1952	7	0	0	7
1953	14	0	1	13
1954	15	1	0	14
1955	19	0	0	19
1956	15	1	0	14
	174	10	10	154

producing well was drilled in the Oakley pool in 1956 and one former dry hole was worked over into a producer in the Harristown pool.

Two of the 13 wells drilled in 1956 were dry holes in pools and 10 were unsuccessful wildcats. Shows of heavy oils are fairly common in Macon County, but there has been little production except in the Blackland pool which is in the extreme southern part of the county and extends into Christian County. The Macon County part of the pool produced 65,000 barrels in 1956, for a grand total of 236,000 barrels.

Three smaller pools, Decatur, Harristown, and Oakley, had a combined production for the year of 7,000 barrels. The only other pool, Decatur North, was abandoned in 1955.

MACOUPIN COUNTY

Fig. 20, Area 15

Although oil was discovered in Macoupin County in 1909, the amount of oil which has been produced is insignificant. Data are incomplete because most of the oil has not been marketed through pipe lines, but production has probably averaged less than 1000 barrels per year. In 1956 known production was less than 500 barrels.

One new pool, Hornsby South, was discovered in 1956. The discovery well was completed in late November with an initial production of nine barrels of oil and nine of water per day from a Pennsylvanian sandstone. No more wells were drilled and no oil marketed before the end of the year.

The 14 dry holes drilled in 1956 included three in pools and 11 wildcats.

MADISON COUNTY

Fig. 22, Area 17

Results of drilling in Madison County during the past few years have been very poor. In 1956, 42 wells were completed. These included three small Pennsylvanian sand oil wells in Livingston and Livingston South, one small Pennsylvanian sand gas well which was drilled as a wildcat and capped when completed, 8 dry holes in pools, and 30 unsuccessful wildcats.

The Marine pool, producing from the Devonian and Silurian, is the biggest pool in Madison County. It had a 1956 production of 297,000 barrels, making its total 9,568,000 barrels, about 72 percent of the total production for the county. St. Jacob produced 61,000 barrels from the Trenton in 1956, to bring its total up to 2,862,000

MADISON COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	0
1938	4	0	0	4	0
1939	9	1	0	8	0
1940	7	0	0	7	0
1941	3	0	0	3	0
1942	35	23	0	12	261,000
1943	23	14	0	9	442,000
1944	51	38	0	13	893,000
1945	47	33	0	14	1,184,000
1946	70	54	0	16	1,454,000
1947	42	24	0	18	1,272,000
1948	43	9	0	34	1,271,000
1949	75	18	0	57	1,174,000
1950	102	19	0	83	1,044,000
1951	75	17	1	57	943,000
1952	35	7	0	28	807,000
1953	53	11	1	41	668,000
1954	52	0	0	52	568,000
1955	34	4	0	30	488,000
1956	42	3	1	38	415,000
	803	275	3	525	12,883,000*

* This does not include about 1,000 barrels produced from the old Collinsville pool which was abandoned in 1921.

MARION COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	122	93	0	29	469,000
1938	729	643	0	86	3,662,000
1939	1,242	1,155	0	87	51,974,000
1940	952	890	0	62	73,958,000
1941	127	95	0	32	32,480,000
1942	42	13	0	29	17,070,000
1943	61	36	0	25	12,375,000
1944	46	26	0	20	9,969,000
1945	62	31	0	31	9,025,000
1946	48	16	0	32	8,490,000
1947	56	29	0	27	7,443,000
1948	45	17	0	28	6,380,000
1949	78	42	0	36	5,628,000
1950	42	18	0	24	5,417,000
1951	37	5	0	32	4,880,000
1952	71	27	0	44	4,855,000
1953	120	83	0	37	3,960,000
1954	180	120	0	60	6,399,000
1955	92	52	0	40	8,621,000
1956	59	30	0	29	7,266,000
	4,211	3,421	0	790	283,271,000*

* Estimated in part and subject to revision. Includes 2,960,000 barrels of oil produced before 1937.

barrels or 22 percent of the county total. The remaining 6 percent is Pennsylvanian oil from Livingston and Livingston South pools.

Secondary recovery is unimportant at present in Madison County. Two projects were started in the Livingston pool, one in 1952 and one in 1954. Only 3,000 barrels of oil has been recovered by waterflooding.

MARION COUNTY

Fig. 17, Area 12

Marion County has produced more oil than any other Illinois county. However, more than 50 percent of the oil was produced during a 4-year period, 1938 through 1941, when Salem and Centralia were being developed. About 80 percent of the producing wells in the county were drilled in the same period.

Eight of the 30 producing wells completed in Marion County in 1956 were Trenton wells in the Patoka pool. The Trenton was a new pay at Patoka, but is an important pay in the Centralia and Salem Consolidated pools, so its discovery at Patoka may prove to be one of the most important developments of 1956.

No new pool was discovered in Marion County in 1956. Twelve of the 30 producing wells were in the Patoka pool and most of the others scattered throughout the county with only two or three in any one pool. The 29 dry holes included 16 dry holes in pools and 13 wildcats.

Secondary recovery has been very important in the Marion County pools. One of the earliest waterfloods in the basin was begun in the Patoka pool in 1943. In 1956 waterflooding is credited with 143,000 of the 231,000 barrels of oil produced from the Patoka pool. Later, smaller floods were begun in the Odin, Tonti, and Wamac pools.

In 1950 the Salem Unit was set up and flooding of the Salem Consolidated pool was begun. At that time it was the largest unitized project in the United States. In 1956, the Salem Consolidated pool produced 4,906,000 barrels of oil by secondary recovery operations. Secondary recovery projects in Marion County produced 5,129,000 barrels of oil in 1956. The total amount so far produced in the county by secondary recovery is about 22,700,000 barrels.

Monroe County

Fig. 24, Area 19

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	1	0	0	1	0
1939	16	7	0	9	10,000
1940	16	8	0	8	21,000
1941	3	3	0	0	17,000
1942	1	0	0	1	6,000
1943	2	1	0	1	4,000
1944	2	0	0	2	2,000
1945	0	0	0	0	2,000
1946	1	0	0	1	4,000
1947	0	0	0	0	2,000
1948	0	0	0	0	1,000
1949	0	0	0	0	1,000
1950	1	0	0	1	0
1951	1	0	0	1	0
1952	2	0	0	2	0
1953	0	0	0	0	0
1954	1	0	0	1	1,000
1955	1	0	0	1	0
1956	0	0	0	0	1,000
	48	19	0	29	238,000*

* Includes 166,000 barrels produced before 1937.

Monroe County has only one oil or gas pool, and has had only one producing well completed in 15 years.

Waterloo, the only pool, was discovered in 1920; 23 producing wells were drilled before 1937, and there was another period of development in 1939 and 1940.

In 1951 the northern part of the pool was converted into underground gas storage. Three producing wells at the southern end of the pool still produce a small amount of oil.

Montgomery County

Fig. 20, Area 15

Montgomery was one of the counties having the biggest increases in drilling in 1956. The 31 wells drilled in 1956 included one dry pool test and 30 wildcats. In the past four years 70 wells have been drilled, all of them dry. Most of the oil produced in Montgomery County has come from Pennsylvanian pays. Recent development of Devonian and Silurian production in Christian and Bond counties encourages the hope that deep production may also be found in Montgomery County, but drilling has not substantiated this hope.

Montgomery County

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	7	0	1	6	0
1939	11	1	0	10	0
1940	40	6	0	34	1,000
1941	15	1	0	14	4,000
1942	4	1	1	2	2,000
1943	10	2	0	8	3,000
1944	11	3	0	8	2,000
1945	2	0	0	2	3,000
1946	1	0	0	1	2,000
1947	8	1	0	7	1,000
1948	15	2	0	13	3,000
1949	31	4	0	27	4,000
1950	23	1	1	21	5,000
1951	20	2	0	18	2,000
1952	35	4	0	31	10,000
1953	13	0	0	13	7,000
1954	11	0	0	11	6,000
1955	15	0	0	15	6,000
1956	31	0	0	31	5,000
	303	28	3	272	88,000*

* Includes 22,000 barrels produced in Litchfield pool before 1937.

Morgan County

Year	Total wells	Oil wells	Gas wells	Dry holes
1937	0	0	0	0
1938	4	0	0	4
1939	1	0	0	1
1940	0	0	0	0
1941	5	0	0	5
1942	3	0	0	3
1943	0	0	0	0
1944	0	0	0	0
1945	0	0	0	0
1946	4	0	2	2
1947	1	0	0	1
1948	4	1	2	1
1949	3	0	1	2
1950	6	0	1	5
1951	1	0	0	1
1952	0	0	0	0
1953	8	1	1	6
1954	8	1	3	4
1955	7	0	1	6
1956	6	0	1	5
	61	3	12	46

At present Morgan County has two pools, Prentice and Waverly, both of which were

discovered by gas wells and now contain non-producing oil and gas wells.

Superficially Morgan County appears to have a fair record with one-fourth of its wells completed as producers. However, all three oil wells were too small to be operated profitably and have been non-operating since completion. The gas has been too limited in quantity to be utilized for any considerable period, so most of the wells were capped when completed.

An attempt has been made to use the Waverly pool for gas storage but without success to date because of leakage from the reservoir. Another attempt at some time in the future is planned.

The Jacksonville Gas pool in Morgan County was discovered in 1910 and abandoned in 1939 after producing an unknown quantity of gas.

Although Morgan County has two oil and gas pools, and completed a new gas well in 1956, it has no commercial production and is located in a part of the state where there is only a slight possibility of finding a good pool.

Moultrie County

Fig. 19, Area 14

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	2	0	0	2	0
1939	4	0	0	4	0
1940	0	0	0	0	0
1941	1	0	0	1	0
1942	0	0	0	0	0
1943	1	0	0	1	0
1944	0	0	0	0	0
1945	1	0	0	1	0
1946	7	1	0	6	0
1947	1	0	0	1	100
1948	1	0	0	1	100
1949	6	0	0	6	100
1950	5	0	0	5	0
1951	3	0	0	3	0
1952	2	0	0	2	0
1953	2	0	0	2	0
1954	1	0	0	1	0
1955	9	4	0	5	11,000
1956	22	0	0	22	6,000
	68	5	0	63	17,000

Moultrie County had more wells drilled last year than in any previous year; the 22 wells completed in 1956 are almost a third of the total number of wells drilled in the past 20 years. One of the 1956 completions was a dry hole in the Gays pool; the other 21 were unsuccessful wildcats.

Undoubtedly much of the increased interest shown in Moultrie County in 1956 was due to the successful development of the Cooks Mills—Bourbon area only a few miles to the east. However, results of exploratory drilling were as unsatisfactory in northern Douglas County as in Moultrie County, so it is unlikely that the 1956 rate of wildcat drilling will continue into 1957.

The only oil pool in Moultrie County is Gays in the extreme southeastern part, only a few miles west of Mattoon. Production for 1956 was 6,000 barrels, making a total production of 17,000 barrels for the county.

Perry County

Fig. 14, Area 9

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	0
1938	5	0	0	5	0
1939	16	0	0	16	0
1940	8	0	0	8	0
1941	5	0	0	5	0
1942	14	3	0	11	2,000
1943	5	0	0	5	1,000
1944	5	0	0	5	4,000
1945	5	0	0	5	2,000
1946	3	0	0	3	2,000
1947	5	0	0	5	0
1948	9	1	0	8	1,000
1949	5	1	0	4	3,000
1950	8	0	0	8	2,000
1951	9	0	0	9	3,000
1952	33	9	1	23	52,000
1953	10	1	1	8	50,000
1954	7	0	0	7	28,000
1955	13	0	0	13	20,000
1956	24	1	0	23	18,000
	190	16	2	172	187,000

Perry County has oil production on all sides and should have good possibilities, but results so far have been disappointing. In 1956, 24 wells were drilled; one discovered a new pool, Tamaroa West, two were dry holes in pools, and 21 were unsuccessful wildcats.

Perry County has had three oil pools; one, Craig, produced about 2,000 barrels before it was abandoned; no production was reported from Tamaroa West, a 1956 discovery.

Tamaroa, the only good pool in the county, produced 18,000 barrels of oil in 1956, giving it a total of 185,000 barrels out of the county's 187,000 barrels of oil.

Pike County

Fig. 21, Area 16

Year	Total wells	Oil wells	Gas wells	Dry holes
1937	1	0	0	1
1938	0	0	0	0
1939	2	0	0	2
1940	4	0	0	4
1941	1	0	0	1
1942	0	0	0	0
1943	1	0	0	1
1944	2	0	0	2
1945	0	0	0	0
1946	0	0	0	0
1947	0	0	0	0
1948	1	0	0	1
1949	1	0	0	1
1950	3	0	0	3
1951	0	0	0	0
1952	0	0	0	0
1953	0	0	0	0
1954	0	0	0	0
1955	10	0	5	5
1956	48	0	38	10
	74	0	43	31

As a result of the discovery of the Fishhook pool in 1955, Pike was one of the counties which showed major increases in drilling in 1956. Results of drilling showed a percentage of successful completions much higher than that for the state as a whole.

The 48 completions in 1956 included 38 gas wells and two dry holes in the Fishhook pool and eight unsuccessful wildcats. The gas wells were capped on completion. At the end of the year it seemed probable that an attempt would eventually be made to use the pool for underground storage.

Pike County has had no oil production. An earlier gas pool, the Pittsfield or Pike County Gas pool, discovered in 1886, marketed some gas, but no production data are available.

Randolph County

Fig. 24, Area 19

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	0
1938	5	0	0	5	0
1939	7	0	0	7	0
1940	9	1	0	8	0
1941	7	0	0	7	0
1942	2	0	0	2	0
1943	2	0	0	2	0
1944	3	0	0	3	0
1945	0	0	0	0	0
1946	2	0	0	2	0
1947	0	0	0	0	0
1948	0	0	0	0	0
1949	3	1	0	2	0
1950	3	0	0	3	0
1951	1	0	0	1	0
1952	24	2	0	22	412,000
1953	22	17	0	5	518,000
1954	22	4	0	18	361,000
1955	10	3	0	7	304,000
1956	5	0	0	5	218,000
	128	28	0	100	1,813,000

All five of the wells drilled in Randolph County in 1956 were unsuccessful wildcats.

Randolph County is essentially a one-pool county. In 1956 Tilden produced 217,000 barrels of oil, bringing its total up to 1,808,000 barrels. The Baldwin pool produced about 1,000 barrels in 1956. Both pools produce from Silurian pays.

A little oil and gas were produced in the Sparta area between 1888 and 1900, and again in 1949. Production data are lacking, but quantities of oil and gas were negligible, and the oil is not included in the table for Randolph County.

Richland County

Fig. 13, Area 8

No new pool or important new pay was discovered in Richland County in 1956. Most of the 40 producing wells were in the Clay City Consolidated pool. The 37 dry holes included 23 in pools and 14 wildcats.

Six Richland County oil pools have secondary recovery projects, but all are small or too new to have produced much oil. Five of the pools, Calhoun Consolidated, Clay City Consolidated, Olney Consoli-

RICHLAND COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	60	48	0	12	948,000
1938	180	135	0	45	4,656,000
1939	102	91	0	11	2,376,000
1940	111	99	1	11	5,011,000
1941	99	68	0	31	4,430,000
1942	92	49	1	42	3,996,000
1943	47	30	0	17	3,849,000
1944	111	74	1	36	4,078,000
1945	151	105	0	46	4,485,000
1946	161	93	1	67	4,112,000
1947	109	68	0	41	3,451,000
1948	156	71	0	85	2,631,000
1949	71	26	0	45	2,286,000
1950	149	59	1	89	3,372,000
1951	162	59	0	103	3,386,000
1952	86	43	0	43	3,100,000
1953	69	31	0	38	3,199,000
1954	122	85	0	37	2,916,000
1955	113	78	0	35	2,784,000
1956	77	40	0	37	3,102,000
	2,228	1,352	5	871	68,168,000*

* Estimated in part and subject to revision.

ST. CLAIR COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	2	0	0	2	33,000
1938	11	5	0	6	36,000
1939	38	21	0	17	146,000
1940	24	15	0	9	182,000
1941	38	27	0	11	304,000
1942	24	5	0	19	272,000
1943	17	0	0	17	28,000
1944	12	4	0	8	15,000
1945	3	0	0	3	95,000
1946	8	2	0	6	127,000
1947	3	3	0	0	124,000
1948	7	7	0	0	148,000
1949	5	3	0	2	106,000
1950	10	5	0	5	75,000
1951	3	1	0	2	80,000
1952	5	0	0	5	47,000
1953	7	0	0	7	50,000
1954	8	0	0	8	36,000
1955	16	1	0	15	28,000
1956	3	0	0	3	16,000
	244	99	0	145	2,826,000*

* Includes 878,000 barrels of oil produced before 1937.

dated, Seminary, and Stringtown, had a combined secondary recovery production of 541,000 barrels of oil in 1956, and a total of about 900,000 barrels of secondary recovery oil. A project in Dundas East was not started until late 1956.

ST. CLAIR COUNTY

Fig. 24, Area 19

All of the oil production shown in the table is from the Dupo pool which was discovered in 1928. By 1937 a total of 237 producing wells had been drilled, only 45 of which were still in operation. The entire pool was shut down late in 1954, but 30 wells were put back into operation in 1955.

The Freeburg South pool, consisting of one small well, was discovered in 1955. Three wells were drilled in 1956, two wildcats and one pool dry hole which was later worked over into a small gas well. Both oil and gas production in Freeburg South must be considered non-commercial.

SALINE COUNTY

Fig. 6, Area 1

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	4	0	0	4	0
1939	7	0	0	7	0
1940	5	0	0	5	0
1941	13	2	0	11	1,000
1942	12	0	0	12	3,000
1943	2	0	1	1	2,000
1944	6	1	0	5	2,000
1945	5	2	0	3	48,000
1946	10	4	0	6	79,000
1947	6	1	0	5	76,000
1948	5	0	0	5	44,000
1949	16	0	0	16	27,000
1950	25	4	0	21	49,000
1951	18	3	0	15	61,000
1952	12	2	1	9	65,000
1953	43	26	0	17	204,000
1954	140	92	0	48	791,000
1955	355	192	1	162	4,099,000
1956	220	107	0	113	2,390,000
	904	436	3	465	7,941,000

Saline County had its second biggest year for both drilling and production in 1956. The Eldorado Consolidated pool was almost completely drilled up in 1955; the 1956 drilling was concentrated in an area

west and northwest of Eldorado Consolidated in the Harco, Harco East, and Dale Consolidated pools. These three pools had 93 of the 107 producing wells completed in 1956. Almost all of the new wells produced from the Aux Vases sandstone, alone or in combination.

The decrease in production from 4,099,000 barrels in 1955 to 2,390,000 barrels in 1956 was a result of the much greater drop in production in the Eldorado Consolidated pool where the decrease was from 3,521,000 barrels (1955) to 965,000 barrels (1956). Part of the decrease in production in the Eldorado Consolidated pool was compensated for by major increases in the three pools where drilling was heaviest. Harco showed the biggest gain, from 6,000 to 547,000 barrels; Dale Consolidated increased from 110,000 to 406,000 barrels, and Harco East from 9,000 to 133,000 barrels.

Two new pools, Pankeyville and Pankeyville East, were discovered in Saline County in 1956. At the end of the year Pankeyville consisted of two Cypress wells which had produced 5,000 barrels of oil and Pankeyville East had only 1 well and had not marketed any pipeline oil.

The 113 dry holes drilled in 1956 included 58 pool dry holes and 55 unsuccessful wildcats. In drilling, Saline County ranked fifth in the state for 1956, dropping back from the second place position it held in 1955.

Sangamon County

Fig. 18, Area 13

Sangamon County has had a poor record so far as an oil producing county. Less than 10 percent of the wells drilled have been completed as oil wells and of the 10 "oil wells" at least three were economically unsuccessful.

Roby, the oldest pool in the county, was discovered in 1949, but no oil was reported as marketed until 1956, when 3,000 barrels of oil was produced.

The biggest pool is Edinburg West, most of which is in Christian County. The four pool wells which are in Sangamon County produced 29,000 barrels in 1956 to make a total production of 60,000 barrels.

Sangamon County

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	1	0	0	1	0
1939	2	0	0	2	0
1940	0	0	0	0	0
1941	0	0	0	0	0
1942	0	0	0	0	0
1943	2	0	0	2	0
1944	0	0	0	0	0
1945	1	0	0	1	0
1946	1	0	0	1	0
1947	1	0	0	1	0
1948	0	0	0	0	0
1949	1	1	0	0	0
1950	3	0	0	3	0
1951	4	0	0	4	0
1952	2	0	0	2	0
1953	0	0	0	0	0
1954	17	2	0	15	0
1955	49	7	0	42	59,000
1956	22	0	0	22	40,000
	106	10	0	96	99,000

The New City pool (three wells) produced 8,000 barrels in 1956 for a total of 35,000 barrels.

Glenarm, the only other pool, consists of one well which has produced less than 1,000 barrels of oil.

The 22 wells drilled in 1956 included three pool dry holes and 19 wildcats. All production in the county is in the southeastern part within 10 miles of Christian County, and it is doubtful that production with commercial value will be found much farther to the north or west.

Shelby County

Fig. 19, Area 14

Shelby County is in an area where possibilities for oil or gas production should be moderately good, but actual results, as shown in the table, have been poor. Only about 10 percent of the wells drilled have been completed as producing wells, and not all of them produced enough oil to pay drilling costs. The 18 wells drilled in 1956 include one producing well in the

SHELBY COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	0
1938	17	0	0	17	0
1939	17	1	0	16	3,000
1940	11	2	0	9	7,000
1941	17	2	0	15	19,000
1942	4	0	0	4	16,000
1943	12	2	0	10	16,000
1944	5	0	0	5	17,000
1945	5	0	0	5	17,000
1946	46	9	0	37	27,000
1947	19	3	0	16	35,000
1948	10	4	0	6	39,000
1949	19	2	0	17	47,000
1950	11	0	0	11	38,000
1951	12	0	0	12	33,000
1952	12	1	0	11	33,000
1953	4	0	0	4	27,000
1954	9	0	0	9	25,000
1955	4	0	0	4	23,000
1956	18	1	0	17	21,000
	253	27	0	226	444,000

WABASH COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	19	9	0	10	139,000
1938	23	6	0	17	384,000
1939	217	170	0	47	1,039,000
1940	202	142	0	60	3,352,000
1941	356	285	1	70	4,531,000
1942	95	61	0	34	3,136,000
1943	194	144	0	50	2,491,000
1944	201	136	1	64	3,400,000
1945	124	79	0	45	2,355,000
1946	182	108	0	74	2,492,000
1947	301	175	0	126	2,433,000
1948	312	178	0	134	2,740,000
1949	357	224	0	133	3,838,000
1950	223	120	0	103	2,962,000
1951	133	59	0	74	2,887,000
1952	87	34	0	53	3,012,000
1953	115	59	0	56	2,543,000
1954	203	108	0	95	3,333,000
1955	144	73	0	71	3,318,000
1956	176	89	0	87	3,336,000
	3,664	2,259	2	1,403	57,854,000*

* Estimated in part and subject to revision. Includes 4,133,000 barrels of oil produced before 1937.

Stewardson pool and 17 unsuccessful wildcats.

Shelby County has four pools. The best of them, Lakewood, produced 9,000 barrels last year for a total of 234,000 barrels of oil. Stewardson also produced 9,000 barrels in 1956, making its total 161,000 barrels. Clarksburg has produced 21,000 barrels including 2,000 last year, and Shelbyville Consolidated, 28,000 barrels including 1,000 in 1956.

WABASH COUNTY

Fig. 8, Area 3

Wabash is the only county in the extreme southeastern part of the state which had an increase in drilling in 1956. In 1955 it was one of the few counties which showed decreased drilling. It has probably had more of its area drilled than any other county in Illinois.

No new pool or pay was discovered in 1956. Fifteen of the 89 new producing wells were in the Gards Point pool, and most of the others in the New Harmony Consolidated pool. The 87 dry holes included 77 in pools and 10 wildcats.

Secondary recovery operations are a major factor in maintaining the level of production. In 1956, 1,155,000 barrels of oil, more than one-third of the year's production, was the result of secondary recovery in the Allendale, Browns East, Friendsville North, Keensburg South, Lancaster South, Mt. Carmel and New Harmony Consolidated pools. About 4,300,000 barrels of secondary recovery oil have been produced.

WASHINGTON COUNTY

Fig. 14, Area 9

More wells were drilled in Washington County in 1956 than in any previous year. However, a comparison of 1956 with 1939, previously the highest drilling year, shows that in 1939 almost three-quarters of all wells drilled were successful, whereas in 1956 only a third were successful. Of the 135 wells drilled in 1956, 45 were completed as oil wells, two as capped gas wells, 41 as pool dry holes, and 47 as unsuccessful wildcats.

No new pool was discovered in Washington County in 1956, but the New Memphis South pool was extended from Clinton County into Washington County.

One new deep pay was discovered; in the Irvington pool the first Trenton wells

WASHINGTON COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	3	0	0	3	0
1938	19	0	0	19	0
1939	133	96	0	37	470,000
1940	102	76	0	26	1,248,000
1941	69	43	0	26	1,707,000
1942	29	14	0	15	1,261,000
1943	24	10	0	14	987,000
1944	13	4	0	9	812,000
1945	25	5	0	20	663,000
1946	27	1	0	26	605,000
1947	16	1	5	10	528,000
1948	33	9	3	21	556,000
1949	17	0	0	17	475,000
1950	10	0	0	10	420,000
1951	47	18	0	29	913,000
1952	49	13	0	36	1,045,000
1953	90	39	0	51	1,095,000
1954	80	26	0	54	936,000
1955	131	67	0	64	1,020,000
1956	135	45	2	88	1,159,000
	1,052	467	10	575	15,900,000

WAYNE COUNTY

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	20	9	0	11	57,000
1938	107	80	0	27	917,000
1939	237	193	0	44	4,698,000
1940	265	229	0	36	6,717,000
1941	404	340	0	64	10,939,000
1942	297	201	0	96	12,142,000
1943	228	151	0	77	8,921,000
1944	330	242	0	88	9,806,000
1945	217	139	0	78	8,558,000
1946	312	196	0	116	8,340,000
1947	253	147	0	106	6,357,000
1948	342	199	0	143	7,788,000
1949	247	145	0	102	8,263,000
1950	205	94	0	111	6,322,000
1951	236	114	0	122	3,886,000
1952	298	155	0	143	5,827,000
1953	383	260	0	123	9,203,000
1954	419	289	0	130	7,565,000
1955	252	166	0	86	8,650,000
1956	236	137	0	99	7,614,000
	5,288	3,486	0	1,802	142,570,000*

* Estimated in part and subject to revision.

were completed. All five of them were small, but Irvington is close to the Centralia and Salem Consolidated pools, both of which have good Trenton production.

Most of the new producers drilled during the year were in Irvington (11 oil wells) or Dubois Consolidated (26 oil wells and two gas wells).

Production was high in 1956, but not as high as in 1940, 1941, and 1942 when the Irvington and Cordes pools were at their production peaks. Secondary recovery, begun in the Cordes pool in 1950, has been very important in maintaining the level of production in Washington County. Production in the Cordes pool increased from 191,000 barrels in 1950 to 689,000 in 1951. A corresponding increase for the county is shown in the table. In 1956, secondary recovery is credited with 155,000 barrels of oil, about 13 percent of the county's production of 1,159,000 barrels for the year. About 2,139,000 barrels of oil has been produced by waterflooding.

WAYNE COUNTY

Fig. 12, Area 7

In 1955 Wayne County showed a major decrease in number of wells completed, a contrast to the over-all increase in the state. In 1956 there was a small decrease which was about the same as that for the entire state.

One new pool, Orchardville North, was discovered in Wayne County, the only 1956 discovery in the deep, densely drilled part of the basin. Only one well had been completed at the end of the year; its production was about 2,000 barrels.

Wayne County had a better drilling record in 1956 than most counties. Of the 236 completions, 137 were producers and only 99 were dry holes. The dry holes included 69 in pools and 30 wildcats.

Wayne is another of the deep basin counties that is rapidly becoming drilled up. However, only a dozen or so wells have tested the deepest Mississippian and pre-Mississippian strata, so there is still a possibility of developing deeper production.

Five pools in Wayne County — Aden Consolidated, Barnhill, Clay City Consolidated, Goldengate Consolidated, and Keenville — have secondary recovery projects in operation. Waterfloods in those five pools produced 1,185,000 of the 7,614,000 barrels of oil produced in Wayne County in 1956,

and have produced a total of 4,202,000 barrels of oil.

White County

Fig. 7, Area 2

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	1	0	0	1	0
1938	4	0	0	4	0
1939	104	68	3	33	238,000
1940	479	412	4	63	5,102,000
1941	839	728	1	110	15,383,000
1942	302	213	0	89	13,369,000
1943	203	148	0	55	10,376,000
1944	277	186	0	91	9,640,000
1945	230	150	0	80	9,216,000
1946	315	219	0	96	9,780,000
1947	223	134	1	88	8,797,000
1948	182	88	1	93	7,472,000
1949	240	127	0	113	7,222,000
1950	290	163	1	126	6,680,000
1951	320	176	1	143	6,797,000
1952	305	146	7	152	6,871,000
1953	247	136	0	111	7,324,000
1954	452	335	1	116	9,324,000
1955	478	304	0	174	10,110,000
1956	262	148	0	114	9,055,000
	5,753	3,881	20	1,852	152,756,000*

* Estimated in part and subject to revision.

White County is currently producing more oil than any other county in Illinois except Fayette. However, two other counties, Marion and Lawrence, have produced so much more oil than White County, it is doubtful that White will be able to surpass them.

White County had the biggest decrease in drilling in 1956. Few counties have had more wells drilled, and most of the county has been tested through the Ste. Genevieve formation. Very few wells have gone deeper.

No new pool or important new pay was discovered during the year. Of the 148 producing wells completed in 1956, 42 were in Phillipstown Consolidated, 27 in Herald Consolidated, 25 in Roland Consolidated, and the remainder distributed in small numbers among other pools. The 114 dry holes include 88 dry holes in pools and 26 wildcats.

In 1956, 2,206,000 barrels of oil, almost one-fourth of the year's production, were produced by secondary recovery projects in eight pools: Albion Consolidated, Centerville East, Concord Consolidated, Herald Consolidated, New Haven Consolidated, New Harmony Consolidated, Phillipstown Consolidated, and Roland Consolidated. Total oil recovered by waterflooding amounts to 9,470,000 barrels.

Williamson County

Fig. 23, Area 18

Year	Total wells	Oil wells	Gas wells	Dry holes	Annual production
1937	0	0	0	0	0
1938	1	0	0	1	0
1939	5	0	0	5	0
1940	5	0	0	5	0
1941	10	0	0	10	0
1942	7	0	0	7	0
1943	5	0	0	5	0
1944	4	0	0	4	0
1945	0	0	0	0	0
1946	1	0	0	1	0
1947	0	0	0	0	0
1948	0	0	0	0	0
1949	3	0	0	3	0
1950	1	(1)	0	1	0
1951	1	0	0	1	500
1952	2	0	0	2	0
1953	0	0	0	0	0
1954	2	0	0	2	0
1955	15	0	0	15	0
1956	19	0	0	19	0
	81	(1)	0	81	500

With a total of 81 wells drilled in the past 20 years Williamson County has had no commercial well completed. In 1950 a dry hole was worked over and less than 500 barrels of oil obtained from it. Developments in Saline and Franklin counties during 1955 and 1956 extended production in those two counties almost to Williamson County. It is reasonable to assume that some production will be discovered in northern and eastern Williamson County, although it may be limited in quantity and area.

Other Counties

Wildcat wells were drilled in 1956 in 18 counties which have had no oil or gas production.

Champaign County had six wildcats, more than in any previous year. This increase in drilling probably resulted from the discovery in 1956 of three new oil pools in Douglas County, the adjoining county on the south.

Schuyler County had five wildcats, which is an unusually high number for that county also.

Each of five counties had two wildcats: Brown, Logan, Massac, Piatt, and Pope.

Each of the remaining 11 counties had one wildcat: Alexander, Cass, Fulton, Greene, Jersey, Johnson, Kendall, Menard, Peoria, Pulaski, and Tazewell.

Geographic distribution of these "wildcat" counties is less widespread than during most recent years. Only one county, Kendall, is in the northern quarter of the state, and only one other, Peoria, is in the northern third.

Twelve of the 18 counties are adjacent to counties in which oil or gas has been found. Thirteen of these counties lie north and northwest of the basin productive area, but 12 are wholly or largely within an area considered to have moderate possibilities for oil or gas production (see fig. 4).

Kendall on the north and Alexander, Johnson, Massac, Pope, and Pulaski are shown as having slight possibilities.

TABLE 9.—ILLINOIS OIL AND GAS POOLS*
January 1, 1957

Pool: County	Township	Range
Ab Lake: Gallatin	8S	10E
Ab Lake West: Gallatin	8–9S	9–10E
Aden Consol.: Wayne, Hamilton	2–3S	7E
Aden South: Hamilton	3S	7E
Akin: Franklin	6S	4E
Akin West: Franklin	6S	4E
Albion Central: Edwards	2S	10E
Albion Consol.: Edwards, White	1–3S	10–11E, 14W
Albion East: Edwards	2S	14W
Albion West: Edwards	3S	10E
Allendale: Wabash, Lawrence	1–2N	11–13W
Alma: Marion	4N	2E
Amity: Richland	4N	14W
Amity South: Richland	4N	14W
Amity West: Richland	4N	14W
Ashley: Washington	2S	1W
Ashmore East: Coles	13N	14W
Assumption Consol.: Christian	13–14N	1E
Assumption South: Christian	12N	1E
Ava–Campbell Hill: Jackson	7S	4W
Ayers Gas: Bond	6N	3W
Baldwin: Randolph	4S	6W
Barnhill: Wayne	2–3S	8E
Bartelso: Clinton	1–2N	3W
Bartelso East: Clinton	1N	3W
Bartelso South: Clinton	1N	3W
Bartelso West: Clinton	1N	3–4W
Beaucoup: Washington	2S	2W
Beaucoup South: Washington	2S	2W
Beaver Creek: Bond, Clinton	3–4N	2–3W
Beaver Creek North: Bond	4N	3W
Beaver Creek South: Clinton, Bond	3–4N	2–3W
Beckemeyer Gas: Clinton	2N	3W
Bellair: Crawford, Jasper	8N	14W
Belle Prairie: Hamilton	4S	6–7E
Carlyle: Clinton	2N	3W
Carlyle North: Clinton	3N	3W
Carlyle South: Clinton	1N	3W
Carmi: White	5S	9E
Carmi North: White	5S	9E
Casey: Clark	10–11N	14W
Centerville: White	4S	9E
Centerville East: White	3–4S	9–10E
Centerville North: White	3S	10E
Centerville Northeast: White	3S	10E
Centralia: Clinton, Marion	1–2N	1E, 1W
Centralia West: Clinton	1N	1W
Chesterville: Douglas	15N	7E
Christopher Consol.: Franklin	6S	1E
Claremont: Richland	3N	14W
Clarksburg: Shelby	10N	4E
Clay City Consol.: Clay, Wayne, Richland, Jasper	1–7N, 1–2S	6–10E
Clay City West: Clay	2N	7E
Coil: Wayne	1S	5E
Coil West: Jefferson	1S	4E
Collinsville: Madison	3N	8W
Colmar-Plymouth: Hancock, McDonough	4N	4–5W
Concord Consol.: White	6S	10E
Concord East Consol.: White	6–7S	10E
Cooks Mills Consol.: Coles, Douglas	13–14N	7–8E
Cordes: Washington	3S	3W
Cottage Grove: Saline	9S	7E
Covington South: Wayne	2S	6E
Craig: Perry	4S	4W
Cravat: Jefferson	1S	1E
Cravat West: Jefferson	1S	1E
Crossville: White	4S	10E
Crossville West: White	4S	10E
Dahlgren: Hamilton	3S	5E
Dale Consol.: Hamilton, Saline, Franklin	5–7S	4–7E

Belle Rive: Jefferson	3S	4E
Bellmont: Wabash	1S	13–14W
Beman: Lawrence	3N	11W
Beman East: Lawrence	3N	10W
Bennington South: Edwards	1N	10E
Benton: Franklin	6S	2–3E
Benton North: Franklin	5–6S	2E
Berryville Consol.: Wabash, Edwards	1–2N	14W
Bessie: Franklin	6S	3E
Bible Grove North: Effingham	6N	7E
Bible Grove South: Clay	5N	7E
Blackland: Macon, Christian	15N	1E– 1W
Black River: White	4S	13W
Blairsville West: Hamilton	4S	7E
Bogota: Jasper	6N	9E
Bogota North: Jasper	6N	9E
Bogota South: Jasper	5–6N	9E
Bone Gap Consol.: Edwards	1S	10–11E, 14W
Bone Gap East: Edwards	1S	14W
Bone Gap West: Edwards	1S	10E
Boulder: Clinton	2–3N	2W
Boulder East: Clinton	3N	1W
Bourbon: Douglas	15N	7E
Bourbon North: Douglas	15N	7E
Boyd: Jefferson	1S	1–2E
Broughton: Hamilton	6S	7E
Broughton South: Saline	7S	7E
Brown: Marion	1N	1E
Browns: Edwards, Wabash	1–2S	14W
Browns East: Wabash	1–2S	14W
Browns South: Edwards	2S	14W
Bungay Consol: Hamilton	4S	7E
Burnt Prairie South: White	4S	9E
Calhoun Central: Richland	2N	10E
Calhoun Consol.: Richland, Wayne	2–3N	9–10E
Calhoun East: Richland	2N	10–11E
Calhoun North: Richland	3N	10E
Calhoun South: Wayne	2N	9E
Carlinville: Macoupin	9N	7W
Carlinville North: Macoupin	10N	7W
Decatur: Macon	16N	2E
Decatur North: Macon	17N	3E
Divide: Jefferson	1S	3E
Divide East: Jefferson	1S	4E
Divide South: Jefferson	2S	3E
Divide West: Jefferson	1S	3E
Dix South: Jefferson	1S	2E
Dubois: Washington	3S	1–2W
Dubois Central: Washington	3S	1W
Dudley: Edgar	13–14N	13W
Dudley West Gas: Edgar	13N	13W
Dudleyville East: Bond	4–5N	2–3W
Dundas East: Richland, Jasper	4–5N	10E
Dupo: St. Clair	1S, 1N	10W
Eberle: Effingham	6N	6E
Edinburg: Christian	14N	3W
Edinburg South: Christian	14N	3W
Edinburg West: Christian, Sangamon	14N	3–4W
Elba: Gallatin	8S	8E
Elbridge: Edgar	12–13N	11W
Eldorado Consol.: Saline	8S	6–7E
Eldorado East: Saline	8S	7E
Eldorado West: Saline	8S	6E
Elk Prairie: Jefferson	4S	2E
Elkton: Washington	2S	4W
Elkville: Jackson	7S	1W
Ellery Consol.: Edwards, Wayne	2S	9–10E
Ellery East: Edwards	2S	10E
Ellery North: Edwards	2S	10E
Ellery South: Edwards	2–3S	10E
Elliottstown: Effingham	7N	7E
Elliottstown East: Effingham	7N	7E
Elliottstown North: Effingham	7N	7E
Enfield: White	5S	8E
Epworth Consol.: White	5–6S	9–10E
Evers: Effingham	8N	7E
Evers South: Effingham	7N	7E
Ewing: Franklin	5S	3E
Ewing East: Franklin	5S	3E
Exchange: Marion	1N	3E

* Includes abandoned pools.

TABLE 9.—(Continued)

Pool: County	Township	Range
Exchange East: Marion	1N	4E
Exchange North: Marion	1N	3E
Fairman: Marion, Clinton	3N	1E, 1W
Fishhook: Pike, Adams	3–4S	4–5W
Fitzgerrell: Jefferson	4S	1E
Flora South: Clay	2N	6E
Francis Mills: Saline	7S	7E
Francis Mills South: Saline	7S	7E
Freeburg South: St. Clair	1S	7W
Friendsville Central.: Wabash	1N	13W
Friendsville North: Wabash	1N	12–13W
Frogtown: Clinton	2N	3–4W
Frogtown North: Clinton	2–3N	3–4W
Gards Point: Wabash	1N	14W
Gards Point North: Wabash	1N	14W
Gays: Moultrie	12N	6E
Germantown East: Clinton	1N	4W
Gillespie-Wyen: Macoupin	8N	6W
Gillespie-Benld Gas: Macoupin	8N	6W
Glenarm: Sangamon	14N	5W
Goldengate Consol.: Wayne, White	2–4S	9E
Goldengate East: Wayne	3S	9E
Goldengate North Consol.: Wayne	2S	8–9E
Grandview: Edgar	12–13N	13W
Greenville Gas: Bond	5N	3W
Half Moon: Wayne	1S	9E
Harco: Saline	8S	5E
Harco East: Saline	8S	5E
Harrisburg: Saline	8S	6E
Harrisburg South: Saline	9S	6E
Harristown: Macon	16N	1E
Herald Consol.: White, Gallatin	6–7S	9–10E
Hidalgo: Jasper	8N	10E
Hidalgo North: Cumberland	9N	9E
Hill: Effingham	6N	6E
Keensburg South: Wabash	2–3S	13W
Keenville: Wayne	1S	5E
Keenville East: Wayne	1S	5E
Kell: Jefferson	1S	3E
Kenner: Clay	3N	5–6E
Kenner North: Clay	3N	6E
Kenner West: Clay	3N	5E
Kenner South: Clay	2N	5E
Keyesport: Clinton	3N	2W
King: Jefferson	3–4S	3E
Kincaid: Christian	13N	3W
Kincaid South: Christian	13N	3W
Kinmundy: Marion	4N	3E
Kinmundy North: Marion	4N	3E
Laclede: Fayette	5N	4E
Lakewood: Shelby	10N	2–3E
Lancaster: Wabash, Lawrence	1–2N	13W
Lancaster Central: Wabash	1N	13W
Lancaster East: Wabash	2N	13W
Lancaster South: Wabash	1N	13W
Langewisch-Kuester: Marion	1N	1E
Lawrence: Lawrence, Crawford	2–5N	11–13W
Lawrence West: Lawrence	3N	13W
Lexington: Wabash	1S	14W
Lexington North: Wabash	1S	14W
Lillyville: Cumberland, Effingham	8–9N	6–7E
Litchfield: Montgomery	8–9N	5W
Livingston: Madison	6N	6W
Livingston East Gas: Madison	6N	6W
Livingston South: Madison	5–6N	6W
Locust Grove: Wayne	1N	9E
Locust Grove South: Wayne	1S	9E
Long Branch: Saline, Hamilton	7S	6E
Long Branch South: Saline	8S	6E
Louden: Fayette, Effingham	6–9N	2–4E

Hill East: Effingham	6N	6E
Hoffman: Clinton	1N	2W
Hoodville East: Hamilton	5S	7E
Hord: Clay	5N	6E
Hord South: Clay	5N	6E
Hornsby South: Macoupin	8N	6W
Hoyleton West: Washington	1S	2W
Huey: Clinton	2N	2W
Huey South: Clinton	1–2N	2W
Hunt City: Jasper	7N	10E
Hunt City East: Jasper	7N	14W
Hunt City South: Jasper	7N	11E
Ina: Jefferson	4S	2–3E
Ina North: Jefferson	4S	3E
Inclose: Edgar, Clark	12N	13–14W
Ingraham: Clay	4N	8E
Inman East Consol.: Gallatin	7–8S	10E
Inman West Consol.: Gallatin	7–8S	9–10E
Iola Central: Clay	5N	5E
Iola Consol.: Clay, Effingham	5–6N	5–6E
Iola South: Clay	4N	5E
Iola West: Clay	5N	5E
Irvington: Washington	1S	1W
Irvington East: Jefferson	1S	1E
Irvington North: Washington	1N, 1S	1W
Iuka: Marion	2N	4E
Iuka West: Marion	2N	3E
Jacksonville Gas: Morgan	15N	9W
Johnson North: Clark	9–10N	14W
Johnson South: Clark	9N	14W
Johnsonville Consol.: Wayne	1N, 1S	6–7E
Johnsonville North: Wayne	1N	6E
Johnsonville South: Wayne	1S	6E
Johnsonville West: Wayne	1N	5–6E
Junction: Gallatin	9S	9E
Junction City: Marion	2N	1E
Junction City South: Marion	2N	1E
Junction East: Gallatin	8–9S	9E
Junction North: Gallatin	8–9S	9E
Keensburg East: Wabash	2S	13W
Louisville North: Clay	4N	6E
Lynchburg: Jefferson	3S	4E
McKinley: Washington	3S	4W
Main: Crawford	5–8N	10–14W
Maple Grove Consol.: Edwards, Wayne	1N	9–10E
Maple Grove South: Edwards	1N	10E
Marcoe: Jefferson	3S	2E
Marine: Madison	4N	6W
Marion: Williamson	9S	3E
Markham City: Jefferson	2–3S	4E
Markham City North: Jefferson, Wayne	2S	4–5E
Markham City West: Jefferson	2–3S	4E
Martinsville: Clark	9–10N	13–14W
Mason North: Effingham	6N	5E
Massilon: Wayne, Edwards	1S	9–10E
Massilon South: Edwards	1S	10E
Mattoon: Coles	11–12N	7–8E
Maunie East: White	6S	11E
Maunie North Consol.: White	5–6S	10–11E, 14W
Maunie South: White	6S	10–11E
Mayberry: Wayne	2–3S	6E
Mayberry North: Wayne	2S	6E
Melrose: Clark	9N	13W
Melrose South: Clark	9N	13W
Miletus: Marion	4N	4E
Mill Shoals: White, Hamilton, Wayne	2–4S	7–8E
Mills Prairie: Edwards	1N	14W
Mills Prairie North: Edwards	1N	14W
Mitchellsville: Saline	10S	6E
Mt. Auburn Consol.: Christian	15N	1–2W
Mt. Carmel: Wabash	1N, 1S	12W
Mt. Erie North: Wayne	1N	9E
Mt. Olive: Montgomery	8N	5W
Mt. Vernon: Jefferson	3S	3E
Mt. Vernon North: Jefferson	2S	3E
Murdock: Douglas	16N	10E
Nason: Jefferson	3S	2E
New Bellair: Crawford	8N	13W
New City: Sangamon	14N	4W
New Harmony Consol.: White, Wabash, Edwards	1N, 1–5S	13–14W

TABLE 9.—(Continued)

Pool: County	Township	Range
New Harmony South: White	5S	14W
New Harmony South (Ind.): White	5S	14W
New Haven Consol.: White	7S	10–11E
New Hebron East: Crawford	6N	12W
New Memphis: Clinton	1N, 1S	5W
New Memphis North: Clinton	1N	5W
New Memphis South: Clinton, Washington	1S	5W
Newton: Jasper	6N	9E
Newton North: Jasper	7N	10E
Newton West: Jasper	6–7N	9E
Noble West: Clay	3N	8E
Oakdale: Jefferson	2S	4E
Oakley: Macon	16N	3E
Oak Point: Clark, Jasper	8–9N	14W
Oak Point West: Clark	9N	14W
Odin: Marion	2N	1–2E
Okawville: Washington	1S	4W
Okawville North: Washington	1S	4W
Old Ripley: Bond	5N	4W
Olney Consol.: Richland	4N	10E
Olney South: Richland	3N	10E
Omaha: Gallatin	7–8S	8E
Omaha East: Gallatin	8S	8E
Omaha South: Gallatin, Saline	8S	7–8E
Omaha West: Saline	7–8S	7E
Omega: Marion	3N	4E
Orchardville: Wayne	1N	5E
Orchardville North: Wayne	1N	5E
Oskaloosa: Clay	3–4N	5E
Oskaloosa East: Clay	3N	5–6E
Oskaloosa South: Clay	3N	5E
Pana: Christian	11–12N	1E
Panama: Bond, Montgomery	7N	3–4W
Pankeyville: Saline	9S	6E
Pankeyville East: Saline	9S	7E
Rochester: Wabash	2S	13W
Roland Consol.: White, Gallatin	5–7S	8–9E
Roland West: Saline	7S	7E
Ruark: Lawrence	2N	12W
Ruark West Consol.: Lawrence	2N	13W
Rural Hill North: Hamilton	5S	5E
Russellville Gas: Lawrence	4–5N	10–11W
Russellville West: Lawrence	5N	11W
St. Francisville: Lawrence	2N	11W
St. Francisville East: Lawrence	2N	11W
St. Jacob: Madison	3N	6W
St. Jacob East: Madison	3N	6W
St. James: Fayette	5–6N	2–3E
St. Paul: Fayette	5N	3E
Ste. Marie: Jasper	5N	11E–14W
Ste. Marie East: Jasper	6N	14W
Ste. Marie West: Jasper	5–6N	10E
Sailor Springs Central: Clay	4N	7–8E
Sailor Springs Consol.: Clay, Effingham	3–6N	6–7E
Sailor Springs East: Clay	4N	8E
Sailor Springs North: Clay	4N	8E
Salem Consol.: Marion, Jefferson	1–2N, 1S	1–2E
Samsville: Edwards	1N	11E
Samsville North: Edwards	1N	14W
Samsville Northwest: Edwards	1N	10E
Samsville West: Edwards	1N	10E
Sandoval: Marion	2N	1E
Sandoval West: Clinton	2N	1W
Santa Fe: Clinton	1N	3W
Schnell: Richland	2N	9E
Schnell East: Richland	2N	9E
Schnell South: Clay	2N	8E
Seminary: Richland	2N	10E
Sesser: Franklin	5–6S	1–2E
Shattuc: Clinton	2N	1W

Parkersburg Consol.: Richland, Edwards	1–3N	10–11E, 14W
Parkersburg South: Edwards	1N	14W
Parkersburg West: Richland, Edwards	2N	10E
Passport: Clay	4N	8E
Passport South: Richland, Clay	4N	8–9E
Passport West: Clay	4N	8E
Patoka: Marion	4N	1E
Patoka East: Marion	4N	1E
Patoka South: Marion	3N	1E
Patoka West: Fayette	4N	1W
Phillipstown Consol.: White, Edwards	3–5S	10–11E, 14W
Phillipstown South: White	5S	10E
Pinkstaff: Lawrence	4N	11W
Pinkstaff East: Lawrence	4N	11W
Pittsfield Gas: Pike	5S	4–5W
Plainview: Macoupin	9N	8W
Posen: Washington	3S	2W
Posen North: Washington	3S	2W
Posen South: Washington	3S	2W
Posey: Clinton	1N	2W
Posey East: Clinton	1N	2W
Posey West: Clinton	1N	3W
Prentice: Morgan	16N	8W
Raccoon Lake: Marion	1N	1E
Raleigh: Saline	7–8S	6E
Raleigh South: Saline	8S	6E
Raymond: Montgomery	10N	4–5W
Raymond East: Montgomery	10N	4W
Redmon North: Edgar	14N	13W
Reservoir: Jefferson	1S	3E
Richview: Washington	2S	1W
Ridgway: Gallatin	8S	8E
Riffle: Clay	4N	6E
Rinard: Wayne	2N	7E
Rinard North: Wayne	2N	7E
Ritter: Richland	3N	10–11E
Ritter North: Richland	3N	11E
Roaches: Jefferson	2S	1E
Roaches North: Jefferson	2S	1E
Roby: Sangamon	15N	3W
Shawneetown: Gallatin	9S	9E
Shawneetown East: Gallatin	9S	10E
Shawneetown North: Gallatin	9S	10E
Shelbyville: Shelby	11N	4E
Sicily: Christian	13N	4W
Siggins: Cumberland, Clark	10–11N	10–11E, 14W
Sorento Consol.: Bond	6N	4W
Sorento West: Bond	6N	4W
Spanish Needle Creek Gas: Macoupin	9N	7W
Sparta Gas: Randolph	4–5S	5–6W
Sparta South: Randolph	5S	5W
Stanford South: Clay	2N	7E
Staunton: Macoupin	7N	7W
Staunton Gas: Macoupin	7N	7W
Staunton West: Macoupin	7N	7W
Stewardson: Shelby	10N	5E
Storms Consol.: White	5–6S	9–10E
Stringtown: Richland	4–5N	11E–14W
Stringtown East: Richland	4N	14W
Stubblefield South: Bond	4N	3W
Sumner: Lawrence	4N	13W
Sumpter: White	4S	9E
Sumpter East: White	4–5S	10E
Sumpter North: White	4S	9E
Sumpter South: White	4–5S	9E
Sumpter West: White	4S	9E
Tamaroa: Perry	4S	1W
Tamaroa West: Perry	4S	2W
Taylor Hill: Franklin	5S	4E
Thackeray: Hamilton	5S	7E
Thompsonville: Franklin	7S	4E
Thompsonville East: Franklin	7S	4E
Thompsonville North: Franklin	7S	4E
Tilden: Randolph	4S	5W
Toliver East: Clay	5N	6–7E
Toliver South: Clay	4N	6E
Tonti: Marion	2–3N	2E
Tovey: Christian	13N	3W
Trumbull: White	5S	8–9E
Trumbull West: White	5S	8E

TABLE 9.—(Concluded)

Pool: County	Township	Range
Valier: Franklin	6S	2E
Waggoner: Montgomery	11N	5W
Wakefield: Jasper	5N	9E
Wakefield North: Jasper	5N	9E
Wakefield South: Richland	5N	9E
Walpole: Hamilton	6–7S	6E
Walpole South: Hamilton	7S	6E
Waltonville: Jefferson	3S	2E
Wamac: Clinton, Marion, Washington	1N	1E
Wamac East: Marion	1N	1E
Warrenton-Borton: Edgar, Coles	13–14N	13–14W
Waterloo: Monroe	1–2S	10W
Waverly Gas: Morgan	13N	8W
Weaver: Clark	11N	10W
West Frankfort: Franklin	7S	2–3E
Westfield: Clark, Coles	11–12N	11E–14W
Westfield East: Clark	11–12N	14W
Westfield North: Coles	12N	14W
Whittington: Franklin	5S	3E
Whittington South: Franklin	5–6S	3E
Whittington West: Franklin	5S	2E
Williams Consol.: Jefferson	3S	2E
Willow Hill East: Jasper	6–7N	10–11E
Woburn Consol.: Bond	6–7N	2W
Woodlawn: Jefferson	2–3S	1–2E
Xenia: Clay	2N	5E
Xenia East: Clay	2N	5E
York: Cumberland	9N	10–11E
Zenith: Wayne	2N	5E
Zenith North: Wayne	2N	6E
Zenith South: Wayne	1N	5E

TABLE 10.—POOLS INCORPORATED INTO OTHER POOLS BY CONSOLIDATION

Original pool name; First consolidation	Present pool assignment	Date of first consol.
Aden North	Aden Consol.	1944
Albion North	Albion Consol.	1944
Allison-Weger	Main Consol.	1955
Assumption North	Assumption Consol.	1953
Barnhill East	Goldengate Consol.	1944
Bend	New Harmony Consol.	1952
Bennington	Maple Grove Consol.	1952
Bible Grove Consol.	Sailor Springs Consol.	1949
Bible Grove East; Bible Grove Consol.	Sailor Springs Consol.	1948
Birds	Main Consol.	1955
Blairsville	Bungay Consol.	1951
Bone Gap South	Bone Gap Consol.	1952
Bonpas	Parkersburg Consol.	1951
Bonpas West	Parkersburg Consol.	1944
Boos; Dundas Consol.	Clay City Consol.	1941
Boos East; Willow Hill Consol.	Clay City Consol.	1947
Boos North	Clay City Consol.	1948
Boyleston Consol.	Clay City Consol.	1948
Brownsville; Stokes-Brownsville	Roland Consol.	1946
Burnt Prairie; Leech Twp.	Goldengate Consol.	1947
Calvin	New Harmony Consol. & Phillipstown Consol.	1941
Calvin North	Phillipstown Consol.	1948
Cantrell Consol.	Dale Consol.	1955
Cantrell North	Dale Consol.	1956
Cantrell South; Cantrell Consol.	Dale Consol.	1953
Chapman	Main Consol.	1954
Cisne	Clay City Consol.	1948
Cisne North	Clay City Consol.	1954
Clay City North	Clay City Consol.	1954
Concord Central; Concord South Consol.	Herald Consol.	1952
Concord North	Concord Consol.	1955
Concord South Consol.	Herald Consol.	1955
Cooks Mills East	Cooks Mills Consol.	1956
Cooks Mills Gas	Cooks Mills Consol.	1955
Cooks Mills North	Cooks Mills Consol.	1955
Cottonwood	Herald Consol.	1953
Cottonwood North	Herald Consol.	1953
Covington; Boyleston Consol.	Clay City Consol.	1944
Covington East	Clay City Consol.	1948
Cowling	New Harmony Consol.	1947
Dead River	New Haven Consol.	1950
Dix	Salem Consol.	1954
Dubois West	Dubois Consol.	1955
Dundas	Clay City Consol.	1948
Eldorado Central	Eldorado Consol.	1954
Eldorado North	Eldorado Consol.	1955
Ellery West	Ellery Consol.	1952
Enterprise	Clay City Consol.	1941
Enterprise West	Clay City Consol.	1941

TABLE 10.—(Continued)

Original pool name; First consolidation	Present pool assignment	Date of first consol.
Epworth East	Epworth Consol.	1951
Fairfield	Clay City Consol.	1953
Fairfield East	Clay City Consol.	1953
Flannigan	Dale Consol.	1955
Flat Rock	Main Consol.	1954
Flora	Sailor Springs Consol.	1955
Friendsville	New Harmony Consol.	1949
Friendsville South	New Harmony Consol.	1949
Gallagher	Calhoun Consol.	1946
Geff	Clay City Consol.	1947
Geff West	Clay City Consol.	1948
Goldengate West	Goldengate North Consol.	1953
Gossett	Roland Consol.	1954
Grayville	Phillipstown Consol.	1948
Grayville West	Albion Consol.	1949
Griffin	New Harmony Consol.	1941
Helena	Ruark West Consol.	1952
Herald East; Concord South Consol.	Herald Consol.	1953
Herald North	Storms Consol.	1953
Hoodville	Dale Consol.	1943
Hoosier; Bible Grove Consol.	Sailor Springs Consol.	1948
Hoosier North; Bible Grove Consol.	Sailor Springs Consol.	1948
Ingraham West; Bible Grove Consol.	Sailor Springs Consol.	1948
Inman	Inman West Consol.	1950
Inman Central	Inman West Consol.	1949
Inman North	Inman West Consol.	1949
Inman South	Inman West Consol.	1950
Iron	Roland Consol.	1954
Keensburg	New Harmony Consol.	1948
Lancaster North	Ruark West Consol.	1952
Lancaster West	Berryville Consol.	1949
Leech Consol.	Goldengate Consol.	1948
Maple Grove East	Parkersburg Consol.	1952
Mason	Iola Consol.	1956
Mason South	Iola Consol.	1948
Maud Central; Maud North Consol.	New Harmony Consol.	1949
Maud Consol.	New Harmony Consol.	1951
Maud North Consol.	New Harmony Consol.	1951
Maud West; Maud North Consol.	New Harmony Consol.	1948
Maunie	Maunie South	1948

TABLE 10.—(Concluded)

Original pool name; First consolidation	Present pool assignment	Date of first consol.
Maunie West	Maunie North Consol.	1955
Merriam	Clay City Consol.	1953
Mitchell	Ellery Consol.	1952
Mt. Auburn Central	Mt. Auburn Consol.	1954
Mt. Auburn East	Mt. Auburn Consol.	1954
Mt. Carmel West	New Harmony Consol.	1948
Mt. Erie	Clay City Consol.	1944
Mt. Erie South	Clay City Consol.	1948
New Haven North	Concord East Consol.	1950
New Haven West	Inman East Consol.	1949
New Hebron	Main Consol.	1955
Noble	Clay City Consol.	1948
Noble North	Clay City Consol.	1948
Noble South	Clay City Consol.	1948
Norris City	Roland Consol.	1955
North City	Christopher Consol.	1954
Olney East	Olney Consol.	1949
Parker	Main Consol.	1954
Parkersburg North	Parkersburg Consol.	1951
Patton	Allendale	1948
Patton West	Allendale	1948
Roundprairie	Johnsonville Consol.	1941
Rural Hill	Dale Consol.	1951
Rural Hill West	Dale Consol.	1955
Sailor Springs South	Sailor Springs Consol.	1942
Sailor Springs West	Sailor Springs Consol.	1949
Shelbyville East	Shelbyville	1956
Sims	Johnsonville Consol.	1948
Sims North	Johnsonville Consol.	1945
Springerton	Bungay Consol.	1946
Stanford	Clay City Consol. & Sailor Springs Consol.	1953
Stanford West	Sailor Springs Consol.	1953
Stokes-Brownsville; Iron Consol.	Roland Consol.	1953
Swearingen gas	Main Consol.	1955
Toliver	Hord South	1955
West End	Dale Consol.	1955
West Frankfort South	West Frankfort	1948
West Liberty; Dundas Consol.	Clay City Consol.	1941
Williams South	Williams Consol.	1953
Willow Hill Consol.	Clay City Consol.	1948
Willow Hill North; Willow Hill Consol.	Clay City Consol.	1947
Woburn South	Woburn Consol.	1950

TABLE 11.—OIL AND GAS PRODUCING STRATA, 1956

System or series / Group / Formation / Pay "sand" / Pool: County	Acres	Approx. depth (ft.)
PENNSYLVANIAN		
McLeansboro		
Trivoli		
Trivoli		
Lawrence: Lawrence, Crawford	x	290
Anvil Rock		
Anvil Rock		
Herald Consol.: White, Gallatin	360	700
Phillipstown Consol.: White, Edwards	10	795
Jamestown		
New Harmony Consol.: White, Wabash, Edwards	x	720
Carbondale		
Cuba		
Dykstra		
Junction City: Marion	x	510
Cuba		
Lawrence: Lawrence, Crawford	x	450
Main Consol.: Crawford, Lawrence	x	510
Jake Creek		
Jake Creek		
Omaha: Gallatin	210	385
Pleasantview		
Allendale: Lawrence, Wabash	x	660
Upper Gas		
Casey: Clark	200	265
Upper Dudley		
Dudley: Edgar	340	310
Gas		
Grandview: Edgar	360	390
"Shallow"		
Martinsville: Clark	40	255
First (Upper) Siggins		
Siggins: Cumberland, Clark	3,200	400
Unnamed		
Westfield North: Coles	10	275
Bone Gap Consol.: Edwards	10	2110
Carlinville: Macoupin	80	380
Carlinville North: Macoupin	160	440
Carmi: White	10	1210
Casey		
Casey: Clark	1,540	445
Cravat West: Jefferson	20	1045
Pennsylvanian		
Elbridge: Edgar	20	760
Several sands		
Epworth Consol.: White	100	1320–1840
Biehl		
Friendsville North: Wabash	120	1620
Pennsylvanian		
*Gillespie-Benld gas: Macoupin	80	540
Gillespie-Wyen: Macoupin	45	650
Grandview: Edgar	50	560
Herald Consol.: White, Gallatin	320	1090–1750
Hornsby South: Macoupin	10	640
Inclose: Edgar, Clark	320	540
Inman East Consol.: Gallatin	50	780–1450
Inman West Consol.: Gallatin	50	925
Irvington East: Jefferson	40	1030
*Jacksonville gas: Morgan	1,380	330
Claypool		
Johnson North: Clark	1,200	415
Johnson South: Clark	200	390
Casey		
Johnson North: Clark	900	465
Johnson South: Clark	300	450
Upper Partlow		
Johnson North: Clark	250	535
Johnson South: Clark	1,700	490
Lower Partlow		
Johnson South: Clark	850	600

Erowning		
Lower Gas		
Casey: Clark	400	300
Gas		
Dudley West: Edgar	40	380
Kickapoo		
Johnson North: Clark	200	315
Second or Lower Siggins		
Siggins: Cumberland, Clark	500	460
Pennsylvanian		
Warrenton-Borton: Edgar	150	200
Gas		
Westfield: Clark, Coles	9,050	280
Isabel		
Wilson		
Brown: Marion	x	840
Lower Dudley		
Dudley: Edgar	560	410
Gas		
Epworth Cons.: White	160	1090
Isabel		
Inclose: Edgar, Clark	60	345
Wilson		
Junction City: Marion	x	610
Junction City South: Marion	10	685
Isabel		
Melrose: Clark	60	840
Melrose South: Clark	10	865
New Bellair: Clark	10	650
Oak Point: Clark	10	560
Wilson		
Wamac East: Marion	40	845
Isabel		
York: Cumberland, Clark	350	590
Tradewater and Caseyville		
Pennsylvanian		
Ab Lake West: Gallatin	10	725
Several sands		
Albion Consol.: Edwards, White	1,900	1490–2000
Allendale: Wabash, Lawrence	x	1070–1500
Pennsylvanian		
Ashmore East: Coles	10	415
"500", "800"		
Bellair: Crawford, Jasper	x	560, 815
Pennsylvanian		
Benton: Franklin	10	1700
Pennsylvanian		
Junction: Gallatin	30	1150
Junction North: Gallatin	50	1565
Keensburg South: Wabash	60	1145
Biehl		
Lancaster East: Wabash	30	1745
Bridgeport		
Lawrence: Lawrence, Crawford	x	800–950
Buchanan		
Lawrence: Lawrence, Crawford	x	1250
Pennsylvanian		
†Litchfield: Montgomery	100	660
Livingston: Madison	390	535
Livingston East gas: Madison	40	540
Livingston South: Madison	370	530
Burtschi		
Louden: Fayette, Effingham	320	1000
Several sands		
Main Consol.: Crawford, Lawrence	x	900–1250
Casey		
Martinsville: Clark	380	500
Pennsylvanian		
Maunie North Consol.: White	10	1320
Maunie South Consol.: White	70	1400
Several sands		
Mt. Carmel: Wabash	810	1370–1520
Pennsylvanian		
Mt. Olive: Montgomery	130	605
Murdock: Douglas	10	370
*New Bellair: Crawford	20	1165
Several sands		
New Harmony Consol.: White, Wabash, Edwards	x	1340–1850
Pennsylvanian		
Old Ripley: Bond	620	600
Omaha: Gallatin	90	580–1335
Panama: Bond, Montgomery	160	575
Parkersburg South: Edwards	60	1400
Several sands		
Phillipstown Consol.: White, Edwards	x	1350–1875
Pennsylvanian		
Plainview: Macoupin	10	410
Prentice: Morgan	310	270
Raymond: Montgomery	100	590
Raymond East: Montgomery	60	595
Redmon North: Edgar	40	365

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Continued)

System or series / Group / Formation / Pay "sand" / Pool: County	Acres	Approx. depth (ft.)
Rochester: Wabash	130	1300
Roland Consol.: White, Gallatin	50	1410
Ruark: Lawrence	290	1600
Bridgeport		
Russellville gas: Lawrence	x	760
Buchanan		
Russellville gas: Lawrence	x	1100
Pennsylvanian		
St. Francisville East: Lawrence	10	1305
3rd and 4th Siggins		
Siggins: Cumberland, Clark	1,000	480–600
Pennsylvanian		
†Sorento Consol.: Bond	10	600
*Spanish Needle Creek: Macoupin	80	300
*Staunton gas: Macoupin	400	460
Staunton: Macoupin	10	515
Staunton West: Macoupin	10	505
Waggoner: Montgomery	40	610
Petro		
Wamac: Marion, Clinton, Washington	250	720
Pennsylvanian		
Waverly: Morgan	160	250
Westfield East: Clark	150	400
Westfield North: Coles	10	490
MISSISSIPPIAN		
Chester		
Degonia		
Degonia		
Albion Consol.: Edwards, White	20	2125
Epworth Consol.: White	60	2090
Herald Consol.: White, Gallatin	30	1920
Inman East Consol.: Gallatin	50	1690
Maunie South Consol.: White	40	1900
Mitchellsville: Saline	10	1330
New Harmony Consol.: White, Wabash, Edwards	x	1925
Epworth Consol.: White	30	2345
Harrisburg: Saline	80	2020
Herald Consol.: White, Gallatin	540	2240
Inman East Consol.: Gallatin	570	1980
Inman West Consol.: Gallatin	100	2080
Junction: Gallatin	140	1750
Junction East: Gallatin	20	2000
Maunie North Consol.: White	100	2305
Maunie South Consol.: White	20	2210
Mitchellsville: Saline	10	1505
Mt. Carmel: Wabash	10	1690
New Harmony Consol.: White, Wabash, Edwards	860	2155
New Harmony South: White	20	2250
New Harmony South (Ind.): White	30	2120
Parkersburg Consol.: Richland, Edwards	80	2430
Phillipstown Consol.: White, Edwards	60	2280
Rochester: Wabash	190	1940
Roland Consol.: White, Gallatin	2,160	2200
Ruark West Consol.: Lawrence	50	1780
St. Francisville East: Lawrence	10	1300
*Samsville: Edwards	30	2420
†Shawneetown: Gallatin	10	1900
Shawneetown East: Gallatin	10	1855
Storms Consol.: White	2,410	2230
Tar Springs		
Tar Springs		
Albion Consol.: Edwards, White	90	2460
Allendale: Wabash, Lawrence	x	1600
Benton: Franklin	2,400	2100
Browns: Edwards, Wabash	10	2365
Centerville East: White	400	2500
Clay City Consol.: Clay, Wayne, Richland, Jasper	160	2560
Concord Consol.: White	200	2270
Concord East Consol.: White	30	2175
Dale Consol.: Hamilton, Saline, Franklin	400	2430

New Harmony South (Ind.): White	20	1850
Phillipstown Consol.: White, Edwards	470	1975
Roland Consol.: White, Gallatin	10	2065
Storms Consol.: White	30	1990
Clore		
Clore		
Black River: White	10	1865
Epworth Consol.: White	190	2100
Herald Consol.: White, Gallatin	20	1965
Inman East Consol.: Gallatin	60	1725
New Harmony Consol.: White, Wabash, Edwards	x	1980
Phillipstown Consol.: White, Edwards	120	2010
Storms Consol.: White	10	2035
Palestine		
Palestine		
Ab Lake: Gallatin	10	1835
Centerville East: White	20	2225
Eldorado Consol.: Saline	260	1920
Eldorado East: Saline	50	1915
Eldorado West: Saline	10	1940
Epworth Consol.: White	30	2150
Herald Consol.: White, Gallatin	10	1940
Inman East Consol.: Gallatin	50	1840
Inman West Consol.: Gallatin	40	1765
Long Branch: Saline, Hamilton	20	2070
Maunie South Consol.: White	480	2010
Mt. Carmel: Wabash	40	1580
New Harmony Consol.: White, Wabash, Edwards	220	2000
New Harmony South (Ind.): White	30	1955
Omaha: Gallatin	360	1700
Phillipstown Consol.: White, Edwards	60	2050
Ridgway: Gallatin	10	1730
Roland Consol.: White, Gallatin	20	2085
†Shawneetown: Gallatin	20	1720
Waltersburg		
Waltersburg		
Ab Lake West: Gallatin	70	2020
Albion Consol.: Edwards, White	630	2365
Allendale: Wabash, Lawrence	x	1540
Bone Gap Consol.: Edwards	150	2310
Clay City Consol.: Clay, Wayne, Richland, Jasper	10	2175
Concord East Consol.: White	30	2140
Eldorado Consol.: Saline	1,420	2120
Eldorado Consol.: Saline	170	2200
Eldorado East: Saline	60	2190
Epworth Consol.: White	80	2360
Harrisburg Gas: Saline	170	2115
Herald Consol.: White, Gallatin	860	2260
Inman East Consol.: Gallatin	1,520	2080
Inman West Consol.: Gallatin	770	2140
Iola Consol.: Clay, Effingham	10	1890
Kenner: Clay	10	2200
Lawrence: Lawrence, Crawford	x	1410
Louden: Fayette, Effingham	1,440	1170
Maunie North Consol.: White	110	2350
Maunie South Consol.: White	520	2270
Mt. Carmel: Wabash	290	1790
New Harmony Consol.: White, Wabash, Edwards	1,300	2215
New Harmony South: White	10	2350
New Haven Consol.: White	130	2105
Omaha: Gallatin	200	1900
Phillipstown Consol.: White, Edwards	930	2295
Phillipstown South: White	10	2345
Raleigh: Saline	10	2235
Roland Consol.: White, Gallatin	320	2300
Sailor Springs Central: Clay	20	2330
Sailor Springs Consol.: Clay, Effingham	700	2340
†Shawneetown: Gallatin	20	1960
Storms Consol.: White	80	2340
Sumpter: White	80	2575
Sumpter South: White	120	2580
Walpole: Hamilton	90	2465
West Frankfort: Franklin	500	2060
Woodlawn: Jefferson	20	x
Glen Dean ls.		
Glen Dean		
Sailor Springs Consol.: Clay, Effingham	10	2390
Hardinsburg		
Hardinsburg		
Albion Consol.: Edwards, White	60	2635
Allendale: Wabash, Lawrence	x	1780
Centerville East: White	10	2615
Concord Consol.: White	10	2485
Dale Consol.: Hamilton, Saline, Franklin	100	2480
Eldorado Consol.: Saline	130	2350
Harco: Saline	10	2330
Inman East Consol.: Gallatin	220	2135
Inman West Consol.: Gallatin	190	2300

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Continued)

System or series / Group / Formation / Pay "sand" / Pool: County	Acres	Approx. depth (ft.)
Junction: Gallatin	10	2120
Lawrence: Lawrence, Crawford	x	1570
Main Consol.: Crawford	160	1075
Maunie North Consol.: White	10	2565
New Haven Consol.: White	10	2245
Roland Consol.: White, Gallatin	1,500	2550
St. Francisville East: Lawrence	40	1460
Sumpter: White	10	2655
Whittington: Franklin	80	2310
Golconda		
Golconda ls.		
Carlyle: Clinton	30	900
Panama: Bond, Montgomery	30	705
Roland Consol.: White, Gallatin	10	2505
St. James: Fayette	10	1555
Jackson		
Lawrence: Lawrence, Crawford	x	1370
Mt. Carmel: Wabash	10	2020
"Barlow" ls.		
Irvington: Washington	10	1525
Cypress-Weiler		
Cypress or Weiler		
Ab Lake West: Gallatin	10	2425
Akin: Franklin	180	2840
Akin West: Franklin	20	2715
Albion Consol.: Edwards, White	380	2860
Albion East: Edwards	120	2800
Allendale: Wabash, Lawrence	x	1920
Alma: Marion	30	1805
*Ava–Campbell Hill: Jackson	450	780
Carlyle		
Bartelso: Clinton	350	985
Cypress-Weiler		
Bartelso West: Clinton	140	960
Beaver Creek South: Clinton, Bond	170	1015
Beckemeyer Gas: Clinton	90	1070
Huey South: Clinton	110	1080
Inman East Consol.: Gallatin	1,450	2390
Inman West Consol.: Gallatin	1,240	2475
Iola Consol.: Clay, Effingham	470	2125
Irvington: Washington	290	1380
Irvington East: Jefferson	60	1750
Irvington North: Washington	40	1340
Junction: Gallatin	20	2275
Junction North: Gallatin	30	2450
Keensburg South: Wabash	130	2385
Kenner West: Clay	300	2600
Langewisch-Kuester: Marion	x	1600
Kirkwood		
Lawrence: Lawrence, Crawford	x	1400
Cypress-Weiler		
Lexington: Wabash	10	2585
Long Branch: Saline, Hamilton	30	2745
Long Branch South: Saline	10	2660
Louden: Fayette, Effingham	2,300	1500
Main Consol.: Crawford, Lawrence	x	1480
Mattoon: Coles	2,020	1750
Maunie South Consol.: White	270	2590
Mt. Carmel: Wabash	3,360	2025
New Harmony Consol.: White, Wabash, Edwards	8,000	2570
New Harmony South: White	10	2670
New Haven Consol.: White	200	2445
Odin: Marion	290	1750
Omaha South: Gallatin, Saline	60	2535
Omaha West: Saline	50	2600
Pankeyville: Saline	30	2250
Pankeyville East: Saline	10	2250
Parkersburg Consol.: Richland, Edwards	160	2830
Passport South: Richland	70	2665
Patoka: Marion	60	1280
Patoka East: Marion	500	1340

Bellair 900		
Bellair: Crawford, Jasper	x	885
Cypress-Weiler		
Benton North: Franklin	130	2460
Bible Grove North: Effingham	50	2535
Bible Grove South: Clay	10	2500
Bone Gap Consol.: Edwards	70	2710
Brown: Marion	x	1660
Browns: Edwards, Wabash	280	2640
Browns East: Wabash	540	2570
Carlyle		
Carlyle: Clinton	940	1035
Cypress-Weiler		
*Carlyle South: Clinton	20	1075
Carmi: White	40	2800
Carmi North: White	20	2940
Centerville East: White	390	2915
Stein		
Centralia: Clinton, Marion	500	1200
Cypress-Weiler		
Clay City Consol.: Clay, Wayne, Richland, Jasper	5,770	2635
Clay City West: Clay	10	2700
Concord Consol.: White	230	2625
Concord East Consol.: White	160	2540
Cooks Mills Consol.: Coles, Douglas	510	1600
Dale Consol.: Hamilton, Saline, Franklin	890	2700
Dubois Consol.: Washington	1,050	1230
Eberle: Effingham	10	2475
Eldorado Consol.: Saline	70	2575
Eldorado East: Saline	30	2515
*Elliottstown East: Effingham	10	2485
Elliottstown North: Effingham	20	2430
Epworth Consol.: White	50	2730
Francis Mills: Saline	10	2675
Freeburg South: St. Clair	50	380
Carlyle		
†Frogtown: Clinton	300	950
Upper Lindley		
*Greenville Gas: Bond	160	925
Cypress-Weiler		
Harco East: Saline	60	2570
Harrisburg South: Saline	10	2300
Herald Consol.: White, Gallatin	1,480	2660
Hill East: Effingham	250	2460
Hoffman: Clinton	120	1190
Patoka South: Marion	320	1350
Phillipstown Consol.: White, Edwards	400	2720
Posey: Clinton	20	1105
Raccoon Lake: Marion	190	1625
Raleigh: Saline	380	2550
Richview: Washington	30	1520
Roland Consol.: White, Gallatin	1,400	2700
Ruark West Consol.: Lawrence	10	2165
†Rural Hill North: Hamilton	20	2930
St. Francisville East: Lawrence	10	1605
St. James: Fayette	1,860	1580
Sailor Springs Consol.: Clay, Effingham	8,200	2550
*Sailor Springs East: Clay	90	2695
Sandoval: Marion	20	1400
Sandoval West: Clinton	10	1420
*Santa Fe: Clinton	10	955
Sesser: Franklin	20	2455
Shattuc: Clinton	160	1280
†Shawneetown: Gallatin	10	2375
Sparta Gas		
*Sparta: Randolph	180	850
Cypress-Weiler		
*Sparta South: Randolph	10	880
Storms Consol.: White	90	2700
Stubblefield South: Bond	10	985
Sumpter: White	40	2860
Sumpter East: White	20	2795
Tamaroa: Perry	470	1120
Tamaroa West: Perry	10	1100
Thackeray: Hamilton	10	3030
Thompsonville North: Franklin	20	2750
Toliver East: Clay	10	2510
Trumbull: White	140	2845
Whittington: Franklin	70	2535
Whittington South: Franklin	100	2580
Woburn Consol.: Bond	220	865
Woodlawn: Jefferson	80	1800
Xenia East: Clay	150	2500
Paint Creek		
Paint Creek or Stray		
Albion East: Edwards	10	2910
Benton North: Franklin	150	2595
Carmi North: White	10	3080
Centerville East: White	20	2980
Dale Consol.: Hamilton, Saline, Franklin	220	2950
Eldorado Consol.: Saline	60	2680

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Continued)

System or series / Group / Formation / Pay "sand" / Pool: County	Acres	Approx. depth (ft.)
Harco: Saline	30	2675
Herald Consol.: White, Gallatin	10	x
Iola Consol.: Clay, Effingham	30	2255
Lancaster: Wabash, Lawrence	10	2530
Lawrence: Lawrence, Crawford	x	1600
Lawrence West: Lawrence	10	2040
Louden: Fayette, Effingham	4,000	1540
Maunie North Consol.: White	40	2830
Mt. Carmel: Wabash	30	2095
New Harmony Consol.: White, Wabash, Edwards	x	2660
Orchardville North: Wayne	10	2655
Parkersburg Consol.: Richland, Edwards	70	2955
Phillipstown Consol.: White, Edwards	50	2780
Roland Consol.: White, Gallatin	330	2800
Bethel or Benoist		
Bethel or Benoist		
Albion Consol.: Edwards, White	420	2960
Albion East: Edwards	20	2920
Allendale: Wabash, Lawrence	x	2010
Alma: Marion	60	1945
Ashley: Washington	120	1430
Assumption Consol.: Christian	430	1050
*Ayers Gas: Bond	325	940
Beaucoup South: Washington	230	1430
Beaver Creek: Bond, Clinton	160	1130
*Beaver Creek North: Bond	40	1115
Beaver Creek South: Clinton, Bond	410	1140
Bellmont: Wabash	10	2650
Benton North: Franklin	30	2600
Bone Gap Consol.: Edwards	30	2880
Boulder: Clinton	530	1190
Boyd: Jefferson	1,430	2060
Browns: Edwards, Wabash	50	2785
Browns South: Edwards	20	2850
Carlyle North: Clinton	470	1150
Centerville East: White	180	2990
McKinley: Washington	70	1000
Main Consol.: Crawford, Lawrence	x	1580
Mason North: Effingham	100	2290
Maunie North Consol.: White	400	2820
Maunie South Consol.: White	10	2735
Miletus: Marion	90	2140
Mt. Carmel: Wabash	60	2110
New Harmony Consol.: White, Wabash, Edwards	x	2700
New Harmony South: White	20	2815
Omaha: Gallatin	10	2570
Oskaloosa: Clay	360	2595
Pana: Christian	50	1470
Panama: Bond, Montgomery	120	865
Pankeyville East: Saline	10	2360
Parkersburg Consol.: Richland, Edwards	140	2930
Parkersburg South: Edwards	20	2815
Patoka: Marion	950	1410
Patoka East: Marion	60	1465
Patoka West: Fayette	180	1380
Phillipstown Consol.: White, Edwards	920	2810
Posen South: Washington	30	1255
Roaches: Jefferson	30	2000
Roaches North: Jefferson	350	1925
Roland Consol.: White, Gallatin	1,100	2800
Ruark: Lawrence	80	2075
Ruark West Consol.: Lawrence	440	2220
St. Francisville: Lawrence	650	1845
St. Francisville East: Lawrence	220	1750
St. Paul: Fayette	240	1900
Sailor Springs Consol.: Clay, Effingham	340	2740
Salem Consol.: Marion, Jefferson	x	1780
Samsville North: Edwards	180	2900
Sandoval: Marion	460	1540
Shattuc: Clinton	10	1420
Shawneetown East: Gallatin	10	2480
Storms Consol.: White	10	2810

*Centerville North: White	10	2990
Centerville Northeast: White	10	3055
Centralia: Clinton, Marion	1,400	1355
Centralia West: Clinton	90	1440
Clarksburg: Shelby	20	1770
Clay City Consol.: Clay, Wayne, Richland, Jasper	100	2800
Cordes: Washington	1,220	1260
Cravat: Jefferson	120	2070
†Crossville: White	30	2880
Dale Consol.: Hamilton, Saline, Franklin	2,100	2975
*Dix South: Jefferson	20	1950
Dubois Consol.: Washington	410	1325
Dubois Central: Washington	10	1335
Elba: Gallatin	50	2660
Elkville: Jackson	10	2000
Ellery Consol.: Edwards, Wayne	280	3110
†Ellery North: Edwards	20	3100
Fairman: Marion, Clinton	460	1435
*Fitzgerrell: Jefferson	10	2760
Friendsville Central: Wabash	50	2330
Goldengate North Consol.: Wayne	10	3095
Herald Consol.: White, Gallatin	210	2790
Hoffman: Clinton	180	1320
Huey: Clinton	100	1260
Iola Central: Clay	10	2420
Iola Consol.: Clay, Effingham	820	2290
Iola South: Clay	120	2490
Irvington: Washington	870	1535
Irvington East: Jefferson	200	1950
Irvington North: Washington	220	1470
Johnsonville Consol.: Wayne	30	2950
Johnsonville West: Wayne	10	2925
Kenner: Clay	590	2690
Kenner North: Clay	280	2755
Kenner West: Clay	200	2705
Keyesport: Clinton	140	1180
Kinmundy: Marion	20	1915
*Kinmundy North: Marion	10	2040
Laclede: Fayette	20	2335
Lakewood: Shelby	80	1690
Lancaster: Wabash, Lawrence	880	2540
Lancaster South: Wabash	70	2520
Lawrence: Lawrence, Crawford	x	1650
Lawrence West: Lawrence	240	2050
Louden: Fayette, Effingham	9,000	1550
Sumpter South: White	10	3025
Tonti: Marion	x	1930
Waltonville: Jefferson	40	2460
Whittington West: Franklin	10	2615
Williams Consol.: Jefferson	170	2490
Woburn Consol.: Bond	320	1020
Woodlawn: Jefferson	1,900	1960
Xenia East: Clay	10	2710
Renault		
Renault		
Ab Lake: Gallatin	40	2735
Albion Consol.: Edwards, White	100	3000
Albion East: Edwards	40	2925
Bungay Consol.: Hamilton	150	3270
Concord East Consol.: White	10	2800
Elba: Gallatin	10	2770
Eldorado West: Saline	10	2910
Epworth Consol.: White	10	2990
†Ina: Jefferson	10	2725
Inman West Consol.: Gallatin	20	2775
Iola Consol.: Clay, Effingham	10	2320
Lawrence: Lawrence, Crawford	x	1695
Maunie North Consol.: White	10	2935
Salem Consol.: Marion, Jefferson	x	x
Sesser: Franklin	120	2690
Aux Vases		
Aux Vases		
Ab Lake: Gallatin	40	2770
Ab Lake West: Gallatin	120	2735
Aden Consol.: Wayne, Hamilton	1,260	3200
Aden South: Hamilton	100	3245
Akin: Franklin	200	3100
Albion Consol.: Edwards, White	940	3045
Albion East: Edwards	120	3020
Allendale: Wabash, Lawrence	x	2280
*Amity West: Richland	10	2925
Barnhill: Wayne	640	3325
Bellair: Crawford, Jasper	30	1200
Belle Prairie: Hamilton	20	3250
Beman: Lawrence	40	1805
Beman East: Lawrence	20	1805
Benton North: Franklin	100	2685
Bible Grove South: Clay	40	2740
Bone Gap Consol.: Edwards	10	3020
Boyd: Jefferson	680	2130
Browns: Edwards, Wabash	10	2965

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Continued)

System or series / Group / Formation / Pay "sand" / Pool: County	Acres	Approx. depth (ft.)
Browns South: Edwards	20	2950
Bungay Consol.: Hamilton	2,950	3295
Burnt Prairie South: White	10	3330
*Calhoun South: Wayne	10	3175
Carmi: White	10	3145
Carmi North: White	100	3270
Centerville: White	10	3240
Centerville East: White	340	3075
Christopher Consol.: Franklin	270	2605
Clay City Consol.: Clay, Wayne, Richland, Jasper	14,400	2940
Clay City West: Clay	80	2950
Coil: Wayne	460	2700
Coil West: Jefferson	100	2720
Concord Consol.: White	450	2905
Concord East Consol.: White	60	2825
†Cooks Mills Consol.: Coles, Douglas	60	1765
†Crossville: White	30	3030
†Crossville West: White	10	3030
Dale Consol.: Hamilton, Saline, Franklin	11,600	3150
Divide East: Jefferson	110	2620
Elba: Gallatin	40	2780
Eldorado Consol.: Saline	470	2900
Eldorado East: Saline	190	2885
Eldorado West: Saline	20	2960
Ellery Consol.: Edwards, Wayne	1,000	3235
Ellery East: Edwards	160	3180
†Ellery North: Edwards	10	3230
†Ellery South: Edwards	40	3200
†Enfield: White	140	3250
Epworth Consol.: White	270	3000
Ewing: Franklin	10	2835
*Fitzgerrell: Jefferson	10	2800
†Gays: Moultrie	100	1970
Goldengate Consol.: Wayne, White	760	3180
Goldengate North Consol.: Wayne	180	3235
Half Moon: Wayne	20	3190
Omaha East: Gallatin	10	2790
Omaha South: Gallatin, Saline	10	2870
Omaha West: Saline	10	2800
Orchardville: Wayne	60	2800
Oskaloosa East: Clay	20	2820
Parkersburg Consol.: Richland, Edwards	10	3070
Phillipstown Consol.: White, Edwards	700	2880
Phillipstown South: White	10	2985
Raleigh: Saline	10	2905
Raleigh South: Saline	90	2860
Roland Consol.: White, Gallatin	2,350	2880
Roland West: Saline	10	2935
Ruark: Lawrence	10	2145
Ste. Marie West: Jasper	10	2720
Sailor Springs Consol.: Clay, Effingham	750	2825
Salem Consol.: Marion, Jefferson	x	1825
Sesser: Franklin	200	2700
†Shawneetown: Gallatin	10	2650
Shawneetown East: Gallatin	20	2660
†Shawneetown North: Gallatin	30	2750
Shelbyville Consol.: Shelby	70	1860
Stanford South: Clay	170	2970
Stewardson: Shelby	70	1945
Storms Consol.: White	100	2900
Sumpter East: White	200	3020
Sumpter North: White	120	3185
Sumpter West: White	10	3165
Thackeray: Hamilton	660	3360
Thompsonville East: Franklin	90	3150
Thompsonville North: Franklin	560	3100
Toliver South: Clay	10	2765
Tonti: Marion	x	2005
Trumbull: White	110	3170
Trumbull West: White	10	3120
Walpole: Hamilton	1,640	3070
Walpole South: Hamilton	20	3125
West Frankfort: Franklin	200	2710

Harco: Saline	490	2860
Harco East: Saline	160	2865
Herald Consol.: White, Gallatin	2,100	2920
Hord South: Clay	20	2735
†Ingraham: Clay	10	2915
Inman East Consol.: Gallatin	210	2715
Inman West Consol.: Gallatin	470	2790
Iola Consol.: Clay, Effingham	1,525	2325
Johnsonville Consol.: Wayne	2,460	3020
Johnsonville South: Wayne	270	3060
Johnsonville West: Wayne	170	2900
Junction North: Gallatin	20	2725
Keenville: Wayne	250	2960
Kenner: Clay	10	2835
King: Jefferson	1,020	2725
Lakewood: Shelby	50	1720
Lawrence: Lawrence, Crawford	x	1775
Lawrence West: Lawrence	10	2110
Locust Grove: Wayne	60	3215
Long Branch: Saline, Hamilton	50	3095
Louden: Fayette, Effingham	50	1600
Louisville North: Clay	20	2760
Main Consol.: Crawford, Lawrence	x	1530
Maple Grove Consol.: Edwards, Wayne	290	3145
Marion: Williamson	10	2385
Markham City North: Jefferson, Wayne	80	2950
Markham City West: Jefferson	320	2905
Mason North: Effingham	10	2355
Mattoon: Coles	200	1900
†Maunie East: White	60	2870
Maunie North Consol.: White	860	2930
Maunie South Consol.: White	120	2845
Miletus: Marion	100	2200
Mill Shoals: White, Hamilton, Wayne	2,430	3245
Mt. Erie North: Wayne	50	3110
Mt. Vernon: Jefferson	50	2665
New Bellair: Crawford	10	1280
New Harmony Consol.: White, Wabash, Edwards	5,100	2800
New Harmony South: White	10	3005
New Haven Consol.: White	70	2720
New Hebron East: Crawford	30	1555
Oakdale: Jefferson	40	2860
Oak Point: Clark	570	1185
Oak Point West: Clark	20	1190
Omaha: Gallatin	20	2730
Whittington: Franklin	40	2735
Whittington West: Franklin	150	2680
Williams Consol.: Jefferson	280	2550
Woburn Consol.: Bond	40	1055
Woodlawn: Jefferson	240	1975
Xenia: Clay	10	2785
Valmeyer		
Ste. Genevieve		
Ohara limestone		
Aden Consol.: Wayne, Hamilton	140	3290
Aden South: Hamilton	20	3310
Akin: Franklin	40	3100
Akin West: Franklin	20	3050
Albion Central: Edwards	180	3350
Albion Consol.: Edwards, White	200	3110
Albion East: Edwards	200	3100
Allendale: Wabash, Lawrence	x	2300
Barnhill: Wayne	140	3370
Bellair: Crawford, Clark	20	860
Bellmont: Wabash	60	2840
Benton North: Franklin	220	2730
Berryville Consol.: Wabash, Edwards	100	2900
Bessie: Franklin	40	2895
Bone Gap Consol.: Edwards	80	3040
Bone Gap East: Edwards	20	2980
Bone Gap West: Edwards	20	3290
Boyd: Jefferson	40	2230
Browns: Edwards, Wabash	40	2965
Bungay Consol.: Hamilton	80	3335
Burnt Prairie South: White	20	3415
Calhoun Consol.: Richland, Wayne	460	3140
Centerville: White	100	3310
Centerville East: White	40	3175
Christopher Consol.: Franklin	20	2675
Clay City Consol.: Clay, Wayne, Richland, Jasper	x	3020
Coil West: Jefferson	100	2790
Concord Consol.: White	40	2930
Concord East Consol.: White	40	2895
Cottage Grove: Saline	20	2770
†Crossville: White	20	3100
Dale Consol.: Hamilton, Saline, Franklin	2,100	3110
Divide: Jefferson	20	2705
Divide West: Jefferson	120	2680
Dundas East: Richland, Jasper	x	2905
Elba: Gallatin	40	2820

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Continued)

System or series Group Formation Pay "sand" Pool: County	Acres	Approx. depth (ft.)
Eldorado Consol.: Saline	40	2900
Ellery Consol.: Edwards, Wayne	680	3300
Ellery East: Edwards	180	3250
†Enfield: White	40	3310
Epworth Consol.: White	20	3095
Ewing East: Franklin	20	3010
Exchange: Marion	40	2695
Exchange East: Marion	20	2775
Francis Mills South: Saline	20	3010
Gards Point: Wabash	320	2870
Gards Point North: Wabash	20	2850
Goldengate Consol.: Wayne, White	800	3250
Goldengate East: Wayne	20	3290
Goldengate North Consol.: Wayne	120	3300
Half Moon: Wayne	380	3280
Harco: Saline	80	2965
Harco East: Saline	40	2880
Herald Consol.: White, Gallatin	140	2965
Inman East Consol.: Gallatin	20	2795
Inman West Consol.: Gallatin	80	2815
Iuka: Marion	126	2650
Johnsonville Consol.: Wayne	600	3120
Johnsonville North: Wayne	40	3190
Johnsonville West: Wayne	60	2930
*Keensburg East: Wabash	40	2705
Keensburg South: Wabash	40	2715
Keenville: Wayne	80	3050
King: Jefferson	160	2765
Lancaster: Wabash, Lawrence	40	2670
Lancaster Central: Wabash	100	2700
Lancaster South: Wabash	20	2670
Lawrence: Lawrence, Crawford	x	1750
Lexington North: Wabash	40	2915
Locust Grove: Wayne	40	3240
Maple Grove Consol.: Edwards, Wayne	80	3230
*Massilon: Wayne, Edwards	120	3255
*Massilon South: Edwards	20	3315
Berryville Consol.: Wabash, Edwards	20	2850
Bible Grove North: Effingham	40	2835
Blairsville West: Hamilton	20	3345
Bogota: Jasper	20	3090
Bone Gap Consol.: Edwards	80	3045
Bourbon: Douglas	560	1600
Bourbon North: Douglas	40	1650
Browns: Edwards, Wabash	20	2975
Bungay Consol.: Hamilton	80	3400
*Calhoun Central: Richland	20	3245
Calhoun Consol.: Richland, Wayne	240	3160
Calhoun North: Richland	20	3155
Centerville: White	20	x
Centerville East: White	20	3185
Chesterville: Douglas	100	1780
*Claremont Gas: Richland	160	3200
Clay City Consol.: Clay, Wayne, Richland, Jasper	x	3030
Coil West: Jefferson	x	2805
Concord Consol.: White	60	3035
Concord East Consol.: White	60	2895
†Cooks Mills Consol.: Coles, Douglas	3,080	1800
Dale Consol.: Hamilton, Saline, Franklin	400	3130
Divide: Jefferson	20	2770
Divide East: Jefferson	60	2700
Divide West: Jefferson	320	2700
Dubois Central: Washington	60	1530
Dundas East: Richland, Jasper	x	2920
Eberle: Effingham	20	2680
Eldorado Consol.: Saline	20	2900
Eldorado East: Saline	20	2975
Ellery Consol.: Edwards, Wayne	760	3320
Ellery East: Edwards	40	3255
†Ellery North: Edwards	80	3345
*Elliottstown: Effingham	20	2730
Epworth Consol.: White	80	3115
*Evers: Effingham	60	2610

Maunie North Consol.: White	160	2995
Mill Shoals: White, Hamilton, Wayne	120	3320
*Mills Prairie: Edwards	20	2925
Mills Prairie North: Edwards	40	2925
Mt. Carmel: Wabash	260	2320
Mt. Erie North: Wayne	40	3170
Mt. Vernon: Jefferson	20	2750
New Harmony Consol.: White, Wabash, Edwards	x	2900
Olney Consol.: Richland	x	3005
Omaha East: Gallatin	20	2855
Orchardville: Wayne	20	2880
Parkersburg Consol.: Richland, Edwards	x	3100
Parkersburg West: Richland, Edwards	40	3220
Phillipstown Consol.: White, Edwards	480	3010
Raccoon Lake: Marion	20	1885
Roaches: Jefferson	60	2170
Roland Consol.: White, Gallatin	600	3020
Ruark: Lawrence	20	2275
Ruark West Consol.: Lawrence	80	2350
Sailor Springs Consol.: Clay, Effingham	240	2900
Salem Consol.: Marion, Jefferson	x	2075
Samsville Northwest: Edwards	20	3190
Samsville West: Edwards	60	3260
Sumpter East: White	120	3115
Taylor Hill: Franklin	60	3055
Thackeray: Hamilton	x	3435
Trumbull: White	40	3230
West Frankfort: Franklin	480	2760
Whittington: Franklin	220	2835
Whittington West: Franklin	100	2800
Zenith South: Wayne	40	2920
Rosiclare		
Aden Consol.: Wayne, Hamilton	100	3320
Aden South: Hamilton	160	3330
Akin West: Franklin	20	3080
Albion Consol.: Edwards, White	40	3130
Albion East: Edwards	80	3125
Allendale: Wabash, Lawrence	x	2300
Alma: Marion	40	2085
*Amity South: Richland	20	2890
Assumption Consol.: Christian	320	1170
Barnhill: Wayne	180	3400
Beman: Lawrence	480	1850
Beman East: Lawrence	90	1860
Benton North: Franklin	160	2775
*Evers South: Effingham	10	2650
Exchange East: Marion	180	2780
Goldengate Consol.: Wayne, White	1,000	3275
Goldengate North Consol.: Wayne	180	3325
Half Moon: Wayne	120	3280
Harco: Saline	100	2970
Herald Consol.: White, Gallatin	140	3005
Hidalgo North: Cumberland	40	2655
Hill East: Effingham	40	2660
*Hunt City: Jasper	20	2540
†Ingraham: Clay	620	3000
Inman East Consol.: Gallatin	20	2790
Inman West Consol.: Gallatin	40	2815
Iola Consol.: Clay, Effingham	900	2400
Iola South: Clay	100	2590
Iuka: Marion	100	2660
Johnsonville Consol.: Wayne	140	3150
Johnsonville North: Wayne	40	3220
Johnsonville South: Wayne	20	3160
Johnsonville West: Wayne	20	3015
Junction North: Gallatin	60	2860
Keenville: Wayne	20	3060
Kenner: Clay	20	2875
King: Jefferson	140	2815
Lancaster Central: Wabash	260	2810
Lancaster East: Wabash	20	2660
Lawrence: Lawrence, Crawford	x	1860
Locust Grove South: Wayne	20	3300
Maple Grove Consol.: Edwards, Wayne	20	3250
Mason North: Effingham	60	2390
Mattoon: Coles	3,820	1950
Maunie North Consol.: White	340	3025
Maunie South Consol.: White	20	2900
Mill Shoals: White, Hamilton, Wayne	220	3345
Mt. Carmel: Wabash	240	2350
Nason: Jefferson	20	2790
New Harmony Consol.: White, Wabash, Edwards	x	2910
Olney Consol.: Richland	x	3050
†Olney South: Richland	700	3100
Omaha South: Gallatin, Saline	20	2865
Parkersburg Consol.: Richland, Edwards	x	3150
Passport: Clay	40	3005
Passport South: Richland	20	3025
Passport West: Clay	180	3030
Patoka: Marion	500	1550

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Continued)

System or series Group Formation Pay "sand" Pool: County	Acres	Approx. depth (ft.)
Phillipstown Consol.: White, Edwards	460	2960
Raccoon Lake: Marion	200	1930
Riffle: Clay	100	2735
Rinard North: Wayne	20	3135
Ritter: Richland	80	3210
Roaches: Jefferson	160	2190
Roaches North: Jefferson	60	2115
Roland Consol.: White, Gallatin	600	3050
Ruark West Consol.: Lawrence	480	2390
†Rural Hill North: Hamilton	20	3325
Russellville West: Lawrence	20	1560
St. James: Fayette	20	1860
St. Paul: Fayette	20	2080
Sailor Springs Central: Clay	20	3015
Sailor Springs Consol.: Clay, Effingham	1,600	2900
*Sailor Springs North: Clay	20	2985
Salem Consol.: Marion, Jefferson	x	2100
Samsville West: Edwards	40	3275
Schnell South: Clay	60	3005
Sesser: Franklin	80	2810
Sumpter East: White	200	3140
Toliver East: Clay	20	2815
Tonti: Marion	x	2125
Trumbull: White	60	3270
*Wakefield: Jasper	40	3100
Walpole: Hamilton	20	3195
West Frankfort: Franklin	60	2810
Whittington: Franklin	20	2880
Whittington West: Franklin	20	2780
Woodlawn: Jefferson	300	2205
Zenith North: Wayne	240	3080
McClosky limestone		
Ab Lake West: Gallatin	20	2830
Aden Consol.: Wayne, Hamilton	2,340	3350
Aden South: Hamilton	340	3395
Akin: Franklin	20	3270
Akin West: Franklin	60	3130
Divide South: Jefferson	100	2880
Divide West: Jefferson	1,300	2750
Dundas East: Richland, Jasper	x	2950
Eberle: Effingham	80	2820
Elbridge: Edgar	360	950
Eldorado Consol.: Saline	40	2975
*Elk Prairie: Jefferson	20	2735
Ellery Consol.: Edwards, Wayne	920	3350
†Ellery North: Edwards	40	3420
†Ellery South: Edwards	160	3300
†Enfield: White	100	3385
*Evers: Effingham	10	2660
Ewing: Franklin	140	2970
Exchange: Marion	80	2730
Exchange East: Marion	180	2840
*Exchange North: Marion	40	2715
Flora South: Clay	100	2985
Goldengate Consol.: Wayne, White	2,000	3310
Goldengate North Consol.: Wayne	120	3350
Half Moon: Wayne	400	3300
Herald Consol.: White, Gallatin	420	3010
†Hidalgo: Jasper	60	2575
*Hill: Effingham	80	2565
Hill East: Effingham	160	2700
*Hoodville East: Hamilton	20	3365
Hord: Clay	240	2800
Hord South: Clay	540	2790
*Hunt City East: Jasper	20	1845
Hunt City South: Jasper	80	2445
Ina North: Jefferson	20	2940
†Ingraham: Clay	100	3075
Inman East Consol.: Gallatin	140	2800
Inman West Consol.: Gallatin	280	2940
Iola Consol.: Clay, Effingham	820	2425
Iola South: Clay	40	2650
*Iola West: Clay	20	2495
Iuka: Marion	620	2750

Albion Central: Edwards	20	3395
Albion Consol.: Edwards, White	1,600	3200
Albion East: Edwards	240	3155
*Albion West: Edwards	20	3375
Allendale: Wabash, Lawrence	x	2300
Amity: Richland	160	2960
Barnhill: Wayne	1,140	3450
Belle Prairie: Hamilton	220	3420
Belle Rive: Jefferson	200	3085
*Bennington South: Edwards	20	3240
Benton North: Franklin	360	2800
Berryville Consol.: Wabash, Edwards	420	2890
Bible Grove North: Effingham	60	2875
Blairsville West: Hamilton	200	3405
Bogota: Jasper	260	3110
*Bogota North: Jasper	10	3080
Bogota South: Jasper	480	3075
Bone Gap Consol.: Edwards	800	3200
Bone Gap East: Edwards	20	3050
*Broughton: Hamilton	20	3275
*Broughton South: Saline	20	3215
Browns: Edwards, Wabash	600	3000
Bungay Consol.: Hamilton	260	3425
Burnt Prairie South: White	20	3460
*Calhoun Central: Richland	20	3280
Calhoun Consol.: Richland, Wayne	1,600	3180
Calhoun East: Richland	160	3265
Calhoun North: Richland	40	3170
Carmi: White	40	3150
Centerville: White	120	3370
Centerville East: White	240	3230
Clay City Consol.: Clay, Wayne, Richland, Jasper	x	3050
Clay City West: Clay	540	3065
Coil: Wayne	20	3065
Coil West: Jefferson	200	2880
Concord Consol.: White	1,120	2990
Concord East Consol.: White	30	2960
†Cooks Mills Consol.: Coles, Douglas	20	1840
Covington South: Wayne	320	3310
†Crossville: White	60	3120
†Crossville West: White	20	3185
Dahlgren: Hamilton	700	3300
Dale Consol.: Hamilton, Saline, Franklin	2,100	3150
Divide: Jefferson	280	2750
Divide East: Jefferson	600	2750
Iuka West: Marion	80	2700
Johnsonville Consol.: Wayne	8,300	3170
Johnsonville North: Wayne	40	3250
Johnsonville South: Wayne	160	3200
Johnsonville West: Wayne	120	3100
Junction: Gallatin	20	2730
*Keensburg East: Wabash	80	2710
Keenville: Wayne	400	3100
Keenville East: Wayne	60	3140
*Kell: Jefferson	40	2625
Kenner: Clay	20	2930
Kenner North: Clay	120	2970
*Kenner South: Clay	20	2870
Kenner West: Clay	40	2870
King: Jefferson	120	2840
Lancaster: Wabash, Lawrence	500	2690
Lancaster Central: Wabash	40	2815
Lancaster South: Wabash	20	2720
Lawrence: Lawrence, Crawford	x	1860
Lawrence West: Lawrence	40	2225
Lexington: Wabash	200	2970
Lillyville: Cumberland, Effingham	160	2425
Locust Grove: Wayne	20	3280
Long Branch: Saline, Hamilton	40	3220
Louden: Fayette, Effingham	20	1785
Lynchburg: Jefferson	40	3045
Main Consol.: Crawford, Lawrence	x	1400
Maple Grove Consol.: Edwards, Wayne	2,040	3260
*Maple Grove South: Edwards	20	3250
*Marco: Jefferson	40	2745
Markham City: Jefferson	760	3070
Markham City North: Jefferson, Wayne	500	3075
Markham City West: Jefferson	360	3035
Mason North: Effingham	20	2475
Mattoon: Coles	20	2010
Maunie North Consol.: White	380	3035
Maunie South Consol.: White	40	2920
Mayberry: Wayne	240	3350
*Mayberry North: Wayne	20	3330
Miletus: Marion	60	2350
Mill Shoals: White, Hamilton, Wayne	700	3375
Mt. Carmel: Wabash	1,300	2360
Mt. Erie North: Wayne	100	3240
Mt. Vernon: Jefferson	180	2800
Mt. Vernon North: Jefferson	20	2675

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Continued)

System or series / Group / Formation / Pay "sand" / Pool: County	Acres	Approx. depth (ft.)
New Harmony Consol.: White, Wabash, Edwards	x	2925
New Harmony South: White	40	3010
New Haven Consol.: White	60	2820
Newton: Jasper	80	2950
*Newton North: Jasper	20	2855
†Newton West: Jasper	60	3000
Noble West: Clay	20	3035
Oakdale: Jefferson	40	2985
Olney Consol.: Richland	x	3100
†Olney South: Richland	520	3115
Omaha West: Saline	20	2910
*Omega: Marion	40	2490
Orchardville: Wayne	40	2905
Oskaloosa East: Clay	20	2895
Oskaloosa South: Clay	60	2770
Parkersburg Consol.: Richland, Edwards	5,000	3175
Parkersburg West: Richland, Edwards	200	3260
Passport: Clay	1,060	3020
Passport South: Richland	20	3030
Patoka East: Marion	80	1635
Phillipstown Consol.: White, Edwards	1,060	3000
*Pinkstaff: Lawrence	20	1735
Pinkstaff East: Lawrence	20	1640
Raccoon Lake: Marion	260	1950
Reservoir: Jefferson	200	2700
Ridgway: Gallatin	20	2840
*Rinard: Wayne	20	3145
Rinard North: Wayne	200	3140
Ritter North: Richland	40	3215
Roaches: Jefferson	120	2250
Roland Consol.: White, Gallatin	1,600	3070
Ruark West Consol.: Lawrence	280	2400
Russellville: Lawrence	40	1560
Ste. Marie: Jasper	800	2860
*Ste. Marie East: Jasper	80	2685
Ste. Marie West: Jasper	200	2815
Kinmundy: Marion	20	2430
Lawrence: Lawrence, Crawford	x	1660
Martinsville "sand"		
Martinsville: Clark	780	480
St. Louis ls.		
Roland Consol.: White, Gallatin	20	x
Salem Consol.: Marion, Jefferson	x	2100
Whittington: Franklin	40	3080
St. Louis-Salem		
Westfield ls.		
Westfield: Clark, Coles	9,000	335
Salem		
Salem ls.		
Aden Consol.: Wayne, Hamilton	80	3735
Barnhill: Wayne	40	3795
Clay City Consol.: Clay, Wayne, Richland, Jasper	1,500	3590
Grandview: Edgar	40	570
*Jacksonville Gas: Morgan	x	330
Lawrence: Lawrence, Crawford	x	1955
Main Consol.: Crawford, Lawrence	x	1815
New Harmony Consol.: White, Wabash, Edwards	60	3755
Salem Consol.: Marion, Jefferson	x	2160
Warsaw		
Warsaw ls.		
Clay City Consol.: Clay, Wayne, Richland, Jasper	10	3600
Dahlgren: Hamilton	20	4110
Osage		
Cole		
Weaver: Clark	20	1565
Carper		
Casey: Clark	30	1300
Johnson North: Clark	20	1325
Louden: Fayette, Effingham	20	2830
Martinsville: Clark	820	1340
Mattoon: Coles	10	2950

Sailor Springs Consol.: Clay, Effingham	x	2925
*Sailor Springs East: Clay	20	3020
*Sailor Springs North: Clay	40	3030
Salem Consol.: Marion, Jefferson	x	2050
Samsville West: Edwards	40	3275
Schnell: Richland	80	3000
*Schnell East: Richland	20	3115
Seminary: Richland	160	3195
Sesser: Franklin	100	2840
†Shawneetown North: Gallatin	20	3045
Stanford South: Clay	110	3090
Storms Consol.: White	120	3055
Stringtown: Richland	800	3025
*Stringtown East: Richland	20	3010
Sumner: Lawrence	40	2260
Sumpter East: White	40	3150
Thackeray: Hamilton	x	3500
*Thompsonville: Franklin	240	3120
Toliver East: Clay	60	2840
Toliver South: Clay	60	2875
Tonti: Marion	x	2130
Trumbull: White	220	3290
Valier: Franklin	20	2715
Wakefield North: Jasper	20	3000
Wakefield South: Jasper	20	3040
West Frankfort: Franklin	280	2825
Whittington: Franklin	100	2870
Whittington West: Franklin	40	2900
Williams Consol.: Jefferson	20	x
Willow Hill East: Jasper	320	2645
Woodlawn: Jefferson	20	2200
Zenith: Wayne	40	2970
Zenith North: Wayne	160	3140
Zenith South: Wayne	280	2985
St. Louis		
St. Louis ls.		
Barnhill: Wayne	20	3520
Clay City Consol.: Clay, Wayne, Richland, Jasper	220	3025
Divide: Jefferson	40	2850
Divide West: Jefferson	80	2810
Ellery Consol.: Edwards, Wayne	40	3430
Exchange East: Marion	20	2940
Frogtown North: Clinton	100	1200
†Ina: Jefferson	40	3000
Iuka: Marion	3,000	2775
Oak Point: Clark	20	2220
Westfield: Clark, Coles	70	875
Kinderhook		
Sylamore		
Sylamore (Hardin)		
Marine: Madison	x	1700
St. Jacob East: Madison	20	1840
DEVONIAN		
Devonian undifferentiated		
Bartelso South: Clinton	100	2475
Boulder East: Clinton	20	2850
Centralia: Clinton, Marion	2,500	2870
Clay City Consol.: Clay, Wayne, Richland, Jasper	20	4350
Dudleyville East: Bond	40	2370
Edinburg West: Christian, Sangamon	60	1660
Elbridge: Edgar	20	1950
Gays: Moultrie	20	3205
Main Consol.: Crawford, Lawrence	x	2795
Martinsville: Clark	680	1550
Posey East: Clinton	40	2740
*Posey West: Clinton	10	2585
Salem Consol.: Marion, Jefferson	5,860	3440
Tonti: Marion	80	3500
Weaver: Clark	680	2030
Lingle		
Lingle ss.		
†Sorento Consol.: Bond	520	1850
Sorento West: Bond	20	1880
Woburn Consol.: Bond	870	2275
Woodlawn: Jefferson	240	3690
Cedar Valley		
Cedar Valley ls.		
Assumption Consol.: Christian	2,870	2300
Assumption South: Christian	60	2630
*Edinburg: Christian	20	1810
Oakley: Macon	140	2285
Geneva		
Geneva dolomite		
Boulder: Clinton	860	2630
Louden: Fayette, Effingham	2,800	3000
Patoka: Marion	20	2835
Patoka East: Marion	40	2950
Sandoval: Marion	390	2920

* Abandoned. † Abandoned, revived. x Undetermined.

TABLE 11.—(Concluded)

System or series / Group / Formation / Pay "sand" / Pool: County	Acres	Approx. depth (ft.)
Clear Creek		
Clear Creek chert		
Beaucoup: Washington	280	3050
Christopher Consol.: Franklin	20	4430
Hoyleton West: Washington	20	2895
Irvington: Washington	400	3090
Sesser: Franklin	60	4360
Hibbard "sand"		
Edinburg South: Christian	40	1795
Kincaid: Christian	70	1780
Kincaid South: Christian	200	1815
Hoing ss.		
Colmar-Plymouth: Hancock, McDonough	2,500	450
Bailey		
Bailey ls.		
Elkton: Washington	40	2340
DEVONIAN-SILURIAN		
Devonian-Silurian ls.		
Frogtown North: Clinton	580	2250
New Memphis North: Clinton	60	2050
Raccoon Lake: Marion	300	3330
Waverly Gas: Morgan	720	1020
SILURIAN		
Silurian undifferentiated		
Baldwin: Randolph	60	1535
Bartelso: Clinton	250	2420
Bartelso East: Clinton	320	2550
Blackland: Macon, Christian	470	1935
*Collinsville: Madison	40	1305
Decatur: Macon	120	2000
*Decatur North: Macon	20	2220
Edinburg West: Christian, Sangamon	680	1690
Germantown East: Clinton	760	2350
Glenarm: Sangamon	20	1680
Harristown: Macon	40	2050
Huey South: Clinton	20	2585
McKinley: Washington	200	2240
Marine: Madison	3,100	1700
Mt. Auburn Consol.: Christian	2,240	1890
New City: Sangamon	60	1730
New Memphis: Clinton	760	1980
†New Memphis South: Clinton, Washington	40	2000
Okawville: Washington	80	2325
Okawville North: Washington	40	2235
*Pittsfield Gas: Pike	8,960	265
†Roby: Sangamon	60	1775
Sicily: Christian	60	1860
Tilden: Randolph	500	2160
Tovey: Christian	20	1850
Edgewood dolomite		
Fishhook Gas: Pike, Adams	6,000	450
ORDOVICIAN		
"Trenton" ls.		
Beaucoup: Washington	20	4095
Centralia: Clinton, Marion	1,400	3930
*Craig: Perry	20	3650
Dupo: St. Clair	1,000	700
Irvington: Washington	100	4273
Louden: Fayette, Effingham	20	3905
Martinsville: Clark	20	2700
Patoka: Marion	200	3950
Posen: Washington	80	3900
Posen North: Washington	10	4015
St. Jacob: Madison	1,120	2260
Salem Consol.: Marion, Jefferson	2,160	4500
Shattuc: Clinton	240	4020
†Waterloo: Monroe	230	410
Westfield: Clark, Coles	300	2300
Woburn Consol.: Bond	340	3170

* Abandoned. † Abandoned, revived. ˣ Undetermined.

Footnotes to Tables 12 and 13, p. 96-127.

[a] Cam, Cambrian; Ord, Ordovician; Sil, Silurian; Dev, Devonian; Mis, Mississippian; Pen, Pennsylvanian.
[b] L, limestone; LS, sandy limestone; OL, oolitic limestone; D, dolomite; DS, sandy dolomite; S, sandstone.
[c] A, anticline; AC, anticline with accumulation due to change in character of rock; AF, anticline with faulting as an important factor; Af, anticline with faulting as a minor factor; AL, anticline-lens; AM, accumulation due to both anticlinal and monoclinal structures; D, dome; H, strata horizontal or nearly horizontal; MC, monocline with accumulation due to change in character of rock; MF, monocline-fault; ML, monocline-lens; MU, monocline-unconformity; R, reef.
[x] Undetermined.

[1] Wells producing from 2 or more pays.
[2] Abandoned 1945; revived 1950.
[3] Total of lines 2, 8, 12, 13, 18, 25, 31, and 36.
[4] Includes Allison-Weger, Birds, Chapman, Flat Rock, Hardinsville, Kibbe, New Hebron, Oblong, Parker, Robinson, and Swearingen Gas.
[5] Pool also listed in table 13.
[6] Pool also listed in table 12.
[7] Total of lines 57 and 77.
[8] Total of lines 1, 44, 45, 78, 79.
[9] Abandoned 1943; revived 1956.
[10] Abandoned 1925; revived 1942.
[11] Abandoned 1921.
[12] Abandoned 1933; revived 1949.
[13] Abandoned 1950.
[14] Abandoned 1935.
[15] Abandoned 1923.
[16] Abandoned 1939.
[17] Abandoned 1904; revived 1942.
[18] Gas not used until 1905; abondoned 1930.
[19] Abandoned 1934.
[20] Abandoned 1900.
[21] Abandoned 1919.
[22] Abandoned 1930; revived 1939; converted in part to gas storage 1951.
[23] Total of lines 95 to 123 inclusive.
[24] Total of lines 1 to 13 inclusive.
[25] Has produced in multiple pay or workover wells only. No original completions.
[26] Abandoned 1953.
[27] Abandoned 1953.
[28] Abandoned 1954.
[29] Abandoned 1954.
[30] Abandoned 1946.
[31] Abandoned 1950.
[32] Abandoned 1956.
[33] Abandoned 1955.
[34] Abandoned 1954.
[35] Abandoned 1952.
[36] Abandoned 1952.
[37] Abandoned 1953.
[38] Abandoned 1954.
[39] Abandoned 1953.
[40] Abandoned 1949; revived 1952.
[41] Abandoned 1948.
[42] Abandoned 1951; revived 1953.
[43] Abandoned 1952; no gas marketed.
[44] Includes Concord North.
[45] Abandoned 1951.
[46] Abandoned 1952; revived 1956.
[47] Abandoned 1953; revived 1956.
[48] Includes Cantrell Consol., Cantrell North, Flannigan, Rural Hill West, and West End.
[49] Abandoned 1955.
[50] Abandoned 1946.
[51] Abandoned 1951.
[52] Abandoned 1940.
[53] Abandoned 1943; revived and abandoned 1951; revived 1954.
[54] Abandoned 1952; revived 1953.
[55] Abandoned 1951.
[56] Abandoned 1956.
[57] Abandoned 1951; revived 1952.
[58] Abandoned 1949; revived 1953.
[59] Abandoned 1951.
[60] Abandoned 1952; revived 1955.
[61] Abandoned 1952.
[62] Abandoned 1950; revived 1955.
[63] Includes Concord South Consol.
[64] Abandoned 1943; revived 1949; abandoned 1952.
[65] Abandoned 1950.
[66] Abandoned 1944.
[67] Includes Toliver.
[68] Abandoned 1950.
[69] Abandoned 1954.
[70] Abandoned 1946; revived 1954.
[71] Abandoned 1945; revived 1950.
[72] Includes Mason.
[73] Abandoned 1945.
[74] Abandoned 1947.
[75] Abandoned 1946.
[76] Abandoned 1952.
[77] Abandoned 1954.
[78] Abandoned 1956.
[79] Abandoned 1950.
[80] Abandoned 1941.
[81] Abandoned 1951.
[82] Abandoned 1953.
[83] Abandoned 1947.
[84] Abandoned 1952; revived 1955.
[85] Includes Maunie West.
[86] Includes Maunie.
[87] Abandoned 1950.
[88] Abandoned 1952.
[89] Abandoned 1956.
[90] Illinois portion only.
[91] Abandoned 1948; revived 1952; abandoned 1954; revived 1956.
[92] Abandoned 1952; revived 1956.
[93] Abandoned 1948.
[94] Abandoned 1953.
[95] Abandoned 1940; revived 1949.
[96] Abandoned 1949.
[97] Abandoned 1947; revived 1951; abandoned 1954.
[98] Abandoned 1951.
[99] Abandoned 1954.
[100] Abandoned 1946; revived 1955; abandoned 1956.
[101] Abandoned 1942.
[102] Abandoned 1951; revived 1954.
[103] Includes Norris City and Gossett.
[104] Abandoned 1950; revived 1956.
[105] Abandoned 1951.
[106] Abandoned 1955.
[107] Abandoned 1952; revived 1955; abandoned 1956.
[108] Abandoned 1951; revived 1955; abandoned 1956.
[109] Abandoned 1942; revived 1951; abandoned 1952.
[110] Abandoned 1956.
[111] Abandoned 1947.
[112] Abandoned 1954.
[113] Abandoned 1950; revived 1955.
[114] Abandoned 1953; revived 1955.
[115] Abandoned 1940; revived 1947. Includes Sorento South.
[116] Abandoned 1956.
[117] Abandoned 1950.
[118] Abandoned 1950.
[119] Abandoned 1956.
[120] Abandoned 1947.
[121] Abandoned 1956.
[122] Abandoned 1947; revived 1953; abandoned 1954.
[123] Abandoned 1955.
[124] Abandoned 1956.

TABLE 12.—OIL PRODUCTION IN ILLINOIS, 1956

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Abandoned	Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
1	Warrenton-Borton: Edgar, Coles	1906	0	x	0	32	150	Unnamed: Pen	S	200	20	29	0	0	2	ML	Trenton	2,212
2	Westfield: Clark, Coles	1904	6	x	52	x	10,000					1,667	2	5	182	D	St. Peter	3,009
3			x	x	x	x	9,050	Gas: Pen	S	280	25	208	0	0		D		
4			x	x	x	x	9,000	Westfield: Mis	L	335	x	1,450	0	4		D		
5			0	x	0	x	70	Carper: Mis	S	875	18	7	2	1		D		
6			0	x	0	x	300	Trenton: Ord	L	2,300	40	19	0	0		D		
7								[1]				3	0	0				
8	Siggins: Cumberland, Clark	1906	931	x	9,696	x	4,000					1,042	0	26	448	D	Dev	2,010
9			x	x	x	x	3,200	1st (Upper) Siggins: Pen	S	400	25	888	0	x		D		
10			x	x	x	x	500	2nd (Lower) Siggins: Pen	S	480	x	93	0	x		D		
11			x	x	x	x	1,000	3rd & 4th Siggins: Pen	S	580	40	202	0	x		D		
12	York: Cumberland, Clark[2]	1907	1	x	13	x	350	Isabel: Pen	S	590	15	71	0	0	7	AM	Dev	2,642
13	Casey: Clark	1906	37	x	364	x	2,100					444	2	0	295	AM	Dev	1,717
14			0	x	0	x	200	Upper Gas: Pen	S	265	x	42	0	0		AM		
15			0	x	0	x	400	Lower Gas: Pen	S	300	x	83	1	4		AM		
16			37	x	364	x	1,540	Casey: Pen	S	445	10	326	0	0		AM		
17			0	x	0	x	30	Carper: Mis	S	1,300	50	3	1	0		AM		
18	Martinsville: Clark	1907	26	x	46	x	1,600					260	5	10	129	D	St. Peter	3,411
19			x	x	x	x	40	Shallow: Pen	S	255	x	8	0	0		D		
20			x	x	x	x	380	Casey: Pen	S	500	x	83	0	2		D		
21			0	x	0	x	780	Martinsville: Mis	L	480	x	23	0	0		D		
22			0	x	0	x	820	Carper: Mis	S	1,340	40	53	5	8		D		
23			0	x	0	x	680	Devonian: Dev	L	1,550	x	43	0	0		D		
24			0	x	0	x	20	Trenton: Ord	L	2,700	x	2	0	0		D		
25	Johnson North: Clark	1907	37	x	448	x	2,400					499	0	40	232	AM	Dev	2,260
26			0	x	0	x	200	Kickapoo: Pen	S	315	x	33	0	x		AM		
27			0	x	0	x	1,200	Claypool: Pen	S	415	x	298	0	0		AM		
28			x	x	x	x	900	Casey: Pen	S	465	x	183	0	x		AM		
29			x	x	x	x	250	Upper Partlow: Pen	S	535	x	47	0	x		AM		
30			0	x	0	x	20	Carper: Mis	S	1,325	x	2	0	0		AM		
31	Johnson South: Clark	1907	420	x	1,693	x	2,200					568	3	21	214	AM	Dev	2,030
32			0	x	0	x	200	Claypool: Pen	S	390	x	38	0	x		AM		
33			x	x	x	x	300	Casey: Pen	S	450	x	60	0	x		AM		
34			x	x	x	x	1,700	Upper Partlow: Pen	S	490	48	429	3	x		AM		
35			0	x	0	x	850	Lower Partlow: Pen	S	600	x	175	0	x		AM		
36	Bellair: Crawford, Jasper	1907	136	x	1,495	x	1,600					506	7	7	100	AM	Mis	1,471
37			136	x	1,495	x	x	"500 ft.": Pen	S	560	30	311	0	1		AM		
38			0	x	0	x	x	"800 ft.": Pen	S	815	x	75	4	x		AM		
39			0	x	0	x	x	"900 ft.": Mis	S	885	x	184	1	x		AM		
40			0	x	0	x	10	Cypress: Mis	S	1,210	4	1	1	0		AM		
41			0	x	0	x	20	Renault: Mis	S	830	6	2	0	x		AM		
42			0	x	0	x	30	Aux Vases: Mis	S	1,200	x	2	1	0		AM		
43			0	x	0	x	20	Ohara: Mis	L	860	4	1	0	x		A		
44	Clark County Division[3]		1,594	1,880	13,807	70,482	24,250					5,057	19	109	1,607		St. Peter	3,411
45	Main Consol.: Crawford, Lawrence [4, 5]	1906	1,887	2,953	7,143	172,613	84,400					9,656	100	173	4,490	ML	St. Peter	4,654

46			0	x	0	x	x	Cuba: Pen	S	510	x	74	0	0		ML				
47			0	x	0	x	20	Unnamed: Pen	S	750	5	2	1	0		ML				
48			1,887	x	7,143	x	x	Robinson: Pen	S	950	25	9,272	42	x		ML				
49			0	x	0	x	x	Pennsylvanian: Pen	S	1,250	x	25	11	x		ML				
50			0	x	0	x	x	Cypress: Mis	S	1,480	15	32	1	x		ML				
51			0	x	0	x	x	Bethel: Mis	S	1,580	18	87	31	x		ML				
52			0	x	0	x	x	Aux Vases: Mis	S	1,530	15	35	13	x		ML				
53			0	x	0	x	x	McClosky (Oblong): Mis	L	1,400	x	112	1	x		MC				
54			0	x	0	x	x	Salem: Mis	L	1,815	5	12	0	0		MC				
55			0	x	0	x	x	Devonian: Dev	L	2,795	11	2	0	0		MC				
56								[1]				4	0	0						
57	Allison-Weger—Now included in Main Consol.																			
58	Birds—Now included in Main Consol.																			
59	Chapman—Now included in Main Consol.																			
60	Flat Rock—Now included in Main Consol.																			
61	New Hebron—Now included in Main Consol.																			
62	Parker—Now included in Main Consol.																			
63	Swearingen gas—Now included in Main Consol.																			
64	Lawrence: Lawrence, Crawford	1906	2,526	x	8,624	x	39,000					4,933	98	82	2,133	A	St. Peter	5,190		
65			0	x	0	x	x	Trivoli: Pen	S	290	x	11	1	0		A				
66			0	x	0	x	x	Cuba: Pen	S	450	x	1	0	0		A				
67			x	x	x	x	x	Bridgeport: Pen	S	800	40	1,260	1	x		A				
68			0	x	0	x	x	Pennsylvanian: Pen	S	950	15	5	5	0		A				
69			0	x	0	x	x	Buchanan: Pen	S	1,250	15	510	1	x		A				
70			0	x	0	x	x	Tar Springs: Mis	S	1,410	10	1	0	x		A				
71			0	x	0	x	x	Hardinsburg: Mis	S	1,570	10	1	0	x		A				
72			x	x	x	x	x	Jackson ("gas"): Mis	S	1,370	15	246	1	x		A				
73			x	x	x	x	x	Cypress (Kirkwood): Mis	S	1,400	30	3,132	26	x		A				
74			x	x	x	x	x	Paint Creek: Mis	S	1,600	8	6	3	x		A				
75			x	x	x	x	x	Bethel (Tracey): Mis	S	1,650	20	857	30	x		A				
76			x	x	x	x	x	Renault: Mis	S	1,695	7	3	0	0		A				
77			0	x	0	x	x	Aux Vases: Mis	S	1,775	8	16	2	x		A				
78			0	x	0	x	x	Ohara: Mis	L	1,750	8	5	2	x		A				
79			0	x	0	x	x	Rosiclare: Mis	LS	1,860	4	19	1	x		A				
80			0	x	0	x	x	McClosky: Mis	L	1,860	10	1,015	3	x		A				
81			0	x	0	x	x	St. Louis: Mis	L	1,660	10	3	2	0		A				
82			0	x	0	x	x	Salem: Mis	L	1,955	2	1	0	0		A				
83								[1]				42	10	x						
84	St. Francisville: Lawrence	x	0	x	0	x	650	Bethel: Mis	S	1,845	6	77	5	1	41	ML	Mis	2,164		
85	Lawrence County Division[7]		2,526	4,553	8,624	262,364	39,650					5,010	103	83	2,174		St. Peter	5,190		
86	Allendale: Wabash, Lawrence	1912	453	787	697	15,679	8,000					913	55	20	442	AM	Mis	2,571		
87			0	x	0	x	x	Pleasantview: Pen	S	660	30	3	0	0		AM				
88			0	x	0	x	x	Bridgeport: Pen	S	1,070	12	x	0	x		AM				
89			0	x	0	x	x	Buchanan: Pen	S	1,290	15	x	0	x		AM				
90			x	x	x	x	x	Biehl: Pen	S	1,450	20	615	11	x		AM				
91			x	x	x	x	x	Jordan: Pen	S	1,490	10	5	0	x		AM				
92			0	x	0	x	x	Waltersburg: Mis	S	1,540	15	24	2	x		AM				
93			0	x	0	x	x	Tar Springs: Mis	S	1,600	20	12	1	x		AM				
94			0	x	0	x	x	Hardinsburg: Mis	S	1,780	10	1	0	x		AM				
95			25	x	64	x	x	Cypress: Mis	S	1,920	10	44	28	x		AM				
96			0	x	0	x	x	Bethel: Mis	S	2,010	10	82	6	x		AM				
97			0	x	0	x	x	Aux Vases: Mis	S	2,280	12	3	0	x		AM				
98			0	x	0	x	x	Ohara: Mis	L	2,300	10	10	4	x		AM				
99			0	x	0	x	x	Rosiclare: Mis	LS	2,300	5	3	0	x		AM				
100			0	x	0	x	x	McClosky: Mis	L	2,300	8	14+	0	x		AM				
101								[1]				12	3	x						
102	Patton and Patton West—Now included in Allendale																			
103	Total Southeastern Fields[8]		6,460	10,173	30,271	521,170	156,450					20,665	277	385	8,715					

104	Ava-Campbell Hill: Jackson[5, 9]	1916	0	0	0	x	80	Cypress: Mis	S	780	18	16	1	0	1	A	Trenton	3,582
105	Bartelso: Clinton	1936	217	356	675	3,046	600					78	0	4	39	D	St. Peter	4,212
106			217	x	675	x	350	Carlyle (Cypress): Mis	S	985	15	51	0	4		D		
107			0	x	0	x	250	Silurian: Sil	L	2,420	12	27	0	0		R		
108	Brown, Junction City, Langewisch-Kuester: Marion	1910	0	5	0	x	340					34	1	1	7	M	Dev	3,405
109			0	x	0	x	x	Dykstra: Pen	S	510	20	x	0	0		MF		
110			0	x	0	x	x	Wilson: Pen	S	845	7	x	1	0		MF		
111			0	x	0	x	x	Cypress: Mis	S	1,660	15	x	0	1		N		
112	Carlinville: Macoupin[10]	1909	0	x	0	x	80	Unnamed: Pen	S	380	x	8	0	0	3	A	Mis	1,380
113	Carlyle: Clinton	1911	0	20	0	3,857	940					185	0	5	32	A	St. Peter	2,177
114			0	x	0	x	30	Golconda: Mis	L	900	10	5	0	x		AC		
115			0	x	0	x	940	Carlyle (Cypress): Mis	S	1,035	20	179	0	x		AL		
116							1					1	0	0				
117	Collinsville: Madison[11]	1909	0	0	0	1	40	Silurian: Sil	L	1,305	20	6	0	0	0	ML	St. Peter	2,177
118	Colmar-Plymouth: Hancock-McDonough	1914	0	67	0	4,080	2,500	Hoing: Dev	S	450	21	497	1	1	200	AL	Ord	805
119	Dupo: St. Clair	1928	0	16	0	2,826	1,000	Trenton: Ord	L	700	50	320	0	1	30	A	Ord	1,800
120	Frogtown: Clinton[12]	1918	0	0	0	x	300	Carlyle (Cypress): Mis	S	950	7	14	0	0	0	ML	Trenton	3,290
121	Gillespie-Wyen: Macoupin	1915	0	x	0	x	45	Unnamed: Pen	S	650	x	23	0	0	2	T	Ord	1,390
122	Jacksonville Gas: Morgan[5, 16]	1910	0	0	0	2	60	Gas: Pen, Mis	LS	330	5	8	0	0	0	ML	Ord	1,390
123	Litchfield: Montgomery[17]	1889	0	x	0	24	100	Unnamed: Pen	S	660	x	18	0	2	0	D	St. Peter	3,000
124	Sandoval: Marion	1909	0	29	0	5,765	500					153	2	0	18	D	St. Peter	5,023
125			0	0	0	0	20	Cypress: Mis	S	1,400	10	1	1	0		D		
126			0	0	0	2,705	460	Benoist: Mis	S	1,540	20	123	0	0		D		
127			0	29	0	3,060	390	Geneva: Dev	D	2,920	9	28	0	0		R		
128							1					1	1	0				
129	Sparta: Randolph[5, 20]	1888	0	0	0	x	20	Cypress: Mis	S	850	7	2	0	0	0	D	Trenton	3,130
130	Wamac: Marion, Clinton, Washington	1921	0	8	3	605	250	Petro: Pen	S	720	20	108	0	0	10	DF	Mis	1,760
131	Waterloo: Monroe[22]	1920	0	1	0	238	230	Trenton: Ord	L	410	50	41	0	0	3	A	Pre-Cam	2,768
132	Total of fields discovered prior to January 1, 1937[23]		6,677	10,675	30,949	541,950	163,535					22,176	282	399	9,086			
133	Ab Lake: Gallatin	1947	0	3	0	26	50					3	0	0	1	M	Mis	2,941
134			0	3	0	7	10	Palestine: Mis	S	1,835	5	1	0	0		MF		
135			0	0	0	x	40	Renault: Mis	L	2,735	8	2	0	0		MF		
136			0	0	0	x	40	Aux Vases: Mis[25]	S	2,770	9	0	0	0		MF		
137	Ab Lake West: Gallatin	1950	0	24	0	45	190					14	7	1	11	M	Mis	2,964
138			0	0	0	0	10	Pennsylvanian: Pen	S	725	10	1	0	0		ML		
139			0	x	0	x	70	Waltersburg: Mis	S	2,020	20	3	3	0		ML		
140			0	x	0	x	10	Cypress: Mis[25]	S	2,425	9	0	0	0		ML		
141			0	x	0	x	120	Aux Vases: Mis	S	2,735	6	6	2	0		ML		
142			0	0	0	2.5	20	McClosky: Mis	L	2,830	2	1	0	1		MC		
143							1					3	2	0				
144	Aden Consolidated: Wayne, Hamilton	1938	203	342	1,061	7,940	2,380					100	2	0	80	A	Dev	5,395
145			115	x	646	x	1,260	Aux Vases: Mis	S	3,200	10	12	2	0		A		
146			0	x	0	x	140	Ohara: Mis[25]	L	3,290	7	0	0	0		A		
147			0	x	0	x	100	Rosiclare: Mis	LS	3,320	5	2	0	0		AC		
148			88	x	415	x	2,340	McClosky: Mis	L	3,350	4	74	0	0		A		
149			0	x	0	x	80	Salem: Mis[25]	L	3,735	16	0	0	0		AC		
150							1					12	0	0				
151	Aden North—Now included in Aden Consol.																	
152	Aden South: Hamilton	1945	0	52	0	503	400					21	1	0	18	A	Mis	3,466
153			0	x	0	x	100	Aux Vases: Mis	S	3,245	8	2	0	0		AL		
154			0	x	0	x	20	Ohara: Mis[25]	L	3,310	7	0	0	0		AC		
155			0	x	0	x	160	Rosiclare: Mis	LS	3,330	8	1	0	0		AC		
156			0	x	0	x	340	McClosky: Mis	L	3,395	9	9	1	0		AC		
157							1					9	0	0				
158	Akin: Franklin	1942	0	273	0	947	380					29	12	0	28	A	Mis	3,515
159			0	x	0	x	180	Cypress: Mis	S	2,840	10	11	0	0		AL		
160			0	x	0	x	200	Aux Vases: Mis	S	3,100	22	15	10	0		AL		

161			0	x	0	x	40	Ohara: Mis	L	3,100	18	2	2	0		AC			
162			0	x	0	x	20	McClosky: Mis[25]	L	3,270	9	0	0	0		AC			
163								[1]				1	0	0					
164	Akin West: Franklin	1948	0	4	0	76	100					6	0	2	4	A	Mis	3,435	
165			0	x	0	x	20	Cypress: Mis	S	2,715	8	2	0	1		AL			
166			0	0	0	x	20	Ohara: Mis[25]	L	3,050	10	0	0	0		AC			
167			0	x	0	x	20	Rosiclare: Mis[25]	L	3,080	12	0	0	0		AC			
168			0	x	0	x	60	McClosky: Mis	L	3,130	4	3	0	0		AC			
169								[1]				1	0	1					
170	Albion Central: Edwards	1955	0	36	0	80	180					7	4	1	6	x	Mis	3,510	
171			0	x	0	x	180	Ohara: Mis	L	3,350	5	6	3	0		x			
172			0	x	0	x	20	McClosky: Mis[25]	L	3,395	4	0	0	0		x			
173								[1]				1	1	1					
174	Albion Consol.: Edwards, White[5]	1940	516	1,108	2,863	16,296	5,500					429	10	3	370	AM	Dev	5,185	
175			0	x	0	x	60	Mansfield: Pen	S	1,650	5	4	0	0		MF			
176			2	x	496	x	300	Bridgeport: Pen	S	1,900	15	19	0	0		MF			
177			x	x	x	x	1,500	Biehl: Pen	S	2,000	15	100	0	0		MF			
178			0	x	0	x	20	Degonia: Mis	S	2,125	9	1	0	0		MF			
179			x	x	x	x	630	Waltersburg: Mis	S	2,365	16	37	0	0		AL			
180			8	x	46	x	90	Tar Springs: Mis	S	2,460	5	4	0	0		AL			
181			0	x	0	x	60	Hardinsburg: Mis	S	2,635	10	3	0	0		A			
182			46	x	259	x	380	Cypress: Mis	S	2,860	15	32	2	0		A			
183			0	x	0	x	420	Bethel: Mis	S	2,960	14	27	1	1		Af			
184			0	x	0	x	100	Renault: Mis	L	3,000	13	1	0	0		Af			
185			x	x	x	x	940	Aux Vases: Mis	S	3,045	18	70	5	1		Af			
186			0	x	0	x	200	Ohara: Mis	L	3,110	5	9	2	1		AC			
187			0	x	0	x	40	Rosiclare: Mis	L	3,130	10	2	0	0		AC			
188			x	x	x	x	1,600	McClosky: Mis	L	3,200	12	82	0	0		AC			
189								[1]				39	0	0					
190	Albion East: Edwards	1943	0	54	0	1,004	730					44	8	2	29	A	Mis	3,254	
191			0	x	0	x	120	Cypress: Mis	S	2,800	7	7	0	0		A			
192			0	x	0	x	10	Paint Creek: Mis	S	2,910	6	0	0	0		AL			
193			0	x	0	x	20	Bethel: Mis	S	2,920	6	1	0	0		AL			
194			0	x	0	x	40	Renault: Mis	LS	2,925	10	3	1	0		AC			
195			0	x	0	x	120	Aux Vases: Mis	S	3,020	17	7	1	0		AL			
196			0	x	0	x	200	Ohara: Mis	L	3,100	7	9	3	1		A			
197			0	x	0	x	80	Rosiclare: Mis	L	3,125	7	3	1	0		A			
198			0	x	0	x	240	McClosky: Mis	L	3,155	7	9	3	1		A			
199								[1]				5	0	0					
200	Albion North—Now included in Albion Consol.																		
201	Albion West: Edwards[26]	1953	0	0	0	1	20	McClosky: Mis	L	3,375	5	1	0	0	0	x	Mis	3,420	
202	Alma: Marion	1941	0	1	0	79	70					6	1	0	2	A	Dev	3,692	
203			0	0	0	x	10	Cypress: Mis[25]	S	1,805	7	0	0	0		AL			
204			0	1	0	x	60	Bethel: Mis	S	1,945	8	4	1	0		AL			
205			0	0	0	x	40	Rosiclare: Mis	L	2,085	10	2	0	0		AC			
206	Amity: Richland	1942	0	1	0	26	160	McClosky: Mis	OL	2,960	5	4	0	0	1	MC	Mis	3,089	
207	Amity South: Richland[27]	1953	0	0	0	.1	20	Rosiclare: Mis	L	2,890	4	1	0	0	0	x	Mis	3,010	
208	Amity West: Richland[28]	1953	0	0	0	0	10	Aux Vases: Mis	S	2,925	12	1	0	0	0	x	Mis	3,100	
209	Ashley: Washington	1953	0	37	0	67	120	Bethel: Mis	S	1,430	7	10	2	0	10	x	Dev	3,116	
210	Ashmore East: Coles	1956	0	0	0	0	10	Pennsylvanian: Pen	S	415	14	1	1	0	0	x	Pen	445	
211	Assumption Consol.: Christian	1948	188	342	925	5,384	2,900					172	1	3	151	A	Ord	3,070	
212			126	x	858	x	430	Bethel: Mis	S	1,050	13	43	0	0		A			
213			50	x	55	x	320	Rosiclare: Mis	S	1,170	4	16	0	0		AL			
214			12	x	12	x	2,870	Cedar Valley: Dev	L	2,300	8	113	1	3		A			
215	Assumption North—Now included in Assumption Consol.																		
216	Assumption South: Christian	1951	0	1	0	9	60	Cedar Valley: Dev	L	2,630	15	3	0	0	1	x	Dev	2,740	
217	Baldwin: Randolph	1954	0	1	0	5	60	Silurian: Sil	L	1,535	x	2	0	0	2	R	Trenton	2,234	
218	Barnhill: Wayne	1939	178	386	913	4,090	1,780					135	15	1	86	A	Mis	3,878	
219			.5	x	.5	x	640	Aux Vases: Mis	S	3,325	15	48	12	1		AL			
220			.5	x	.5	x	140	Ohara: Mis	OL	3,370	6	2	0	0		AC			
221			0	x	0	x	180	Rosiclare: Mis	LS	3,400	9	3	0	0		AC			
222			177	x	912	x	1,140	McClosky: Mis	OL	3,450	15	68	0	0		AC			

TABLE 12.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Number of wells 1956 Abandoned	Number of wells 1956 Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
223			0	3	0	3	20	St. Louis: Mis	L	3,520	7	1	1	0		AC		
224			0	x	0	x	40	Salem: Mis	L	3,795	8	1	0	0		AC		
225								[1]				10	0	0				
226	Barnhill East—Now included in Goldengate Consol.																	
227	Bartelso East: Clinton	1950	0	91	0	442	320	Silurian: Sil	L	2,550	7	16	0	0	16	R	Sil	2,788
228	Bartelso South: Clinton	1942	0	.5	0	23	100	Devonian: Dev	L	2,475	3	3	0	0	1	A	Dev	2,652
229	Bartelso West: Clinton	1945	0	2	0	17	140	Cypress: Mis	S	960	15	12	0	1	4	A	Dev	2,520
230	Beaucoup: Washington	1951	0	18	0	300	280					14	0	0	14	A	Trenton	4,192
231			0	x	0	x	280	Clear Creek: Dev	L	3,050	12	13	0	0		A		
232			0	x	0	x	20	Trenton: Ord[25]	L	4,095	5	0	0	0		A		
233								[1]				1	0	0				
234	Beaucoup South: Washington	1951	0	63	0	399	230	Bethel: Mis	S	1,430	9	22	0	0	20	AL	Dev	3,122
235	Beaver Creek: Bond, Clinton	1942	0	8	14	183	160	Bethel: Mis	S	1,130	6	16	0	0	13	A	Dev	2,526
236	Beaver Creek North: Bond[29]	1949	0	0	0	1	40	Bethel: Mis	S	1,115	4	4	0	0	0	A	Dev	2,556
237	Beaver Creek South: Clinton, Bond[5]	1946	0	32	0	316	420					42	0	0	27	A	Dev	2,539
238			0	0	0	0	10	Cypress: Mis	S	1,005	20	1	0	0		A		
239			0	32	0	316	410	Bethel: Mis	S	1,140	5	41	0	0		A		
240	Beckemeyer Gas: Clinton[5]	1956	0	0	0	0	10	Cypress: Mis	S	1,070	23	1	1	0	1	x	Sil	2,730
241	Belle Prairie: Hamilton	1940	0	18	0	600	230					12	0	0	9	A	Dev	5,483
242			0	x	0	x	20	Aux Vases: Mis	S	3,250	8	1	0	0		AL		
243			0	x	0	x	220	McClosky: Mis	L	3,420	6	10	0	0		AC		
244								[1]				1	0	0				
245	Belle Rive: Jefferson	1943	0	10	0	316	200	McClosky: Mis	L	3,085	6	5	0	0	3	AC	Mis	3,201
246	Bellmont: Wabash	1951	0	5	0	65	70					4	0	0	3	M	Mis	3,006
247			0	2	0	10	10	Bethel: Mis	S	2,650	7	1	0	0		ML		
248			0	3	0	55	60	Ohara: Mis	L	2,840	7	3	0	0		MC		
249	Beman: Lawrence	1942	0	7	0	241	500					23	0	0	13	A	Mis	2,000
250			0	x	0	x	40	Aux Vases: Mis	S	1,805	20	2	0	0		AL		
251			0	x	0	x	480	Ste. Genevieve: Mis	L	1,850	7	19	0	0		AC		
252								[1]				2	0	0				
253	Beman East: Lawrence	1947	0	2	0	104	100					5	0	1	2	A	Mis	1,907
254			0	x	0	x	20	Aux Vases: Mis	S	1,805	20	1	0	0		AL		
255			0	x	0	x	90	Ste. Genevieve: Mis	L	1,860	7	3	0	1		AC		
256								[1]				1	0	0				
257	Bend—Now included in New Harmony Consol.																	
258	Bennington—Now included in Maple Grove Consol.																	
259	Bennington South: Edwards[30]	1944	0	0	0	10	20	McClosky: Mis	L	3,240	8	1	0	0	0	MC	Mis	3,420
260	Benton: Franklin	1941	734	1,050	9,449	32,708	2,400					243	0	0	132	A	Mis	3,205
261			0	0	0	x	20	Pennsylvanian: Pen[25]	S	1,700	9	0	0	0		AL		
262			734	1,050	9,449	32,708	2,400	Tar Springs: Mis	S	2,100	10	243	0	0		A		
263	Benton North: Franklin	1941	0	93	0	1,805	750					60	4	2	51	A	Mis	2,906
264			0	x	0	x	130	Cypress: Mis	S	2,460	17	13	1	2		A		
265			0	x	0	x	150	Paint Creek: Mis	S	2,595	9	8	1	0		A		
266			0	x	0	x	30	Bethel: Mis	S	2,600	20	3	0	0		AL		
267			0	x	0	x	100	Aux Vases: Mis	S	2,685	10	3	0	0		A		
268			0	x	0	x	220	Ohara: Mis	L	2,730	8	6	1	0		A		
269			0	x	0	x	160	Rosiclare: Mis	S	2,775	6	4	0	0		A		

270			0	x	0	x	360	McClosky: Mis	L	2,800	10	9	0	0		A			
271								[1]				14	1	0					
272	Berryville Consol.: Wabash, Edwards	1943	0	10	0	917	520					18	0	2	4	M	Mis	3,125
273			0	x	0	x	100	Ohara: Mis	L	2,900	6	4	0	0		MC		
274			0	x	0	x	20	Rosiclare: Mis	L	2,850	12	1	0	0		MC		
275			0	x	0	x	420	McClosky: Mis	L	2,890	10	12	0	2		MC		
276								[1]				1	0	0				
277	Bessie: Franklin	1943	0	4	0	76	40	Ohara: Mis	L	2,895	10	1	0	0	1	MC	Mis	3,457
278	Bible Grove—Now included in Sailor Springs Consol.																	
279	Bible Grove East—Now included in Sailor Springs Consol.																	
280	Bible Grove North: Effingham	1947	0	2	0	77	130					7	0	1	2	M	Mis	2,999
281			0	1	0	x	50	Cypress: Mis	S	2,535	7	3	0	1		M		
282			0	0	0	x	40	Rosiclare: Mis	LS	2,835	5	1	0	0		ML		
283			0	1	0	x	60	McClosky: Mis	L	2,875	5	2	0	1		M		
284								[1]				1	0	0				
285	Bible Grove South: Clay	1942	0	4	0	102	50					3	0	0	2	M	Mis	2,953
286			0	.5	0	5	10	Cypress: Mis	S	2,500	10	1	0	0		ML		
287			0	3.5	0	97	40	Aux Vases: Mis	S	2,740	10	2	0	0		ML		
288	Blackland: Macon, Christian	1953	0	67	0	245	470	Silurian: Sil	L	1,935	12	15	0	1	11	MU	Ord	3,780
289	Black River: White	1952	0	2	0	12	10	Clore: Mis	S	1,865	6	1	0	0	1	x	Mis	3,071
290	Blairsville—Now included in Bungay Consol.																	
291	Blairsville West: Hamilton	1951	0	10	0	320	200					10	0	1	5	A	Mis	3,507
292			0	x	0	x	20	Rosiclare: Mis[25]	L	3,345	6	0	0	0		AC		
293			0	x	0	x	200	McClosky: Mis	L	3,405	8	9	0	1		AC		
294								[1]				1	0	0				
295	Bogota: Jasper	1943	0	7	0	465	280					9	1	2	6	A	Mis	3,234
296			0	1	0	4	20	Rosiclare: Mis	L	3,090	4	1	0	0		AC		
297			0	6	0	461	260	McClosky: Mis	L	3,110	7	8	1	2		A		
298	Bogota North: Jasper[31]	1949	0	0	0	0	10	McClosky: Mis	L	3,080	3	1	0	0	0	x	Mis	3,150
299	Bogota South: Jasper	1944	0	18	0	418	480	McClosky: Mis	L	3,075	8	23	0	0	17	MC	Mis	3,182
300	Bone Gap Consol.: Edwards	1941	32	70	290	1,856	1,210					58	1	3	29	A	Mis	3,350
301			0	0	0	2	10	Pennsylvanian: Pen	S	2,110	8	1	0	1		AL		
302			32	x	290	x	150	Waltersburg: Mis	S	2,310	20	15	0	0		A		
303			0	4	0	244	70	Cypress: Mis	S	2,710	10	7	0	2		A		
304			0	x	0	x	30	Bethel: Mis	S	2,880	14	3	1	0		AL		
305			0	0	0	10	10	Aux Vases: Mis	S	3,020	9	1	0	0		AL		
306			0	x	0	x	80	Ohara: Mis	L	3,040	5	2	0	0		AC		
307			0	x	0	x	80	Rosiclare: Mis	L	3,045	5	3	0	0		AC		
308			0	x	0	x	800	McClosky: Mis	L	3,200	6	24	0	0		AC		
309								[1]				2	0	0				
310	Bone Gap East: Edwards[32]	1951	0	1	0	13	40					2	0	1	0	M	Mis	3,156
311			0	1	0	13	20	Ohara: Mis	L	2,980	10	1	0	1		MC		
312			0	0	0	0	20	McClosky: Mis	L	3,050	5	1	0	0		MC		
313	Bone Gap South—Now included in Bone Gap Consol.																	
314	Bone Gap West: Edwards[33]	1954	0	0	0	2	20	Ohara: Mis	L	3,290	5	1	0	0	0	x	Mis	3,388
315	Bonpas—Now included in Parkersburg Consol.																	
316	Bonpas West—Now included in Parkersburg Consol.																	
317	Boos—Now included in Clay City Consol.																	
318	Boos East—Now included in Clay City Consol.																	
319	Boos North—Now included in Clay City Consol.																	
320	Boulder: Clinton	1941	0	366	0	6,005	720					47	1	6	31	D	Trenton	3,813
321			0	x	0	x	530	Bethel: Mis	S	1,190	20	27	1	3		D		
322			0	x	0	x	540	Geneva: Dev	D	2,630	7	20	0	3		R		
323	Boulder East: Clinton	1955	0	9	0	12	20	Devonian: Dev	L	2,850	5	1	0	0	1	x	Dev	2,946
324	Bourbon: Douglas	1956	0	489	0	489	560	Rosiclare: Mis	LS	1,600	12	50	50	1	49	x	Mis	1,715
325	Bourbon North: Douglas	1956	0	7	0	7	40	Rosiclare: Mis	LS	1,650	16	2	2	0	2	x	Mis	1,674
326	Boyd: Jefferson	1944	353	936	10,243	11,367	1,430					115	0	0	110	A	Dev	3,870
327			x	x	x	x	1,430	Bethel: Mis	S	2,060	19	73	0	0		A		
328			x	x	x	x	680	Aux Vases: Mis	S	2,130	15	6	0	0		A		
329			0	x	0	x	40	Ohara: Mis[25]	L	2,230	2	0	0	0		AC		
330								[1]				36	0	0				

331	Boyleston: Now included in Clay City Consol.																		
332	Broughton: Hamilton[34]	1951	0	0	0	6	20	McClosky: Mis	L	3,275	5	1	0	0	0	x	Mis	3,355
333	Broughton South: Saline[35]	1951	0	0	0	0	20	McClosky: Mis	L	3,215	4	1	0	0	0	x	Mis	3,300
334	Browns: Edwards, Wabash	1943	0	80	0	1,587	910					51	2	3	37	A	Mis	3,147
335			0	x	0	x	10	Tar Springs: Mis[25]	S	2,365	14	0	0	0		AL		
336			0	x	0	x	280	Cypress: Mis	S	2,640	13	11	2	1		A		
337			0	x	0	x	50	Bethel: Mis	S	2,785	12	1	0	0		AL		
338			0	x	0	x	10	Aux Vases: Mis	S	2,965	7	1	0	0		AL		
339			0	x	0	x	40	Ohara: Mis	L	2,965	4	2	0	0		AC		
340			0	x	0	x	20	Rosiclare: Mis[25]	L	2,975	3	0	0	0		AC		
341			0	x	0	x	600	McClosky: Mis	L	3,000	6	27	0	1		A		
342								[1]				9	0	1				
343	Browns East: Wabash	1946	0	65	0	2,278	540	Cypress: Mis	S	2,570	13	52	2	0	39	ML	Mis	3,113
344	Browns South: Edwards	1943	0	1	0	17	30					3	0	0	1	N	Mis	3,095
345			0	x	0	x	20	Bethel: Mis	S	2,850	15	1	0	0		NL		
346			0	x	0	x	20	Aux Vases: Mis	S	2,950	8	1	0	0		NL		
347								[1]				1	0	0				
348	Brownsville—Now included in Roland Consol.																	
349	Bungay Consol.: Hamilton	1941	202	792	473	9,479	3,260					216	21	0	181	A	Mis	3,565
350			0	x	0	x	150	Renault: Mis	S	3,270	10	13	6	0		AL		
351			202	x	473	x	2,950	Aux Vases: Mis	S	3,295	15	173	15	0		AL		
352			0	x	0	x	80	Ohara: Mis	L	3,335	8	2	0	0		AC		
353			0	x	0	x	80	Rosiclare: Mis	L	3,400	8	2	0	0		AC		
354			0	x	0	x	260	McClosky: Mis	L	3,425	8	10	0	0		AC		
355								[1]				6	0	0				
356	Burnt Prairie—Now included in Goldengate Consol.																	
357	Burnt Prairie South: White	1947	0	4	0	16.5	50					3	0	1	1	x	Mis	3,565
358			0	3.5	0	3 5	10	Aux Vases: Mis	S	3,330	24	1	0	0		x		
359			0	0	0	10	20	Ohara: Mis	L	3,415	6	1	0	0		x		
360			0	.5	0	3	20	McClosky: Mis	L	3,460	4	1	0	1		x		
361	Calhoun Central: Richland[36]	1950	0	0	0	.5	40					2	0	0	0	M	Mis	3,335
362			0	0	0	x	20	Rosiclare: Mis	L	3,245	6	1	0	0		MC		
363			0	0	0	x	20	McClosky: Mis	L	3,280	3	1	0	0		MC		
364	Calhoun Consol.: Richland, Wayne	1944	37	101	308	3,325	2,400					100	0	1	65	A	Mis	3,990
365			0	x	0	x	x	Ohara: Mis	OL	3,140	9	19	0	0		A		
366			0	x	0	x	x	Rosiclare: Mis	OL	3,160	6	11	0	0		A		
367			37	x	308	x	x	McClosky: Mis	OL	3,180	10	56	0	1		A		
368								[1]				14	0	0				
369	Calhoun East: Richland	1950	0	5	0	206	160	McClosky: Mis	L	3,265	5	5	0	0	5	MC	Mis	3,380
370	Calhoun North: Richland	1944	0	3	0	57	40					2	0	0	1	A	Mis	3,280
371			0	x	0	x	20	Rosiclare: Mis[25]	LS	3,155	10	0	0	0		A		
372			0	x	0	x	40	McClosky: Mis	OL	3,170	11	1	0	0		A		
373								[1]				1	0	0				
374	Calhoun South: Wayne[37]	1953	0	0	0	1	10	Aux Vases: Mis	S	3,175	5	1	0	0	0	x	Mis	3,350
375	Calvin—Now included in New Harmony Consol. and Phillipstown Consol.																	
376	Calvin North—Now included in Phillipstown Consol.																	
377	Cantrell—Now included in Dale Consol.																	
378	Cantrell North—Now included in Dale Consol.																	
379	Cantrell South—Now included in Dale Consol.																	
380	Carlinville North: Macoupin[5, 38]	1941	0	0	0	1	120	Pottsville: Pen	S	440	10	6	0	0	0	x	Trenton	1,970
381	Carlyle North: Clinton	1950	0	43	0	439	470	Bethel: Mis	S	1,150	6	41	1	0	35	AL	Dev	2,558
382	Carlyle South: Clinton[39]	1951	0	0	0	2	20	Cypress: Mis	S	1,075	4	2	0	0	0	x	Mis	1,194
383	Carmi: White[40]	1939	0	7	0	46	100					9	1	2	2	M	Mis	3,340
384			0	0	0	1	10	Pennsylvanian: Pen	S	1,210	10	1	0	1		ML		
385			0	7	0	39	40	Cypress: Mis	S	2,800	15	5	1	1		ML		
386			0	0	0	x	10	Aux Vases: Mis	S	3,145	8	1	0	0		ML		
387			0	0	0	x	40	McClosky: Mis	OL	3,150	6	2	0	0		MG		
388	Carmi North: White	1942	0	13	0	207	110					6	0	0	4	A	Mis	3,452
389			0	x	0	x	20	Cypress: Mis	S	2,940	13	1	0	0		Af		
390			0	x	0	x	10	Paint Creek: Mis[25]	S	3,080	12	0	0	0		Af		
391			0	x	0	x	100	Aux Vases: Mis	S	3,270	14	4	0	0		Af		
392								[1]				1	0	0				

393	Centerville: White	1940	0	13	0	462	200					10	0	1	5	N	Mis	3,919
394			0	0	0	x	10	Aux Vases: Mis[25]	S	3,240	6	0	0	0		NL		
395			0	x	0	x	100	Ohara: Mis	L	3,310	10	4	0	1		NC		
396			0	x	0	x	20	Rosiclare: Mis[25]	L	x	x	0	0	0		NC		
397			0	x	0	x	120	McClosky: Mis	OL	3,370	4	5	0	0		NC		
398								[1]				1	0	0				
399	Centerville East: White	1941	63	251	103	4,386	1,350					122	2	1	107	A	Mis	3,427
400			0	x	0	x	20	Palestine: Mis	S	2,225	3	2	0	0		ALf		
401			x	x	x	x	400	Tar Springs: Mis	S	2,500	24	28	0	0		ALf		
402			0	x	0	x	10	Hardinsburg: Mis	S	2,615	22	1	0	0		ALf		
403			x	x	x	x	390	Cypress: Mis	S	2,915	6	29	0	0		ALf		
404			0	x	0	x	20	Paint Creek: Mis[25]	S	2,980	40	0	0	0		ALf		
405			0	x	0	x	180	Bethel: Mis	S	2,990	20	9	0	0		ALf		
406			0	x	0	x	340	Aux Vases: Mis	S	3,075	21	27	1	0		ALf		
407			0	x	0	x	40	Ohara: Mis	OL	3,175	5	1	0	0		ACf		
408			0	x	4	x	20	Rosiclare: Mis[25]	LS	3,185	6	0	0	0		ACf		
409			0	x	0	x	240	McClosky: Mis	OL	3,230	7	10	0	1		ACf		
410								[1]				15	1	0				
411	Centerville North: White[41]	1947	0	0	0	0	10	Bethel: Mis	S	2,990	13	1	0	0	0	ML	Mis	3,290
412	Centerville Northeast: White	1955	0	2	0	3	10	Bethel: Mis	S	3,055	14	1	0	0	1	x	Mis	3,407
413	Centralia: Clinton, Marion	1937	136	593	170	39,471	3,360					995	0	6	427	A	Ord	4,170
414			x	x	x	x	500	Cypress: Mis	S	1,200	12	50	0	0		A		
415			x	x	x	x	1,400	Bethel: Mis	S	1,355	20	566	0	6		A		
416			0	x	0	x	2,500	Devonian: Dev	L	2,870	9	319	0	3		A		
417			0	x	34	x	1,400	Trenton: Ord	L	3,930	22	59	0	0		A		
418								[1]				1	0	0				
419	Centralia West: Clinton	1940	0	3	0	386	90	Bethel: Mis	S	1,440	9	9	0	0	2	N	Dev	3,021
420	Chesterville: Douglas	1956	0	11	0	11	100	Rosiclare: Mis	LS	1,780	8	5	5	1	4	x	Mis	1,829
421	Christopher Consol.: Franklin[42]	1951	0	69	0	253	290					18	2	0	17	A	Dev	4,600
422			0	x	0	x	270	Aux Vases: Mis	S	2,605	15	16	2	0		A		
423			0	0	0	0	20	Ohara: Mis	L	2,675	8	1	0	0		A		
424			0	x	0	x	20	Clear Creek: Dev[25]	L	4,430	x	0	0	0		A		
425								[1]				1	0	0				
426	Cisne—Now included in Clay City Consol.																	
427	Cisne North—Now included in Clay City Consol.																	
428	Clarksburg: Shelby	1946	0	2	0	21	20	Bethel: Mis	S	1,770	6	2	0	0	1	A	Mis	2,454
429	Clay City Consol.: Clay, Wayne, Richland, Jasper	1937	1,292	9,270	2,326	188,545	83,000					4,295	180	80	3,205	A	St. Peter	7,205
430			0	x	0	x	10	Waltersburg: Mis	S	2,175	6	1	0	0		AL		
431			0	x	0	x	160	Tar Springs: Mis	S	2,560	15	8	0	x		AL		
432			0	x	0	x	5,770	Cypress: Mis	S	2,635	15	411	10	x		AL		
433			0	x	0	x	100	Bethel: Mis	S	2,800	15	3	1	x		AL		
434			228	x	375	x	14,400	Aux Vases: Mis	S	2,940	15	1,242	84	x		AL		
435			x	x	x	x	x	Ohara: Mis	OL	3,020	5	110	2	x		AC		
436			x	x	x	x	x	Rosiclare: Mis	LS	3,030	8	282	19	x		AC		
437			x	x	x	x	x	McClosky: Mis	OL	3,050	10	2,016	39	x		AC		
438			0	x	0	x	220	St. Louis: Mis	L	3,025	3	9	2	x		A		
439			0	x	0	x	1,500	Salem: Mis	L	3,590	10	64	9	x		A		
440			0	x	0	x	10	Warsaw: Mis[25]	L	3,600	17	0	0	0		A		
441			0	0	0	x	20	Devonian: Dev[25]	L	4,350	10	0	0	0		A		
442								[1]				249	14	x				
443	Clay City North—Now included in Clay City Consol.																	
444	Clay City West: Clay	1941	0	67	0	1,690	560					22	0	0	16	A	Dev	4,973
445			0	0	0	20	10	Cypress: Mis	S	2,700	10	1	0	0		AL		
446			0	x	0	x	80	Aux Vases: Mis	S	2,950	7	1	0	0		AL		
447			0	x	0	x	540	McClosky: Mis	OL	3,065	15	20	0	0		AL		
448	Coil: Wayne	1942	0	31	0	1,393	480					17	0	0	12	A	Mis	3,250
449			0	31	0	1,392	460	Aux Vases: Mis	S	2,700	10	16	0	0		A		
450			0	0	0	1	20	McClosky: Mis	OL	3,065	15	1	0	0		AC		
451	Coil West: Jefferson	1942	0	15	0	583	300					16	0	0	8	A	Mis	3,022
452			0	x	0	x	100	Aux Vases: Mis	S	2,720	15	4	0	0		AL		

TABLE 12.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Abandoned	Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
453			0	x	0	x	100	Ohara: Mis	L	2,790	7	1	0	0		AC		
454			0	x	0	x	x	Rosiclare: Mis[25]	L	2,805	x	0	0	0		AC		
455			0	x	0	x	200	McClosky: Mis[1]	L	2,880	8	6	0	0		AC		
456												5	0	0				
457	Concord Central—Now included in Herald Consol.																	
458	Concord Consol.: White[44]	1942	30	223	139	4,453	1,560					122	1	5	103	A	Mis	3,138
459			0	x	0	x	200	Tar Springs: Mis	S	2,270	11	20	0	1		AL		
460			0	10	0	30	10	Hardinsburg: Mis	S	2,485	7	1	0	0		A		
461			0	x	0	x	230	Cypress: Mis	S	2,625	10	15	0	2		AL		
462			9	x	35	x	450	Aux Vases: Mis	S	2,905	14	24	0	0		AL		
463			0	x	0	x	40	Ohara: Mis	L	2,930	8	2	0	1		AC		
464			x	x	x	x	60	Rosiclare: Mis	L	3,035	8	2	1	0		AC		
465			x	x	x	x	1,120	McClosky: Mis[1]	L	2,990	10	44	0	0		AC		
466												14	0	1				
467	Concord East Consol.: White	1942	0	161	0	377	320					28	9	0	23	A	Mis	3,125
468			0	x	0	x	30	Waltersburg: Mis	S	2,140	10	3	0	0		A		
469			0	x	0	x	30	Tar Springs: Mis	S	2,175	4	3	0	0		A		
470			0	x	0	x	160	Cypress: Mis	S	2,540	6	12	7	0		A		
471			0	x	0	x	10	Renault: Mis	L	2,800	6	1	1	0		A		
472			0	x	0	x	60	Aux Vases: Mis	S	2,825	12	3	1	0		A		
473			0	x	0	x	40	Ohara: Mis	L	2,895	6	2	0	0		AC		
474			0	x	0	x	60	Rosiclare: Mis[25]	S	2,895	5	0	0	0		AC		
475			0	x	0	x	30	McClosky: Mis[1]	L	2,965	2	1	0	0		AC		
476												4	1	0				
477	Concord North—Now included in Concord Consol.																	
478	Concord South—Now included in Herald Consol.																	
479	Cooks Mills Consol.: Coles, Douglas[5]	1941	0	1,217	0	1,308	2,700					204	179	3	197	A	Dev	2,888
480			0	x	0	x	10	Cypress: Mis	S	1,600	20	1	1	0		A		
481			0	x	0	x	20	Aux Vases: Mis	S	1,765	15	1	0	0		A		
482			0	x	0	x	2,680	Rosiclare: Mis	S	1,800	9	200	178	3		A		
483			0	x	0	x	20	McClosky: Mis[1]	L	1,840	4	1	0	0		A		
484												1	0	0				
485	Cooks Mills East—Now included in Cooks Mills Consol.																	
486	Cooks Mills Gas—Now included in Cooks Mills Consol.																	
487	Cooks Mills North—Now included in Cooks Mills Consol.																	
488	Cordes: Washington	1939	155	289	2,139	7,316	1,220	Bethel: Mis	S	1,260	14	144	2	0	88	A	Dev	2,887
489	Cottage Grove: Saline	1955	0	3	0	7	20	Ohara: Mis	L	2,770	x	1	0	0	1	x	Mis	2,977
490	Cottonwood—Now included in Herald Consol.																	
491	Cottonwood North—Now included in Herald Consol.																	
492	Covington—Now included in Clay City Consol.																	
493	Covington East—Now included in Clay City Consol.																	
494	Covington South: Wayne	1943	0	2	0	170	320	McClosky: Mis	L	3,310	5	8	0	0	2	AC	Mis	3,397
495	Cowling: Now included in New Harmony Consol.																	
496	Craig: Perry[45]	1948	0	0	0	2	20	Trenton: Ord	L	3,650	20	1	0	0	0	A	Ord	3,735
497	Cravat: Jefferson	1939	0	6	0	332	120	Bethel: Mis	S	2,070	10	11	0	0	7	A	Mis	2,363
498	Cravat West: Jefferson	1956	0	0	0	0	20	Pennsylvanian: Pen	S	1,045	10	2	2	0	2	x	Mis	2,320
499	Crossville: White[46]	1946	0	.5	0	16	120					10	4	0	4	M	Mis	3,251
500			0	x	0	x	30	Bethel: Mis	S	2,880	9	3	1	0		ML		

501			0	x	0	x	30	Aux Vases: Mis	S	3,030	20	2	2	0		ML			
502			0	x	0	x	20	Ohara: Mis	L	3,100	3	1	0	0		MC			
503			0	x	0	x	60	McClosky: Mis	L	3,120	5	3	0	0		MC			
504								[1]				1	1	0					
505	Crossville West: White[47]	1952	0	3	0	4	30					2	1	0	1	M	Mis	3,242	
506			0	0	0	1	10	Aux Vases: Mis	S	3,030	8	1	0	0		ML			
507			0	3	0	3	20	McClosky: Mis	L	3,185	x	1	1	0		MC			
508	Dahlgren: Hamilton	1941	0	5	0	1,179	700					44	1	0	4	A	Dev	5,299	
509			0	4	0	1,178	700	McClosky: Mis	L	3,300	11	43	0	0		A			
510			0	1	0	1	20	Warsaw: Mis	L	4,110	15	1	1	0		A			
511	Dale Consol.: Hamilton, Saline, Franklin[48]	1940	157	3,478	593	58,735	15,900					1,215	83	23	966	A	Dev	5,345	
512			0	x	0	x	400	Tar Springs: Mis	S	2,430	25	25	0	0		A			
513			0	x	0	x	100	Hardinsburg: Mis[25]	S	2,480	10	0	0	0		A			
514			0	x	0	x	890	Cypress: Mis	S	2,700	15	48	0	0		A			
515			0	x	0	x	220	Paint Creek: Mis	S	2,950	18	9	0	0		A			
516			0	x	0	x	2,100	Bethel: Mis	S	2,975	18	110	1	1		A			
517			157	x	593	x	11,600	Aux Vases: Mis	S	3,150	20	775	75	20		A			
518			0	x	0	x	2,100	Ohara: Mis	L	3,110	10	55	2	0		A			
519			0	x	0	x	400	Rosiclare: Mis	LS	3,130	7	10	0	0		A			
520			0	x	0	x	2,100	McClosky: Mis	L	3,150	7	51	1	0		A			
521								[1]				131	3	2					
522	Dead River—Now included in New Haven Consol.																		
523	Decatur: Macon	1953	0	2	0	12	120	Silurian: Sil	L	2,000	7	6	0	5	1	MU	Ord	2,800	
524	Decatur North: Macon[49]	1954	0	0	0	.1	20	Silurian: Sil	L	2,200	10	1	0	0	0	MU	Sil	2,240	
525	Divide: Jefferson	1943	0	36	0	458	300					14	1	0	8	A	Mis	2,951	
526			0	x	0	x	20	Ohara: Mis[25]	L	2,705	11	0	0	0		AC			
527			0	x	0	x	20	Rosiclare: Mis[25]	LS	2,770	5	0	0	0		AC			
528			0	x	0	x	280	McClosky: Mis	L	2,750	6	11	0	0		AC			
529			0	x	0	x	40	St. Louis: Mis	L	2,850	7	1	0	0		AC			
530								[1]				2	1	0					
531	Divide East: Jefferson	1947	3	66	3	1,324	700					41	0	0	29	A	Mis	2,911	
532			0	x	0	x	110	Aux Vases: Mis	S	2,620	10	9	0	0		AL			
533			0	x	0	x	60	Rosiclare: Mis	L	2,700	10	3	0	0		AL			
534			3	x	3	x	600	McClosky: Mis	L	2,750	5	28	0	0		AC			
535								[1]				1	0	0					
536	Divide South: Jefferson	1948	0	10	0	184	100	McClosky: Mis	L	2,880	5	5	1	0	5	x	Mis	2,981	
537	Divide West: Jefferson	1944	0	246	0	3,330	1,500					76	17	1	67	A	Mis	3,635	
538			0	x	0	x	120	Ohara: Mis	L	2,680	10	1	0	1		AC			
539			0	x	0	x	320	Rosiclare: Mis	LS	2,700	6	11	3	0		AC			
540			0	x	0	x	1,300	McClosky: Mis	L	2,750	6	49	8	0		AC			
541			0	x	0	x	80	St. Louis: Mis	L	2,810	7	4	4	0		AC			
542								[1]				11	2	0					
543	Dix—Now included in Salem Consol.																		
544	Dix South: Jefferson[50]	1941	0	0	0	13	20	Bethel: Mis	S	1,950	8	2	0	0	0	N	Mis	2,283	
545	Dubois Central: Washington	1954	0	13	0	37	50					3	0	0	3	x	Dev	3,100	
546			0	0	0	0	10	Bethel: Mis	S	1,335	12	1	0	0		x			
547			0	13	0	37	60	Rosiclare: Mis	L	1,530	8	2	0	0		x			
548	Dubois Consol.: Washington[5]	1939	0	268	0	698	1,000					88	26	0	82	A	Ord	4,217	
549			0	x	0	x	650	Cypress: Mis	S	1,230	10	56	22	0		AL			
550			0	x	0	x	410	Bethel: Mis	S	1,325	10	31	4	0		AL			
551								[1]				2	0	0					
552	Dubois West—Now included in Dubois Consol.																		
553	Dudley: Edgar[5]	1948	0	64	0	648	580					74	0	0	62	M	St. Peter	2,997	
554			0	x	0	x	260	Upper Dudley: Pen	S	310	20	20	0	0		ML			
555			0	x	0	x	560	Lower Dudley: Pen	S	410	50	54	0	0		ML			
556	Dudleyville East: Bond	1954	0	.5	0	2	40	Devonian: Dev	L	2,370	5	2	0	0	1	x	Ord	3,397	
557	Dundas—Now included in Clay City Consol.																		
558	Dundas East: Richland, Jasper	1942	68	107	81	2,080	1,660					60	0	0	52	A	Mis	3,158	
559			0	x	0	x	x	Ohara: Mis	OL	2,905	10	7	0	0		A			
560			0	x	0	x	x	Rosiclare: Mis	OL	2,920	8	19	0	0		A			

561			68	x	81	x	x	McClosky: Mis	OL	2,950	10	33	0	0		A			
562								[1]				1	0	0					
563	Eberle: Effingham	1947	0	5	0	75	110					6	0	0	5	N	Mis	2,882	
564			0	x	0	x	10	Cypress: Mis	S	2,475	10	1	0	0		NL			
565			0	x	0	x	20	Rosiclare: Mis	LS	2,680	5	1	0	0		NC			
566			0	x	0	x	80	McClosky: Mis	L	2,820	7	4	0	0		N			
567	Edinburg: Christian[51]	1949	0	0	0	0	20	Cedar Valley: Dev	L	1,810	2	1	0	0	0	A	Dev	1,853	
568	Edinburg South: Christian	1955	0	2	0	2	40	Hibbard: Dev	LS	1,795	13	2	1	0	2	x	Sil	1,902	
569	Edinburg West: Christian, Sangamon	1954	0	258	0	858	700					34	4	1	31	A	Ord	2,285	
570			0	x	0	x	60	Devonian: Dev	S	1,660	6	1	0	0		A			
571			0	x	0	x	680	Silurian: Sil	L	1,690	8	31	4	1		A			
572								[1]				2	0	0					
573	Elba: Gallatin	1955	0	12	0	15	100					7	4	0	7	x	Mis	2,991	
574			0	x	0	x	50	Bethel: Mis	S	2,660	10	3	1	0		x			
575			0	x	0	x	10	Renault: Mis[25]	L	2,770	3	0	0	0		x			
576			0	x	0	x	40	Aux Vases: Mis	S	2,780	5	1	0	0		x			
577			0	x	0	x	40	Ohara: Mis	L	2,820	11	1	0	0		x			
578								[1]				2	2	0					
579	Elbridge: Edgar	1949	0	50	0	1,276	360					38	0	0	27	D	Dev	2,093	
580			0	x	0	x	20	Pennsylvanian: Pen	S	760	3	2	0	0		D			
581			0	x	0	x	360	Fredonia: Mis	L	950	3	36	0	0		D			
582			0	0	0	x	20	Devonian: Dev[25]	L	1,950	20	0	0	0		R			
583	Eldorado Central—Now included in Eldorado Consol.																		
584	Eldorado Consol.: Saline[5]	1941	0	965	0	5,036	2,300					218	10	6	210	A	Mis	3,606	
585			0	x	0	x	220	Palestine: Mis	S	1,920	20	19	5	1		AL			
586			0	x	0	x	1,340	Waltersburg: Mis	S	2,125	25	131	1	1		AL			
587			0	x	0	x	130	Tar Springs: Mis	S	2,200	15	9	0	0		AL			
588			0	x	0	x	130	Hardinsburg: Mis	S	2,350	8	8	0	1		AL			
589			0	x	0	x	70	Cypress: Mis	S	2,575	8	4	3	0		AL			
590			0	x	0	x	60	Paint Creek: Mis	S	2,680	18	2	0	0		AL			
591			0	x	0	x	470	Aux Vases: Mis	S	2,900	12	33	1	2		AL			
592			0	x	0	x	40	Ohara: Mis	L	2,900	5	1	1	0		AC			
593			0	x	0	x	20	Rosiclare: Mis[25]	LS	2,900	4	0	0	0		AC			
594			0	x	0	x	40	McClosky: Mis	L	2,975	5	2	0	0		AC			
595												15	0	2					
596	Eldorado East: Saline[5]	1953	0	31	0	193	260					20	0	1	18	A	Mis	3,102	
597			0	x	0	x	10	Palestine: Mis	S	1,915	10	1	0	1		AL			
598			0	x	0	x	20	Tar Springs: Mis	S	2,190	10	1	0	0		AL			
599			0	x	0	x	30	Cypress: Mis	S	2,515	20	2	0	0		AL			
600			0	x	0	x	190	Aux Vases: Mis	S	2,885	6	14	0	0		AL			
601			0	0	0	x	20	Rosiclare: Mis	L	2,975	4	1	0	0		AC			
602								[1]				1	0	0					
603	Eldorado North—Now included in Eldorado Consol.																		
604	Eldorado West: Saline	1955	0	12	0	15	30					3	1	1	2	x	Mis	3,138	
605			0	10	0	10	10	Palestine: Mis	S	1,940	18	1	1	0		x			
606			0	x	0	x	10	Renault: Mis[25]	L	2,910	6	0	0	0		x			
607			0	x	0	x	20	Aux Vases: Mis	L	2,960	6	2	0	1		x			
608	Elk Prairie: Jefferson[52]	1938	0	0	0	1	20	McClosky: Mis	L	2,735	7	1	0	0	0	x	Mis	2,956	
609	Elkton: Washington	1955	0	.5	0	2	40	Bailey: Dev	L	2,340	30	2	0	1	1	x	Dev	2,485	
610	Elkville: Jackson	1941	0	0	0	4	10	Bethel: Mis	S	2,000	10	1	0	0	0	x	Mis	2,387	
611	Ellery Consol.: Edwards, Wayne	1941	0	378	0	2,717	2,720					183	9	2	167	H	Mis	3,556	
612			0	x	0	x	280	Bethel: Mis	S	3,110	11	21	1	0		HL			
613			0	x	0	x	1,000	Aux Vases: Mis	S	3,235	20	59	3	1		HL			
614			0	x	0	x	680	Ohara: Mis	L	3,300	10	16	1	0		HC			
615			0	x	0	x	760	Rosiclare: Mis	L	3,320	11	13	0	0		HC			
616			0	x	0	x	920	McClosky: Mis	L	3,350	4	27	0	1		HC			
617			0	x	0	x	40	St. Louis: Mis	L	3,430	10	1	0	0		HL			
618								[1]				46	4	0					
619	Ellery East: Edwards	1952	0	93	0	460	320					24	0	0	24	M	Mis	3,390	
620			0	x	0	x	160	Aux Vases: Mis	S	3,180	35	13	4	0		ML			

621			0	x	0	x	180	Ohara: Mis	L	3,255	6	11	0	0		MC				
622			0	x	0	x	40	Rosiclare: Mis	L	3,255	4	2	0	0		MC				
623	Ellery North: Edwards[53]	1942	0	3	0	22	140					6	0	2	1	M	Mis	3,496		
624			0	x	0	x	20	Bethel: Mis	S	3,100	35	1	0	1		ML				
625			0	x	0	x	10	Aux Vases: Mis[25]	S	3,230	12	0	0	0		ML				
626			0	x	0	x	80	Rosiclare: Mis	S	3,345	8	3	0	1		ML				
627			0	0	0	3	40	McClosky: Mis	L	3,420	7	1	0	0		MC				
628							[1]					1	0	0						
629	Ellery South: Edwards[54]	1943	0	6	0	162	200					8	0	0	3	M	Mis	3,434		
630			0	6	0	24	40	Aux Vases: Mis	S	3,200	15	4	0	0		ML				
631			0	0	0	138	160	McClosky: Mis	L	3,300	9	4	0	0		MC				
632	Ellery West—Now included in Ellery Consol.																			
633	Elliottstown: Effingham[55]	1947	0	0	0	14	20	Rosiclare: Mis	S	2,730	8	1	0	0	0	HL	Mis	2,884		
634	Elliottstown East: Effingham[56]	1954	0	1	0	3	10	Cypress: Mis	S	2,485	5	1	0	1	0	HL	Mis	2,867		
635	Elliottstown North: Effingham	1953	0	1	0	10	20	Cypress: Mis	S	2,430	4	2	0	0	1	HL	Mis	2,865		
636	Enfield: White[57]	1950	26	39	127	274	280					16	0	0	14	A	Mis	4,259		
637			26	x	127	x	140	Aux Vases: Mis	S	3,250	10	9	0	0		AL				
638			0	x	0	x	40	Ohara: Mis	L	3,310	4	2	0	0		AC				
639			0	x	0	x	100	McClosky: Mis	L	3,385	8	5	0	0		AC				
640	Enterprise—Now included in Clay City Consol.																			
641	Enterprise West—Now included in Clay City Consol.																			
642	Epworth Consol.: White[5]	1941	0	252	0	1,374	830					74	7	4	65	A	Mis	3,240		
643			0	x	0	x	50	Pennsylvanian: Pen	S	1,320	10	4	0	0		A				
644			0	x	0	x	50	Biehl: Pen	S	1,840	4	5	0	0		Af				
645			0	x	0	x	60	Degonia: Mis	S	2,090	10	5	0	0		AL				
646			0	x	0	x	190	Clore: Mis	S	2,100	10	16	5	0		AL				
647			0	x	0	x	30	Palestine: Mis	S	2,150	12	2	0	0		AL				
648			0	x	0	x	30	Waltersburg: Mis	S	2,345	6	1	0	0		AL				
649			0	x	0	x	80	Tar Springs: Mis	S	2,360	15	6	1	0		Af				
650			0	x	0	x	50	Cypress: Mis	S	2,730	10	3	0	0		Af				
651			0	x	0	x	10	Renault: Mis	L	2,990	5	1	0	0		A				
652			0	x	0	x	270	Aux Vases: Mis	S	3,000	13	23	1	4		Af				
653			0	x	0	x	20	Ohara: Mis[25]	L	3,095	10	0	0	0		AC				
654			0	x	0	x	80	Rosiclare: Mis	L	3,115	2	3	0	0		AC				
655							[1]					6	1	0						
656	Epworth East—Now included in Epworth Consol.																			
657	Evers: Effingham[58]	1948	0	9	0	54	70					4	0	0	3	A	Mis	2,808		
658			0	9	0	53	60	Rosiclare: Mis	L	2,610	7	3	0	0		AL				
659			0	0	0	1	10	McClosky: Mis	L	2,660	4	1	0	0		AC				
660	Evers South: Effingham[59]	1948	0	0	0	2	10	Rosiclare: Mis	LS	2,650	8	1	0	0	0	AC	Mis	2,771		
661	Ewing: Franklin	1944	0	8	0	489	150					8	0	0	3	A	Mis	3,094		
662			0	2	0	53	10	Aux Vases: Mis	S	2,835	8	1	0	0		AL				
663			0	6	0	436	140	McClosky: Mis	L	2,970	7	7	0	0		A				
664	Ewing East: Franklin	1956	0	x	0	x	20	Ohara: Mis	L	3,010	10	1	1	0	1	x				
665	Exchange: Marion	1943	0	1	0	60	80					2	0	0	1	M	Mis	2,869		
666			0	x	0	x	40	Ohara: Mis[25]	L	2,695	10	0	0	0		MC				
667			0	x	0	x	80	McClosky: Mis	L	2,730	8	2	0	0		MC				
668	Exchange East: Marion	1955	0	111	0	189	320					16	4	1	15	x	Mis	3,006		
669			0	x	0	x	20	Ohara: Mis	L	2,775	14	1	0	0		x				
670			0	x	0	x	180	Rosiclare: Mis	S	2,780	11	7	4	0		x				
671			0	x	0	x	180	McClosky: Mis	L	2,840	4	6	0	1		x				
672			0	x	0	x	20	St. Louis: Mis	L	2,940	8	1	0	0		x				
673							[1]					1	0	0						
674	Exchange North: Marion[60]	1951	0	1	0	3	40	McClosky: Mis	L	2,715	6	2	0	0	1	MC	Mis	2,831		
675	Fairfield—Now included in Clay City Consol.																			
676	Fairfield East—Now included in Clay City Consol.																			
677	Fairman: Marion, Clinton	1939	0	22	0	1,604	460	Bethel: Mis	S	1,435	10	41	0	1	21	A	Ord	4,100		
678	Fitzgerrell: Jefferson[61]	1944	0	0	0	16	10					1	0	0	0	x	Mis	3,012		
679			0	0	0	x	10	Bethel: Mis	S	2,760	5	1	0	0		x				
680			0	0	0	x	10	Aux Vases: Mis[25]	S	2,800	x	0	0	0		x				
681	Flannigan—Now included in Dale Consol.																			

TABLE 12.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Number of wells 1956 Abandoned	Number of wells 1956 Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
682	Flora—Now included in Sailor Springs Consol.																	
683	Flora South: Clay	1946	0	7	0	150	100	McClosky: Mis	L	2,985	6	4	0	0	3	AC	Mis	3,361
684	Francis Mills: Saline	1952	0	8	0	51	10	Cypress: Mis	S	2,675	5	1	0	0	1	x	Mis	3,238
685	Francis Mills South: Saline	1955	0	2	0	5	20	Ohara: Mis	L	3,010	11	1	0	0	1	x	Mis	3,180
686	Freeburg South: St. Clair[5]	1955	0	x	0	x	10	Cypress: Mis	S	380	30	1	0	0	1	x	Ord	2,000
687	Friendsville—Now included in New Harmony Consol.																	
688	Friendsville Central: Wabash	1946	0	0	0	31	50	Bethel: Mis	S	2,330	15	5	0	0	0	MC	Mis	2,630
689	Friendsville North: Wabash	1946	2	5	142	202	120	Biehl: Pen	S	1,620	12	13	0	0	8	MC	Mis	2,592
690	Friendsville South: Now included in New Harmony Consol.																	
691	Frogtown North: Clinton	1951	0	143	0	1,482	580					34	0	2	29	D	Sil	2,456
692			0	x	0	x	100	St. Louis: Mis	L	1,200	10	5	0	0		D		
693			0	x	0	x	580	Devonian-Silurian	L	2,250	8	29	0	2		R		
694	Gallagher—Now included in Calhoun Consol.																	
695	Gards Point: Wabash	1951	0	83	0	140	320	Ohara: Mis	L	2,870	6	16	15	0	16	MC	Mis	2,961
696	Gards Point North: Wabash	1952	0	1	0	19	20	Ohara: Mis	L	2,850	3	1	0	0	1	MC	Mis	2,955
697	Gays: Moultrie[62]	1946	0	6	0	17	100					5	4	0	4	M	Dev	3,305
698			0	x	0	x	100	Aux Vases: Mis	S	1,970	5	4	3	0		ML		
699			0	x	0	x	20	Devonian: Dev[25] [1]	L	3,205	3	0	0	0		MC		
700												0	0	0				
701	Geff—Now included in Clay City Consol.																	
702	Geff West—Now included in Clay City Consol.																	
703	Germantown East: Clinton	1956	0	329	0	329	760	Silurian: Sil	L	2,350	30	21	21	0	21	R	Trenton	3,310
704	Glenarm: Sangamon	1955	0	.5	0	1	20	Silurian: Sil	L	1,680	9	1	0	0	1	x	Sil	1,720
705	Goldengate Consol.: Wayne, White	1938	2	339	10	7,376	3,860					210	5	6	156	A	Mis	3,607
706			0	x	0	x	760	Aux Vases: Mis	S	3,180	15	69	3	1		AL		
707			x	x	x	x	800	Ohara: Mis	OL	3,250	6	13	0	1		AC		
708			x	x	x	x	1,000	Rosiclare: Mis	LS	3,275	7	17	1	0		AC		
709			1	x	9	x	2,000	McClosky: Mis [1]	OL	3,310	7	70	1	3		AC		
710												41	0	1				
711	Goldengate East: Wayne	1951	0	0	0	5	20	Ohara: Mis	L	3,290	3	1	0	0	0	x	Mis	3,420
712	Goldengate North Consol.: Wayne	1945	0	42	0	272	460					30	3	2	24	M	Mis	3,509
713			0	x	0	x	10	Bethel: Mis[25]	S	3,095	3	0	0	0		ML		
714			0	x	0	x	180	Aux Vases: Mis	S	3,235	25	11	0	0		ML		
715			0	x	0	x	120	Ohara: Mis[25]	L	3,300	4	0	0	0		MC		
716			0	x	0	x	180	Rosiclare: Mis	L	3,325	5	5	0	0		MC		
717			0	x	0	x	120	McClosky: Mis [1]	L	3,350	6	2	0	0		MC		
718												12	3	2				
719	Goldengate West—Now included in Goldengate North Consol.																	
720	Gossett—Now included in Roland Consol.																	
721	Grandview: Edgar	1945	0	2	0	2	50	Pennsylvanian: Pen	S	560	10	5	4	1	4	M	Ord	2,694
722	Grayville—Now included in Phillipstown Consol.																	
723	Grayville West—Now included in Albion Consol.																	
724	Griffin—Now included in New Harmony Consol.																	
725	Half Moon: Wayne	1947	0	268	0	1,623	880					44	9	0	41	M	Mis	3,510
726			0	x	0	x	20	Aux Vases: Mis	S	3,190	18	1	0	0		ML		
727			0	x	0	x	380	Ohara: Mis	L	3,280	11	18	7	0		MC		
728			0	x	0	x	120	Rosiclare: Mis	L	3,280	4	4	2	0		MC		

729			0	x	0	x	400	McClosky: Mis	L	3,300	10	19	0	0		MC			
730								[1]				2	1	0					
731	Harco: Saline	1954	0	547	0	553	550					53	50	2	51	x	Mis		3,107
732			0	x	0	x	30	Paint Creek: Mis	S	2,330	6	0	0	0		x			
733			0	x	0	x	10	Hardinsburg: Mis[25]	S	2,675	8	3	2	0		x			
734			0	x	0	x	490	Aux Vases: Mis	S	2,860	15	40	38	2		x			
735			0	x	0	x	80	Ohara: Mis	L	2,965	10	3	3	0		x			
736			0	x	0	x	100	Rosiclare: Mis	LS	2,970	10	4	4	0		x			
737								[1]				3	3	0					
738	Harco East: Saline	1955	0	133	0	142	240					21	19	0	21	x	Mis		3,031
739			0	x	0	x	60	Cypress: Mis	S	2,575	20	5	4	0		x			
740			0	x	0	x	160	Aux Vases: Mis	S	2,865	8	13	13	0		x			
741			0	x	0	x	40	Ohara: Mis	L	2,880	14	2	1	0		x			
742								[1]				1	1	0					
743	Harrisburg: Saline[5]	1954	0	28	0	105	90					9	0	1	7	x	Mis		2,930
744			0	28	0	105	80	Waltersburg: Mis	S	2,020	14	8	0	1		x			
745			0	0	0	.5	10	Tar Springs: Mis	S	2,115	6	1	0	0		x			
746	Harrisburg South: Saline	1955	0	0	0	0	10	Cypress: Mis	S	2,300	x	1	0	0	0	x	Mis		2,352
747	Harristown: Macon	1954	0	1	0	5	40	Silurian: Sil	L	2,050	3	2	1	0	2	MU	Sil		2,080
748	Helena—Now included in Ruark West Consol.																		
749	Herald Consol.: White, Gallatin[5, 63]	1939	29	1,056	29	8,741	4,900					490	64	12	408	A	Mis		3,394
750			0	x	0	x	10	Pennsylvanian: Pen	S	1,060	10	1	0	0		AL			
751			0	x	0	x	160	Pennsylvanian: Pen	S	1,500	15	13	1	0		AL			
752			0	x	0	x	30	Pennsylvanian: Pen	S	1,750	18	3	1	0		AL			
753			0	x	0	x	30	Degonia: Mis	S	1,920	12	3	0	0		AL			
754			0	x	0	x	20	Clore: Mis[25]	S	1,965	10	0	0	0		AL			
755			0	x	0	x	10	Palestine: Mis	S	1,940	20	1	0	0		AL			
756			29	x	29	x	420	Waltersburg: Mis	S	2,240	10	39	0	1		A			
757			0	x	0	x	420	Tar Springs: Mis	S	2,260	13	34	1	0		A			
758			0	x	0	x	1,480	Cypress: Mis	S	2,660	14	142	3	5		A			
759			0	x	0	x	10	Paint Creek: Mis[25]	S	x	x	0	0	0		AL			
760			0	x	0	x	210	Bethel: Mis	S	2,790	11	15	1	2		AL			
761			0	x	0	x	2,100	Aux Vases: Mis	S	2,920	6	197	54	2		AL			
762			0	x	0	x	140	Ohara: Mis	L	2,965	6	5	0	0		AC			
763			0	x	0	x	140	Rosiclare: Mis	L	3,005	4	3	0	0		AC			
764			0	x	0	x	420	McClosky: Mis	L	3,010	10	15	1	1		AC			
765								[1]				24	4	1					
766	Herald East—Now included in Herald Consol.																		
767	Herald North—Now included in Storms Consol.																		
768	Hidalgo: Jasper[64]	1940	0	0	0	10	60	McClosky: Mis	L	2,575	4	3	0	0	0	MC	Dev		4,140
769	Hidalgo North: Cumberland	1946	0	1	0	13	40	Rosiclare: Mis	S	2,655	12	2	0	0	1	x	Mis		2,776
770	Hill: Effingham[65]	1943	0	0	0	41	80	McClosky: Mis	L	2,565	5	2	0	0	0	N	Mis		2,710
771	Hill East: Effingham	1954	0	187	0	462	430					32	2	1	31	x	Mis		3,251
772			0	136	0	228	250	Cypress: Mis	S	2,460	8	23	2	1		x			
773			0	x	0	x	40	Rosiclare: Mis	L	2,660	5	1	0	0		x			
774			0	x	0	x	160	McClosky: Mis	L	2,700	7	7	0	0		x			
775								[1]				1	0	0					
776	Hoffman: Clinton	1939	0	10	0	710	260					48	0	0	27	A	Dev		2,914
777			0	x	0	x	120	Cypress: Mis	S	1,190	11	12	0	0		A			
778			0	x	0	x	180	Bethel: Mis	S	1,320	7	35	0	0		A			
779								[1]				1	0	0					
780	Hoodville—Now included in Dale Consol.																		
781	Hoodville East: Hamilton[66]	1944	0	0	0	1	20	McClosky: Mis	L	3,365	3	1	0	0	0	N	Mis		3,411
782	Hoosier—Now included in Sailor Springs Consol.																		
783	Hoosier North—Now included in Sailor Springs Consol.																		
784	Hord: Clay	1950	0	62	0	283	240	Ste. Genevieve: Mis	L	2,800	5	11	2	1	10	M	Mis		2,954
785	Hord South: Clay[67]	1942	0	37	0	913	560					26	1	1	24	N	Mis		2,975
786			0	x	0	x	20	Aux Vases: Mis	S	2,735	8	2	1	1		N			
787			0	x	0	x	540	Ste. Genevieve: Mis	L	2,790	7	24	0	0		NC			
788	Hornsby South: Macoupin	1956	0	x	0	x	10	Pennsylvanian: Pen	S	640	1	1	1	0	1	x	Pen		651
789	Hoyleton West: Washington	1955	0	1	0	1	20	Clear Creek: Dev	L	2,895	12	1	0	0	1	x	Sil		2,965
790	Huey: Clinton	1945	0	1	0	3	100	Bethel: Mis	S	1,260	6	7	0	1	1	AL	Dev		2,720

791	Huey South: Clinton	1953	0	6	0	32	130					13	1	0	11	x	Sil	2,675
792			0	6	0	32	110	Cypress: Mis	S	1,080	5	12	0	0		x		
793			0	x	0	x	20	Silurian: Sil	L	2,585	10	1	1	0		x		
794	Hunt City: Jasper[68]	1945	0	0	0	1	20	Rosiclare: Mis	S	2,540	10	1	0	0	0	ML	Mis	2,715
795	Hunt City East: Jasper[69]	1952	0	0	0	4	20	Fredonia: Mis	L	1,845	6	1	0	0	0	x	Mis	1,855
796	Hunt City South: Jasper	1947	0	2	0	32	80	McClosky: Mis	L	2,445	7	4	0	0	2	MC	Mis	2,559
797	Ina: Jefferson[70]	1938	0	0	0	16	50					3	0	0	0	A	Mis	3,498
798			0	0	0	0	10	Renault: Mis	S	2,725	14	1	0	0		AL		
799			0	0	0	16	40	St. Louis: Mis	L	3,000	4	2	0	0		AC		
800	Ina North: Jefferson	1949	0	0	0	1	20	McClosky: Mis	L	2,940	4	1	0	0	0	x	Mis	3,150
801	Inclose: Edgar, Clark[5]	1941	0	x	0	x	60	Isabel: Pen	S	345	8	7	1	0	3	AL	Mis	1,600
802	Ingraham: Clay[71]	1942	0	17	0	548	680					33	1	0	27	M	Mis	3,148
803			0	x	0	x	10	Aux Vases: Mis[25]	S	2,915	15	0	0	0		ML		
804			0	x	0	x	620	Rosiclare: Mis	L	3,000	7	28	0	0		MC		
805			0	x	0	x	100	McClosky: Mis	L	3,075	8	5	1	0		MC		
806	Ingraham West—Now included in Sailor Springs Consol.																	
807	Inman—Now included in Inman West Consol.																	
808	Inman Central—Now included in Inman West Consol.																	
809	Inman East Consol.: Gallatin	1940	1,198	1,471	2,128	13,465	3,520					355	19	1	324	A	Mis	3,020
810			0	x	0	x	10	Pennsylvanian: Pen	S	780	10	4	0	0		AF		
811			0	x	0	x	40	Pennsylvanian: Pen	S	1,450	4	1	0	0		AF		
812			0	x	0	x	50	Degonia: Mis	S	1,690	10	1	0	0		AF		
813			x	x	x	x	60	Clore: Mis	S	1,725	8	1	0	0		AF		
814			x	x	x	x	50	Palestine: Mis	S	1,840	13	1	0	0		AF		
815			x	x	x	x	570	Waltersburg: Mis	S	1,980	18	36	3	0		AF		
816			x	x	x	x	1,520	Tar Springs: Mis	S	2,080	13	127	0	0		AF		
817			x	x	x	x	220	Hardinsburg: Mis	S	2,135	10	9	0	0		AF		
818			x	x	x	x	1,450	Cypress: Mis	S	2,390	14	103	5	0		AF		
819			0	x	0	x	210	Aux Vases: Mis	S	2,715	8	21	9	1		AF		
820			0	x	0	x	20	Ohara: Mis	L	2,795	5	1	0	0		AF		
821			0	x	0	x	20	Rosiclare: Mis	L	2,790	7	1	0	0		AF		
822			0	x	0	x	140	McClosky: Mis	L	2,800	8	4	0	0		AF		
823								[1]				45	2	0				
824	Inman North—Now included in Inman West Consol.																	
825	Inman South—Now included in Inman West Consol.																	
826	Inman West Consol.: Gallatin	1940	94	490	94	3,919	2,950					243	5	2	208	T	Mis	3,094
827			0	x	0	x	40	Pennsylvanian: Pen	S	925	8	4	0	0		NL		
828			0	0	0	0	10	Pennsylvanian: Pen	S	1,630	5	1	1	1		NL		
829			0	x	0	x	40	Palestine: Mis	S	1,765	13	3	0	0		NL		
830			0	x	0	x	100	Waltersburg: Mis	S	2,080	10	8	1	0		TL		
831			0	x	0	x	770	Tar Springs: Mis	S	2,140	8	47	1	0		TL		
832			0	x	0	x	190	Hardinsburg: Mis	S	2,300	10	7	0	0		TL		
833			94	x	94	x	1,240	Cypress: Mis	S	2,475	10	80	2	1		T		
834			0	x	0	x	20	Renault: Mis	L	2,775	7	1	0	0		T		
835			0	x	0	x	470	Aux Vases: Mis	S	2,790	15	34	0	0		TL		
836			0	x	0	x	80	Ohara: Mis	L	2,815	12	1	0	0		TC		
837			0	x	0	x	40	Rosiclare: Mis	L	2,815	8	1	0	0		TC		
838			0	x	0	x	280	McClosky: Mis	L	2,940	6	7	0	0		TC		
839								[1]				49	0	0				
840	Iola Central: Clay	1954	0	.5	0	1	10	Bethel: Mis	S	2,420	5	1	0	0	1	x	Mis	2,723
841	Iola Consol.: Clay, Effingham[72]	1939	0	409	0	9,354	3,150					247	15	6	192	A	Dev	4,227
842			0	x	0	x	10	Tar Springs: Mis[25]	S	1,890	9	0	0	0		AL		
843			0	x	0	x	470	Cypress: Mis	S	2,125	15	27	0	0		A		
844			0	x	0	x	30	Paint Creek: Mis[25]	S	2,255	10	0	0	0		AL		
845			0	x	0	x	820	Bethel: Mis	S	2,290	12	30	0	0		A		
846			0	x	0	x	10	Renault: Mis[25]	L	2,320	x	0	0	0		AC		
847			0	x	0	x	1,520	Aux Vases: Mis	S	2,325	10	87	11	1		A		
848			0	x	0	x	900	Rosiclare: Mis	LS	2,400	7	22	4	3		A		
849			0	x	0	x	820	McClosky: Mis	OL	2,425	10	27	0	1		A		
850								[1]				54	0	1				

851	Iola South: Clay	1947	0	13	0	193	200					15	0	1	12	A	Dev	4,325
852			0	x	0	x	120	Bethel: Mis	S	2,490	10	9	0	0		AL		
853			0	x	0	x	100	Rosiclare: Mis	L	2,590	6	4	0	1		AC		
854			0	x	0	x	40	McClosky: Mis[1]	L	2,650	3	1	0	0		AC		
855												1	0	0				
856	Iola West: Clay[73]	1945	0	0	0	.5	20	McClosky: Mis	L	2,495	11	1	0	0	0	MC	Mis	2,613
857	Iron Consol.:—Now included in Roland Consol.																	
858	Irvington: Washington	1940	0	333	0	6,079	1,200					130	11	2	108	A	Ord	4,440
859			0	x	0	x	10	Barlow: Mis[25]	L	1,525	3	0	0	0		AC		
860			0	x	0	x	290	Cypress: Mis	S	1,380	12	26	1	1		A		
861			0	x	0	x	870	Bethel: Mis	S	1,535	12	82	0	1		A		
862			0	x	0	x	400	Clear Creek: Dev	L	3,090	12	15	5	0		A		
863			0	x	0	x	100	Trenton: Ord[1]	L	4,275	90	4	4	0		A		
864												3	1	0				
865	Irvington East: Jefferson	1951	0	119	0	191	280					26	6	0	26	x	Mis	2,222
866			0	3	0	12	40	Pennsylvanian: Pen	S	1,030	15	4	0	0		x		
867			0	x	0	x	60	Cypress: Mis	S	1,750	15	4	0	0		x		
868			0	x	0	x	200	Bethel: Mis[1]	S	1,950	x	15	5	0		x		
869												3	1	0				
870	Irvington North: Washington	1953	0	112	0	472	260					26	1	0	26	A	Ord	4,334
871			0	x	0	x	40	Cypress: Mis	S	1,340	16	4	1	0		AL		
872			0	x	0	x	220	Bethel: Mis	S	1,470	6	22	0	0		AL		
873	Iuka: Marion	1947	0	111	0	573	780					39	1	1	36	M	Mis	2,911
874			0	x	0	x	120	Ohara: Mis	L	2,650	5	1	0	0		MC		
875			0	x	0	x	100	Rosiclare: Mis[25]	L	2,660	15	0	0	0		MC		
876			0	x	0	x	620	McClosky: Mis	L	2,750	10	18	1	0		MC		
877			0	x	0	x	300	St. Louis: Mis[1]	L	2,775	5	6	3	1		MC		
878												14	0	0				
879	Iuka West: Marion	1955	0	3	0	3	80	McClosky: Mis	L	2,700	5	3	2	0	3	x	Mis	2,801
880	Johnsonville Consol.: Wayne	1940	301	1,055	534	30,521	9,000					416	12	3	336	A	Dev	5,198
881			0	x	0	x	30	Bethel: Mis[25]	S	2,950	12	0	0	0		AL		
882			0	x	0	x	2,460	Aux Vases: Mis	S	3,020	20	91	6	0		AL		
883			0	x	0	x	600	Ohara: Mis	OL	3,120	10	6	0	0		AC		
884			0	x	0	x	140	Rosiclare: Mis	OL	3,150	8	5	0	0		AC		
885			301	x	534	x	8,300	McClosky: Mis[1]	OL	3,170	15	275	4	3		AC		
886												39	2	0				
887	Johnsonville North: Wayne	1943	0	15	0	61	120					5	2	0	5	A	Mis	3,335
888			0	x	0	x	40	Ohara: Mis[25]	OL	3,190	3	0	0	0		AC		
889			0	x	0	x	40	Rosiclare: Mis	L	3,220	8	4	2	0		AC		
890			0	x	0	x	40	McClosky: Mis[25][1]	OL	3,250	3	0	0	0		AC		
891												1	0	0				
892	Johnsonville South: Wayne	1942	0	27	0	489	440					33	0	0	25	A	Mis	3,300
893			0	x	0	x	270	Aux Vases: Mis	S	3,060	15	26	0	0		A		
894			0	x	0	x	20	Rosiclare: Mis	L	3,160	4	1	0	0		AC		
895			0	x	0	x	160	McClosky: Mis	L	3,200	5	6	0	0		AC		
896	Johnsonville West: Wayne	1942	0	42	0	531	370					28	0	1	17	M	Mis	3,251
897			0	x	0	x	10	Bethel: Mis	S	2,925	7	1	0	0		ML		
898			0	x	0	x	170	Aux Vases: Mis	S	2,900	6	17	0	0		ML		
899			0	x	0	x	60	Ohara: Mis	L	2,930	6	3	0	1		MC		
900			0	x	0	x	20	Rosiclare: Mis	L	3,015	4	1	0	0		MC		
901			0	x	0	x	120	McClosky: Mis	L	3,100	7	6	0	0		MC		
902	Junction: Gallatin	1939	38	42	194	495	210					21	0	1	17	M	Mis	2,818
903			0	1	0	16	30	Pennsylvanian: Pen	S	1,150	7	3	0	0		ML		
904			38	38	194	466	140	Waltersburg: Mis	S	1,750	14	15	0	0		ML		
905			0	0	0	5	10	Hardinsburg: Mis	S	2,120	5	1	0	0		ML		
906			0	x	0	x	20	Cypress: Mis	S	2,275	12	1	0	1		ML		
907			0	x	0	x	20	McClosky: Mis[25][1]	L	2,730	9	0	0	0		MC		
908												1	0	0				
909	Junction East: Gallatin	1953	0	4	0	29	20	Waltersburg: Mis	S	2,000	14	2	0	0	2	x	Mis	2,970
910	Junction North: Gallatin	1946	0	24	0	75	150					13	0	0	11	M	Mis	2,983

TABLE 12.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Abandoned	Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
911			0	2	0	23	50	Pennsylvanian: Pen	S	1,565	16	5	0	0		ML		
912			0	x	0	x	30	Cypress: Mis	S	2,450	10	3	0	0		ML		
913			0	8	0	24	20	Aux Vases: Mis	S	2,725	4	2	0	0		ML		
914			0	x	0	x	60	Rosiclare: Mis	L	2,860	6	3	0	0		MC		
915	Junction City South: Marion	1952	0	0	0	.5	10	Wilson: Pen	S	685	8	1	0	0	0	NL	Mis	2,007
916	Keensburg—Now included in New Harmony Consol.																	
917	Keensburg East: Wabash[74]	1939	0	0	0	9	120					3	0	0	0	M	Mis	2,802
918			0	0	0	x	40	Ohara: Mis	L	2,705	10	1	0	0		MC		
919			0	0	0	x	80	McClosky: Mis	L	2,710	6	2	0	0		MC		
920	Keensburg South: Wabash	1944	6	30	14	488	230					18	0	2	14	A	Mis	2,879
921			0	x	0	x	60	Pennsylvanian: Pen	S	1,145	15	6	0	0		AL		
922			6	x	14	x	130	Cypress: Mis	S	2,385	9	11	0	2		AL		
923			0	.5	0	65	40	Ohara: Mis	L	2,715	10	1	0	0		AC		
924	Keenville: Wayne	1945	118	158	217	1,556	720					53	0	1	44	A	Mis	3,267
925			115	x	214	x	250	Aux Vases: Mis	S	2,960	20	25	0	0		AL		
926			0	x	0	x	80	Ohara: Mis	L	3,050	8	2	0	0		AC		
927			0	x	0	x	20	Rosiclare: Mis	L	3,060	10	1	0	0		AC		
928			3	x	3	x	400	McClosky: Mis	L	3,100	7	23	0	1		AC		
929												2	0	0				
930	Keenville East: Wayne	1951	0	6	0	47	60	McClosky: Mis	L	3,140	10	3	0	0	3	x	Mis	3,220
931	Kell: Jefferson[75]	1942	0	0	0	3	40	McClosky: Mis	L	2,625	6	1	0	0	0	A	Mis	2,720
932	Kenner: Clay	1942	0	25	0	905	640					46	0	0	40	A	Mis	3,082
933			0	0	0	x	10	Tar Springs: Mis	S	2,200	7	1	0	0		AL		
934			0	x	0	x	590	Bethel: Mis	S	2,690	10	42	0	0		A		
935			0	x	0	x	10	Aux Vases: Mis[25]	S	2,835	9	0	0	0		AL		
936			0	0	0	x	20	Rosiclare: Mis	LS	2,875	5	1	0	0		AC		
937			0	0	0	x	20	McClosky: Mis	L	2,930	7	1	0	0		AC		
938												1	0	0				
939	Kenner North: Clay	1947	0	23	0	790	300					32	0	1	27	A	Mis	3,076
940			0	x	0	x	280	Bethel: Mis	S	2,755	8	27	0	0		A		
941			0	x	0	x	120	McClosky: Mis	L	2,970	6	5	0	1		AC		
942	Kenner South: Clay[76]	1950	0	0	0	3	20	McClosky: Mis	L	2,870	10	1	0	0	0	AC	Mis	3,000
943	Kenner West: Clay	1947	120	157	219	1,636	310					30	0	1	25	A	Dev	4,800
944			x	x	x	x	300	Cypress: Mis	S	2,600[x]	26	14	0	1		A		
945			x	x	x	x	200	Bethel: Mis	S	2,705	9	2	0	0		A		
946			0	x	0	x	40	McClosky: Mis[25]	L	2,870	4	0	0	0		A		
947												14	0	0				
948	Keyesport: Clinton	1949	0	12	0	84	140	Bethel: Mis	S	1,180	8	13	0	0	8	AL	Mis	1,358
949	Kincaid: Christian	1955	0	234	0	444	70	Hibbard: Dev	DS	1,780	19	7	6	0	7	MU	Dev	1,804
950	Kincaid South: Christian	1955	0	810	0	885	200	Hibbard: Dev	DS	1,815	12	15	5	0	15	MU	Dev	1,855
951	King: Jefferson	1942	0	201	0	2,419	1,100					99	4	2	80	A	Dev	4,759
952			0	x	0	x	1,020	Aux Vases: Mis	S	2,725	15	81	4	2		AL		
953			0	x	0	x	160	Ohara: Mis	L	2,765	10	1	0	0		AC		
954			0	x	0	x	140	Rosiclare: Mis	LS	2,815	10	4	0	0		AC		
955			0	x	0	x	120	McClosky: Mis	L	2,840	5	2	0	0		AC		
956												9	0	0				
957	Kinmundy: Marion	1950	0	2	0	20	40					3	1	1	2	A	Mis	2,479
958			0	2	0	20	20	Bethel: Mis	S	1,915	3	2	0	0		A		

959			0	0	0	0	20	Salem: Mis	L	2,430	7	1	1	1		A				
960	Kinmundy North: Marion[77]	1953	0	0	0	.5	10	Bethel: Mis	S	2,040	6	1	0	0	0	x	Mis	2,301		
961	Laclede: Fayette	1943	0	1	0	17	30	Bethel: Mis	S	2,335	15	4	0	0	2	A	Mis	2,608		
962	Lakewood: Shelby	1941	0	9	0	234	130					12	0	0	11	A	Mis	1,794		
963			0	x	0	x	80	Bethel: Mis	S	1,690	7	7	0	0		AL				
964			0	x	0	x	50	Aux Vases: Mis	S	1,720	8	5	0	0		AL				
965	Lancaster: Wabash, Lawrence	1940	0	41	0	2,696	1,400					102	2	0	60	A	Mis	2,908		
966			0	x	0	x	10	Paint Creek: Mis	S	2,530	5	1	0	0		AL				
967			0	x	0	x	880	Bethel: Mis	S	2,540	14	69	2	0		AL				
968			0	x	0	x	40	Ohara: Mis	L	2,670	10	1	0	0		AC				
969			0	x	0	x	500	McClosky: Mis[1]	L	2,690	7	30	0	0		AC				
970												1	0	0						
971	Lancaster Central: Wabash	1946	0	5	0	361	300					14	0	0	5	M	Mis	2,888		
972			0	x	0	x	100	Ohara: Mis	L	2,750	7	2	0	0		MC				
973			0	x	0	x	260	Rosiclare: Mis	L	2,810	7	8	0	0		MC				
974			0	x	0	x	40	McClosky: Mis[25][1]	L	2,815	8	0	0	0		MC				
975												4	0	0						
976	Lancaster East: Wabash	1944	0	2	0	37	50					4	0	0	3	M	Mis	2,750		
977			0	2	0	17	30	Biehl: Pen	S	1,745	10	3	0	0		ML				
978			0	0	0	20	20	Rosiclare: Mis	L	2,660	6	1	0	0		MC				
979	Lancaster North—Now included in Ruark West Consol.																			
980	Lancaster South: Wabash	1946	8	25	17	235	110					13	0	0	11	M	Mis	2,817		
981			8	25	17	218	70	Bethel: Mis	S	2,520	6	11	0	0		ML				
982			0	0	0	.5	20	Ohara: Mis	L	2,670	6	1	0	0		MC				
983			0	0	0	16	20	McClosky: Mis	L	2,720	12	1	0	0		MC				
984	Lancaster West—Now included in Berryville Consol.																			
985	Lawrence West: Lawrence	1952	0	60	0	350	270					25	0	0	23	x	Mis	2,324		
986			0	x	0	x	10	Paint Creek: Mis[25]	S	2,040	4	0	0	0		x				
987			0	x	0	x	240	Bethel: Mis	S	2,050	15	21	7	1		x				
988			0	.5	0	3	10	Aux Vases: Mis	S	2,110	8	1	0	0		x				
989			0	x	0	x	40	McClosky: Mis[1]	L	2,225	11	1	0	0		x				
990												2	0	0						
991	Leech Consol.—Now included in Goldengate Consol.																			
992	Lexington: Wabash	1947	0	10	0	369	200					11	0	0	4	A	Mis	3,031		
993			0	1	0	9	10	Cypress: Mis	S	2,585	10	1	0	0		AL				
994			0	9	0	360	200	McClosky: Mis	L	2,970	8	10	0	0		AC				
995	Lexington North: Wabash	1951	0	.5	0	6	40	Ste. Genevieve: Mis	L	2,915	4	2	0	0	1	MC	Mis	3,045		
996	Lillyville: Cumberland, Effingham	1946	0	10	0	331	160	McClosky: Mis	L	2,425	10	8	0	0	8	A	Dev	4,000		
997	Livingston: Madison	1948	3	40	3	377	390	Pennsylvanian: Pen	S	535	15	50	2	1	39	ML	Ord	2,378		
998	Livingston South: Madison[5]	1950	0	16	0	134	330	Pennsylvanian: Pen	S	530	7	36	1	2	28	ML	Mis	845		
999	Locust Grove: Wayne	1951	0	11	0	118	100					7	1	0	7	x	Mis	3,420		
1000			0	x	0	x	60	Aux Vases: Mis	S	3,215	10	5	1	0		x				
1001			0	x	0	x	40	Ohara: Mis	L	3,240	4	1	0	1		x				
1002			0	x	0	x	20	McClosky: Mis[25][1]	L	3,280	6	0	0	0		x				
1003												1	0	0						
1004	Locust Grove South: Wayne	1953	0	3	0	11	20	Rosiclare: Mis	L	3,300	10	1	0	0	1	x	Mis	3,394		
1005	Long Branch: Saline, Hamilton	1950	0	31	0	156	120					11	3	0	8	A	Mis	3,389		
1006			0	10	0	73	20	Palestine: Mis	S	2,070	8	2	0	0		AL				
1007			0	x	0	x	30	Cypress: Mis	S	2,745	13	2	0	0		AL				
1008			0	x	0	x	50	Aux Vases: Mis	S	3,095	9	4	3	0		AL				
1009			0	x	0	x	40	McClosky: Mis[1]	L	3,220	5	2	0	0		AC				
1010												1	0	0						
1011	Long Branch South: Saline	1955	0	4	0	6	10	Cypress: Mis	S	2,660	8	1	0	0	1	x	Mis	3,210		
1012	Louden: Fayette, Effingham[5]	1937	7,694	9,972	30,950	198,579	23,200					2,180	9	11	1,981	A	St. Peter	4,680		
1013			x	x	x	x	23,000	Cypress: Mis	S	1,500	30	1,203	7	3		A				
1014			x	x	x	x	4,000	Paint Creek: Mis	S	1,540	15	174	2	1		A				
1015			x	x	x	x	9,000	Bethel: Mis	S	1,550	10	428	0	5		A				
1016			x	x	x	x	50	Aux Vases: Mis	S	1,600	6	1	0	0		AL				
1017			0	x	0	x	20	McClosky: Mis	L	1,785	4	1	0	1		AC				
1018			0	x	0	x	20	Carper: Mis[25]	S	2,830	9	0	0	0		AL				
1019			495	x	16,213	x	2,800	Geneva: Dev	D	3,000	15	85	0	0		A				
1020			0	x	0	x	20	Trenton: Ord[25]	L	3,905	12	0	0	0		A				

1021							[1]					288	0	1					
1022	Louisville North: Clay[78]	1953	0	0	0	2	20 Aux Vases: Mis	S	2,755	10	2	0	1	0	ML	Mis	2,977
1023	Lynchburg: Jefferson	1951	0	24	0	210	40 McClosky: Mis	L	3,045	8	2	0	0	2	AC	Mis	3,169
1024	McKinley: Washington	1940	0	7	0	427	220				17	0	0	7	D	Ord	3,983
1025			0	x	0	x	70 Bethel: Mis	S	1,000	5	7	0	0		D		
1026			0	x	0	x	200 Silurian: Sil	L	2,240	40	10	0	0		R		
1027	Maple Grove Consol.: Edwards, Wayne	1943	23	179	93	3,625	2,250				103	6	3	74	A	Mis	3,385
1028			x	x	x	x	290 Aux Vases: Mis	S	3,145	15	20	5	0		A		
1029			x	x	x	x	80 Ohara: Mis	L	3,230	3	2	1	0		AC		
1030			x	x	x	x	20 Rosiclare: Mis[25]	L	3,250	1	0	0	0		AC		
1031			x	x	x	x	2,040 McClosky: Mis	L	3,260	6	76	0	3		A		
1032							[1]				5	0	0				
1033	Maple Grove East—Now included in Parkersburg Consol.																
1034	Maple Grove South: Edwards[79]	1945	0	0	0	9	20 McClosky: Mis	L	3,250	10	1	0	0	0	MC	Mis	3,358
1035	Marcoe: Jefferson[80]	1938	0	0	0	13	40 McClosky: Mis	L	2,745	15	2	0	0	0	MC	Mis	3,066
1036	Marine: Madison	1943	0	297	0	9,568	3,100 Devonian & Silurian	L	1,700	5	146	0	0	135	R	Ord	2,619
1037	Marion: Williamson[81]	1950	0	0	0	5	10 Aux Vases: Mis	S	2,385	5	1	0	0	0	x	Mis	2,560
1038	Markham City: Jefferson	1942	1	26	1	1,243	760 Ste. Genevieve: Mis	L	3,070	10	19	0	0	11	A	Mis	3,215
1039	Markham City North: Jefferson, Wayne	1943	0	34	0	974	500				18	0	0	9	A	Mis	3,169
1040			0	x	0	x	80 Aux Vases: Mis	S	2,950	6	4	0	0		AL		
1041			0	x	0	x	500 McClosky: Mis	L	3,075	8	14	0	0		AC		
1042	Markham City West: Jefferson	1945	17	57	31	1,569	600				34	0	1	29	A	Mis	3,182
1043			x	x	x	x	320 Aux Vases: Mis	S	2,905	15	16	0	0		AL		
1044			x	x	x	x	360 McClosky: Mis	L	3,035	7	15	0	0		AC		
1045							[1]				3	0	0				
1046	Mason—Now included in Iola Consol.																
1047	Mason North: Effingham	1951	0	20	0	178	120				10	0	0	10	A	Mis	2,553
1048			0	x	0	x	100 Bethel: Mis	S	2,290	13	7	0	0		AL		
1049			0	x	0	x	10 Aux Vases: Mis[25]	S	2,355	5	0	0	0		AL		
1050			0	x	0	x	60 Rosiclare: Mis	L	2,390	18	2	0	0		AC		
1051			0	x	0	x	20 McClosky: Mis[25]	L	2,475	5	0	0	0		AC		
1052							[1]				1	0	0				
1053	Mason South—Now included in Iola Consol.																
1054	Massilon: Wayne, Edwards[82]	1946	0	0	0	91	120 Ohara: Mis	L	3,255	6	3	0	0	0	MC	Mis	3,472
1055	Massilon South: Edwards[83]	1947	0	0	0	.5	20 Ohara: Mis	L	3,315	9	1	0	0	0	MC	Mis	3,391
1056	Mattoon: Coles	1939	332	635	551	12,248	5,220				436	13	3	372	A	St. Peter	4,915
1057			x	x	x	x	2,020 Cypress: Mis	S	1,750	13	96	0	0		A		
1058			0	x	0	x	200 Aux Vases: Mis	S	1,900	15	5	0	0		AL		
1059			x	x	x	x	3,820 Rosiclare: Mis	S	1,950	12	226	9	3		A		
1060			0	x	0	x	20 McClosky: Mis	L	2,010	5	1	0	0		AC		
1061			0	x	0	x	10 Carper: Mis	S	2,950	10	1	0	0		A		
1062							[1]				107	4	0				
1063	Maud Central—Now included in New Harmony Consol.																
1064	Maud Consolidated—Now included in New Harmony Consol.																
1065	Maud North Consolidated—Now included in New Harmony Consol.																
1066	Maud West—Now included in New Harmony Consol.																
1067	Maunie—Now included in Maunie South																
1068	Maunie East: White[84]	1951	0	7	0	26	60 Aux Vases: Mis	S	2,870	20	5	1	0	4	AF	Mis	3,032
1069	Maunie North Consol.: White[85]	1941	0	337	0	2,351	1,840				161	10	1	141	A	Mis	3,260
1070			0	x	0	x	10 Pennsylvanian: Pen	S	1,320	20	1	0	0		AL		
1071			0	x	0	x	100 Waltersburg: Mis	S	2,305	12	9	0	0		AL		
1072			0	x	0	x	110 Tar Springs: Mis	S	2,350	10	8	0	0		AL		
1073			0	x	0	x	10 Hardinsburg: Mis[25]	S	2,565	10	0	0	0		A		
1074			0	x	0	x	40 Paint Creek: Mis	S	2,830	13	2	0	0		AL		
1075			0	x	0	x	400 Bethel: Mis	S	2,820	13	23	1	0		AL		
1076			0	x	0	x	10 Renault: Mis	L	2,935	2	1	1	0		AC		
1077			0	x	0	x	860 Aux Vases: Mis	S	2,930	13	68	7	0		AL		
1078			0	x	0	x	160 Ohara: Mis	L	2,995	4	5	0	0		AC		
1079			0	x	0	x	340 Rosiclare: Mis	L	3,025	6	9	0	0		AC		
1080			0	x	0	x	380 McClosky: Mis	L	3,035	10	12	1	0		AC		
1081							[1]				20	1	1				

1082	Maunie South Consol.: White[86]	1941	214	299	2,243	5,516	1,500					141	5	14	98	A	Mis	3,160
1083			0	x	0	x	70	Bridgeport: Penn	S	1,400	7	7	0	1		AL		
1084			0	x	0	x	90	Degonia: Mis	S	1,900	10	6	0	0		AL		
1085			200	x	1,383	x	480	Palestine: Mis	S	2,010	17	39	0	0		AL		
1086			0	x	0	x	20	Waltersburg: Mis	S	2,210	19	2	0	0		AL		
1087			14	x	860	x	520	Tar Springs: Mis	S	2,270	16	43	4	8		AF		
1088			0	x	0	x	270	Cypress: Mis	S	2,590	10	23	1	4		AL		
1089			0	x	0	x	10	Bethel: Mis[25]	S	2,735	x	0	0	0		AL		
1090			0	x	0	x	120	Aux Vases: Mis	S	2,845	12	10	0	0		AL		
1091			0	x	0	x	20	Rosiclare: Mis[25]	L	2,900	8	0	0	0		AC		
1092			0	x	0	x	40	McClosky: Mis	L	2,920	6	1	0	0		AC		
1093								[1]				10	0	1				
1094	Maunie West—Now included in Maunie North Consol.																	
1095	Mayberry: Wayne	1941	0	4	0	315	240	McClosky: Mis	L	3,350	8	7	0	0	2	AC	Dev	5,377
1096	Mayberry North: Wayne[87]	1948	0	0	0	1	20	McClosky: Mis	L	3,330	2	1	0	0	0	x	Mis	3,463
1097	Melrose: Clark	1953	0	x	0	x	60	Isabel: Pen	S	840	10	6	1	1	5	x	Pen	878
1098	Melrose South: Clark	1953	0	0	0	0	10	Isabel: Pen	S	865	7	1	0	0	0	x	Pen	880
1099	Merriam: Now included in Clay City Consol.																	
1100	Miletus: Marion	1947	0	15	0	240	210					15	0	0	11	A	Dev	3,950
1101			0	x	0	x	90	Bethel: Mis	S	2,140	7	6	1	0		A		
1102			0	x	0	x	100	Aux Vases: Mis	S	2,200	7	5	0	0		A		
1103			0	x	0	x	60	McClosky: Mis	L	2,350	5	1	0	0		A		
1104								[1]				3	0	0				
1105	Mill Shoals: White, Hamilton, Wayne	1939	42	300	266	7,737	2,630					220	3	2	162	A	Mis	4,311
1106			42	x	266	x	2,430	Aux Vases: Mis	S	3,245	11	170	3	1		A		
1107			0	x	0	x	120	Ohara: Mis	OL	3,320	11	2	0	0		AC		
1108			0	x	0	x	200	Rosiclare: Mis	LS	3,345	8	7	0	0		AC		
1109			0	x	0	x	700	McClosky: Mis	OL	3,375	5	28	0	1		AC		
1110								[1]				13	0	0				
1111	Mills Prairie: Edwards[88]	1948	0	0	0	2	20	Ohara: Mis	L	2,925	5	1	0	0	0	MC	Mis	3,010
1112	Mills Prairie North: Edwards[89]	1953	0	0	0	5	40	Ohara: Mis	L	2,925	5	2	0	2	0	MC	Mis	3,003
1113	Mitchell—Now included in Ellery Consol.																	
1114	Mitchellsville: Saline	1955	0	3	0	6	20					2	0	0	2	x	Mis	2,452
1115			0	x	0	x	10	Degonia: Mis	S	1,330	6	1	0	0		x		
1116			0	3	0	6	10	Waltersburg: Mis	S	1,505	9	1	0	0		x		
1117	Mt. Auburn Central—Now included in Mt. Auburn Consol.																	
1118	Mt. Auburn Consolidated: Christian	1943	0	200	0	797	2,240	Silurian: Sil	L	1,890	15	97	10	0	95	MU	Sil	2,020
1119	Mt. Auburn East—Now included in Mt. Auburn Consol.																	
1120	Mt. Carmel: Wabash[90]	1940	414	701	742	10,927	4,500					441	4	1	299	A	Dev	4,237
1121			0	x	0	x	60	Bridgeport: Pen	S	1,370	20	5	0	0		AL		
1122			8	x	97	x	700	Biehl: Pen	S	1,470	20	46	0	0		AL		
1123			0	x	0	x	50	Jordan: Pen	S	1,520	15	2	0	0		AL		
1124			0	x	0	x	40	Palestine: Mis	S	1,580	10	3	0	0		AL		
1125			0	x	0	x	10	Waltersburg: Mis[25]	S	1,690	10	0	0	0		AL		
1126			39	x	107	x	290	Tar Springs: Mis	S	1,790	13	17	3	0		AL		
1127			0	x	0	x	10	Jackson: Mis[25]	S	2,020	25	0	0	0		AL		
1128			367	x	538	x	3,360	Cypress: Mis	S	2,025	15	257	1	0		AL		
1129			0	x	0	x	30	Paint Creek: Mis	S	2,095	7	2	1	0		AL		
1130			0	x	0	x	60	Bethel: Mis	S	2,110	16	3	0	0		AL		
1131			0	x	0	x	260	Ohara: Mis	OL	2,320	5	9	0	0		AC		
1132			0	x	0	x	240	Rosiclare: Mis	S	2,350	5	6	0	0		AL		
1133			0	x	0	x	1,300	McClosky: Mis	OL	2,360	6	45	1	1		AC		
1134								[1]				46	1	0				
1135	Mt. Carmel West—Now included in New Harmony Consol.																	
1136	Mt. Erie—Now included in Clay City Consol.																	
1137	Mt. Erie North: Wayne	1944	0	13	0	366	180					11	0	0	5	M	Mis	3,354
1138			0	x	0	x	50	Aux Vases: Mis	S	3,110	8	4	0	0		ML		
1139			0	x	0	x	40	Ohara: Mis	L	3,170	6	2	0	0		MC		
1140			0	x	0	x	100	McClosky: Mis	L	3,240	5	5	0	0		MC		

TABLE 12.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Abandoned	Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
1141	Mt. Erie South—Now included in Clay City Consol.																	
1142	Mt. Olive: Montgomery[5]	1942	0	x	0	x	50	Pottsville: Pen	S	605	6	5	0	0	0	A	Pen	905
1143	Mt. Vernon: Jefferson	1943	0	13	0	317	230					10	1	1	4	A	Mis	3,009
1144			0	4	0	x	50	Aux Vases: Mis	S	2,665	8	5	1	1		A		
1145			0	0	0	x	20	Ohara: Mis[25]	L	2,750	6	0	0	0		AC		
1146			0	9	0	x	180	McClosky: Mis	L	2,800	7	4	0	0		AC		
1147								[1]				1	0	0				
1148	Mt. Vernon North: Jefferson	1956	0	5	0	5	20	McClosky: Mis	L	2,675	6	1	1	0	1	x	Mis	2,726
1149	Murdock: Douglas	1955	0	x	0	x	10	Pennsylvanian: Pen	S	370	16	1	0	0	0	x	Pen	395
1150	Nason: Jefferson	1943	0	2	0	25	20	Rosiclare: Mis	S	2,790	12	1	0	0	1	ML	Mis	3,925
1151	New Bellair: Crawford[91]	1942	0	x	0	10	40					4	1	0	1	M	Dev	2,760
1152			0	0	0	0	10	Isabel: Pen	S	650	3	1	0	0		ML		
1153			0	0	0	10	20	Pennsylvanian: Pen	S	1,165	10	2	0	0		ML		
1154			0	x	0	x	10	Aux Vases: Mis	S	1,280	20	1	1	0		M		
1155	New City: Sangamon	1954	0	8	0	35	60	Silurian: Sil	L	1,730	11	3	0	0	3	MU	Sil	1,855
1156	New Harmony Consol.: White, Wabash, Edwards[90]	1939	1,678	3,973	7,038	86,985	23,700					2,111	31	27	1,641	A	Shakopee	7,682
1157			0	x	0	x	x	Jamestown: Pen	S	720	13	2	0	0		AL		
1158			0	x	0	x	x	Mansfield: Pen[25]	S	x	x	0	0	0		AL		
1159			0	x	0	x	x	Bridgeport: Pen	S	1,340	7	3	0	0		AL		
1160			x	x	x	x	x	Biehl: Pen	S	1,850	20	77	1	2		AL		
1161			0	x	0	x	x	Jordan: Pen[25]	S	1,760	x	0	0	0		AL		
1162			0	x	0	x	x	Degonia: Mis	S	1,925	10	4	0	1		AL		
1163			0	x	0	x	x	Clore: Mis	S	1,980	10	3	0	0		AL		
1164			0	x	0	x	220	Palestine: Mis	S	2,000	10	16	0	0		AL		
1165			x	x	x	x	860	Waltersburg: Mis	S	2,155	20	33	1	0		AL		
1166			x	x	x	x	1,300	Tar Springs: Mis	S	2,215	26	98	1	1		ALf		
1167			x	x	x	x	8,000	Cypress: Mis	S	2,570	20	553	13	8		ALf		
1168			0	x	0	x	x	Paint Creek: Mis	S	2,660	20	19	1	0		ALf		
1169			x	x	x	x	x	Bethel: Mis	S	2,700	27	483	1	12		ALf		
1170			x	x	x	x	5,100	Aux Vases: Mis	S	2,800	15	293	4	0		ALf		
1171			0	x	0	x	x	Ohara: Mis	OL	2,900	6	24	2	1		AC		
1172			0	x	0	x	x	Rosiclare: Mis	LS	2,910	10	16	0	0		AC		
1173			x	x	x	x	x	McClosky: Mis	OL	2,925	8	166	2	1		AC		
1174			0	x	0	x	60	Salem: Mis	L	3,755	6	2	1	0		AC		
1175								[1]				347	4	1				
1176	New Harmony South (Ill.): White	1941	0	1	0	78	90					7	0	0	1	A	Mis	3,207
1177			0	x	0	x	20	Waltersburg: Mis	S	2,250	18	1	0	0		AF		
1178			0	x	0	x	10	Tar Springs: Mis	S	2,350	16	1	0	0		AF		
1179			0	0	0	0	10	Cypress: Mis	S	2,670	8	1	0	0		Af		
1180			0	0	0	x	20	Bethel: Mis	S	2,815	10	1	0	0		Af		
1181			0	0	0	2	10	Aux Vases: Mis	S	3,005	7	1	0	0		AF		
1182			0	x	0	x	40	McClosky: Mis	L	3,010	5	1	0	0		AF		
1183								[1]				1	0	0				
1184	New Harmony South (Ind.): White[90]	1946	0	3	0	446	60					6	0	0	0	T	Mis	3,068
1185			0	x	0	x	20	Degonia: Mis[25]	S	1,850	8	0	0	0		TF		
1186			0	x	0	x	30	Palestine: Mis	S	1,955	10	1	0	0		TF		
1187			0	x	0	x	30	Waltersburg: Mis	S	2,120	30	3	0	0		TF		
1188								[1]				2	0	0				

1189	New Haven Consol.: White[90]	1941	93	108	173	1,021	360					31	0	0	29	A	Mis	2,980
1190			9	x	17	x	130	Tar Springs: Mis	S	2,105	12	8	0	0		Af		
1191			0	x	0	x	10	Hardinsburg: Mis	S	2,245	8	1	0	0		Af		
1192			84	x	156	x	200	Cypress: Mis	S	2,445	12	11	0	0		Af		
1193			0	x	0	x	70	Aux Vases: Mis	S	2,720	15	4	0	0		Af		
1194			0	x	0	x	60	McClosky: Mis	OL	2,820	6	1	0	0		AC		
1195								[1]				6	0	0				
1196	New Haven North—Now included in Concord East Consol.																	
1197	New Haven West—Now included in Inman East Consol.																	
1198	New Hebron East: Crawford	1954	0	x	0	x	30	Aux Vases: Mis	S	1,555	4	3	0	0	0	x	Mis	1,571
1199	New Memphis: Clinton	1952	0	287	0	1,005	760	Silurian: Sil	L	1,980	x	36	2	0	36	R	Sil	2,240
1200	New Memphis North: Clinton	1954	0	4	0	16	60	Devonian-Silurian	L	2,050	15	3	0	0	3	x	Dev	2,272
1201	New Memphis South: Clinton, Washington[92]	1952	0	0	0	1	40	Silurian: Sil	L	2,000	25	2	1	0	0	x	Sil	2,131
1202	Newton: Jasper	1944	0	2	0	75	80	Ste. Genevieve: Mis	L	2,950	6	4	0	0	2	MC	Mis	3,040
1203	Newton North: Jasper[93]	1945	0	0	0	7	20	McClosky: Mis	L	2,855	5	1	0	0	0	MC	Mis	2,889
1204	Newton West: Jasper[94]	1947	0	0	0	1	60	McClosky: Mis	L	3,000	7	3	0	0	0	MC	Mis	3,102
1205	Noble—Now included in Clay City Consol.																	
1206	Noble North—Now included in Clay City Consol.																	
1207	Noble West: Clay	1951	0	1	0	8	20	McClosky: Mis	L	3,035	8	1	0	0	1	x	Mis	3,149
1208	Noble South—Now included in Clay City Consol.																	
1209	Norris City—Now included in Roland Consol.																	
1210	North City—Now included in Christopher Consol.																	
1211	Oakdale: Jefferson	1956	0	61	0	61	80					6	6	0	6	x	Mis	3,767
1212			0	59	0	59	40	Aux Vases: Mis	S	2,860	35	4	4	0		x		
1213			0	2	0	2	40	McClosky: Mis	L	2,985	5	2	2	0		x		
1214	Oakley: Macon	1954	0	4	0	10	140	Cedar Valley: Dev	L	2,285	5	7	1	0	5	x	Dev	2,321
1215	Oak Point: Clark	1952	0	151	0	171	600					43	25	0	41	M	Dev	2,691
1216			0	0	0	0	10	Isabel: Pen	S	560	10	1	0	0		ML		
1217			0	151	0	171	570	Aux Vases: Mis	S	1,185	17	41	25	0		x		
1218			0	0	0	x	20	Carper: Mis	L	2,220	x	1	0	0		ML		
1219	Oak Point West: Clark	1955	0	3	0	3	20	Aux Vases: Mis	S	1,190	8	2	1	0	2	x	Mis	1,560
1220	Odin: Marion	1945	54	55	1,147	1,553	290	Cypress: Mis	S	1,750	13	29	0	0	28	AL	Dev	3,597
1221	Okawville: Washington	1951	0	5	0	32	80	Silurian: Sil	L	2,325	3	4	1	0	4	R	Sil	2,603
1222	Okawville North: Washington	1955	0	5	0	8	40	Silurian: Sil	L	2,235	x	2	1	0	2	x	Sil	2,498
1223	Old Ripley: Bond	1954	0	48	0	102	620	Pennsylvanian: Pen	S	600	17	53	4	1	52	A	Dev	2,221
1224	Olney Consolidated: Richland	1938	30	124	88	3,759	2,270					92	1	4	41	A	Mis	3,289
1225			0	x	0	x	x	Ohara: Mis	L	3,005	6	7	0	0		A		
1226			0	x	0	x	x	Rosiclare: Mis	L	3,050	5	2	0	0		A		
1227			30	x	88	x	x	McClosky: Mis	L	3,100	6	81	1	4		A		
1228								[1]				2	0	0				
1229	Olney East—Now included in Olney Consol.																	
1230	Olney South: Richland[95]	1937	0	47	0	662	860					40	4	2	34	M	Dev	4,910
1231			0	x	0	x	700	Rosiclare: Mis	L	3,100	4	15	0	0		MC		
1232			0	x	0	x	520	McClosky: Mis	L	3,115	3	6	1	1		MC		
1233								[1]				16	0	1				
1234	Omaha: Gallatin[5]	1940	80	113	2,123	2,607	720					55	1	1	45	D	Mis	2,941
1235			0	x	0	x	210	Jake Creek: Pen	S	385	20	15	0	0		D		
1236			0	x	0	x	30	Pennsylvanian: Pen	S	580	10	4	1	1		D		
1237			0	x	0	x	60	Biehl: Pen	S	1,335	10	4	0	0		D		
1238			80	x	2,123	x	360	Palestine: Mis	S	1,700	15	24	0	0		D		
1239			0	x	0	x	80	Tar Springs: Mis	S	1,900	15	6	0	0		D		
1240			0	x	0	x	10	Bethel: Mis[25]	S	2,570	14	0	0	0		D		
1241			0	x	0	x	20	Aux Vases: Mis	S	2,730	20	1	0	0		D		
1242								[1]				1	0	0				
1243	Omaha East: Gallatin	1946	0	1	0	11	30					2	0	0	1	M	Mis	3,000
1244			0	0	0	0	10	Aux Vases: Mis	S	2,790	x	1	0	0		M		
1245			0	1	0	11	20	Ohara: Mis	L	2,855	8	1	0	0		MCf		
1246	Omaha South: Gallatin, Saline	1951	0	6	0	19	90					7	0	0	4	N	Mis	3,035
1247			0	6	0	14	60	Cypress: Mis	S	2,535	15	5	0	0		NL		
1248			0	0	0	0	10	Aux Vases: Mis	S	2,870	11	1	0	0		N		

1249			0	0	0	5	20	Rosiclare: Mis	L	2,865	1	1	0	0		NC			
1250	Omaha West: Saline	1950	0	10	0	121	70					6	0	0	4	A	Mis	3,016	
1251			0	x	0	x	50	Cypress: Mis	S	2,600	14	4	0	0		AL			
1252			0	x	0	x	10	Aux Vases: Mis[25]	S	2,800	30	0	0	0		AL			
1253			0	0	0	1	20	McClosky: Mis[1]	L	2,910	8	1	0	0		AC			
1254												1	0	0					
1255	Omega: Marion[96]	1946	0	0	0	5	40	McClosky: Mis	L	2,490	10	2	0	0	0	D	Mis	2,584	
1256	Orchardville: Wayne	1950	0	12	0	88	100					8	0	0	8	A	Mis	3,000	
1257			0	9	0	62	60	Aux Vases: Mis	S	2,800	16	5	0	0		AL			
1258			0	2	0	4	20	Ohara: Mis	L	2,880	3	1	0	0		AC			
1259			0	1	0	22	40	McClosky: Mis	L	2,905	5	2	0	0		AC			
1260	Orchardville North: Wayne	1956	0	2	0	2	10	Paint Creek: Mis	S	2,655	6	1	1	0	1	x	Mis	3,020	
1261	Oskaloosa: Clay	1950	161	206	625	1,438	360	Bethel: Mis	S	2,595	15	36	0	1	34	A	Mis	2,961	
1262	Oskaloosa East: Clay[97]	1947	0	0	0	35	40					3	0	0	0	A	Mis	3,050	
1263			0	0	0	7	20	Aux Vases: Mis	S	2,820	5	2	0	0		AL			
1264			0	0	0	28	20	McClosky: Mis	L	2,895	4	1	0	0		AC			
1265	Oskaloosa South: Clay	1951	0	3	0	20	60	McClosky: Mis	L	2,770	4	3	0	1	2	AC	Mis	2,883	
1266	Pana: Christian	1951	0	7	0	46	50	Bethel: Mis	S	1,470	8	4	0	0	4	x	Dev	2,847	
1267	Panama: Bond, Montgomery[5]	1940	0	2	0	15	40					4	0	0	3	A	Dev	2,016	
1268			0	1	0	7	30	Golconda: Mis	L	705	12	3	0	0		A			
1269			0	1	0	8	10	Bethel: Mis	S	865	12	1	0	0		A			
1270	Pankeyville: Saline	1956	0	5	0	5	30	Cypress: Mis	S	2,250	x	2	2	1	1	x	Mis	2,742	
1271	Pankeyville East: Saline	1956	0	0	0	0	10					1	1	0	0	x	Mis	2,604	
1272			0	0	0	0	10	Cypress: Mis[25]	S	2,250	x	0	0	0		x			
1273			0	0	0	0	10	Bethel: Mis[25][1]	S	2,360	13	0	0	0		x			
1274												1	1	0					
1275	Parker—Now included in Main Consol.																		
1276	Parkersburg Consolidated: Richland, Edwards	1941	59	286	65	9,515	6,300					274	1	12	148	A	Mis	3,333	
1277			0	x	0	x	80	Waltersburg: Mis	S	2,430	10	8	0	0		A			
1278			0	x	0	x	160	Cypress: Mis	S	2,830	12	8	0	0		A			
1279			0	x	0	x	70	Paint Creek: Mis	S	2,955	17	2	0	0		A			
1280			0	x	0	x	140	Bethel: Mis	S	2,930	12	4	0	0		A			
1281			0	x	0	x	10	Aux Vases: Mis	S	3,070	20	1	1	1		A			
1282			0	x	0	x	x	Ohara: Mis	L	3,100	10	2	0	0		A			
1283			0	x	0	x	x	Rosiclare: Mis	L	3,150	10	42	0	3		A			
1284			59	x	65	x	5,000	McClosky: Mis[1]	OL	3,175	10	182	0	7		A			
1285												25	0	1					
1286	Parkersburg North—Now included in Parkersburg Consol.																		
1287	Parkersburg South: Edwards	1948	0	5	0	55	80					8	0	0	6	x	Mis	3,187	
1288			0	4	0	42	60	Pennsylvanian: Pen	S	1,400	10	6	0	0		x			
1289			0	1	0	13	20	Bethel: Mis	S	2,815	5	2	0	0		x			
1290	Parkersburg West: Richland, Edwards	1943	0	10	0	186	240					10	0	2	6	A	Mis	3,331	
1291			0	0	0	x	40	Ohara: Mis	L	3,220	5	1	0	0		AC			
1292			0	10	0	x	200	McClosky: Mis	L	3,260	6	9	0	0		AC			
1293	Passport: Clay	1945	0	64	0	2,153	1,060					57	1	1	39	A	Mis	3,140	
1294			0	0	0	x	40	Rosiclare: Mis	L	3,005	5	1	0	0		AC			
1295			0	64	0	x	1,060	McClosky: Mis[1]	L	3,020	10	55	1	1		A			
1296												1	0	0					
1297	Passport South: Richland	1948	0	25	0	83	110					7	2	1	5	A	Mis	3,692	
1298			0	25	0	64	70	Cypress: Mis	S	2,665	15	5	2	1		AL			
1299			0	0	0	19	20	Rosiclare: Mis	L	3,025	6	1	0	0		AC			
1300			0	x	0	x	20	McClosky: Mis	L	3,030	8	1	0	0		AC			
1301	Passport West: Clay	1954	0	10	0	49	180	Ste. Genevieve: Mis	L	3,030	5	9	4	3	6	AC	Mis	3,130	
1302	Patoka: Marion	1937	143	231	7,594	11,695	1,160					183	12	0	97	D	Ord	4,056	
1303			5	x	50	x	60	Cypress: Mis[25]	S	1,280	10	0	0	0		D			
1304			91	x	6,242	x	950	Bethel: Mis	S	1,410	27	164	1	0		D			
1305			47	x	1,302	x	500	Rosiclare: Mis	S	1,550	9	8	1	0		D			
1306			0	x	0	x	20	Geneva: Dev	D	2,835	10	1	0	0		D			
1307			0	x	0	x	200	Trenton: Ord[1]	L	3,950	25	8	8	0		D			
1308												2	2	0					

1309	Patoka East: Marion	1941	0	92	0	4,081	600					64	0	1	50	D	Ord	4,178
1310			0	x	0	x	500	Cypress: Mis	S	1,340	16	54	0	1		D		
1311			0	x	0	x	60	Bethel: Mis	S	1,465	10	5	0	0		D		
1312			0	x	0	x	80	McClosky: Mis	L	1,635	8	3	0	0		D		
1313			0	x	0	x	40	Geneva: Dev	D	2,950	30	2	0	0		R		
1314	Patoka South: Marion	1953	0	73	0	272	320	Cypress: Mis	S	1,350	10	28	1	0	27	A	Mis	1,728
1315	Patoka West: Fayette	1950	0	20	0	217	180	Bethel: Mis	S	1,380	6	17	0	0	13	A	Mis	1,735
1316	Patton—Now included in Allendale																	
1317	Patton West—Now included in Allendale																	
1318	Phillipstown Consol.: White, Edwards	1939	78	1,149	1,503	16,193	6,000					468	44	8	376	A	Dev	5,350
1319			0	x	0	x	10	Anvil Rock: Pen	S	795	10	1	0	0		Af		
1320			x	x	x	x	x	Clark-Bridgeport: Pen	S	1,350	10	13	0	0		Af		
1321			x	x	x	x	x	Pennsylvanian: Pen	S	1,450	10	9	0	0		Af		
1322			x	x	x	x	x	Buchanan: Pen	S	1,550	15	23	0	0		Af		
1323			25	x	391	x	x	Biehl: Pen	S	1,875	15	45	2	0		Af		
1324			12	x	59	x	470	Degonia: Mis	S	1,975	15	35	0	1		Af		
1325			23	x	23	x	120	Clore: Mis	S	2,010	12	4	0	0		Af		
1326			0	x	0	x	60	Palestine: Mis	S	2,050	11	1	0	0		Af		
1327			0	x	0	x	60	Waltersburg: Mis	S	2,280	11	4	0	0		Af		
1328			0	x	0	x	930	Tar Springs: Mis	S	2,295	15	61	1	0		Af		
1329			11	x	54	x	450	Cypress: Mis	S	2,720	12	23	2	1		Af		
1330			0	x	0	x	50	Paint Creek: Mis	S	2,780	9	4	0	0		Af		
1331			0	x	0	x	920	Bethel: Mis	S	2,810	15	69	24	0		Af		
1332			0	x	0	x	700	Aux Vases: Mis	S	2,880	15	33	3	0		Af		
1333			0	x	0	x	480	Ohara: Mis	L	3,010	10	17	3	3		ACf		
1334			0	x	0	x	460	Rosiclare: Mis	LS	2,960	10	15	3	0		ACf		
1335			0	x	0	x	1,060	McClosky: Mis	L	3,000	6	44	0	1		ACf		
1336							[1]					67	6	2				
1337	Phillipstown South: White	1951	0	x	0	x	20					2	0	1	0	M	Mis	3,161
1338			0	x	0	x	10	Tar Springs: Mis	S	2,345	10	1	0	0		Mf		
1339			0	x	0	x	10	Aux Vases: Mis	S	2,985	10	1	0	0		Mf		
1340	Pinkstaff: Lawrence[98]	1951	0	0	0	.1	20	McClosky: Mis	L	1,735	4	1	0	0	0	x	Mis	1,797
1341	Pinkstaff East: Lawrence	1955	0	x	0	x	20	McClosky: Mis	L	1,640	6	1	0	0	1	x	Mis	1,644
1342	Plainview: Macoupin	1942	0	0	0	2	10	Pennsylvanian: Pen	S	410	5	1	0	0	0	x	Pen	421
1343	Posen: Washington	1952	0	6	0	46	80	Trenton: Ord	L	3,900	25	4	0	0	4	A	Ord	3,954
1344	Posen North: Washington	1953	0	1	0	3	10	Trenton: Ord	L	4,015	15	1	0	0	1	AC	Ord	4,112
1345	Posen South: Washington	1955	0	x	0	x	30	Bethel: Mis	S	1,255	2	3	2	2	0	x	Mis	1,300
1346	Posey: Clinton	1941	0	.5	0	9	20	Cypress: Mis	S	1,105	5	2	0	0	1	M	Sil	2,729
1347	Posey East: Clinton	1952	0	2	0	12	40	Devonian: Dev	L	2,740	8	2	0	0	2	x	Dev	2,770
1348	Posey West: Clinton[99]	1954	0	0	0	1	10	Devonian: Dev	L	2,585	15	1	0	0	0	x	Dev	2,604
1349	Prentice: Morgan[5]	1953	0	0	0	0	30	Pennsylvanian: Pen	S	270	10	3	1	0	0	x	Ord	1,513
1350	Raccoon Lake: Marion	1949	0	157	0	2,595	400					47	0	2	42	D	Sil	3,530
1351			0	x	0	x	190	Cypress: Mis	S	1,625	10	18	0	1		D		
1352			0	x	0	x	20	Ohara: Mis[25]	L	1,885	5	0	0	0		DC		
1353			0	x	0	x	200	Rosiclare: Mis	S	1,930	12	2	0	0		DC		
1354			0	x	0	x	260	McClosky: Mis	L	1,950	10	4	0	0		DC		
1355			0	x	0	x	300	Devonian & Silurian	L	3,330	10	15	0	1		R		
1356							[1]					8	0	0				
1357	Raleigh: Saline	1953	0	97	0	572	380					36	0	0	36	A	Mis	3,106
1358			0	x	0	x	10	Tar Springs: Mis[25]	S	2,235	20	0	0	0		A		
1359			0	x	0	x	380	Cypress: Mis	S	2,550	12	34	0	0		A		
1360			0	x	0	x	10	Aux Vases: Mis[25]	S	2,905	5	0	0	0		A		
1361							[1]					2	0	0				
1362	Raleigh South: Saline	1955	0	117	0	173	90	Aux Vases: Mis	S	2,860	16	7	1	0	7	x	Mis	3,092
1363	Raymond: Montgomery	1940	0	1	0	17	100	Pottsville: Pen	S	590	10	10	0	0	2	ML	Dev	2,049
1364	Raymond East: Montgomery	1951	0	2	0	19	60	Pennsylvanian: Pen	S	595	10	5	0	0	4	x	Mis	1,008
1365	Reservoir: Jefferson	1950	0	14	0	226	200	McClosky: Mis	L	2,700	6	10	0	0	7	MC	Mis	2,808
1366	Richview: Washington	1946	0	1	0	13	30	Cypress: Mis	S	1,520	7	3	0	1	1	AL	Mis	1,932
1367	Ridgway: Gallatin[100]	1946	0	0	0	.1	30					2	0	1	0	MC	Mis	2,938

TABLE 12.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Abandoned	Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
1368			0	0	0	0	10	Palestine: Mis	S	1,730	18	1	0	1		ML		
1369			0	0	0	.1	20	McClosky: Mis	L	2,840	6	1	0	0		MC		
1370	Riffle: Clay	1948	0	0	0	72	100	Rosiclare: Mis	L	2,735	7	5	0	1	0	MC	Mis	2,848
1371	Rinard: Wayne[101]	1937	0	0	0	7	20	McClosky: Mis	L	3,145	5	1	0	0	0	AC	Mis	3,280
1372	Rinard North: Wayne	1952	0	16	0	188	200					10	0	0	8	M	Mis	3,280
1373			0	0	0	0	20	Rosiclare: Mis	L	3,135	6	1	0	0		MC		
1374			0	16	0	188	200	McClosky: Mis	L	3,140	5	9	0	0		MC		
1375	Ritter: Richland	1950	0	4	0	109	80	Ste. Genevieve: Mis	L	3,215	5	5	1	0	1	x	Mis	3,288
1376	Ritter North: Richland	1951	0	4	0	30	40	McClosky: Mis	L	3,215	5	2	0	0	1	x	Mis	3,288
1377	Roaches: Jefferson	1938	0	7	0	593	200					13	0	0	4	A	Dev	3,840
1378			0	x	0	x	30	Bethel: Mis[25]	S	2,000	x	0	0	0		AL		
1379			0	x	0	x	60	Ohara: Mis	L	2,170	5	2	0	0		AC		
1380			0	x	0	x	160	Rosiclare: Mis	L	2,190	12	5	0	0		AC		
1381			0	x	0	x	120	McClosky: Mis	L	2,250	4	6	0	0		AC		
1382	Roaches North: Jefferson	1944	0	29	0	1,326	350					34	0	1	28	A	Mis	2,283
1383			0	x	0	x	350	Bethel: Mis	S	1,925	7	32	0	1		A		
1384			0	x	0	x	60	Rosiclare: Mis	L	2,115	8	1	0	0		AC		
1385								[1]				1	0	0				
1386	Roby: Sangamon[102]	1949	0	3	0	3	60	Silurian: Sil	L	1,775	5	3	1	1	1	MU	Sil	1,822
1387	Rochester: Wabash[90]	1948	0	87	0	827	280					38	2	0	28	M	Mis	2,810
1388			0	x	0	x	130	Pennsylvanian: Pen	S	1,300	16	11	0	0		MCf		
1389			0	x	0	x	190	Waltersburg: Mis	S	1,940	20	24	2	0		ML		
1390								[1]				3	0	0				
1391	Roland Consol.: White, Gallatin[5, 103]	1940	794	2,533	2,135	31,197	8,800					819	25	18	671	A	Dev	5,225
1392			0	x	0	x	50	Pennsylvanian: Pen	S	1,410	10	4	0	0		A		
1393			0	x	0	x	10	Degonia: Mis	S	2,065	7	1	1	0		A		
1394			0	x	0	x	20	Palestine: Mis	S	2,085	2	2	0	0		A		
1395			296	x	502	x	2,000	Waltersburg: Mis	S	2,200	15	112	1	0		AL		
1396			0	x	0	x	320	Tar Springs: Mis	S	2,300	15	20	0	0		AL		
1397			498	x	1,633	x	1,500	Hardinsburg: Mis	S	2,550	20	137	0	0		AL		
1398			0	x	0	x	10	Golconda: Mis[25]	S	2,505	5	0	0	0		A		
1399			0	x	0	x	1,400	Cypress: Mis	S	2,700	15	91	4	4		AL		
1400			0	x	0	x	330	Paint Creek: Mis	S	2,800	12	19	1	0		AL		
1401			0	x	0	x	1,100	Bethel: Mis	S	2,800	12	58	2	x		AL		
1402			0	x	0	x	2,350	Aux Vases: Mis	S	2,880	13	181	6	1		AL		
1403			0	x	0	x	600	Ohara: Mis	OL	3,020	6	15	2	x		AC		
1404			0	x	0	x	600	Rosiclare: Mis	L	3,050	6	15	0	x		AC		
1405			0	x	0	x	1,600	McClosky: Mis	L	3,070	6	60	1	x		AC		
1406			0	x	0	x	20	St. Louis: Mis[25]	L	x	x	0	0	0		AC		
1407								[1]				104	7	x				
1408	Roland West: Saline	1950	0	0	0	22	10	Aux Vases: Mis	S	2,935	15	1	0	0	0	ML	Mis	3,161
1409	Roundprairie—Now included in Johnsonville Consol.																	
1410	Ruark: Lawrence	1941	0	91	0	2,142	390					38	9	1	29	A	Mis	2,442
1411			0	x	0	x	290	Pennsylvanian: Pen	S	1,600	10	30	4	0		AL		
1412			0	x	0	x	80	Bethel: Mis	S	2,075	11	6	4	1		AL		
1413			0	x	0	x	10	Aux Vases: Mis[25]	S	2,145	7	0	0	0		AL		
1414			0	0	0	0	20	Ohara: Mis	L	2,275	5	1	0	0		AC		
1415								[1]				1	1	0				

1416	Ruark West Consol.: Lawrence	1947	0	116	0	682	610						56	6	0	51	M	Mis	2,633
1417			0	x	0	x	50	Waltersburg: Mis	S	1,780	10		6	0	0		ML		
1418			0	x	0	x	10	Cypress: Mis[25]	S	2,165	9		0	0	0		ML		
1419			0	x	0	x	440	Bethel: Mis	S	2,220	20		33	6	0		ML		
1420			0	x	0	x	80	Ohara: Mis[25]	L	2,350	5		0	0	0		MC		
1421			0	x	0	x	40	Rosiclare: Mis	L	2,390	5		1	0	0		MC		
1422			0	x	0	x	280	McClosky: Mis	L	2,400	3		5	0	0		MC		
1423								[1]					11	0	0				
1424	Rural Hill—Now included in Dale Consol.																		
1425	Rural Hill North: Hamilton[104]	1949	0	0	0	1	40						3	2	0	2	M	Mis	3,468
1426			0	0	0	0	20	Cypress: Mis	S	2,930	10		2	2	0		ML		
1427			0	0	0	1	20	Rosiclare: Mis	L	3,325	8		1	0	0		MC		
1428	Rural Hill West—Now included in Dale Consol.																		
1429	Russellville Gas: Lawrence[5]	1937	0	1	0	12	40	McClosky: Mis[25]	L	1,560	7		0	0	0	1	AC	Dev	3,133
1430	Russellville West: Lawrence	1955	0	1	0	2	20	Rosiclare: Mis	L	1,565	22		1	0	0	1	x	Mis	1,646
1431	St. Francisville East: Lawrence	1941	0	20	0	310	240						19	0	0	19	A	Mis	1,960
1432			0	x	0	x	10	Pennsylvanian: Pen	S	1,305	2		1	0	0		AL		
1433			0	x	0	x	10	Waltersburg: Mis	S	1,300	6		1	0	0		AL		
1434			0	x	0	x	40	Hardinsburg: Mis	S	1,460	6		3	0	0		AL		
1435			0	x	0	x	10	Cypress: Mis	S	1,605	15		1	0	0		AL		
1436			0	x	0	x	220	Bethel: Mis	S	1,750	20		13	0	0		A		
1437	St. Jacob: Madison	1942	0	61	0	2,802	1,120	Trenton: Ord	L	2,260	17		53	0	0	40	A	Ord	2,549
1438	St. Jacob East: Madison	1955	0	0	0	1	20	Hardin: Mis	S	1,840	x		1	0	0	0	x	Ord	2,600
1439	St. James: Fayette	1938	25	406	80	13,743	1,860						194	3	4	134	A	Dev	3,457
1440			0	0	0	x	10	Golconda: Mis[25]	L	1,555	15		0	0	0		A		
1441			25	x	80	x	1,860	Cypress: Mis	S	1,580	16		192	3	4		A		
1442			0	x	0	x	20	Rosiclare: Mis	L	1,860	16		1	0	0		A		
1443								[1]					1	0	0				
1444	St. Paul: Fayette	1941	0	14	0	564	260						18	0	1	13	A	Dev	3,570
1445			0	14	0	564	240	Bethel: Mis	S	1,900	9		17	0	1		A		
1446			0	0	0	0	20	Rosiclare: Mis	L	2,080	6		1	0	0		A		
1447	Ste. Marie: Jasper	1941	13	27	139	860	800	McClosky: Mis	L	2,860	8		25	0	2	15	AC	Mis	3,034
1448	Ste. Marie East: Jasper[105]	1949	0	0	0	1	80	McClosky: Mis	L	2,685	10		4	0	0	0	MC	Mis	3,018
1449	Ste. Marie West: Jasper	1949	0	47	0	144	200						12	8	0	12	M	Mis	2,968
1450			0	x	0	x	10	Aux Vases: Mis[25]	S	2,720	25		0	0	0		ML		
1451			0	x	0	x	200	McClosky: Mis	L	2,815	6		12	8	0		MC		
1452	Sailor Springs Central: Clay[106]	1948	0	0	0	1.5	40						3	0	0	0	M	Mis	3,128
1453			0	0	0	.5	20	Tar Springs: Mis	S	2,330	6		2	0	0		ML		
1454			0	0	0	1	20	Rosiclare: Mis	L	3,015	4		1	0	0		MC		
1455	Sailor Springs Consol.: Clay, Effingham	1938	217	1,796	415	27,692	13,500						862	42	16	717	A	Mis	3,460
1456			0	x	0	x	700	Tar Springs: Mis	S	2,340	12		46	0	0		A		
1457			0	x	0	x	10	Glen Dean: Mis[25]	L	2,390	8		0	0	0		A		
1458			175	x	335	x	8,200	Cypress: Mis	S	2,550	12		460	34	x		A		
1459			0	x	0	x	340	Bethel: Mis	S	2,740	20		17	0	1		A		
1460			6	x	25	x	750	Aux Vases: Mis	S	2,825	13		56	3	x		A		
1461			0	x	0	x	240	Ohara: Mis	OL	2,900	6		4	0	x		A		
1462			x	x	x	x	1,600	Rosiclare: Mis	LS	2,900	8		56	2	x		A		
1463			x	x	x	x	x	McClosky: Mis	OL	2,925	8		162	0	x		A		
1464								[1]					61	3	x				
1465	Sailor Springs East: Clay[107]	1944	0	0	0	62	130						11	1	2	0	D	Mis	3,168
1466			0	0	0	62	90	Cypress: Mis	S	2,695	8		9	0	0		D		
1467			0	0	0	0	20	McClosky: Mis	L	3,020	7		2	1	2		D		
1468	Sailor Springs North: Clay[108]	1948	0	1	0	4	60						3	0	1		M	Mis	3,126
1469			0	0	0	.5	20	Rosiclare: Mis	L	2,985	2		1	0	0		MC		
1470			0	1	0	3.5	40	McClosky: Mis	L	3,030	2		2	0	1		MC		
1471	Sailor Springs South—Now included in Sailor Springs Consol.																		
1472	Sailor Springs West—Now included in Sailor Springs Consol.																		
1473	Salem Consol.: Marion, Jefferson	1938	5,343	6,595	21,906	252,419	14,400						2,764	5	18	2,181	A	St. Peter	5,655
1474			4,366	x	18,828	x	x	Bethel: Mis	S	1,780	40		599	0	2		A		
1475			225	⎧x	508	⎧x	x	⎧Renault: Mis[25]	S	x	x		0	0	0		A		
1476				⎩x		⎩x	x	⎩Aux Vases: Mis	S	1,825	40		154	0	0		A		

1477			0	x	0	x	x	Ohara: Mis	L	2,075	3	2	0	1		A				
1478			5	x	67	x	x	Rosiclare: Mis	LS	2,100	15	135	3	7		A				
1479			683	x	2,116	x	x	McClosky: Mis	L	2,050	17	588	2	5		A				
1480			0	x	0	x	x	St. Louis: Mis[25]	L	2,100	x	0	0	0		A				
1481			0	x	0	x	x	Salem: Mis	L	2,160	17	8	0	0		A				
1482			64	x	387	x	5,860	Devonian: Dev	L	3,440	40	541	0	1		A				
1483			0	x	0	x	2,160	Trenton: Ord	L	4,500	50	2	0	0		A				
1484								[1]				735	0	2						
1485	Samsville: Edwards[109]	1942	0	0	0	1	30	Waltersburg: Mis	S	2,420	7	3	0	0	0	A	Mis	3,303		
1486	Samsville North: Edwards	1945	2	13	5	220	180	Paint Creek-Bethel: Mis	S	2,900	6	16	0	1	5	A	Mis	3,220		
1487	Samsville Northwest: Edwards[110]	1955	0	0	0	3	20	Ohara: Mis	L	3,190	4	1	0	1	0	x	Mis	3,248		
1488	Samsville West: Edwards	1951	0	7	0	130	120					5	0	1	4	x	Mis	3,425		
1489			0	x	0	x	60	Ohara: Mis	L	3,260	6	3	0	1		x				
1490			0	x	0	x	40	Rosiclare: Mis[25]	L	3,275	6	0	0	0		x				
1491			0	x	0	x	40	McClosky: Mis	L	3,275	6	2	0	0		x				
1492	Sandoval West: Clinton	1946	0	1	0	25	10	Cypress: Mis	S	1,420	4	1	0	0	1	A	Mis	1,560		
1493	Santa Fe: Clinton[111]	1944	0	0	0	2	10	Cypress: Mis	S	955	10	1	0	0	0	A	Dev	2,512		
1494	Schnell: Richland	1938	0	4	0	241	80	McClosky: Mis	OL	3,000	5	4	0	0	2	AC	Mis	3,130		
1495	Schnell East: Richland[112]	1954	0	0	0	.5	20	McClosky: Mis	L	3,115	4	1	0	0	0	AC	Mis	3,150		
1496	Schnell South: Clay	1951	0	0	0	10	60	Rosiclare: Mis	L	3,005	4	3	0	0	0	AC	Mis	3,109		
1497	Seminary: Richland	1945	6	10	20	208	160	McClosky: Mis	L	3,195	8	8	0	0	6	MC	Mis	3,330		
1498	Sesser: Franklin	1942	0	63	0	986	450					37	1	0	29	A	Dev	4,688		
1499			0	x	0	x	20	Cypress: Mis	S	2,455	5	2	0	0		AL				
1500			0	x	0	x	120	Renault: Mis	L	2,690	10	10	0	0		AC				
1501			0	x	0	x	200	Aux Vases: Mis	S	2,700	10	16	1	0		AL				
1502			0	x	0	x	80	Rosiclare: Mis	L	2,810	10	2	0	0		AC				
1503			0	x	0	x	100	McClosky: Mis	L	2,840	5	2	0	0		AC				
1504			0	x	0	x	60	Clear Creek: Dev	L	4,360	x	2	0	0		AC				
1505								[1]				3	0	0						
1506	Shattuc: Clinton	1945	0	26	0	504	340					28	0	0	25	A	Ord	4,078		
1507			0	x	0	x	160	Cypress: Mis	S	1,280	7	12	0	0		AL				
1508			0	x	0	x	10	Bethel: Mis	S	1,420	13	1	0	0		AL				
1509			0	x	0	x	240	Trenton: Ord	L	4,020	13	15	0	0		A				
1510	Shawneetown: Gallatin[113]	1945	0	11	0	11	40					4	1	0	3	M	Mis	2,837		
1511			0	x	0	x	20	Palestine: Mis[25]	S	1,720	28	0	0	0		M				
1512			0	x	0	x	10	Waltersburg: Mis[25]	S	1,900	12	0	0	0		M				
1513			0	x	0	x	20	Tar Springs: Mis	S	1,960	x	1	0	0		M				
1514			0	x	0	x	10	Cypress: Mis[25]	S	2,375	14	0	0	0		M				
1515			0	0	0	.5	10	Aux Vases: Mis	S	2,650	10	1	0	0		MF				
1516								[1]				2	1	0						
1517	Shawneetown East: Gallatin	1952	0	1	0	11	30					3	0	0	2	x	Mis	2,830		
1518			0	0	0	x	10	Waltersburg: Mis	S	1,855	10	1	0	0		x				
1519			0	0	0	1	10	Bethel: Mis	S	2,480	x	1	0	0		x				
1520			0	1	0	10	10	Aux Vases: Mis	S	2,660	9	1	0	0		x				
1521	Shawneetown North: Gallatin[114]	1948	0	16	0	40	50					4	0	0	3	MF	Mis	3,091		
1522			0	16	0	34	30	Aux Vases: Mis	S	2,750	20	3	0	0		MF				
1523			0	0	0	6	20	McClosky: Mis	L	3,045	6	1	0	0		MF				
1524	Shelbyville Consolidated: Shelby	1946	0	1	0	28	70	Aux Vases: Mis	S	1,860	15	6	0	0	1	A	Mis	3,119		
1525	Shelbyville East—Now included in Shelbyville																			
1526	Sicily: Christian	1956	0	16	0	16	60	Silurian: Sil	L	1,860	16	3	3	0	3	x	Sil	1,872		
1527	Sims—Now included in Johnsonville Consol.																			
1528	Sims North—Now included in Johnsonville Consol.																			
1529	Sorento Consolidated: Bond[115]	1938	0	419	0	639	530					44	24	0	38	A	Ord	2,680		
1530			0	x	0	x	10	Pennsylvanian: Pen	S	600	12	1	1	0		A				
1531			0	x	0	x	520	Lingle: Dev	S	1,875	8	43	23	0		A				
1532	Sorento West: Bond[116]	1956	0	0	0	0	20	Devonian: Dev	L	1,880	x	1	1	1	0	x	Ord	2,706		
1533	Sparta South: Randolph[117]	1949	0	0	0	0	10	Cypress: Mis	S	880	8	1	0	0	0	A	Mis	900		
1534	Springerton—Now included in Bungay Consol.																			
1535	Stanford—Now included in Clay City Consol. & Sailor Springs Consol.																			
1536	Stanford South: Clay	1946	72	60	345	655	270					22	2	1	15	A	Mis	3,247		
1537			x	x	x	x	170	Aux Vases: Mis	S	2,970	12	16	1	0		AL				

1538			x	x	x	x	110	McClosky: Mis	L	3,090	3	6	1	1		AC			
1539	Stanford West—Now included in Sailor Springs Consol.																		
1540	Staunton: Macoupin	1952	0	.5	0	1	10	Pennsylvanian: Pen	S	515	11	1	0	0	1	A	Ord	2,371	
1541	Staunton West: Macoupin	1954	0	.5	0	.5	10	Pennsylvanian: Pen	S	505	10	2	1	0	1	x	Pen	535	
1542	Stewardson: Shelby	1939	0	9	0	161	70	Aux Vases: Mis	S	1,945	9	7	1	0	6	A	Mis	2,138	
1543	Stokes-Brownsville—Now included in Roland Consol.																		
1544	Storms Consolidated: White[5]	1939	0	194	0	7,974	3,360					225	2	4	160	AM	Mis	3,267	
1545			0	x	0	x	30	Degonia: Mis	S	1,990	7	1	0	0		Mf			
1546			0	x	0	x	10	Clore: Mis[25]	S	2,035	8	0	0	0		Mf			
1547			0	x	0	x	2,130	Waltersburg: Mis	S	2,230	15	196	0	1		AL			
1548			0	x	0	x	80	Tar Springs: Mis	S	2,340	10	5	1	1		Mf			
1549			0	x	0	x	90	Cypress: Mis	S	2,700	10	4	0	0		Mf			
1550			0	x	0	x	10	Bethel: Mis	S	2,810	x	1	0	0		Mf			
1551			0	x	0	x	100	Aux Vases: Mis	S	2,900	10	6	0	1		Mf			
1552			0	x	0	x	120	Ste. Genevieve: Mis	L	3,055	5	6	0	1		MC			
1553								[1]				7	1	0					
1554	Stringtown: Richland	1941	17	47	44	1,376	800	Ste. Genevieve: Mis	OL	3,025	8	32	0	1	25	AC	Mis	3,401	
1555	Stringtown East: Richland[118]	1948	0	0	0	2	20	McClosky: Mis	L	3,010	4	1	0	0	0	x	Mis	3,144	
1556	Stubblefield South: Bond[119]	1955	0	0	0	0	10	Cypress: Mis	S	985	4	1	0	1	0	x	Dev	2,455	
1557	Sumner: Lawrence	1944	0	0	0	16	40	McClosky: Mis	L	2,260	4	2	0	0	0	MC	Mis	2,365	
1558	Sumpter: White	1945	0	18	0	160	120					11	0	0	9	A	Mis	3,379	
1559			0	x	0	x	80	Tar Springs: Mis	S	2,575	18	6	0	0		Af			
1560			0	x	0	x	10	Hardinsburg: Mis	S	2,655	14	1	0	0		Af			
1561			0	x	0	x	40	Cypress: Mis	S	2,860	15	3	0	0		Af			
1562								[1]				1	0	0					
1563	Sumpter East: White	1951	0	81	0	551	400					29	0	0	27	A	Mis	3,305	
1564			0	x	0	x	20	Cypress: Mis	S	2,795	16	2	0	0		AL			
1565			0	x	0	x	200	Aux Vases: Mis	S	3,020	15	10	0	0		AL			
1566			0	x	0	x	120	Ohara: Mis	L	3,115	12	3	0	0		AC			
1567			0	x	0	x	200	Rosiclare: Mis	L	3,140	4	4	0	0		AC			
1568			0	x	0	x	40	McClosky: Mis	L	3,150	5	1	0	0		AC			
1569								[1]				9	0	0					
1570	Sumpter North: White	1952	0	86	0	204	120	Aux Vases: Mis	S	3,185	3	11	0	0	10	NL	Mis	3,425	
1571	Sumpter South: White	1948	0	11	0	146	120					10	1	2	8	Af	Mis	3,430	
1572			0	x	0	x	120	Tar Springs: Mis	S	2,580	8	9	0	2		Af			
1573			0	x	0	x	10	Bethel: Mis[25]	S	3,025	15	0	0	0		Af			
1574								[1]				1	1	0					
1575	Sumpter West: White	1952	0	2	0	13	10	Aux Vases: Mis	S	3,165	5	1	0	0	1	NL	Mis	3,336	
1576	Swearingen Gas—Now included in Main Consol.																		
1577	Tamaroa: Perry[5]	1942	0	18	0	185	150	Cypress: Mis	S	1,120	13	14	0	0	11	AL	Mis	1,630	
1578	Tamaroa West: Perry	1956	0	x	0	x	10	Cypress: Mis	S	1,100	5	1	1	0	1	x	Mis	1,600	
1579	Taylor Hill: Franklin	1949	0	5	0	39	60	Ohara: Mis	L	3,055	4	3	0	0	2	x	Mis	3,227	
1580	Thackeray: Hamilton	1944	0	123	0	2,605	680					63	4	0	55	A	Mis	3,660	
1581			0	3	0	5	10	Cypress: Mis	S	3,030	24	1	0	0		A			
1582			0	x	0	x	660	Aux Vases: Mis	S	3,360	15	59	4	0		AL			
1583			0	x	0	x	x	Ohara: Mis[25]	L	3,435	5	0	0	0		AC			
1584			0	x	0	x	x	McClosky: Mis	L	3,500	10	1	0	0		AC			
1585								[1]				2	1	0					
1586	Thompsonville: Franklin[120]	1940	0	0	0	285	240	McClosky: Mis	L	3,120	10	19	0	0	0	A	Mis	3,455	
1587	Thompsonville East: Franklin	1949	33	27	45	249	90	Aux Vases: Mis	S	3,150	8	9	1	0	8	ML	Mis	3,371	
1588	Thompsonville North: Franklin	1944	16	22	35	1,599	560					72	1	1	50	A	Mis	3,365	
1589			0	0	0	x	20	Cypress: Mis	S	2,750	10	1	0	0		AL			
1590			16	22	35	x	560	Aux Vases: Mis	S	3,100	20	71	1	1		AL			
1591	Tilden: Randolph	1952	0	217	0	1,808	500	Silurian: Sil	L	2,160	60	24	0	0	24	R	Ord	3,093	
1592	Toliver—Now included in Hord South																		
1593	Toliver East: Clay	1943	0	4	0	210	90					5	0	1	4	M	Mis	2,965	
1594			0	0	0	0	10	Cypress: Mis	S	2,510	14	1	0	1		M			
1595			0	1	0	13	20	Rosiclare: Mis	L	2,815	6	1	0	0		MC			
1596			0	3	0	197	60	McClosky: Mis	OL	2,840	8	3	0	0		MC			
1597	Toliver South: Clay	1953	0	18	0	27	70					4	3	0	4	M	Mis	2,915	
1598			0	4	0	13	10	Aux Vases: Mis	S	2,765	x	1	0	0		MC			

TABLE 12.—(Concluded)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.) During 1956 Secondary recovery	Oil production (M bbls.) During 1956 Total	Oil production (M bbls.) To end of 1956 Secondary recovery	Oil production (M bbls.) To end of 1956 Total	Total proved area (acres)	Producing formation Name: Age[a]	Character[b]	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Abandoned	Producing end of year	Structure[c]	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
1599			0	14	0	14	60	McClosky: Mis	L	2,875	5	3	3	0		MC		
1600	Tonti: Marion	1938	26	182	61	10,744	670					95	0	0	79	D	Ord	4,900
1601			26	x	61	x	x	Bethel: Mis	S	1,930	20	9	0	0		D		
1602			0	x	0	x	x	Aux Vases: Mis	S	2,005	30	16	0	0		D		
1603			0	x	0	x	x	Rosiclare: Mis	LS	2,125	12	1	0	0		D		
1604			0	x	0	x	x	McClosky: Mis	OL	2,130	15	56	0	0		D		
1605			0	x	0	x	80	Devonian: Dev	L	3,500	7	7	0	0		R		
1606												6	0	0				
1607	Tovey: Christian	1955	0	4	0	6	20	Silurian: Sil	L	1,850	10	1	0	0	1	x	Sil	1,881
1608	Trumbull: White	1944	0	45	0	769	460					34	0	0	23	A	Mis	3,462
1609			0	x	0	x	140	Cypress: Mis	S	2,845	10	13	0	0		A		
1610			0	x	0	x	110	Aux Vases: Mis	S	3,170	9	8	0	0		A		
1611			0	x	0	x	40	Ohara: Mis[25]	L	3,230	15	0	0	0		AC		
1612			0	x	0	x	60	Rosiclare: Mis	L	3,270	6	1	0	0		AC		
1613			0	x	0	x	220	McClosky: Mis	L	3,290	5	9	0	0		AC		
1614												3	0	0				
1615	Trumbull West: White[121]	1953	0	1	0	4	10	Aux Vases: Mis	S	3,120	x	1	0	1		x	Mis	3,330
1616	Valier: Franklin	1942	0	0	0	2	20	McClosky: Mis	L	2,715	12	1	0	0	0	ML	Mis	2,725
1617	Waggoner: Montgomery	1940	0	x	0	11	40	Pottsville: Pen	S	610	10	4	0	0	0	x	Dev	1,893
1618	Wakefield: Jasper[122]	1946	0	0	0	2	40	Rosiclare: Mis	L	3,100	5	2	0	0	0	x	Mis	3,207
1619	Wakefield North: Jasper	1953	0	1	0	19	20	McClosky: Mis	L	3,000	6	1	0	0	1	x	Mis	3,204
1620	Wakefield South: Jasper[123]	1955	0	0	0	0	20	McClosky: Mis	L	3,040	4	1	0	0	0	x		
1621	Walpole: Hamilton	1941	0	157	0	5,803	1,740					98	0	1	92	A	Mis	3,390
1622			0	x	0	x	90	Tar Springs: Mis	S	2,465	15	6	0	1		AL		
1623			0	x	0	x	1,640	Aux Vases: Mis	S	3,070	20	91	0	0		A		
1624			0	1	0	8	20	Rosiclare: Mis	L	3,195	7	1	0	0		AC		
1625	Walpole South: Hamilton	1951	0	6	0	107	20	Aux Vases: Mis	S	3,120	6	2	0	0	2	AL	Mis	3,362
1626	Waltonville: Jefferson	1943	0	2	0	103	40	Bethel: Mis	S	2,460	9	4	0	0	3	A	Mis	2,905
1627	Wamac East: Marion	1952	0	3	0	19	40	Wilson: Pen	S	845	15	4	0	0	4	ML	Mis	2,216
1628	Waverly: Morgan[5]	1946	0	0	0	0	20	Devonian-Silurian	L	1,020	10	1	0	0	0	A	Ord	1,534
1629	Weaver: Clark	1949	0	113	0	1,306	680					38	0	0	29	R	Dev	2,135
1630			0	x	0	x	20	Cole: Mis	L	1,565	5	1	0	0		D		
1631			0	x	0	x	680	Devonian: Dev	L	2,030	10	37	0	0		R		
1632	West End—Now included in Dale Consol.																	
1633	West Frankfort: Franklin	1941	0	250	0	3,032	1,150					81	11	1	73	A	Mis	3,156
1634			0	x	0	x	500	Tar Springs: Mis	S	2,060	20	37	2	1		A		
1635			0	x	0	x	200	Aux Vases: Mis	S	2,710	20	14	8	0		AL		
1636			0	x	0	x	480	Ohara: Mis	L	2,760	8	11	0	0		AC		
1637			0	x	0	x	60	Rosiclare: Mis[25]	L	2,810	8	0	0	0		AC		
1638			0	x	0	x	280	McClosky: Mis	L	2,825	14	6	0	0		AC		
1639												13	1	0				
1640	West Frankfort South—Now included in West Frankfort																	
1641	West Liberty—Now included in Clay City Consol.																	
1642	Westfield East: Clark[5]	1947	0	x	0	x	110	Pennsylvanian: Pen	S	400	11	13	0	2	3	ML	Pen	678
1643	Westfield North: Coles	1949	0	0	0	.4	20					2	0	0	0	x	Pen	611
1644			0	0	0	.4	10	Pleasantview: Pen	S	275	5	1	0	0		x		
1645			0	0	0	0	10	Pennsylvanian: Pen	S	490	10	1	0	0		x		

1646	Whittington: Franklin	1939	0	127	0	780	550					35	4	0	31	A	Mis	3,130
1647			0	x	0	x	80	Hardinsburg: Mis	S	2,310	10	6	0	0		A		
1648			0	x	0	x	70	Cypress: Mis	S	2,535	10	6	1	0		A		
1649			0	x	0	x	40	Aux Vases: Mis	S	2,735	15	3	0	0		A		
1650			0	x	0	x	220	Ohara: Mis	L	2,835	10	10	2	0		AC		
1651			0	x	0	x	20	Rosiclare: Mis	L	2,880	10	1	0	0		AC		
1652			0	x	0	x	100	McClosky: Mis	L	2,870	9	5	0	0		AC		
1653			0	x	0	x	40	St. Louis: Mis	L	3,080	6	1	0	0		AC		
1654								[1]				2	0	0				
1655	Whittington South: Franklin	1950	0	22	0	295	100	Cypress: Mis	S	2,580	10	10	0	0	10	A	Dev	4,810
1656	Whittington West: Franklin	1943	0	6	0	201	250					14	1	0	5	A	Mis	2,942
1657			0	x	0	x	10	Bethel: Mis	S	2,615	10	1	0	0		AL		
1658			0	x	0	x	150	Aux Vases: Mis	S	2,680	15	5	1	0		AL		
1659			0	x	0	x	100	Ohara: Mis	L	2,800	5	1	0	0		AC		
1660			0	x	0	x	20	Rosiclare: Mis[25]	L	2,780	4	0	0	0		AC		
1661			0	x	0	x	40	McClosky: Mis	L	2,900	6	1	0	0		AC		
1662								[1]				6	0	0				
1663	Williams Consolidated: Jefferson	1948	0	112	0	675	400					41	2	2	38	A	Dev	4,578
1664			0	x	0	x	170	Bethel: Mis	S	2,490	10	11	0	1		AL		
1665			0	x	0	x	280	Aux Vases: Mis	S	2,550	5	27	2	1		AL		
1666			0	x	0	x	20	McClosky: Mis[25]	L	x	x	0	0	0		AC		
1667								[1]				3	0	0				
1668	Williams South—Now included in Williams Consol.																	
1669	Willow Hill Consol.—Now included in Clay City Consol.																	
1670	Willow Hill East: Jasper	1946	0	6	2	230	320	McClosky: Mis	L	2,645	6	18	0	0	8	A	Mis	3,281
1671	Willow Hill North: Now included in Clay City Consol.																	
1672	Woburn Consolidated: Bond	1940	0	614	11	2,455	1,540					120	14	0	106	A	Ord	3,279
1673			0	x	0	x	220	Cypress: Mis	S	865	8	20	0	0		AL		
1674			0	x	0	x	320	Bethel: Mis	S	1,020	10	34	3	0		AL		
1675			0	x	0	x	40	Aux Vases: Mis	S	1,055	10	1	1	0		AL		
1676			0	x	0	x	870	Lingle: Dev	S	2,275	8	47	8	0		AC		
1677			0	x	0	x	340	Trenton: Ord	L	3,170	12	16	1	0		AC		
1678								[1]				1	1	0				
1679	Woburn South—Now included in Woburn Consol.																	
1680	Woodlawn: Jefferson	1940	0	358	0	14,252	1,980					190	0	6	120	A	Ord	5,101
1681			0	x	0	x	20	Tar Springs: Mis[25]	S	x	x	0	0	0		AL		
1682			0	x	0	x	80	Cypress: Mis	S	1,800	10	3	0	0		AL		
1683			0	x	0	x	1,900	Bethel: Mis	S	1,960	25	172	0	6		A		
1684			0	x	0	x	240	Aux Vases: Mis[25]	S	1,975	10	0	0	0		A		
1685			0	x	0	x	300	Rosiclare: Mis	LS	2,205	15	4	0	0		A		
1686			0	x	0	x	20	McClosky: Mis	L	2,200	3	0	0	0		A		
1687			0	x	0	x	240	Lingle: Dev	S	3,690	6	11	0	0		A		
1688	Xenia: Clay	1941	0	1	0	32	10	Aux Vases: Mis	S	2,785	13	1	0	0	1	A	Dev	4,698
1689	Xenia East: Clay	1951	0	34	0	374	160					15	0	4	11	A	Mis	3,011
1690			0	x	0	x	150	Cypress: Mis	S	2,500	6	14	0	4		AL		
1691			0	x	0	x	10	Bethel: Mis	S	2,710	6	1	0	0		AL		
1692	Zenith: Wayne[124]	1948	0	1	0	24	40	McClosky: Mis	L	2,970	7	2	0	0	0	AC	Mis	3,059
1693	Zenith North: Wayne	1951	0	54	0	741	260					13	0	0	13	N	Mis	3,210
1694			0	x	0	x	240	Rosiclare: Mis	L	3,080	6	8	0	0		NC		
1695			0	x	0	x	160	McClosky: Mis	L	3,140	4	1	0	0		NC		
1696								[1]				4	0	0				
1697	Zenith South: Wayne	1949	0	9	0	736	280					14	0	1	5	M	Mis	3,116
1698			0	x	0	x	40	Ohara: Mis[25]	L	2,920	6	0	0	0		MC		
1699			0	x	0	x	280	McClosky: Mis	L	2,985	7	12	0	0		MC		
1700								[1]				2	0	0				
1701	Total of fields discovered after January 1, 1937		24,045	71,639	117,859	1,376,940	375,780					28,729	1,412	462	22,191			
1702	Total for Illinois		30,722	82,314	148,808	1,918,890	539,315					50,905	1,694	861	31,277			

TABLE 13.—GAS PRODUCTION IN ILLINOIS, 1956

Line No.	Pool: County	Year of discovery	Gas production Million cu. ft. During 1956	Gas production Million cu. ft. To end of 1956	Proved area (acres)	Producing formation Name: Age	Character	Depth to top (ft.)	Av. thickness (ft.)	Number of wells Completed to end of 1956	Number of wells 1956 Completed	Abandoned	Producing end of year	Structure	Deepest zone tested Name	Deepest zone tested Depth of hole (ft.)
1	Main Consolidated: Crawford[6]	1906	x	x	x					x	1	0	x		St. Peter	4,654
2			x	x	x	Robinson: Pen	S	1,000	x	x	1	0		ML		
3			0	0	160	Hardinsburg: Mis	S	1,075	40	1	0	0		ML		
4			x	x	320	Cypress: Mis	S	1,425	6	2	0	0		ML		
5	Ava-Campbell Hill: Jackson[f, 9]	1916	0	x	370	Cypress: Mis	S	780	18	20	0	0	0	A	Trenton	3,582
6	Ayers (Gas): Bond[13]	1922	0	298.7	325	Bethel: Mis	S	940	5	21	0	0	0	A	Ord	3,044
7	Gillespie-Benld (Gas): Macoupin[14]	1923	0	135.8	80	Unnamed: Pen	S	540	x	4	0	0	0	A	Pen	603
8	Greenville (Gas): Bond[15]	1910	0	990.0	160	Lindley (1st & 2nd): Mis	S	925	x	4	0	0	0	A	Dev	2,373
9	Jacksonville (Gas): Morgan[6, 16]	1910	0	x	1,320	Gas: Pen, Mis	LS	330	5	45	0	0	0	ML	Ord	1,390
10	Pittsfield (Gas): Pike[18]	1886	0	x	8,960	Niagaran: Sil	L	265	10	68	0	0	0	A	Pre-Cam	2,226
11	Spanish Needle Creek (Gas): Macoupin[19]	1915	0	14.4	80	Unnamed: Pen	S	305	x	7	0	0	0	D	Trenton	2,070
12	Sparta: Randolph[6, 20]	1888	0	x	160	Cypress: Mis	S	850	7	18	0	0	0	D	Trenton	3,130
13	Staunton (Gas): Macoupin[21]	1916	0	1,050.0	400	Unnamed: Pen	S	460	x	18	0	0	0	A	Ord	2,371
14	Total of fields discovered prior to January 1, 1937[24]		x	2,506.5	12,335					210	1	0	x			
15	Albion Consol.: Edwards, White[6]	1940	0	0	40	Pennsylvanian: Pen	S	1,490	6	1	0	0	0	MF	Dev	5,185
16	Beaver Creek South: Clinton, Bond[6]	1946	0	0	160	Cypress: Mis	S	1,015	20	4	0	0	0	A	Dev	2,539
17	Beckemeyer Gas: Clinton[6]	1956	0	0	80	Cypress: Mis	S	1,070	23	2	2	0	0	x	Sil	2,730
18	Boulder: Clinton[6]	1941	0	0	320	Geneva: Dev	D	2,630	7	4	0	0	0	R	Trenton	3,813
19	Carlinville North: Macoupin[6, 38]	1941	0	0	40	Pottsville: Pen	S	440	10	1	0	0	0	x	Trenton	1,970
20	Claremont: Richland[43]	1950	0	0	160	Rosiclare: Mis	L	3,200	5	1	0	0	0	MC	Mis	3,340
21	Cooks Mills Consol.: Coles, Douglas[6]	1941	0	0	720					15	11	0	0	A	Dev	2,888
22			0	0	500	Cypress: Mis	S	1,600	10	7	4	0		A		
23			0	0	40	Aux Vases: Mis	S	1,800	8	1	0	0		A		
24			0	0	400	Rosiclare: Mis	S	1,765	15	4	4	0		A		
25					[1]					3	3	0				
26	Dubois Consol.: Washington[6]	1939	0	0	400	Cypress: Mis	S	1,220	10	10	2	0	0	AL	Ord	4,217
27	Dudley: Edgar[6]	1948	0	0	80	Pennsylvanian: Pen	S	300	20	2	0	0	0	M	St. Peter	2,997
28	Dudley West Gas: Edgar	1953	0	0	40	Gas: Pen	S	380	11	1	0	0	0	x	Pen	428
29	Eldorado Consol.: Saline[6]	1941	635.8	635.8	160					4	2	0	3	A	Mis	3,606
30			x	x	40	Palestine: Mis	S	1,920	20	1	1	0		AL		
31			x	x	80	Waltersburg: Mis	S	2,055	20	2	1	0		AL		
32			0	0	40	Tar Springs: Mis	S	2,225	17	1	0	0		AL		
33	Eldorado East: Saline[6]	1953	0	0	40					1	1	0	0	A	Mis	3,102
34			0	0	40	Palestine: Mis	S	1,900	30	0	0	0		AL		
35			0	0	40	Tar Springs: Mis	S	2,135	20	0	0	0		AL		
36						[1]				1	1	0				
37	Epworth Consol.: White[6]	1941	0	0	160	Gas: Pen	S	1,090	40	1	0	0	0	Af	Mis	3,238
38	Fishhook: Pike, Adams	1955	0	0	6,000	Edgewood: Sil	L	450	5	46	40	0	0	x	Sil	813
39	Freeburg South: St. Clair[6]	1956	0	0	40	Cypress: Mis	S	380	30	1	1	0	0	x	Ord	2,000
40	Grandview: Edgar[6]	1945	x	x	400					11	0	0	2	M	Ord	2,694
41			x	x	360	Gas: Pen	S	400	x	10	0	0		ML		
42			x	x	40	Salem: Mis	L	570	2	1	0	0		MC		
43	Harco: Saline[6]	1954	76.9	76.9	x	x: Mis	x	x	x	x	x	0	x		Mis	3,107
44	Harrisburg: Saline[6]	1952	0	93.2	160	Tar Springs: Mis	S	2,085	6	1	0	0	0	x	Mis	2,789
45	Herald Consol.: White, Gallatin[6, 63]	1939	81.1	x	1,080					19	0	0	7	A	Mis	3,394

46			52.7	x	360	Anvil Rock: Pen	S	700	25	9	0	0		AL			
47			0	x	120	Pennsylvanian: Pen	S	1,750	18	3	0	0		AL			
48			0	x	120	Waltersburg: Mis	S	2,240	10	3	0	0		A			
49			28.4	619.4	480	Tar Springs: Mis	S	2,315	6	4	0	0		AL			
50	Inclose: Edgar, Clark[6]	1941	x	x	320	Pennsylvanian: Pen	S	540	12	8	0	0	0	x	Mis	815	
51	Livingston East: Madison	1951	0	0	40	Pennsylvanian: Pen	S	540	12	1	0	0	0	x	Mis	815	
52	Livingston South: Madison[6]	1950	0	0	40	Pennsylvanian: Pen	S	530	2	1	0	0	0	ML	Mis	845	
53	Louden: Fayette, Effingham[6]	1937	0	x	1,760					14	0	0	0	A	St. Peter	4,680	
54			0	x	320	Burtschi: Pen	S	1,000	20	5	0	0		AL			
55			0	0.9	1,440	Tar Springs: Mis	S	1,170	2	9	0	0		AL			
56	Mt. Olive: Montgomery[6]	1942	0	0	80	Pottsville: Pen	S	605	6	2	0	0	0	A	Pen	905	
57	Omaha: Gallatin[6]	1940	0	0	120	Tar Springs: Mis	S	1,900	15	2	0	0	0	D	Mis	2,941	
58	Panama: Bond, Montgomery[6]	1940	0	x	280					7	0	0	0	A	Dev	2,016	
59			0	x	160	Pennsylvanian: Pen	S	575	30	4	0	0		A			
60			0	x	120	Bethel: Mis	S	865	12	3	0	0		A			
61	Prentice: Morgan[6]	1953	0	0	280	Pennsylvanian: Pen	S	260	15	6	1	0	0	x	Ord	1,513	
62	Redmon North: Edgar	1955	0	0	40	Pennsylvanian: Pen	S	365	3	1	0	0	0	x	Mis	450	
63	Roland Consol.: White, Gallatin[6]	1940	0	0	160	Waltersburg: Mis	S	2,150	19	1	0	0	0	AL	Dev	5,225	
64	Russellville Gas: Lawrence[6]	1937	0	7,081.6	1,800					60	0	0	0	A	Dev	3,133	
65			0	x	x	Bridgeport: Pen	S	760	15	18	0	0		AL			
66			0	x	x	Buchanan: Pen	S	1,100	12	42	0	0		AL			
67	Storms Consol.: White[6]	1937	0	0	280	Waltersburg: Mis	S	2,230	15	7	0	0	0	AL	Mis	3,267	
68	Tamaroa: Perry[6]	1942	0	0	320	Cypress: Mis	S	1,120	13	2	0	0	0	AL	Mis	1,630	
69	Waverly: Morgan[6]	1946	0	0	860					7	0	0	0	A	Ord	2,070	
70			0	0	160	Pennsylvanian: Pen	S	250	13	1	0	0		AL			
71			0	0	700	Devonian: Dev	L	1,000	10	6	0	0		A			
72	Westfield East: Clark[6]	1947	0	0	40	Pennsylvanian: Pen	S	400	11	1	0	0	0	ML	Pen	678	
73	Total for fields discovered after January 1, 1937		793.9	9,115.9	16,460					245	60	0	12				
74	Total for Illinois		793.9	11,622.4	28,795					455	61	0	12				

PART II

WATERFLOOD OPERATIONS

ABSTRACT

During 1956, waterflooding produced approximately 31,300,000 barrels of oil in Illinois. There were 333 waterfloods reported in operation, and these projects recovered 29,600,000 barrels of oil. An additional 1,700,000 barrels are estimated to have been produced by "dump" flooding. At the end of 1956, the cumulative waterflood recovery was 133,200,000 barrels. Tables of statistics are included.

INTRODUCTION

This report is the result of a joint effort by the Illinois State Geological Survey and the Illinois Secondary Recovery and Pressure Maintenance Study Committee of the Interstate Oil Compact Commission. The following persons were appointed to the Study Committee by Governor William G. Stratton to assist in the compilation of data on the waterflood and pressure maintenance projects that were in operation in Illinois during 1956.

A. H. Bell, Chairman,
Illinois State Geological Survey,
Urbana, Illinois

Paul A. Witherspoon, previous Chairman,
University of California,
Berkeley, Calif.

R. N. Ayars,
The Ohio Oil Co.,
Terre Haute, Ind.

Hugh S. Barger,
Barger Engineering,
Evansville, Indiana

C. E. Brehm,
Box 368,
Mt. Vernon, Illinois

R. G. Brown,
The Texas Co.,
Salem, Illinois

Robert Bulla,
Calvan American, Inc.,
Robinson, Illinois

W. H. Davison,
Tekoil Corp.,
Robinson, Illinois

James T. Dorland,
Calvert Drilling Co.,
Olney, Illinois

R. E. Dunn,
Walter Duncan Oil Properties,
Mt. Vernon, Illinois

T. W. George,
George & Wrather,
Mt. Carmel, Illinois

T. F. Lawry,
Mahutska Oil Co.,
Robinson, Illinois

R. W. Love,
The Texas Co.,
Salem, Illinois

E. A. Milz,
Shell Oil Co.,
Centralia, Illinois

Fred A. Noah,
The Noah Petroleum Co.,
Albion, Illinois

Paul Phillippi,
Forest Oil Corp.,
Casey, Illinois

Mark Plummer,
The Pure Oil Co.,
Olney, Illinois

J. D. Simmons,
Carter Oil Co.,
Mattoon, Illinois

C. E. Skiles,
Skiles Oil Corp.,
Mt. Carmel, Illinois

W. G. Sole,
Magnolia Petroleum Co.,
Salem, Illinois

Harry F. Swannack,
Gulf Oil Corp.,
Evansville, Indiana

Carl R. Temple,
Sohio Petroleum Co.,
Centralia, Illinois

R. R. Vincent,
C. L. McMahon, Inc.,
Evansville, Indiana

R. A. Wilson,
Tide Water Associated Oil Co.,
Robinson, Illinois

In order to collect information on water injection and pressure maintenance projects, the Study Committee met in Robinson, Illinois, and set up a questionnaire on January 13, 1955. The Geological Survey sent this questionnaire to all waterflood op-

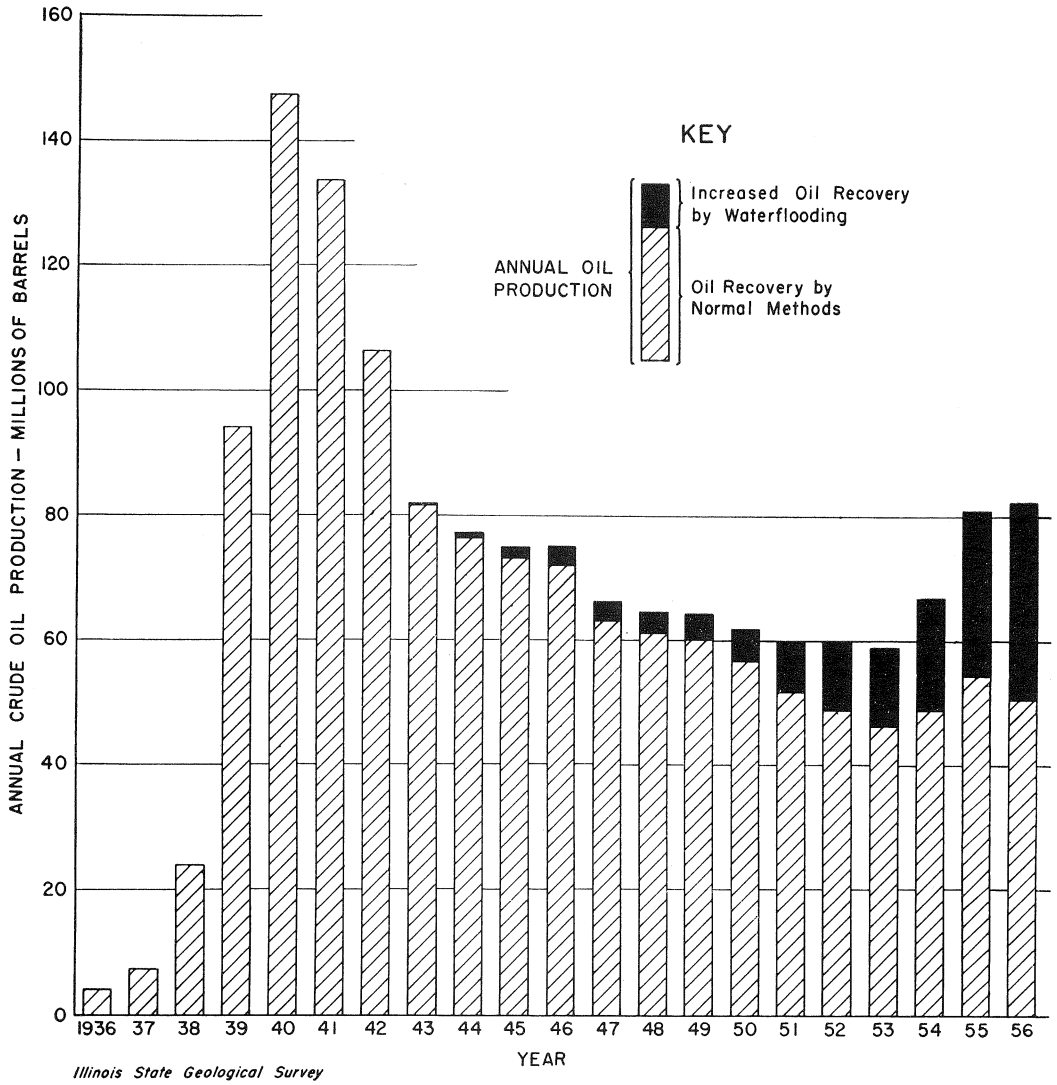


Fig. 25. — Annual crude oil production in Illinois.

erators in Illinois and compiled the data returned.

This report supplements seven previous summaries of waterflood operations listed below.

(1) "Summary of Water Flooding Operations in Illinois, 1950," which reported operations during 1949. Published by Interstate Oil Compact Commission and reprinted by Illinois State Geological Survey as Circular 165.

(2) "Summary of Water Flooding Operations in Illinois to 1951," which reported operations during 1950. Published by Interstate Oil Compact Commission and reprinted by Illinois State Geological Survey as Circular 176.

(3) "Summary of Water Flooding Operations in Illinois Oil Pools During 1951." Published by Interstate Oil Compact Commission and reprinted by Illinois State Geological Survey as Circular 182.

(4) "Summary of Water Flooding Operations in Illinois Oil Pools During 1952." Published by Interstate Oil Compact Commission and reprinted by Illinois State Geological Survey as Circular 185.

(5) "Summary of Water Flooding Operations in Illinois Oil Pools During 1953." Published by Interstate Oil Compact Commission and reprinted by Illinois State Geological Survey as Circular 193.

(6) "Summary of Water Flood Operations in Illinois Oil Pools During 1954." Published by Interstate Oil Compact Commission and reprinted by Illinois State Geological Survey as Illinois Petroleum 73.

(7) "Part II. — Waterflood Operations," *in:* Petroleum Industry in Illinois in 1955: Illinois State Geological Survey Bulletin 81.

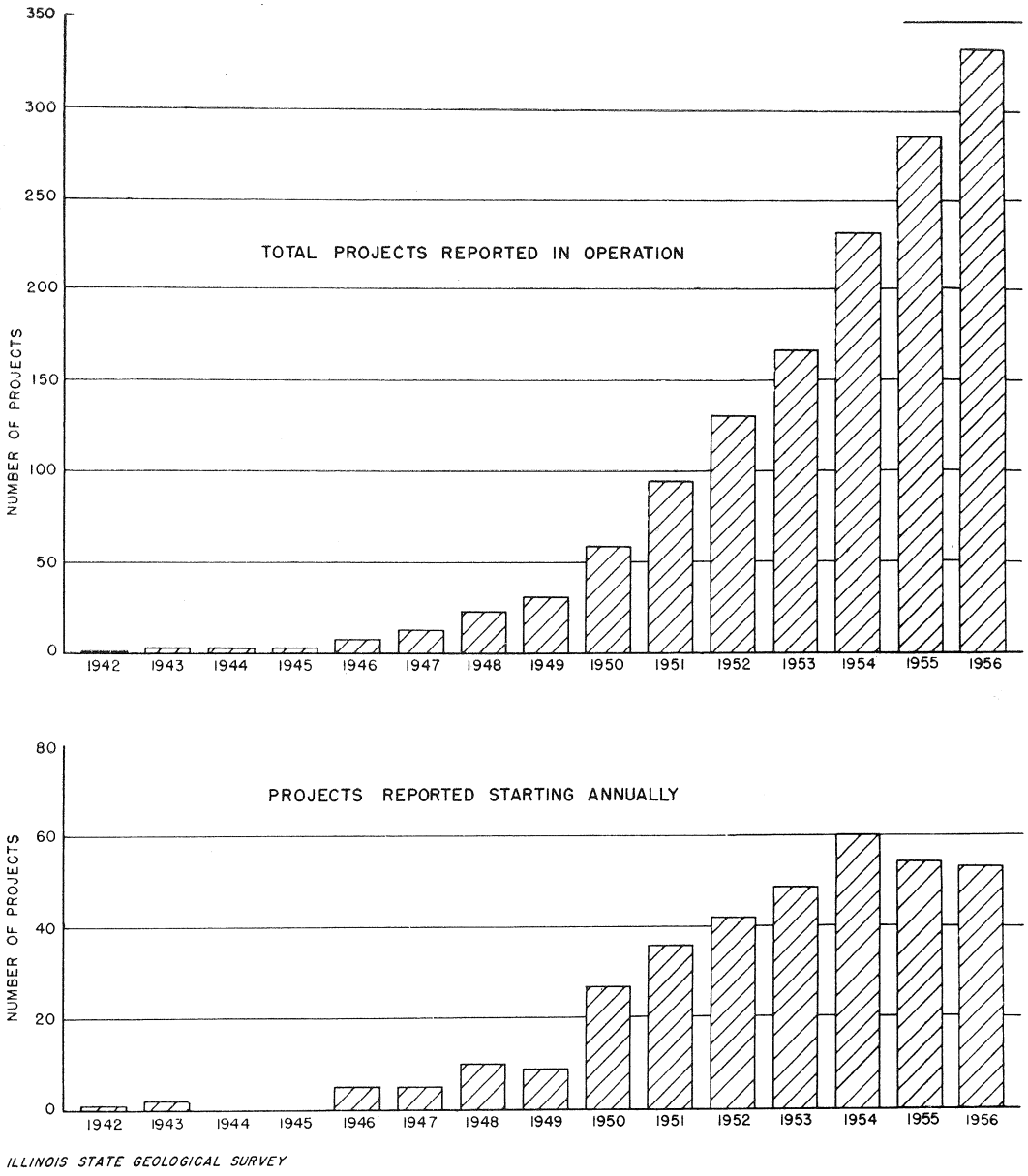


Fig. 26. — Reported development of waterflood projects in Illinois.

SUMMARY OF RESULTS

Continuing the trend of the past few years, oil production in Illinois during 1956 was slightly larger than the production of immediately preceding years. As can be seen in figure 25, this rise in production can be attributed almost entirely to the large increase in oil recovered by means of waterflooding. This method of secondary recovery produced approximately 31,300,000 barrels of oil during 1956, or 38 percent of the state's total recovery of 82,314,000 barrels. Of this waterflood oil, 29,600,000 barrels is reported in table 14, and an additional 1,700,000 barrels is estimated to have been recovered by "dump" flooding. The 1956 waterflood recovery is 18 percent higher than the 1955 recovery of approximately 26,560,000 barrels.

Figure 25 shows the effect of waterflood (including "dump" flood) operations on the state's annual oil production since 1936. The cumulative waterflood recovery at the end of 1956 was approximately 133,200,000 barrels, which includes 21,500,000 barrels of "dump" flood oil.

Table 14 presents a summary of the information collected on waterflood projects in operation during 1956. The data are arranged alphabetically by fields and include 333 projects. Excluding the "dump" floods, there were approximately 350 waterfloods in operation during 1956. Table 14 provides data on 95 percent of these projects, although in terms of cumulative figures, this summary approaches 100 percent coverage.

Based on the reported data in table 14, a total of 271,270,000 barrels of water was injected during 1956 in recovering 29,600,000 barrels of waterflood oil, or a ratio of 9.2 barrels of water for each barrel of oil. A cumulative total of 1,014,900,000 barrels of water had been injected by the end of 1956 in recovering 111,540,000 barrels of oil, or an over-all input water-oil ratio of 9.1.

Figure 26 shows the reported development of waterflood projects in Illinois by years since 1942. The rapid increase in the number of projects since 1949 is evident. As a result, the number of projects has increased by a factor of ten in the past seven years from 33 projects at the end of 1949 to 333 projects at the end of 1956. As shown in table 14, these 333 projects had developed 92,350 acres of waterflooding, or 17 percent of the state's total oil-productive acreage. There were 5,307 injection wells and 7,687 producing wells reported operating in these projects in 1956.

Table 15 presents data on the waterflood projects that have been reported abandoned by the end of 1956. Several projects previously reported as temporarily abandoned were added to this table along with three projects abandoned during 1956, bringing the total projects reported abandoned to 22.

Table 16 includes data on the eight pressure maintenance operations that used water injection during 1956. The oil-production statistics in table 16 include both primary recovery and any additional oil obtained by pressure maintenance operations.

Each project listed in tables 14, 15, and 16 has been numbered, and corresponding numbers on figures 27, 28, and 29 show the locations of the waterflood and pressure maintenance operations. Figure 27 shows all reported projects, while figures 28 and 29 show details of portions of the old oil fields and the Wabash Valley fields, respectively.

For a generalized geologic column, see figure 3, which indicates the stratigraphic sequence of oil-producing formations in the Illinois basin. Given below is a list of the oil-producing formations with the number of reported waterfloods, as taken from table 14. An index map of counties, townships, and ranges in Illinois is shown in figure 5.

Formation ("Sand Name")	No. of Reported Waterfloods During 1956
(Westfield "Gas" Sand)	2
*(Casey "Gas" Sand)	1
(Siggins)	4
(Bellair "500")	2
(Biehl)	17
(Bridgeport)	10
(Casey)	11
(Claypool)	1
(Jordon)	2
*(Pennsylvanian unclassified)	4
(Petro)	1
(Robinson)	55
(U. Partlow)	6
Kinkaid	
*Degonia	1
*Clore	2
*Palestine	2
Menard	
*Waltersburg	9
Vienna	
*Tar Springs	14
*Glen Dean	
*Hardinsburg	5
*Golconda (Jackson)	2
*Cypress (Kirkwood, Weiler)	63
*Paint Creek (Bethel)	21
*Yankeetown (Benoist)	15
*Renault	2
*Aux Vases	37
*Ste. Genevieve	
(Ohara)	6
(Rosiclare)	19
(McClosky)	48
*St. Louis	
*Salem	
Osage	
* (Carper)	
Chouteau	
New Albany	
*Devonian	2
*Silurian	
Maquoketa	
*(Trenton)	

* Oil producing formations. See also figure 3.

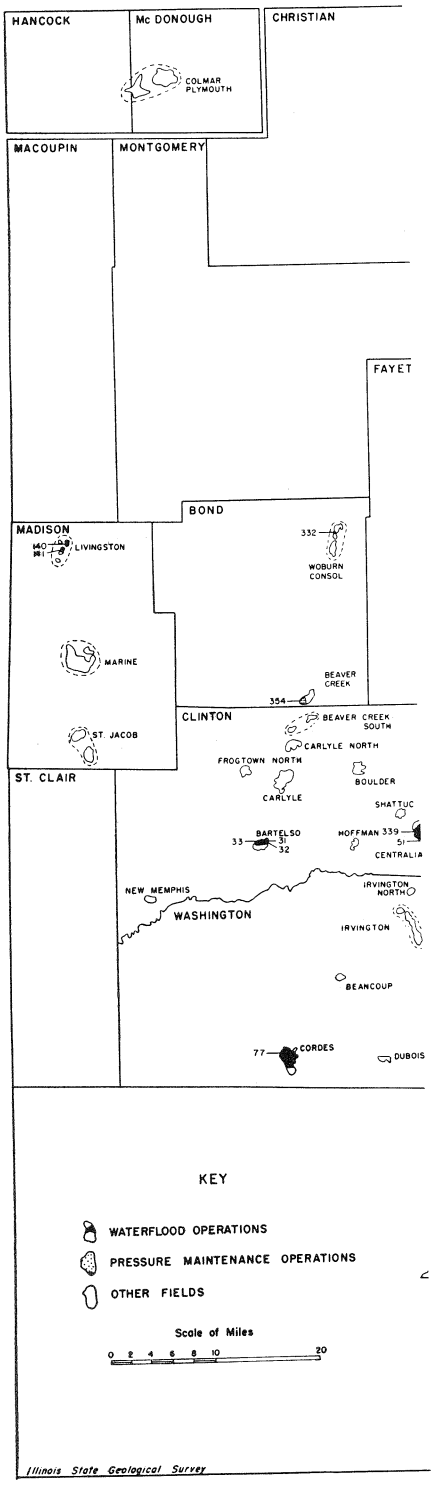
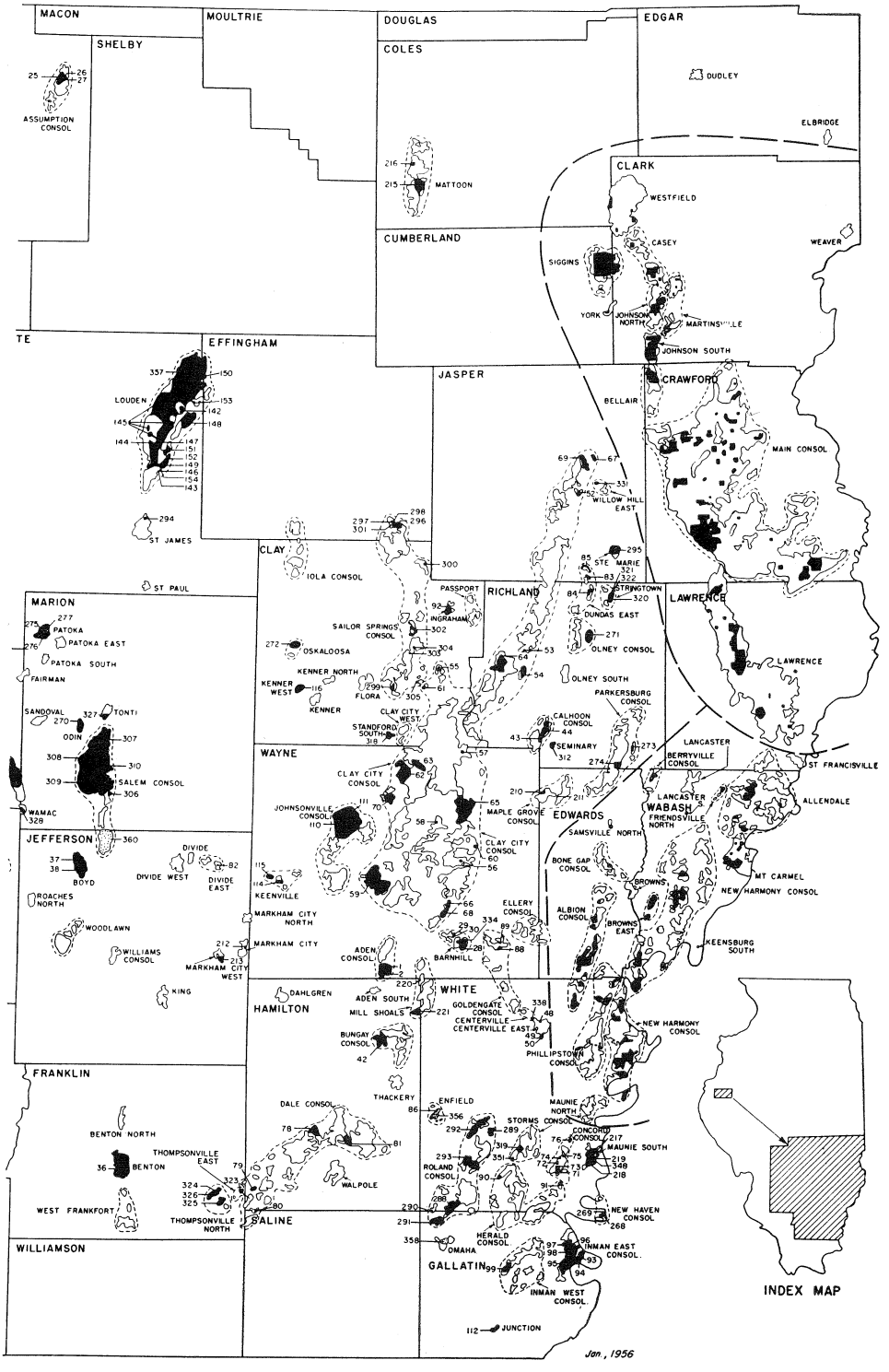


Fig. 27 — Waterflood and pressure are shown in detail in figures



maintenance operations in Illinois during 1956 shown in black. Areas outlined by heavy dashes 28 and 29.

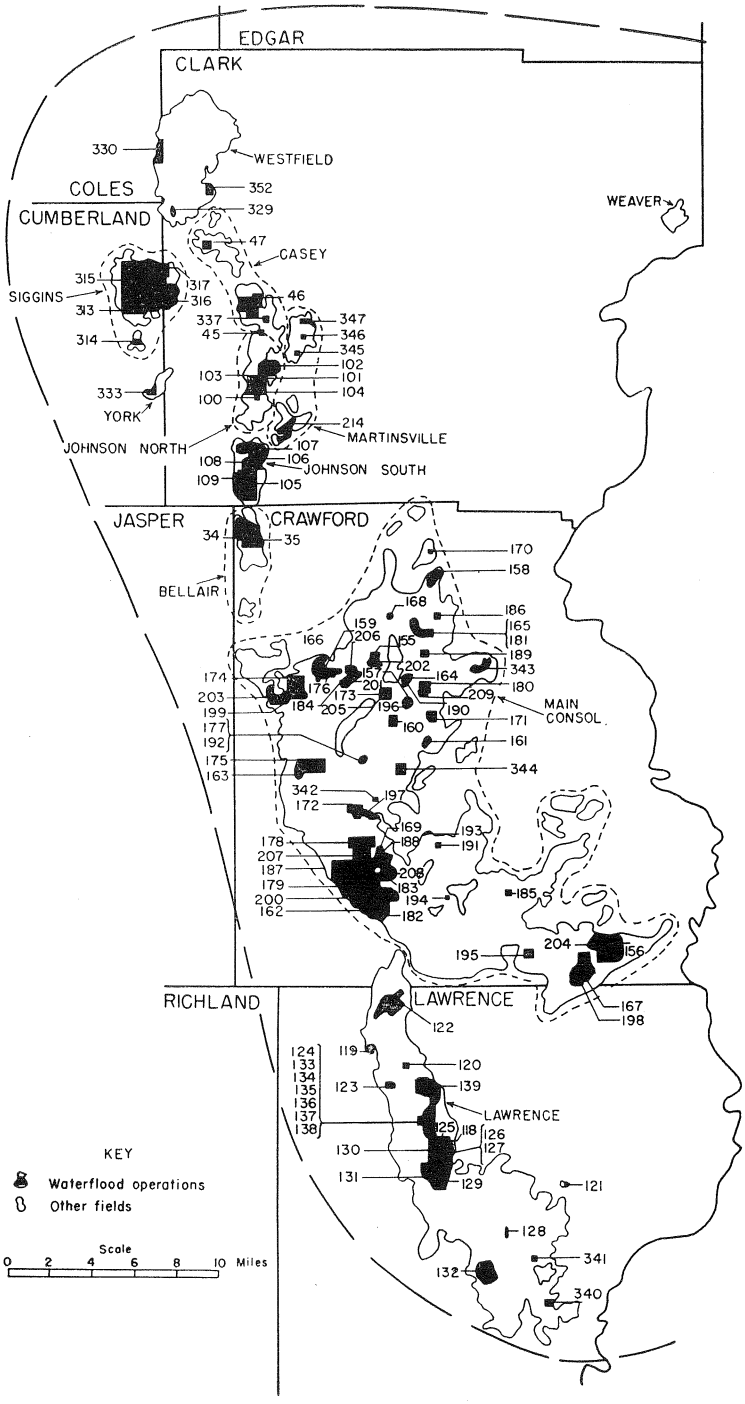


Fig. 28. — Detail of waterflood operations in Clark, Crawford and Lawrence counties.

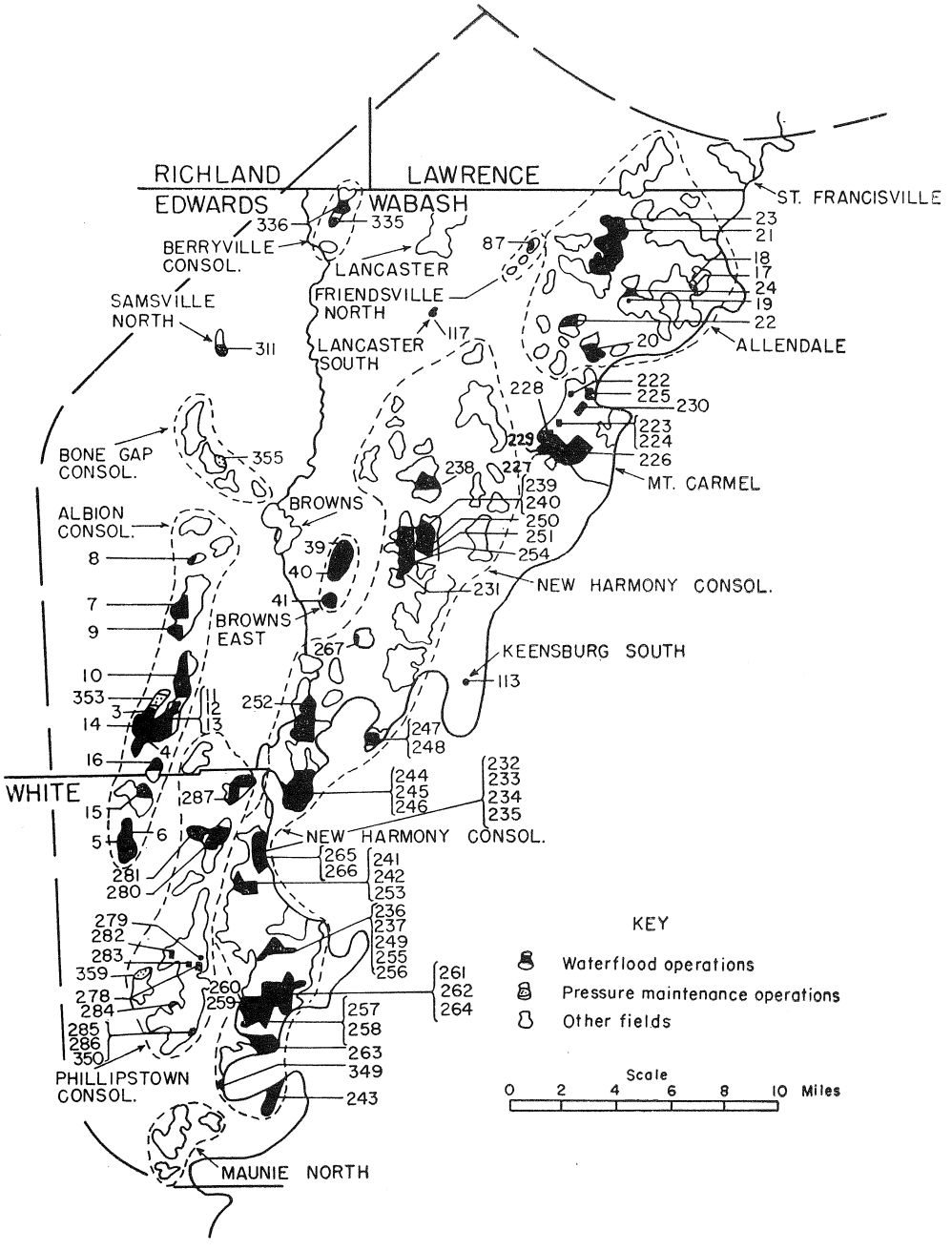


Fig. 29. — Detail of waterflood and pressure maintenance operations in Wabash, Edwards, and White counties.

TABLE 14.—ILLINOIS WATERFLOOD PROJECTS

Map No.	Field	Operator	Project	Formation Sand(S), Lime(L)	General County
1	Aden Consol.	Texas	Aden	Aux Vases(S)	Wayne
2	Aden Consol.	Texas	Aden	McClosky(L)	Wayne
3	Albion Consol.	Calvert	South Albion	Upper Biehl(S)	Edwards
4	Albion Consol.	Carter	Albion*	Lower Bridgeport(S)	Edwards
5	Albion Consol.	Concho	North Crossville	Cypress(S)	White
6	Albion Consol.	Concho	North Crossville	Tar Springs(S)	White
7	Albion Consol.	Continental	Stafford	McClosky(L)	Edwards
8	Albion Consol.	First Nat'l Pet. Trust	Brown	Aux Vases(S)	Edwards
9	Albion Consol.	Jarvis Bros. & Marcell	A. C. Wick	McClosky(L)	Edwards
10	Albion Consol.	Superior	South Albion S.R.P. # 1	Biehl(S) Waltersburg(S)	Edwards
11	Albion Consol.	Superior	South Albion Unit # 2	Aux Vases(S)	Edwards
12	Albion Consol.	Superior	South Albion Unit # 2	Biehl(S)	Edwards
13	Albion Consol.	Superior	South Albion Unit # 2*	Bridgeport(S)	Edwards
14	Albion Consol.	Tidewater	S. W. Albion	Biehl(S)	Edwards
15	Albion Consol.	Yingling	Biehl Unit # 1	Biehl(S)	White
16	Albion Consol.	Yingling	Biehl Unit # 2	Biehl(S)	Edwards
17	Allendale	Ashland	Allendale	Biehl(S)	Wabash
18	Allendale	Bass & Hamman	Gilliate	Biehl(S)	Wabash
19	Allendale	Bass & Hamman	White	Biehl(S)	Wabash
20	Allendale	G. S. Engle	Patton	Cypress(S)	Wabash
21	Allendale	Forest	Allendale	Biehl & Jordan(S)	Wabash
22	Allendale	Indiana Farm Bureau	Woods	Biehl(S)	Wabash
23	Allendale	B. Kidd	Allendale	Biehl & Jordan(S)	Wabash
24	Allendale	F. C. Luecking	Mataliano et al.	Biehl(S)	Wabash
25	Assumption Consol.	Continental	Benoist	Benoist(S)	Christian
26	Assumption Consol.	Continental	Devonian*	Devonian(L)	Christian
27	Assumption Consol.	Continental	Rosiclare*	Rosiclare(S)	Christian
28	Barnhill	Ashland	Barnhill	McClosky(L)	Wayne
29	Barnhill	Wausau	Simpson*	Aux Vases(S)	Wayne
30	Barnhill	Wausau	Simpson*	Ohara(L)	Wayne
31	Bartelso	T. R. Kerwin	Belle Oil	Cypress(S)	Clinton
32	Bartelso	Robben Oil	Robben Oil Unit	Cypress(S)	Clinton
33	Bartelso	H. S. Woodard	H. S. Woodard	Cypress(S)	Clinton
34	Bellair	Forest	Bellair	Bellair "500"(S)	Crawford
35	Bellair	Pure	Fulton	Bellair "500"(S)	Crawford
36	Benton	Shell	Benton Unit	Tar Springs(S)	Franklin
37	Boyd	Superior	Boyd Field Unit	Aux Vases(S)	Jefferson
38	Boyd	Superior	Boyd Field Unit	Benoist(S)	Jefferson
39	Browns East	T. W. George	Bellmont	Cypress(S)	Wabash
40	Browns East	Magnolia	Bellmont	Cypress(S)	Wabash

REPORTED OPERATING DURING 1956

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.-R.		Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	
8, 9, 16, 17, 20	3S- 7E	Aug. 1946	599,065	2,939,793	114,542	646,247	754,650	2,048,365*	1
8, 9, 16, 17, 20	3S- 7E	Aug. 1946	589,840	3,134,259	88,164	414,860	*	*	2
1, 2	3S-10E	Dec. 1955	141,549	141,549	32,384	32,384*	19,431	19,431	3
11, 12	3S-10E	Dec. 1947	28,456†	456,264†	1,864†	66,305†	24,908†	363,532†	4
26, 27, 34, 35	3S-10E	Oct. 1952	453,208	2,489,722	45,797	258,526	260,245	728,215	5
26, 27, 34, 35	3S-10E	Oct. 1952	139,308	554,267	8,424	46,055*	12,482	45,385	6
13	2S-10E	May 1943	151,470	625,159	3,490	37,280*	151,470	625,159	7
6	2S-11E	Apr. 1952	*	*	—	—	—	—	8
24	2S-10E	July 1951	*	*	—	—	—	—	9
25, 36 30, 31	2S-10E 2S-11E	Jan. 1955	385,709	913,805	161,932	220,116	167,308	256,695*	10
1, 2, 11, 12	3S-10E	Aug. 1956	73,803	73,803	*	*	*	*	11
1, 2, 11, 12	3S-10E	Aug. 1956	104,443	104,443	1,208	1,208*	8,637	8,637*	12
1, 2, 11, 12	3S-10E	July 1946	171,827	2,103,158	†	430,084‡	†	2,383,302‡	13
2, 11, 14	3S-10E	May 1956	518,265	518,265	67,903	67,903*	59,470	59,470	14
23	3S-10E	Aug. 1949	567,665	3,329,487	96,716	761,469	206,393	290,016*	15
14	3S-10E	Dec. 1950	408,102	1,891,386	37,606	397,330	216,865	416,071*	16
13	1N-12W	Sept. 1955	38,316	49,330	20,378	23,741*	—	—	17
13	1N-12W	Nov. 1954	119,657	180,707	26,720	36,809	—	—	13
22	1N-12W	June 1952	49,376	60,325*	3,175	15,830†	—	—	19
28	1N-12W	— 1953	134,481	385,187	25,495	63,610*	24,570	52,620	20
3, 4, 9, 10	1N-12W	June 1955	3,838,246	5,327,845	287,877	388,258*	—	—	21
20	1N-12W	Nov. 1953	192,373	535,909	9,357	36,895*	216,000	432,000†	22
3	1N-12W	Sept. 1953	683,500	1,093,099	80,525	117,647	449,000	490,000	23
15	1N-12W	June 1952	—	45,050*	—	13,200*	—	22,800*	24
3, 4, 9, 10, 15, 16, 21	13N- 1E	July 1950	946,529	4,909,882	126,085	857,625*	293,127	1,472,082	25
9	13N- 1E	May 1955	271,784	424,808	12,321	12,321	2,454	3,943†	26
9, 10	13N- 1E	June 1955	78,438	115,788	49,778	55,155†	32,835	41,472	27
26, 34, 35	2S- 8E	Jan. 1951	806,790	3,969 480	177,346	911,926	—	—	28
27	2S- 8E	Oct. 1956	8,985	8,985	275	275	370	370	29
27	2S- 8E	Oct. 1956	9,553	9,553	535	535	355	355	30
4	1N- 3W	Apr. 1952	126,969	595,519	12,511	109,156*	91,236	—	31
4	1N- 3W	Nov. 1953	399,546	1,180,426	149,004	420,887*	147,932	303,754	32
5, 8	1N- 3W	Jan. 1954	285,041	680,280*	54,873	144,653†	163,914	327,993	33
2, 11, 12	8N-14W	July 1948	1,531,553	14,215,250	50,008	540,844	—	—	34
1, 2, 11, 12	8N-14W	July 1948	3,734,878	32,515,038	86,094	953,995	2,046,883	13,049,710	35
23, 24, 25, 26, 35, 36 18, 30, 31 18, 19, 20, 30 13, 24, 25 18, 19, 20, 30 13, 24, 25	6S- 2E 6S- 3E 1S- 2E 1S- 1E 1S- 2E 1S- 1E	Nov. 1949 Aug. 1954 Jan. 1955*	11,486,277 1,220,617 5,488,949	74,128,873 2,475,309 9,005,412†	733,647 * 353,208	9,449,418 * 467,059†	9,473,019 * 3,545,123	35,250,678 * 5,705,906†	36 37 38
1, 2, 11, 12	2S-14W	Jan. 1951	459,459	3,009,463	41,472	905,190*	325,422	1,122,091	39
2, 11	2S-14W	Nov. 1947	52,757	768,474	24,249	551,134*	40,800	218,827	40

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head pressure PSI
	Inj.	Prod.			Subjected to inj.	Total				
1	13	16	Perimeter	—	640	1,050	Penn. Sand	Brine	12.6	1,245
2	12	15	Perimeter	—	560	920	Penn. Sand	Brine	37.4	1,167
3	2	6	Perimeter	10	110	130	Shallow Sand & Produced	Brine	10.8	—
4	1	5	Flank	—	74	106	Produced	Brine	—	—
5	8	21	Perimeter	10	250	300	River & Produced	Fresh & Brine	12.9	1,340
6	4	5	5-Spot	10	100	100	River & Produced	Fresh & Brine	15.9	1,340
7	1	1	—	—	80	80	Produced	Brine	103.7	0
8	1	1	Spot	10	30	20	Hardinsburg	Brine	—	*
9	1	6	—	—	140	140	—	Brine	—	*
10	1	21	Flank	—	222	222	Shallow Sand	Fresh	—	1,200
	5				325	325	& Produced	& Brine		
11	6	11	5-Spot	20	243	243	Shallow Sand & Gravel & Produced	Fresh & Brine	8.8	—
12	3	5	—	—	79.3	79.3	Shallow Sand & Gravel & Produced	Fresh & Brine	15.7	300
13	2	14	Modified Flank	—	260	260	Shallow Sand & Gravel & Produced	Fresh & Brine	—	—
14	18	18	5-Spot	20	710	710	Shallow Sand & Produced	Fresh & Brine	7.7	305
15	3	13	Flank	—	220	220	River & Produced	Fresh & Brine	30.5	1,200
16	1	6	Flank	—	90	90	Penn. Sand	Brine	50.8	1,200
17	1	2	Irregular	—	20	20	Penn. Sand	Brine	7.0	0
18	3	1	Perimeter	—	20	30	Well 100′-150′ & Produced	Fresh & Brine	6.4	—
19	2	1	—	—	30	70	Well 100′-150′ & Produced	Fresh & Brine	4.0	—
20	4	7	—	25	130	130	—	Fresh	5.8	3,273
21	25	24	Modified 5-Spot	25	300	—	Gravel Beds & Produced	Fresh & Brine	—	750
22	5	7	—	10	147	147	Produced	Brine	7.0	50
23	3½	4	Irregular	20	70	75	Shallow Sand	Fresh	16.7	—
24	1	2	—	—	44	44	Shallow Sand	Fresh	—	—
25	14	25	Perimeter	—	450	450	Creek & Produced	Fresh & Brine	14.6	938
26	4	8	5-Spot	—	140	140	Creek & Produced	Fresh & Brine	14.3	127
27	1	9	Line Drive	—	80	100	Creek & Produced	Fresh & Brine	17.9	390
28	8	16	Irregular	—	260	320	Cypress	Brine	30.7	*
29	1†	4	—	—	40	160	Penn. Sand	Brine	8.9	None
30	1†	4	—	—	40	70	Penn. Sand	Brine	16.6	None
31	5	5	5-Spot	5	40	40	Tar Springs	Brine	4.6	550
32	12	19	5-Spot	10	200	200	Bethel	Brine	7.6	510
33	5	9	5-Spot	10	80	75	Bethel & Produced	Brine	10.4	550
34	56	51	5-Spot	4.4	200	—	Gravel Bed	Fresh	2.0	285
35	131	125	5-Spot	4.4	443	443	Gravel Bed	Fresh	3.7	285
36	107	119	5-Spot	20	2,200	2,200	Lake & Produced	Fresh & Brine	8.4	460
37	12	*	Peripheral	—	569	569	Surface & Produced	Fresh & Brine	24.1	400
38	8	85	Peripheral	—	1,564	1,564	Surface & Produced	Fresh & Brine	108.7	800
39	18	16	5-Spot	20	290	330	Shallow Sand	Fresh & Brine	5.4	1,450
40	3	11	Line Drive	10	169	190	Tar Springs	Brine	—	—

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
3,200	10	22	150	35.4	—	*Includes Aden McClosky water production.	1
3,350	3.6	—	—	35.4	6.5 @ 100°F.	*Water production included with Aden Aux Vases flood.	2
2,075	18	20	200	33.4	—	*Includes primary production since start of flood.	3
1,900	13	20	305	35	6.0 @ 111°F.	*Project included in Superior Albion Unit No. 2 after June 30, 1956. †As of 6-30-56.	4
2,850	12	18	—	37	—		5
2,460	6	18	—	37	—	*Corrected figure.	6
3,222	4	16.3	898	39	—	*Includes primary production since start of flood.	7
3,005	21	—	—	—	—	*Dump flood.	8
3,150	30	—	—	37	—	*Dump flood.	9
2,025	7.1	18.6	807		5.4 @ 85°F.	*Corrected figure.	10
2,400	12.3	18.5	74	36	4.7 @ 90°F.		
2,550	10	20.6	53	37.5	4.3 @ 98°F.	*Included in Biehl production.	11
1,485	15.8	18.2	326	37.3	4.5 @ 84°F.	*Includes Bridgeport & Aux Vases production since 8-1-56.	12
1,900	12.2	20.2	323	35.7	5.5 @ 83°F.	*Previously abandoned—reinstated as an active flood during 1956. †Included in Biehl production. ‡As of 1-1-56.	13
1,850	16	18	150	32.2	—	*Includes primary production since start of flood.	14
2,000	17	20.2	265	37.6	5.3 @ 88°F.	*Since 1-1-55.	15
1,950	22	19.3	303	35.8	6.0 @ 84°F.	*Since 1-1-55.	16
1,475	15	—	—	36	—	*Includes primary production since start of flood.	17
1,490	17	—	—	—	—		18
1,450	17	—	—	—	—	*Since 7-1-55. Does not include dump flood injection. †Since 1-1-54.	19
2,000	16	—	—	34.8	—	*Includes primary production since 1-1-54.	20
1,500	B-15	17.7	390	37	12.3 @ 60°F.	*Corrected figure. Includes primary production since acquisition of properties for water flooding.	21
	J-13	14.9	100				
1,520	15	—	—	28.4	8.5 @ 32°F.	*Includes primary production since start of flood. †Since 1-1-55.	22
1,490	32	16.5	600	37	7.6 @ 79°F.		23
1,385	15	—	—	34.5	—	*As of 1-1-54.	24
1,050	12.7	19.4	102.5	39.8	—	*Corrected figure.	25
2,280	13	12	—	39.3	1.8 @ 88°F.	*Pilot flood. †Due mainly to casing leak in one well.	26
1,150	12	22	561	39.3	2.6 @ 78°F.	*Pilot flood. †Corrected figure.	27
3,350	9	—	—	39	—	*Controlled dump flood.	28
3,253	14	18.7	42	38	7 @ 85°F.	*Pilot flood. †Dual injection well.	29
3,323	8	20.1	108	39	—	*Pilot flood. †Dual injection well.	30
971	15	22.2	165	37	6.3 @ 71°F.	*Includes primary production since start of flood.	31
980	12	20	110	36.9	6.3 @ 71°F.	*Includes primary production since start of flood.	32
970	15	21	210	36	—	*Corrected figure. †Includes primary production since start of flood.	33
550	38	17.1	148	32.4	16 @ 77°F.	Previously subjected to gas injection.	34
560	21	18.6	149	32	18.7 @ 77°F.		35
2,100	35	19	65	40.4	3.5 @ 86°F.		36
2,130	11.9	21.4	240	36.8	4.4 @ 90°F.	*Included with Boyd Field Unit Benoist. Previously used for gas storage.	37
2,065	17.3	17.5	173	39.5	3.2 @ 90°F.	*Pressure maintenance from 6-45 to 1-55. †Since 1-1-55; includes Aux Vases production.	38
2,570	13	—	—	—	—	*Includes primary production since start of flood.	39
2,570	—	—	—	36	4.6 @ 90°F.	*Includes primary production since start of flood.	40

TABLE 14.—

Map No.	Field	Operator	Project	Formation Sand(S), Lime(L)	County
					General
41	Browns East	Magnolia	South Bellmont Unit	Cypress(S)	Wabash
42	Bungay Consol.	Texas	Blairsville Unit	Aux Vases(S)	Hamilton
43	Calhoun Consol.	Ashland	Calhoun	McClosky(L)	Richland
44	Calhoun Consol.	Phillips	Bohlander Unit	McClosky(L)	Richland
45	Casey	F. A. Bridge	States Oil	Casey(S)	Clark
46	Casey	Forest	Casey	Casey(S)	Clark
47	Casey	Franchot	North Casey	Casey(S)	Clark
48	Centerville East	Sun	East Centerville	Tar Springs(S)	White
49	Centerville East	Tekoil	East Centerville Area	Cypress(S)	White
50	Centerville East	Tekoil	East Centerville Area	Tar Springs(S)	White
51	Centralia	Shell	Centralia	Benoist & Cypress(S)	Clinton
52	Clay City Consol.	Ashland	Boos East	McClosky(L)	Jasper
53	Clay City Consol.	Ashland	Noble North	McClosky(L)	Richland
54	Clay City Consol.	Calvert	East Noble Unit	Rosiclare(L)	Richland
55	Clay City Consol.	Calvert	North Clay City Unit	Rosiclare(L)	Clay
56	Clay City Consol.	Calvert	Wilson	Rosiclare(L)	Wayne
57	Clay City Consol.	Demier*	—	Rosiclare(L)	Wayne
58	Clay City Consol.	F. & W.	Miller-Lambrich	Ohara, Rosiclare, McClosky(L)	Wayne
59	Clay City Consol.	General American	Covington Unit	Ste. Genevieve Lime Series	Wayne
60	Clay City Consol.	Gulf	Winona*	McClosky & L. Ohara(L)	Wayne
61	Clay City Consol.	Phillips	Minnie	Rosiclare(S)	Clay
62	Clay City Consol.	Pure	Jordan School Pool Unit	Aux Vases(S)	Wayne
63	Clay City Consol.	Pure	N. E. Jordan School Pool Unit*	Aux Vases(S)	Wayne
64	Clay City Consol.	Pure	Old Noble Area	McClosky(L)	Richland
65	Clay City Consol.	Pure	Van Fossan Unit	McClosky(L)	Wayne
66	Clay City Consol.	Robinson & Puckett	North Puckett Unit	Aux Vases(S)	Wayne
67	Clay City Consol.	Robinson & Puckett	N. E. McClosky #1	McClosky (L)	Jasper
68	Clay City Consol.	Robinson & Puckett	South Puckett Unit 1	Aux Vases(S)	Wayne
69	Clay City Consol.	Robinson & Puckett	S. W. McClosky Unit 2	McClosky(L)	Jasper
70	Clay City Consol.	Toklan	—	Aux Vases(S)	Wayne
71	Concord	Great Lakes Carbon	McClosky	Rosiclare & McClosky(L)	White
72	Concord	Barron Kidd	Kerwin Concord	McClosky(L)	White
73	Concord	Phillips	Dallas Lease	Rosiclare & McClosky(L)	White
74	Concord	Phillips	Kerwin Lease	Rosiclare & McClosky(L)	White
75	Concord	Phillips	Tuley Lease	McClosky(L)	White
76	Concord North	C. E. Brehm	Concord N.	Aux Vases(S)	White
77	Cordes	Shell	Cordes Co-op.*	Benoist(S)	Washington
78	Dale Consol.	Inland	N. Rural Hill Unit	Aux Vases(S)	Hamilton
79	Dale Consol.	Phillips	Cantrell Unit	Aux Vases(S)	Hamilton
80	Dale Consol.	Phillips	West End	Aux Vases(S)	Hamilton & Saline

(Continued)

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.-R.		Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	
11, 14	2S-14W	Apr. 1956	149,700	149,700	15,164	15,164	1,956	1,956	41
16, 17, 20, 21	4S- 7E	June 1948	1,250,074	4,579,541	201,766	472,533	335,621	724,466	42
13	2N- 9E								
7, 18	2N-10E	Sept. 1951	274,500	988,675*	16,341	96,609†	—	—	43
6, 7	2N-10E	June 1950	265,430	1,702,444	20,503	211,328	285,881	1,228,458	44
26	10N-14W	Jan. 1954	—	4,910*	—	—	—	—	45
14, 15, 23	10N-14W	Mar. 1950	628,457	5,308,174	36,772	362,028	—	—	46
33	11N-14W								
4	10N-14W	Dec. 1953	172,403	611,178	None	None	*	*	47
7	4S-10E	Oct. 1950	30,560	263,436	2,351	38,203	26,070	120,800	48
18	4S-10E	Mar. 1956	232,660	232,660	61,263*	61,263*	90,614*	90,614*	49
18	4S-10E	May 1956	82,635	82,635	*	*	*	*	50
35, 36	2N- 1W								
1, 2, 12	1N- 1W	May 1956	2,813,274	2,813,274	135,554	135,554	161,622	161,622	51
2	6N-10E	Sept. 1953	66,700	168,833*	2,929	11,142	—	—	52
35	4N- 9E	July 1954	74,803	210,578	666	3,202*	—	—	53
2, 10, 11	3N- 9E	May 1955	431,858	552,827	18,403	18,716*	139,144	143,819	54
5, 8	3N- 8E	June 1955	217,295	283,725	26,993	30,994*	66,487	73,167	55
15	1S- 8E	Apr. 1955	63,700*	118,900	1,712	3,696†	—	—	56
22	2N- 8E	Feb. 1954	104,400	171,400†	29,865	55,431†	104,400	—	57
29	1N- 8E	Aug. 1950	*	*	12,000	112,000	—	—	58
25	1S- 6E								
32, 33, 19, 20, 28, 30, 31, 29	1S- 7E	June 1955	3,871,042	5,886,230*	311,400	313,081	507,129	588,239*	59
12	1S- 8E	Aug. 1955	9,000	25,000*	None	None	178	300*	60
24	3N- 7E	July 1953 *	36,600	133,548*	3,737	77,217*	32,100	412,498*	61
3	1N- 7E								
27, 34, 35	2N- 7E	Oct. 1955	1,768,427	2,216,603	113,757	202,868*	83,770	156,008*	62
25, 26, 35, 36	2N- 7E	Oct. 1956	268,672	268,672	None	None	None	None	63
4, 5, 8, 9	3N- 9E								
32, 33, 34	4N- 9E	Aug. 1954	4,484,259*	13,154,006†	432,398*	718,190†	1,483,339*	1,926,635†	64
14, 15, 22, 23	1N- 8E	Jan. 1953	1,432,445	6,969,052	100,534	241,655	629,639	1,172,747	65
9	2S- 8E	Jan. 1956	221,566	221,566	4,073	4,073	2,082	2,082	66
13, 14, 24	7N-10E	May 1953	210,313	675,799	29,350	111,426	43,236	75,334	67
16	2S- 8E	Aug. 1954	584,178	1,531,144	104,090	161,828	248,554	286,623	68
23, 26	7N-10E	May 1953	354,856	1,668,581	94,017	255,494	103,849	283,791	69
16, 17	1N- 7E	Feb. 1955	551,731	551,731*	4,530	4,530*	—	—	70
28	6S-10E	June 1953	—	233,490*	—	5,132*	—	44,366*	71
21	6S-10E	Jan. 1955	108,450	161,863	5,695	7,463	25,500	38,850	72
28	6S-10E	Aug. 1953	55,935	247,168	481	2,961	18,333	42,228	73
21	6S-10E	Feb. 1953	103,800	477,352	5,146	14,932	30,438	115,221	74
21	6S-10E	July 1951	94,943	1,230,569	9,790	73,830	50,973	1,019,481	75
10	6S-10E	Dec. 1952	30,500	212,421	9,306	35,013	—	—	76
14, 15, 22, 23	3S- 3W	Aug. 1950	1,028,033	7,742,287	154,688	2,139,456†	1,028,794	5,143,696	77
5, 6, 7, 8	6S- 6E	Feb. 1952	556,637	3,202,191	23,555	281,425*	460,735	1,419,676*	78
5, 6, 7	7S- 5E	Aug. 1955	309,879	441,913	34,875	34,875	26,298	26,298	79
17, 19, 20	7S- 5E	Jan. 1956	223,652	223,652	14,000	14,000	11,639	11,639	80

TABLE 14.—

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head press-ure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
41	5	8	5-Spot	20	75	130	Shallow Sand	Fresh	—	—
42	10	12	—	20	640	640	Penn. Sand	Brine	22.1	1,409
43	3	7	Irregular	—	140	195	Cypress	Brine	41.8	*
44	3	7	Irregular	—	160	280	Upper Sand & Produced	Brine	24.2	1,258
45	2	—	—	4.4	—	—	Shallow Sand	Fresh	—	—
46	76	66	5-Spot	4.4	280	—	Gravel Bed	Fresh	2.3	220
47	15	10	5-Spot	4.4	40	560	Gravel Bed & River	Fresh	1.6	120
48	1	5	Flank	—	80	—	Gravel Bed & Produced	Fresh & Brine	—	1,190
49	5	22	5-Spot	10	130	280	Palestine Sand	Brine	10.3	886
50	4	22	5-Spot	10	130	280	Palestine Sand	Brine	10.5	850
51	97	109	5-Spot	20	B. 1,500 U.C.700 L.C.200	B. 1,500 U.C.950 L.C.200	Devonian & Produced	Brine	—	255
52	2	4	Flank	—	40	80	Gravel Bed & Produced	Fresh & Brine	—	—
53	1	1	—	—	20	40	Cypress Sand	Brine	41.0	—
54	3	19	Peripheral	20	280	280	Cypress Sand	Brine	35.9	—
55	2	8	Peripheral	20	460	460	Cypress Sand	Brine	59.5	—
56	1	1	Peripheral	20	40	40	Cypress Sand	Brine	—	—
57	1	2	—	20	60	—	—	Brine	—	None
58	4	4	Irregular	10	120	180	Cypress & Produced	Brine	—	—
59	28	24	5-Spot	40	1,967	2,100	Cypress & Penn. Sand	Brine	27.1	643
60	1	1	None	20	12.5	50	Tar Springs	Brine	—	—
61	1	1	—	—	20	20	Produced	Brine	3.3	None
62	34	39	5-Spot	17.6	695	695	Penn. Sand	Brine	9.8	700
63	22	19	5-Spot	20	380	540	Penn. Sand	Brine	9.3	700
64	13	49	Line Drive	100	1,350*	1,350*	Cypress	Brine	94.5	0
65	16	29	Line Drive	113	1,810	1,810	Chester Sands	Brine	24.5	0–500
66	5	6	Altered Peripheral	—	172	172	Sewage Effluent & Produced	Fresh & Brine	15.2	600
67	2	6	Modified Line	—	235	235	Shallow Sand & Produced	Fresh & Brine	46.5	1,600
68	7	11	Altered Peripheral	—	243	243	Sewage Effluent & Produced	Fresh & Brine	15.4	742
69	5	15	Modified Line	—	415	415	Shallow Sand & Produced	Fresh & Brine	23.7	1,600
70	5	27	—	—	680	777	Penn. Sand & Produced	Fresh & Brine	50.4	880
71	3	8	Modified Peripheral	—	140	150	Gravel Bed	Fresh	—	—
72	1	3	—	10	30	40	Cypress & Shallow Sand	Fresh & Brine	*	*
73	1	3	—	—	40	60	Shallow Sand & Produced	Fresh & Brine	5.1	35
74	1	3	—	—	50	100	Shallow Sand & Produced	Fresh & Brine	9.5	0
75	1	5	—	—	65	120	Upper Sand & Produced	Brine	8.7	0
76	1	3	Irregular	—	40	40	Gravel Bed	Fresh	7.0	904
77	36	67	5-Spot	20	640	640	Pottsville	Brine	5.6	381
78	7	6	5-Spot	20	310	325	Cypress	Brine	—	1,122
79	3	7	5-Spot	10	50	110	Penn. 1700′	Brine	18.9	393
80	2	7	Irregular	10	40	90	Penn. 1700′	Brine	21.1	222

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,560	—	—	—	—	—		41
3,330	15.5	19.6	92	37.5	1.8 @ 99°F.		42
3,150	6	—	—	37	—	*Dump flood. †Includes primary production since start of flood.	43
3,130	10	11.2	67.5	39	—		44
444	20	—	—	—	—	*As of 1-1-55.	45
450	10	17.4	173	31.9	16.6 @ 70°F.	Previously subjected to gas injection.	46
290	20	21.5	400	26.6	50 @ 60°F.	*Negligible.	47
2,530	6	—	—	36.6	—		48
2,845	15	15.4	12.2	36.2	3.4 @ 110°F.	*Includes primary production from both Cypress and Tar Springs since 3-1-56.	49
2,460	8	15.9	97.8	35.0	4.1 @ 105°F.	*Included in Cypress production figures.	50
B.1,350	B. 17	19.6	186	38	—		51
C.1,200	U.C. 9	19.3	80				
	L.C.10	21.1	225				
2,645	8	—	—	40	3.2 @ 75°F.	*Injection shut down from 12-55 to 6-56.	52
3,000	5	—	—	38	—	*Includes primary production since start of flood.	53
2,950	11	—	—	38	—	*Includes primary production during 1956.	54
3,010	5	—	—	36.4	—	*Includes primary production during 1956.	55
3,159	10	—	—	—	—	*Estimated injection. †Includes primary production from 4-55 to 1-56.	56
3,033	10	—	—	—	—	*Previously operated by Slagter Prod. Co. †Since 1-1-55, Nov. & Dec., 1955 not included. Includes primary production.	57
3,060	5	—	—	—	—	*Dump flood.	58
3,200	14	—	80	39	—	*Corrected figures.	59
3,115	8	12	—	40.1	3.04 @ 100°F.	*Abandoned October, 1956.	60
2,990	30	—	—	38.5	—	*Previously affected by dump flood. Surface injection began 7-53.	61
2,950	14.6	19	73	35	—	*Corrected figure. Previously subjected to gas injection.	62
2,950	15.5	19	106	37	—	*Includes dump flood previously operated by I. J. Neal. Previously subjected to gas injection.	63
2,930	10	—	—	36	—	*Includes data of adjacent Ohio flood. †Corrected figure.	64
3,070	10	13	1–300	36	—		65
3,150	8	19	115	39	3.7 @ 100°F.		66
2,530	6.2	14	—	39.8	3.7 @ 100°F.		67
3,200	14.8	20	80	39	3.7 @ 100°F.		68
2,580	8.2	14	—	39.8	2.9 @ 92°F.		69
3,000	6	19	—	38	—	*Since 1-1-56.	70
2,980	22	—	—	37.5	—	*As of 1-1-55.	71
3,003	16	—	—	—	—	*Dump flood.	72
2,960	30	—	—	36	—		73
2,960	30	—	—	36.5	—		74
2,960	30	—	—	36.5	—		75
2,950	12	21.1	218	35.1	5 @ 103°F.		76
1,230	14	20	250	37	—	*Cooperative: Shell, Magnolia, McBride, Horton. †Corrected figure.	77
3,125	14.7	23.9	—	—	—	*Cumulative since 1-1-53.	78
3,200	15	—	—	38	—		79
3,150	15	—	—	36.5	—		80

TABLE 14.—

Map No.	Field	Operator	Project	Formation Sand(S), Lime(L)	County
					General
81	Dale Consol.	Texas	West Dale Unit	Aux Vases(S)	Hamilton
82	Divide East	Gulf	Holloway	McClosky(L)	Jefferson
83	Dundas East	Gulf	Bessie Lease*	McClosky(L)	Jasper
84	Dundas East	Gulf	East Dundas Unit	McClosky(L)	Richland
85	Dundas East	Sohio	Dundas East	Ohara(L)	Jasper
86	Enfield South	Ryan	S. Enfield Unit #2	McClosky(L)	White
87	Friendsville North	Magnolia	J. L. Litherland	Biehl(S)	Wabash
88	Goldengate Consol.	Cities Service	Goldengate	McClosky(L)	Wayne
89	Goldengate Consol.	Cities Service	Goldengate	Ohara & Rosiclare(L)	Wayne
90	Herald Consol.	C. E. Brehm	Herald West	Waltersburg(S)	White
91	Herald Consol.	Mabee & Allen	Ackerman Unit	Aux Vases(S)	White
92	Ingraham	Carter	Ingraham	Rosiclare(L)	Clay
93	Inman East Consol.	Carter	Big Barn	Upper Cypress(S)	Gallatin
94	Inman East Consol.	Carter	Kerwin-Crawford	Clore, Cypress, Hardinsburg, Palestine, Tar Springs, Waltersburg(S)	Gallatin
95	Inman East Consol.	Carter	West Unit	Waltersburg, Cypress, Hardinsburg(S)	Gallatin
96	Inman East Consol.	Natural Resources	Big Barn*	Cypress(S)	Gallatin
97	Inman East Consol.	Natural Resources	Big Barn*	Tar Springs(S)	Gallatin
98	Inman East Consol.	Sun	Inman East	Tar Springs(S)	Gallatin
99	Inman West Consol.	Gulf	West Inman Unit	Cypress(S)	Gallatin
100	Johnson North	Bass & Hamman	North Johnson	Casey(S)	Clark
101	Johnson North	C. L. McMahon	Block "A"	Casey(S)	Clark
102	Johnson North	C. L. McMahon	Block "B"	Casey(S)	Clark
103	Johnson North	Oldfield*	V. Jones	Casey(S)	Clark
104	Johnson North	Tidewater	Clark County #1	Casey(S)	Clark
105	Johnson South	Forest	South Johnson	Upper Partlow(S)	Clark
106	Johnson South	Pure	Johnson Flood Extension #1	Upper Partlow(S)	Clark
107	Johnson South	Pure	Johnson Flood Extension #2	Clay Pool, Casey, Upper Partlow(S)	Clark
108	Johnson South	Pure	Pure-Kewanee	Upper Partlow(S)	Clark
109	Johnson South	Pure	Weaver-Bennett	Upper Partlow(S)	Clark
110	Johnsonville Consol.	Texas	Johnsonville Unit	Aux Vases(S)	Wayne
111	Johnsonville Consol.	Texas	Johnsonville Unit	McClosky(L)	Wayne
112	Junction	Alco*	Junction	Waltersburg(S)	Gallatin
113	Keensburg South	White & Vickery	A. P. Garst	Cypress(S)	Wabash
114	Keenville	Calvert	Keenville Unit	McClosky(L)	Wayne
115	Keenville	W. Duncan	Keenville Unit	Aux Vases(S)	Wayne
116	Kenner West	Phillips	West Kenner	Benoist & Cypress(S)	Clay
117	Lancaster South	Ashland	Lancaster South	Bethel(S)	Wabash
118	Lawrence	Bradley	C. M. Perkins	Bridgeport & Kirkwood (S)	Lawrence
119	Lawrence	Calvan American	Piper	Cypress(S)	Lawrence
120	Lawrence	Dearborn	Applegate	Jackson & Cypress(S)	Lawrence

(Continued)

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.-R.		Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	
11	6S- 6E	July 1951	413,758	2,205,415	84,093	263,394	222,811	668,711	81
21	1S- 4E	May 1955	109,743	160,834	2,754	2,754	5,316	5,316	82
23	5N-10E	May 1954	115,310	273,500	14,126	15,744	40,395	40,781	83
25, 26, 35, 36	5N-10E	Oct. 1956	40,230	40,230	None	None	None	None	84
14	5N-10E	Apr. 1955	316,900	616,200	53,656	64,883	303,710	346,431	85
28, 29	5S- 8E	Sept. 1956	46,387	46,387	None	None	—	—	86
1, 12	1N-13W	July 1947	75,907	603,023	1,741	141,832*	31,997	278,439	87
28, 32, 33	2S- 9E	Oct. 1953	231,995	642,805	1,320	9,246	119,023	230,646	88
28, 33	2S- 9E	Aug. 1956	54,265	54,265	413	413	1,193	1,193	89
28, 33	6S- 9E	Jan. 1955	40,067	96,426	28,610*	28,610*	—	—	90
4	7S-10E	Feb. 1956	29,978	29,978	None	None	—	—	91
4, 9	4N- 8E	Dec. 1956	1,859	1,859	None	None	2,843	2,843	92
11	8S-10E	Apr. 1954	13,818	63,084*	24,367	49,606	393	894	93
11, 14	8S-10E	June 1955	1,164,483	1,375,535	92,541	92,541	77,316	92,927	94
15	8S-10E	July 1956	541,135	541,135	31,715*	31,715	24,351	24,351	95
34	7S-10E								
2, 3, 4, 10, 11	8S-10E	Mar. 1954	467,338	1,461,836	248,253	583,141†	69,702	101,027	96
34	7S-10E								
2, 3, 4, 10, 11	8S-10E	Mar. 1954	2,225,268	6,300,100	713,745	1,230,583†	741,772	1,195,042	97
3	8S-10E	Mar. 1954	203,959	612,737	87,003	138,852	42,610	64,236	98
15, 16	8S- 9E	May 1955	490,710	862,706	93,691	93,691	12,760	13,290	99
2, 11	9N-14W	June 1953	186,691	915,604*	6,462	34,314	—	—	100
2	9N-14W	Apr. 1949	281,413	5,707,903	5,792	246,114	—	2,713,041*	101
35, 36	10N-14W	May 1951	182,619	1,078,587	8,838	56,829	137,060	337,925*	102
1, 3	9N-14W	Sept. 1951	—	75,475†	—	1,235†	—	2,438†	103
2	9N-14W	Feb. 1950	317,272	1,772,789	15,876	110,409	163,800	1,051,347	104
27, 34, 35	9N-14W	Mar. 1949	4,090,146	23,469,704	138,374	799,756	—	—	105
23, 26	9N-14W	Jan. 1954	2,091,977	4,900,170	163,158	367,448	1,711,219	2,804,706	106
23, 26	9N-14W	Nov. 1955	1,300,195	1,428,793*	16,764	16,862*	23,349	24,573*	107
22, 27	9N-14W	Jan. 1954	642,920	1,444,931	47,666	100,939	485,784	642,244	108
27	9N-14W	Jan. 1953	1,209,568	5,900,425	53,839	407,704	1,228,261	3,648,323	109
21, 26, 27, 28, 33, 34, 35	1N- 6E	Oct. 1956	283,388	283,388	None	None	None	None	110
3, 4	1S- 6E								
21, 26, 27, 28, 33, 34, 35	1N- 6E	Nov. 1954	3,554,256	6,893,778	300,634	533,782	1,479,203	2,474,152	111
3, 4	1S- 6E								
16	9S- 9E	May 1951	191,113	935,024	39,195	193,504†	118,908	308,686	112
27	2S-13W	Nov. 1954	74,384	99,040	5,899	14,400	—	—	113
27, 28, 33, 34	1S- 5E	Nov. 1956*	19,037	19,037	2,697†	2,697	10,460	10,460	114
28, 29	1S- 5E	Apr. 1954	375,798	887,237	114,594	214,241*	97,348	132,948	115
23	3N- 5E	Feb. 1952	1,908,953	5,456,165	120,048	218,631	376,515	555,289	116
21	1N-13W	Jan. 1955	26,570	50,014	8,384	16,998*	—	—	117
32	4N-12W	Feb. 1955	201,502 397,595	343,128* 671,128	94,817	102,499†	265,287	395,287	118
2, 11	4N-13W	Dec. 1953	16,403*	146,380*	512†	5,816†	—	—	119
7	4N-12W	Sept. 1952	280,275	442,770*	6,862	9,870*	—	3,600†	120

TABLE 14.—

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head press-ure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
81	3	12	Perimeter	10	295	295	Shallow Sand & Produced	Fresh & Brine	27.0	739
82	1	2	Edge Well	20	20	150	Produced	Brine	43.5	0
83	1	2	—	—	20	20	Cypress	Brine	—	0
84	3	6	None	40	220	360	Penn. Sand	Brine	—	380
85	4	7	Perimeter	10	102	180	*	Brine	27.1	0
86	1	3	None	—	60	90	150′ Sand	Fresh	98.7	1,620
87	2	3	5-Spot	10	13	40	Shallow Sand	Fresh	—	—
88	2	8	Irregular	105	159	210	Gravel Bed	Fresh	39.7	260
89	1	3	Irregular	50	50	80	Gravel Bed	Fresh	—	471
90	1	19	Pilot	—	40	250	Penn. Sand	Brine	5.5	—
91	1	2	—	—	146	146	Cypress	Brine	4.1	881
92	8	18	5-Spot	40	282	498	Penn. Sand	Brine	—	80
93	2	1	5-Spot	10	15	30	River	Fresh	3.2	1,105
94	37	36	5-Spot	20	358	435	Gravel Bed	Fresh	—	670
95	32	33	5-Spot	20	508	930	Gravel Bed	Fresh	—	166
96	50	50	Modified 5-Spot	20	664	664	Gravel Bed	Fresh	2.7	1,097
97	50	50	Modified 5-Spot	20	750	796	Gravel Bed	Fresh	8.1	1,017
98	2	2	5-Spot	10	40	40	Gravel Bed	Fresh	9.6	750
99	10	7	5-Spot	20	110	170	Penn. Sand	Brine	8.1	1,390
100	14	9	5-Spot	4.5	36	87	Gravel Bed & Produced	Fresh & Brine	1.7	—
101	13	8	5-Spot	4.4	125	—	Shallow Sand & Produced	Fresh & Brine	—	400
102	18	12	5-Spot	4.4	80	—	Shallow Sand & Produced	Fresh & Brine	—	400
103	3†	2	5-Spot	4.4	15	65	Shallow Sand	Fresh	—	—
104	17	25	5-Spot	4.4	81	102	Shallow Sand & Produced	Fresh & Brine	3.0	356
105	86	75	5-Spot	4.4	400	—	Produced	Brine	2.7	288
106	66	60	5-Spot	5	243	243	Produced	Brine	2.5	250
107	69	56	5-Spot	4.5	234	234	Produced	Brine	—	250
108	20	13	5-Spot	4.4	53	67	Produced	Brine	2.7	250
109	38	34	5-Spot	4.4	114	151	Produced	Brine	2.5	250
110	19	65	—	10	1,200	2,110	Penn. Sand	Brine	24.9	208
111	18	80	Perimeter	20	3,400	3,400	Weiler Sand	Brine	53.3	—
112	11	7	Irregular 5-Spot	10	263	263	Shallow Sand	Fresh	3.4	933
113	1	1	None	60	60	60	Surface Gravel	Fresh	13.6	43
114	3	16	Peripheral	10	180	220	Cypress & Produced	Brine	—	—
115	3	9	Perimeter	—	120	120	Shallow Sand	Fresh	26.4	1,350
116	12	15	Irregular 5-Spot	10	329	329	Penn. Sand & Produced	Brine	16.8	608
117	1	3	Irregular	—	30	30	Lower Tar Springs	Brine	7.3	673
118	17	15	5-Spot	10	80	100	Buchanan & Produced	Brine	1.7 2.8	400
119	4	8	5-Spot	10	12.5	144	Shallow Sand	Brine	—	—
120	4	1	5-Spot	10	—	225	Gravel Bed	Fresh	8.5	500

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
3,050	14	17	125	38	—	Previously subjected to gas injection.	81
2,805	6.9	18	—	36.6	3.35 @ 97°F.		82
2,941	14	16.6	775	37.8	2.47	*Previously reported as Dundas East project.	83
2,985	6	12.5	—	41.4	—		84
2,900	8	—	—	—	—	*Dump flood using Cypress water.	85
3,385	5	10.5	22	—	2.5 @ 103°F.		86
1,620	—	—	—	35.6	7.5 @ 86°F.	*Includes primary production since start of flood.	87
3,308	8	—	—	34	—		88
3,280	8	—	—	—	—		89
1,866	20	19.5	200	38	3.5 @ 60°F.	*Includes primary production since 1-1-56.	90
2,913	23	—	—	34	—		91
3,000	5.1	14.2	2,450	—	—		92
2,400	5.9	16.5	58	36.4	4.2 @ 92°F.	*Corrected figure.	93
1,670	5–17.7	15.5–19.6	75–959	—	—		94
2,000	4.5–11	16.5–19.6	5–109	—	—	*Includes 20,920 barrels accumulated at start of flood.	95
2,400	9.6	16.8	50	38	3.6 @ 63°F.	*Also includes J. L. Crawford, Sohio, Sun, Carter leases. †Includes primary production since start of flood.	96
2,100	15	17.5	137	37.7	3.6 @ 63°F.	*Also includes J. L. Crawford, Sohio, Sun, Carter leases. †Includes primary production since start of flood.	97
2,100	29	17.9	133	35.5	—		98
2,500	16.5	13.5	40	38.6	—		99
400	22	19.2	225	33	13.6	*Corrected figure.	100
450	10–30	20.8	399	33.9	19	*As of April, 1955. Previously subjected to gas injection.	101
480	22	18.3	66	33	10 @ 70°F.	*Does not include water production from 4-55 through 12-55. Previously subjected to gas injection.	102
440	19	19.8	252	34.5	17 @ 67°F.	*Formerly operated by H. V. Sherrill. †Project temporarily shut down since 2-15-54.	103
425	17	20.6	415	33.9	10.7 @ 70°F.	Subjected to gas injection 1946-47.	104
490	48	16.6	319	29.2	14.7 @ 77°F.	Previously subjected to gas injection.	105
465	35	18.9	312	29.7	21 @ 65°F.		106
420–500	19 15 30	20.6	294	—	—	*Corrected figures.	107
507	33	18.2	277	29.7	25.5 @ 65°F.	Previously subjected to air injection.	108
467	35.5	18.6	285	29.7	25.5 @ 65°F.		109
3,000	7.5	19.1	187	37.5	—		110
3,100	10	15.5	850	38.5	—		111
1,750	14	13.4	21.9	34.7	6.7 @ 81°F.	*Former operator J. A. Lewis. †Corrected figure, includes primary production since start of flood.	112
2,403	15	20.6	134	37.5	4.6 @ 91°F.		113
3,100	9	—	—	—	—	*Date of unitization 6-1-56. †Includes primary production since 11-1-56.	114
2,950	13	20	155	39	3.5 @ 97°F.	*Includes primary production since start of flood.	115
2,600	26	18	125	37.5	—		116
2,520	10	—	—	—	—	*Includes primary production since start of flood.	117
900 1,375	19 23	18 14.2	125 28	36	6.1 @ 60°F.	*Includes six line wells with Ohio. †Includes primary production since start of flood.	118
1,520	25	20.8	33	38.6	3.5 @ 86°F.	*As of 5-18-56. †As of 8-15-56.	119
1,320	22.7	20.1	62	34.7	4.3 @ 81°F.	Formerly operated by H. V. Sherrill. *Data for 1955 is not included. †As of 1-1-55.	120

TABLE 14.—

Map No.	Field	Operator	Project	General: Formation Sand(S), Lime(L)	General: County
121	Lawrence	W. Duncan	L. C. David	Paint Creek(S)	Lawrence
122	Lawrence	T. W. George	Klondike	Bethel(S)	Lawrence
123	Lawrence	W. W. Holden	Gray	Jackson, Bethel, Renault(S)	Lawrence
124	Lawrence	W. C. McBride	Crump "40"	Kirkwood(S)	Lawrence
125	Lawrence	W. C. McBride	Neal	Paint Creek, Kirkwood (S)	Lawrence
126	Lawrence	Murphy	Stoltz	Main (Second) Bridgeport(S)	Lawrence
127	Lawrence	Murphy	Stoltz	Kirkwood(S)	Lawrence
128	Lawrence	Ohio	Gillespie	McClosky(L)	Lawrence
129–134	Lawrence	Ohio	6 Projects	Bridgeport(S)	Lawrence
135–137	Lawrence	Ohio	3 Projects*	Kirkwood(S)	Lawrence
138–139	Lawrence	Ohio	2 Projects*	Kirkwood & Paint Creek(S)	Lawrence
140	Livingston	W. H. Krohn	—	Pennsylvanian(S)	Madison
141	Livingston	Neary & Cahill	C. & O. Henke	Pennsylvanian(S)	Madison
142	Louden	J. P. Babcock	Rhodes & McCloy	Paint Creek & Bethel(S)	Fayette
143	Louden	W. L. Belden	Hinton	Cypress(S)	Fayette
144	Louden	Burtschi	D. L. Burtschi	Cypress (Stein)(S)	Fayette
145	Louden	Carter	Louden	Chester Sands(S)	Fayette
146	Louden	Jarvis Bros. & Marcell	Homan	Cypress(S)	Fayette
147	Louden	B. Kidd	Louden	Weiler(S)	Fayette
148	Louden	J. A. Lewis	Louden Extension	Cypress(S)	Fayette
149	Louden	Mabee	Louden	Cypress(S)	Fayette
150	Louden	W. C. McBride	Stokes Weiler	Weiler (Cypress)(S)	Fayette
151	Louden	Shell	Louden North Unit	Cypress(S)	Fayette
152	Louden	Shell	Louden South Unit	Cypress(S)	Fayette
153	Louden	R. H. Troop	Durbin Area*	Cypress(S)	Fayette
154	Louden	R. H. Troop	Hiatt Unit	Cypress(S)	Fayette
155	Main Consol.	Arkansas Fuel*	North Morris	Robinson(S)	Crawford
156	Main Consol.	Ashland	Birds #1	Robinson(S)	Crawford
157	Main Consol.	Bell Bros.	Barrick	Robinson(S)	Crawford
158	Main Consol.	Calvan American	Bishop	Robinson(S)	Crawford
159	Main Consol.	Calvan American	Grogan	Robinson(S)	Crawford
160	Main Consol.	Calvan American	Mitchell	Robinson(S)	Crawford
161	Main Consol.	E. Constantin	J. S. Kirk	Robinson(S)	Crawford
162	Main Consol.	E. Constantin	Sanders	Robinson(S)	Crawford
163	Main Consol.	E. Constantin*	Short*	Robinson(S)	Crawford
164	Main Consol.	E. Constantin	Smith	Robinson(S)	Crawford
165	Main Consol.	E. Constantin*	Wood*	Robinson(S)	Crawford
166	Main Consol.	Forest	Oblong	Robinson(S)	Crawford
167	Main Consol.	D. W. Franchot	Birds	Robinson(S)	Crawford
168	Main Consol.	G. M. J.	Porterville	Robinson(S)	Crawford

(Continued)

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.–R.		Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	
8	3N–11W	Aug. 1956	9,221	9,221	None	None	—	—	121
25, 26, 35, 36	5N–13W	June 1952	1,601,849	4,402,125	190,642	564,864	17,700	—	122
13	4N–13W	May 1953	229,473	651,951	46,681	84,502*	134,897	204,562	123
19	4N–12W	Apr. 1956	150,468	150,468	20,081	20,081	—	—	124
29	4N–12W	June 1956	163,189	163,189	3,614	3,614	—	—	125
32	4N–12W	Jan. 1955	247,711	438,450	*	*	*	*	126
32	4N–12W	Jan. 1955	439,460	687,141	151,348*	223,503*	182,276*	212,000*	127
23	3N–12W	Nov. 1956	122,989	122,989	None	None	None	None	128
—	3, 4N–12W	Aug. 1948	8,650,859	36,545,635	932,829	5,282,995*	5,104,818	15,969,197	129–134
—	4N–12W	Mar. 1955	1,128,607	1,432,910	63,209	63,209	29,819	29,819	135–137
—	3, 4N–12W	Jan. 1952	3,975,528	11,633,862	1,013,966	2,248,898†	1,305,867	2,395,675	138–139
17	6N– 6W	July 1954	26,116	43,321	2,540	3,375	—	—	140
17, 20	6N– 6W	— 1952	—	—	—	—	—	—	141
27	8N– 3E	Jan. 1954	356,456	1,189,806	150,990	255,974*	122,561	163,619	142
32	7N– 3E	Sept. 1956	12,039	12,039	540	540	900	900	143
18	7N– 3E	Oct. 1953	56,401	224,766	18,751	90,974	—	—	144
—	7, 8N–3E	Oct. 1950	39,728,562	103,650,154	6,219,335	13,481,678	5,856,154	10,067,731	145
29, 32	7N– 3E	Mar. 1954	248,000	356,128	10,200	10,200	58,200	—	146
8	7N– 3E	Sept. 1954	53,023	174,233	21,553	34,463	67,540	92,960	147
2, 3 34, 35, 36	7N– 3E 8N– 3E	Dec. 1955	2,234,436	2,259,639	417,445	418,326*	290,855	293,316	148
28	7N– 3E	Aug. 1955	114,511	170,973	72	1,072	1,924	11,030	149
14	8N– 3E	Mar. 1956	127,848	127,848	None	None	338	338	150
20, 21	7N– 3E	Nov. 1956	141,176	141,176	—	—	3,054	3,054	151
21, 28, 29	7N– 3E	Mar. 1955	1,170,155	2,048,771	359,708	444,761	348,506	547,892	152
24	8N– 3E	Oct. 1956	25,080	25,080	—	—	—	—	153
29	7N– 3E	Sept. 1956	47,800	47,800	None	None	—	—	154
2	7N–13W	Apr. 1951	—	664,551†	—	26,276†	—	417,283†	155
9, 10, 15, 16	5N–11W	May 1954	2,889,962	7,926,170	94,950	210,184	—	1,210,048*	156
13	7N–13W	Oct. 1954	31,997	108,456*	None	None	—	—	157
20	8N–12W	Nov. 1953	782,337	1,021,220	6,884	11,492*	—	—	158
4, 9	7N–13W	Nov. 1953	109,480	302,993	439	1,537	—	—	159
24, 25	7N–13W	June 1953	191,820	459,950	18,357	41,160*	—	31,127†	160
29, 30, 31, 32 1, 2, 3	7N–12W 5N–13W	Aug. 1951	190,837	657,359	11,854	34,884	75,240	223,470*	161
26, 34, 35, 36 5, 6	6N–13W 6N–13W	Aug. 1952	1,167,523	5,193,973	18,991	75,964	470,520	1,419,920*	162
31, 32	7N–13W	Feb. 1952	†	†	†	†	†	†	163
7 12	7N–12W 7N–13W	Mar. 1954	60,810	337,332	677	1,474	360	1,025	164
31, 32	8N–12W	Aug. 1952	†	†	†	†	†	†	165
5, 8, 9	7N–13W	Aug. 1956	280,574	280,574	9,479	17,195*	—	—	166
21, 22	5N–11W	June 1951	2,818,090	9,946,125*	140,243	534,175*	200,000	600,000	167
25, 36	8N–13W	May 1954	340,436	608,155	8,357	12,236*	36,000	—	168

TABLE 14.—

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head press-ure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
121	1	1	—	10	20	10	River Gravel Bed	Fresh	—	1,050
122	37	34	5-Spot	13.5	750	900	Shallow Sand	Fresh	6.6	1,050
123	6	8	5-Spot	10	60	160	Penn. Sand	Brine	—	697
124	5	4	5-Spot	10	40	40	Gravel Pits	Fresh	4.4	—
125	3	2	5-Spot	10	20	80	Gravel Pits	Fresh	6.2	—
126	9	10	5-Spot	3	25	25	Gravel Beds & Produced	Fresh & Brine	3.0	338
127	10	8	5-Spot	3	25	25	Gravel Beds & Produced	Fresh & Brine	6.5	296
128	4	*	—	—	80	—	Gravel Bed	Fresh	—	—
129–134	127	248	5-Spot	10	1,552	—	Gravel Beds & Produced	Fresh & Brine	—	—
135–137	57	24	—	—	404	—	Gravel Beds	Fresh	—	—
138–139	119	136	5-Spot	10	1,160	—	Gravel Beds & Produced	Fresh & Brine	—	—
140	2	5	—	—	—	80	Benoist & Aux Vases Sands	Fresh & Brine	2.4	680
141	5	10	—	—	40	40	Salem	Brine	—	500
142	7	8	—	20	140	140	Tar Springs & Produced	Brine	5.6	600
143	1	1	5-Spot	20	20	10	—	Brine	—	100
144	1	3	—	10	20	—	*	Brine	5.2	350
145	395	778	5-Spot & Sunflower	20 / 17.5	11,131	13,637	Tar Springs & Produced	Fresh & Brine	9.2	336
146	10	14	5-Spot	20	160	400	Tar Springs & Produced	Brine	—	—
147	1	4	5-Spot	40	40	50	Tar Springs	Brine	5.4	563
148	46	48	5-Spot	20	1,000	1,000	Tar Springs	Brine	8.3	33
149	3	4	5-Spot	20	80	80	Tar Springs	Brine	3.5	None
150	3	3	5-Spot	20	60	60	Tar Springs	Brine	6.5	3
151	20	21	5-Spot	10	250	250	Tar Springs	Brine	9.9	129
152	20	21	5-Spot	20	350	590	Tar Springs	Brine	8.7	38
153	1	3	—	40	30	—	Tar Springs	Brine	10.5	58
154	2	3	—	20	40	40	Tar Springs	Brine	—	None
155	5	7	Modified 5-Spot	4.4	44	100	Buchanan	Brine	—	—
156	67	53	5-Spot	10	530	580	Penn. Sand	Brine	3.9	595
157	1	6	5-Spot	20	20	40	Cypress & Produced	Fresh & Brine	1.6	197
158	26	3	5-Spot	10	207	474	Penn. Sand	Brine	—	—
159	8	5	5-Spot	10	28	231	Penn. Sand	Brine	1.7	—
160	13	18	5-Spot	10	62	240	Penn. Sand	Brine	1.8	—
161	14	23	5-Spot	10	80	540	City Water	Fresh	0.7	389
162	72	101	5-Spot	10	650	1,640	Lower Penn.	Brine	2.2	322
163	26	33	5-Spot	10	160	533	Lower Penn.	Brine	—	—
164	6	5	5-Spot	10	50	280	Surface	Fresh	1.1	280
165	25	30	5-Spot	10	210	425	Lower Penn.	Brine	—	—
166	24	2	5-Spot	10	140	230	Gravel Beds & Produced	Fresh & Brine	4.6	350
167	69	68	5-Spot	10	580	1,600	Wabash River Gravel Bed	Fresh	4.7	—
168	3	13	5-Spot	—	40	550	Produced & Lake	Fresh & Brine	10.4	550

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
1,600	6	—	—	—	—		121
1,625	18	17.2	60	37.8	5.2 @ 80°F.		122
J. 1,428 B.1,611 R.1,632	J.8 B.14.5 R.15	J.18.4 B.14.6 R.18.5	J.95 B.13 R.17.2	38	5 @ 85°F.	*Includes primary production since start of flood.	123
1,280	25	21	90	—	—		124
1,390	45	16.5	60	—	—		125
860	25	22.3	148	37	—	*Included in production from Kirkwood formation.	126
1,400	18.5	17.3	17.5	37	—	*Includes production from Bridgeport formation.	127
1,750	10	20	1,500	—	—	*Pilot not affected.	128
—	—	20	—	—	—	*Includes primary production since start of floods. Previously subjected to gas injection.	129–134
—	—	—	—	—	—	*Boyd, Sutton, Kimmel.	135–137
—	—	20	—	—	—	*Westall & Middagh. †Includes primary production since start of floods.	138–139
520	15	—	—	33.5	—		140
550	15	—	—	—	—		141
1,558	25	—	—	38	—	*Includes primary production since start of flood. Previously subjected to gas injection.	142
1,584	20	17.4	126	34	—		143
1,492	30	—	—	—	—	*Water supplied by Carter. Previously subjected to gas injection.	144
1,500	30	20	105	38	2.6 @ 79°F.	Previously subjected to gas injection.	145
1,560	35	18	200	36	—		146
1,450	27	—	—	38	—		147
1,550	16	20	200	38	5.0 @ 60°F.	*Includes small amount of primary production since start of flood.	148
1,550	30	—	—	36	—		149
1,480	23	19.4	93	—	—		150
1,550	21	21	180	36.6	4.7 @ 60°F.		151
1,550	18.4	20.4	164.2	36.6	4.7 @ 60°F.		152
1,493	30	—	—	34.6	—	*Not in Louden field main flood area.	153
1,536	30	—	—	34.6	—		154
983	12	21	243	32	—	*Operated by Mahutska since 2-15-56. †All data as of 1-1-56. Previously subjected to gas injection.	155
950	30	21	136	31	15 @ 75°F.	*As of 1-1-56.	156
960	56	19.2	126	—	—	*Corrected figure.	157
950	22.4	22.1	156	35.7	10 @ 78°F.	*Includes primary production since 1-1-54.	158
950	22.4	22.1	156	35	10 @ 78°F.		159
880	22	23.8	94	33.2	10 @ 78°F.	*Includes primary production since 1-1-53. †As of 1-1-56.	160
900	50	17	170	34	—	Previously subjected to gas injection. *Since 1-1-54.	161
880	20	21	205	32	—	Previously subjected to gas injection. *Since 1-1-54.	162
850	30	22	130	32	—	*Sold to Ohio Oil Co. during 1956. †Injection and production figures included in Ohio data.	163
900	25	18	70	34	—	Previously subjected to gas injection.	164
850	30	21	105	32	—	*Sold to Ohio Oil Co. during 1956. †Injection and production figures included in Ohio data.	165
950	21	19.5	77	33	—	*Includes production due to adjacent floods prior to start of flood.	166
950	24	18.9	162	31.7	21 @ 60°F.	*Corrected figures include cumulative injection and secondary production of former Yingling flood.	167
900	30	17.2	45	38.6	—	*Includes primary production since start of flood.	168

TABLE 14.—

Map No.	General				
	Field	Operator	Project	Formation Sand(S), Lime(L)	County
169	Main Consol.	Kewanee	Wright	Robinson(S)	Crawford
170	Main Consol.	A. J. Leverton	Stanfield	Robinson(S)	Crawford
171	Main Consol.	Logan	Alexander-Reynolds	Robinson(S)	Crawford
172	Main Consol.	Mahutska	Oil Center	Robinson(S)	Crawford
173–184	Main Consol.	Ohio	12 Projects*	Robinson(S)	Crawford
185	Main Consol.	Partlow & Cochonour	Rich	Robinson(S)	Crawford
186	Main Consol.	Petroleum Producing	—	Robinson(S)	Crawford
187	Main Consol.	Pickens*	Tohill & Hughes-Robinson	Robinson(S)	Crawford
188	Main Consol.	Red Head	"DIM"	Robinson*(S)	Crawford
189	Main Consol.	Ree	Culver	Robinson(S)	Crawford
190	Main Consol.	Ree	Culver Extension	Robinson(S)	Crawford
191	Main Consol.	Ree	Little John	Robinson(S)	Crawford
192	Main Consol.	E. C. Reeves	Billingsley	Robinson(S)	Crawford
193	Main Consol.	Shakespeare	McIntosh Unit	Robinson(S)	Crawford
194	Main Consol.	Shakespeare	Montgomery Unit	Robinson(S)	Crawford
195	Main Consol.	Skiles	Weger*	Robinson(S)	Crawford
196	Main Consol.	Tidewater	Barrick-Walters	Robinson(S)	Crawford
197	Main Consol.	Tidewater	Birch #1	Robinson(S)	Crawford
198	Main Consol.	Tidewater	Birds Area	Robinson(S)	Crawford
199	Main Consol.	Tidewater	Clark-Hulse	Robinson(S)	Crawford
200	Main Consol.	Tidewater	Dennis-Hardin	Robinson(S)	Crawford
201	Main Consol.	Tidewater	Henry-Ikemire	Robinson(S)	Crawford
202	Main Consol.	Tidewater	W. A. Howard	Robinson(S)	Crawford
203	Main Consol.	Tidewater	Lefever-Musgrave	Robinson(S)	Crawford
204	Main Consol.	Tidewater	Montgomery-Seitzinger	Robinson(S)	Crawford
205	Main Consol.	Tidewater	Stahl-Walters	Robinson(S)	Crawford
206	Main Consol.	Tidewater	Stifle-Drake	Robinson(S)	Crawford
207	Main Consol.	Tidewater	G. L. Thompson	Robinson(S)	Crawford
208	Main Consol.	Wilson	Hughes-Walker	Robinson(S)	Crawford
209	Main Consol.	Wiser	H. J. Musgrave	Robinson(S)	Crawford
210	Maple Grove Consol.	Ashland	Bennington	McClosky(L)	Edwards
211	Maple Grove Consol.	Investment Oil	—	McClosky(L)	Edwards
212	Markham City	Tidewater	Newton	McClosky(L)	Jefferson
213	Markham City West	Gulf	Markham City, West	Aux Vases(S) & McClosky(L)	Jefferson
214	Martinsville	Froderman & Connelly	Froderman & Connelly	Casey, Partlow(S)	Clark
215	Mattoon	Carter	Mattoon	Cypress & Rosiclare(S)	Coles
216	Mattoon	Noknil	Mattoon	Rosiclare(S)	Coles
217	Maunie South	Magnolia	Maunie Coop.*	Tar Springs(S)	White
218	Maunie South	Magnolia	Palestine Sand Unit	Palestine(S)	White
219	Maunie South	Magnolia	Tar Springs Unit	Tar Springs(S)	White

(Continued)

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.-R.		Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	Total 1956	Cumulative 12-31-56	
23, 26	6N-13W	Jan. 1953	462,251	1,466,892	1,835	3,596	84,790	272,768	169
17	8N-12W	June 1952	11,000	76,000	600	1,630	5,400	16,100	170
20	7N-12W	Dec. 1951	541,625	1,615,424	48,477	182,310	128,100	345,060	171
10, 14, 15	6N-13W	May 1954	1,227,619	2,758,519	132,679	232,586	—	—	172
—	—	— 1948	6,440,979	47,395,499*	959,453	3,904,886*	5,099,731	17,910,110*	173-184
35, 36	6N-12W	Oct. 1954	228,510	306,510	9,561	14,561	114,250	116,830	185
29, 32	8N-12W	Sept. 1951	90,000	444,855	None	None	None	None	186
28	6N-13W	June 1951	110,281†	2,312,569	7,563†	139,218	—	412,743‡	187
25, 26	6N-13W	July 1953	534,911	1,620,046	16,524	36,698†	—	—	188
5, 6, 7	7N-12W	Feb. 1953	466,120	1,148,796*	172	2,669*	—	65,707†	189
18	7N-12W	Mar. 1954	*	72,206	*	None	*	None	190
20	6N-12W	Oct. 1952	116,836	116,836*	3,415	9,782†	11,220	11,220*	191
34, 35	7N-13W	Dec. 1953	602,834	1,411,986	12,054	35,441	7,400	14,285	192
17, 18, 19, 20	6N-12W	July 1954	70,214	163,179	5,850	8,731	53,655	76,330	193
32, 33 / 4	6N-12W / 5N-12W	May 1954	151,068	272,932	7,878	10,382	48,169	65,619	194
18, 19 / 13, 24	5N-11W / 5N-12W	Nov. 1952	51,895	776,693*	2,263	8,545*	11,810	108,610*	195
19	7N-12W	Mar. 1954	256,575	704,410	23,356	48,524	21,500	59,940	196
14	6N-13W	Aug. 1954	199,779	400,781	31,940	59,722	15,700	26,155	197
16, 20, 21	5N-11W	Feb. 1952	568,771	1,323,966	55,045	144,505	174,300	962,745	198
18	7N-13W	Jan. 1952	476,039	1,386,318	38,294	161,118	256,280	537,047	199
27, 34	6N-13W	Aug. 1950	442,637	2,557,115	75,046	451,921	425,260	1,423,447	200
10, 15	7N-13W	Feb. 1948	335,261	2,980,724	22,935	389,739	231,900	1,417,211	201
11	7N-13W	Dec. 1952	101,511	392,463	7,040	30,534	43,250	166,675	202
13	7N-14W	Feb. 1954	149,823	417,685	58,909	93,248	16,610	34,965	203
15, 16	5N-11W	May 1954	146,117	231,710	5,389	8,843	12,570	50,025	204
13, 14	7N-13W	Nov. 1954	60,403	115,945	16,013	18,969	50,700	59,790	205
10	7N-13W	June 1952	224,150	878,537	12,992	35,132	95,270	247,976	206
26, 27	6N-13W	Sept. 1952	159,965	758,879	21,633	58,551	76,700	150,822	207
26	6N-13W	Aug. 1950	—	—	—	39,604*	—	56,290*	208
18	7N-12W	Oct. 1955	174,152	192,535	2,652	2,652*	10,300	10,300	209
7	1N-10E	Sept. 1952	65,880	281,660	17,273	85,346*	—	—	210
8, 9	1N-10E	July 1955	*	*	6,060	7,560†	—	—	211
1	3S- 4E	Aug. 1955	*	*	806	806†	6,570	6,570	212
3, 4, 9, 10	3S- 4E	Apr. 1954	281,106	608,966	17,498	30,895*	608,993	725,558	213
18 / 13	9N-13W / 9N-14W	—	1,440,000	1,440,000*	26,344	33,880†	—	—	214
35	12N- 7E	May 1952	1,536,689	4,314,185	331,660	547,059	647,384	1,089,747	215
22	12N- 7E	Nov. 1950	—	248,682*	—	3,571*	—	86,926*	216
24	6S-10E	Nov. 1955	135,921	168,261	7,605	9,126	116,484	136,057	217
13, 24 / 18	6S-10E / 6S-11E	Feb. 1953	1,806,514	6,028,699	200,167	1,382,724*	1,647,218	3,353,745	218
24, 25 / 19	6S-10E / 6S-11E	Aug. 1947	224,851	4,729,680	6,675	791,238*	55,350	2,036,509	219

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head press-ure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
169	15	34	5-Spot	10	113	210	Penn. Sand, Produced & Lake	Fresh & Brine	5.6	474
170	3	3	5-Spot	4.4	20	140	Shallow Sand & Produced	Fresh & Brine	—	450
171	22	25	5-Spot	—	90	330	Cypress	Brine	3.1	420
172	53	48	5-Spot	4.5	240	650	Surface & Produced	Fresh & Brine	3.2	—
173–184	342	406	5-Spot	10	2,210	—	Gravel Beds & Produced	Fresh & Brine	—	—
185	5	9	Line	5	60	120	Penn. Sand	Brine	—	250
186	4	2	5-Spot	10	10	700	Shallow Sand & Pond	Fresh	4.1	300
187	14	13	5-Spot	10	87	298	Shallow Sand	Fresh	—	—
188	18	14	5-Spot	10	103	—	230′ Sand & Surface	Fresh & Brine	—	400
189	8	8	5-Spot	10	—	710	Lake	Fresh	3.2	—
190	2	0	5-Spot	4.5	6	114	Lake	Fresh	—	—
191	3	9	Irregular	4.5	13.5	100	Penn. Sand	Fresh & Brine	—	—
192	6	7	5-Spot	10	115	350	Penn. Sand	Brine	13.8	237
193	4	8	Peripheral	4.7	39	88	Penn. Sand 400′-450′	Brine	4.0	227
194	6	6	Modified 5-Spot	6–10	52	85	Lower Robinson	Brine	2.7	522
195	9	11	5-Spot	10	90	110	Creek & Produced	Fresh & Brine	—	450
196	9	32	5-Spot	10	110	300	Mississippian	Brine	4.1	331
197	9	13	5-Spot	10	58	60	Gravel Bed	Fresh	4.3	282
198	24	41	5-Spot	10	220	277	Tar Springs	Brine	3.6	550
199	13	19	5-Spot	7	80	98	Gravel Bed	Fresh	5.0	415
200	10	15	5-Spot	10	94	94	—	Fresh	3.6	350
201	24	40	5-Spot	4.4	91	115	Gravel Bed & Penn. Sand	Fresh & Brine	2.7	450
202	7	16	5-Spot	10	35	90	Gravel Bed & Penn. Sand	Fresh & Brine	3.1	431
203	10	14	5-Spot	10	55	110	—	Fresh	2.1	473
204	5	7	—	—	40	40	Tar Springs	Brine	—	550
205	4	5	—	—	37	80	Gravel Bed	Fresh	2.2	452
206	6	24	5-Spot	10	33	160	Penn. Sand	Brine	6.8	392
207	4	7	5-Spot	10	40	40	Gravel Bed	Fresh	5.2	381
208	—	8	Line Wells	—	40	40	Gravel Bed & Produced	Fresh & Brine	—	—
209	2	7	5-Spot	10	40	160	Gravel Bed	Fresh	8.0	340
210	1	6	Flank	—	110	110	Produced	Brine	36.1	—
211	1	2	—	20	20	118	540′-600′ Sand	Fresh	—	—
212	1	1	—	40	40	40	Cypress	Brine	—	—
213	5†	19	Flank	—	A.V. 25 Mc. 30	210 150	Cypress	Brine	—	644
214	46	39	—	—	230	500	Pond	Fresh	—	300
215	29	34	5-Spot	20	461	610	Sewage Effluent & Produced	Fresh & Brine	11.2	768
216	2*	5	Irregular	—	30	60	Produced	Brine	—	—
217	1	3	Irregular	—	18	80	Gravel Bed	Fresh	—	—
218	31	26	5-Spot	20	448	570	Gravel Bed	Fresh	—	—
219	2	4	5-Spot	20	138	230	Gravel Bed & Produced	Fresh & Brine	—	—

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
900	15	20	245	—	—	Previously subjected to gas injection.	169
977	30	23	57	36	—		170
940	22	20.5	167	36	7 @ 80°F.		171
925	20	19	175	33	—	Previously subjected to gas injection.	172
—	—	20	—	—	—	*Former Constantin projects, Short and Wood, included.	173–184
1,006	12	24.3	240	26	—		185
1,000	15	20	75	35.7	7.3 @ 76°F.		186
850	30	19.5	125	32	10 @ 80°F.	*Hardinville Production Co. operated this flood after 10-1-56. †Figures for 1-1-56 to 10-1-56 not included. ‡As of 1-1-56.	187
830	10	—	—	31	—	*Upper and Lower Robinson sands flooded. †Since 1-1-54. Previously subjected to gas injection.	188
950	50	22.7	101	—	10 @ 78°F.	*Data for July through Nov., 1955, not included. †As of 7-1-55.	189
945	14	20.8	154	32.4	—	*Temporarily shut down during 1955.	190
850	24	20	50	—	10 @ 78°F.	*Since 1-1-56. New injection system completed August, 1956. †Corrected figure. Previously subjected to gas injection.	191
925	20	30	45	35	—		192
925	12	—	—	32.6	11 @ 75°F.	Previously subjected to gas injection.	193
975	25.8	22.6	150	28.3	23 @ 71°F.		194
900	20	17	37	—	—	*Project abandoned July, 1956.	195
950	19	20	152	35	7 @ 60°F.		196
881	14	19.1	108	32	—		197
950	18	19.4	197	30.1	—	Subjected to gas injection 1946–1952.	198
910	20	19.9	278	34	—	Subjected to gas injection since 1941.	199
875	34	19.8	178	32.7	—	Subjected to gas injection 1932–1950.	200
935	14	21	175	35	7 @ 60°F.	Subjected to gas injection 1934–1948.	201
950	13	19.6	184	35.3	—	Subjected to gas injection 1935–1953.	202
910	20	20	250	34	—		203
979	14	19	144	32	—		204
987	19	—	—	—	—		205
980	15	18.2	221	33.5	—	Subjected to gas injection since 1934.	206
860	21	19.8	108	33	—		207
880	25	19	83	32	—	*As of 1-1-55, due to Ohio line input wells. Previously subjected to gas injection.	208
1,010	30	21.1	334	32.6	—	*Includes primary production since 1-1-56. Production prior to water injection 30 barrels per month.	209
3,100	5	—	—	38	—	*Includes primary production since start of flood.	210
3,275	5	—	—	36	—	*Dump flood. †Includes primary production since start of flood.	211
3,080	6	—	—	—	—	*Dump flood. †Total production since 1-1-56.	212
A.V. 2,900	11.8	22.1	269	38	A.V. 3.2 @ 99°F.	*Corrected figure. †Dual injection wells.	213
Mc. 3,000	7	15.4	230		Mc. 2.8 @ 104°F.		
C.415 P.511	25	24	42.5	32	—	*Since 1-1-56. †Includes primary production since 7-1-55.	214
Cyp. Ros. 1,750 1,950	13	16	84	39	1.7 @ 85°F.		215
1,952	10	15	990	37	—	*As of 1-1-55.	216
2,275	—	—	—	—	—	*Cooperative flood with Skelly.	217
2,010	—	—	—	—	—	*Includes primary production since start of flood.	218
2,270	—	—	—	37.3	4.6 @ 89°F.	*Includes primary production since start of flood.	219

TABLE 14.—

Map No.	Field	Operator	Project	Formation Sand(S), Lime(L)	General County
220	Mill Shoals	Barron Kidd	Gardner	Aux Vases(S)	Hamilton
221	Mill Shoals	Sohio	B. R. Gray, Trustee	Aux Vases(S)	Hamilton
222	Mt. Carmel	G. S. Engle	G. Dunkel	Biehl(S)	Wabash
223	Mt. Carmel	First Nat'l Pet. Trust	Shaw Courter	Biehl(S)	Wabash
224	Mt. Carmel	First Nat'l Pet. Trust	Shaw Courter	Cypress(S)	Wabash
225	Mt. Carmel	T. W. George	North Mt. Carmel	Cypress(S)	Wabash
226	Mt. Carmel	O'Meara Brothers	Mt. Carmel	Cypress(S)	Wabash
227	Mt. Carmel	Shell	Mt. Carmel	Cypress(S)	Wabash
228	Mt. Carmel	Skiles	Chapman-Courter	Cypress(S)	Wabash
229	Mt. Carmel	Skiles	W. Mt. Carmel	Tar Springs(S)	Wabash
230	Mt. Carmel	Texas	Stein	Tar Springs(S)	Wabash
231	New Harmony Consol.	Ashland	Maud North	Benoist(S)	Wabash
232	New Harmony Consol.	Arrow	*	Benoist(S)	White
233	New Harmony Consol.	Arrow	*	Aux Vases(S)	White
234	New Harmony Consol.	Arrow	*	Lower Cypress(S)	White
235	New Harmony Consol.	Arrow	*	Middle McClosky(L)	White
236	New Harmony Consol.	Calstar	Ford	Aux Vases(S)	White
237	New Harmony Consol.	Calstar	Ford "B"*	Bethel(S)	White
238	New Harmony Consol.	Cities Service	Brines	Benoist(S)	Wabash
239	New Harmony Consol.	T. W. George	East Maud	Bethel(S)	Wabash
240	New Harmony Consol.	T. W. George	East Maud	Cypress(S)	Wabash
241	New Harmony Consol.	Herndon & Ashland	Calvin	Aux Vases(S)	White
242	New Harmony Consol.	Herndon	Calvin	Benoist(S)	White
243	New Harmony Consol.	Inland	Bowman's Bend Unit	Tar Springs(S)	White
244	New Harmony Consol.	Luboil	Helm*	Aux Vases(S)	Wabash
245	New Harmony Consol.	Luboil	Helm*	Bethel(S)	Wabash
246	New Harmony Consol.	Luboil	Helm*	Waltersburg(S)	Wabash
247	New Harmony Consol.	Phillips	Schultz	Upper Cypress(S)	Wabash
248	New Harmony Consol.	Phillips	Schultz	Lower Cypress(S)	Wabash
249	New Harmony Consol.	Sinclair	M. S. Donald	Aux Vases(S)	White
250	New Harmony Consol.	Skiles	East Maud	Bethel(S)	Wabash
251	New Harmony Consol.	Skiles	East Maud	Cypress(S)	Wabash
252	New Harmony Consol.	Skiles	Siegert Bottoms	Bethel(S)	Wabash, Edwards
253	New Harmony Consol.	Skiles	Smith-Davenport	Cypress(S)	White
254	New Harmony Consol.	Skiles	West Maud	Bethel(S)	Wabash
255	New Harmony Consol.	Sun	Ford "B"*	Aux Vases(S)	White
256	New Harmony Consol.	Sun	Ford "B"*	Bethel(S)	White
257	New Harmony Consol.	Sun	Greathouse*	Bethel(S)	White
258	New Harmony Consol.	Sun	Greathouse*	Cypress(S)	White
259	New Harmony Consol.	Sun	Greathouse	McClosky(L)	White

(Continued)

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.–R.		Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	
24	3S– 7E	Sept. 1956	*	*	None	None	—	—	220
1	4S– 7E	May 1952	311,170	1,187,694	41,959	265,740*	190,884	341,965	221
5	1S–12W	June 1952	65,485	198,039*	5,286	28,386†	10,660	31,610*	222
7	1S–12W	Feb. 1950	38,573	345,059	3,000	68,602	—	148,325*	223
7	1S–12W	Apr. 1953	46,279	259,021	2,160	28,431	—	9,463*	224
4, 5	1S–12W	Aug. 1955	130,730	176,262	2,155	2,155	3,481	3,481	225
17	1S–12W	July 1954	335,072	882,475	38,436	58,255	—	73,652*	226
17, 18	1S–12W	July 1954	702,500	2,033,797	255,316	345,356	211,526	274,544	227
7, 18	1S–12W	Jan. 1955	133,904	342,040	69,946	105,124*	38,562	46,388*	228
18	1S–12W	Oct. 1955	115,776	129,719	26,500	32,500	2,370	2,370	229
5, 8	1S–12W	Feb. 1952	104,470	443,610	12,035	73,868	80,681	251,254	230
5, 6, 7, 8	2S–13W	Apr. 1956	88,099	88,099	7,081	7,081*	None	None	231
32	3S–14W	Sept. 1956	59,391	59,391	None	None	—	—	232
32, 33; 5	3S–14W; 4S–14W	Sept. 1956	85,668	85,668	None	None	—	—	233
33	3S–14W	Sept. 1956	45,658	45,658	None	None	—	—	234
32, 33; 5	3S–14W; 4S–14W	Sept. 1956	62,617	62,617	None	None	—	—	235
21, 22	4S–14W	Jan. 1956	388,866	540,886*	4,050	12,894*	—	—	236
21	4S–14W	Mar. 1953	—	273,014†	—	52,853†	—	67,939†	237
20, 21	1S–13W	Aug. 1956	141,752	141,752	None	None	5,661	5,661	238
32, 33	1S–13W	July 1952	27,141	97,858*	12,180	54,848†	—	—	239
32, 33	1S–13W	Jan. 1955	25,011	30,856	12,180	54,844*	—	—	240
5, 8	4S–14W	Nov. 1952	862,282	2,049,756	149,917	239,050*	—	—	241
8	4S–14W	—	301,615	301,615	*	*	—	—	242
15, 16, 21, 22	5S–14W	Dec. 1953	687,544	1,927,601	231,213	564,711*	347,060	607,140	243
22	3S–14W	Dec. 1951	—	—	—	—	—	—	244
22	3S–14W	Dec. 1951	—	—	—	—	—	—	245
22	3S–14W	Dec. 1950	—	—	—	—	—	—	246
7	3S–13W	May 1952	92,054	710,846	1,897	41,540	72,290	314,178	247
7	3S–13W	July 1951	477,079	2,257,420	15,795	111,392	472,293	1,642,510	248
21, 28	4S–14W	Oct. 1956	41,670	41,670	—	—	3,650	3,650	249
32, 33; 4, 5	1S–13W; 2S–13W	Apr. 1952	120,044	582,268*	43,022	143,035*	25,901	86,601	250
32, 33; 4, 5	1S–13W; 2S–13W	Nov. 1952	102,792	442,657*	18,441	55,673*	54,620	194,920	251
34; 2, 3, 10	2S–14W; 3S–14W	Oct. 1951	265,417	1,660,684	67,704	377,602	60,757	156,947	252
15	4S–14W	May 1955	44,381	135,138	1,566	1,566	608	608	253
32; 5	1S–13W; 2S–13W	Oct. 1950	279,194	1,544,764	14,294	299,146*	65,180	260,340	254
21	4S–14W	Mar. 1953	31,068	142,064	2,622	5,374	3,535	3,719	255
21	4S–14W	Mar. 1953	107,469	330,603	17,186	45,927	99,800	121,096	256
33; 4	4S–14W; 5S–14W	Jan. 1949	261,479	2,484,605*	70,243	247,536*	136,100	1,781,185*	257
33	4S–14W	Jan. 1953	131,448	461,894	None	None	17,800	31,780	258
33; 4	4S–14W; 5S–14W	Aug. 1947	107,340	1,086,865*	3,743	128,681	27,840	225,963	259

TABLE 14.—

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head press-ure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
220	1	2	Irregular	10	30	30	Hardinsburg	Brine	—	—
221	8	7	5-Spot	20	170	170	Gravel Bed	Fresh	9.7	260
222	2	3	Modified	29	87	68	Shallow Sand	Fresh	13.4	470
223	1†	2	Spot	10	30	30	Water Well & Produced	Fresh & Brine	6.6	—
224	1†	4	Spot	10	50	50	Water Well	Fresh	11.2	—
225	3	4	5-Spot	20	70	70	Penn. Sand, 800′	Brine	8.5	514
226	6	15	—	—	234	—	Water Well	Fresh	11.8	673
227	20	27	5-Spot	20	325	570	Gravel Bed	Fresh	7.1	455
228	4	7	Peripheral	—	100	100	River & Produced	Fresh & Brine	4.8	650
229	3	3	—	10	70	40	Produced	Brine	17.6	950
230	2	8	Flank	—	30	73	Shallow Sand & Produced	Fresh & Brine	12.3	966
231	5	10	—	20	137	150	(Purchased Water)	Brine	10.6	1,381
232	4	4	5-Spot	20	50	131	Wabash River & Gravel Bed	Fresh	12.3	—
233	9	11	5-Spot	20	162.5	323	River & Gravel Bed	Fresh	5.9	—
234	3	5	5-Spot	20	45	165	River & Gravel Bed	Fresh	15.3	—
235	4	7	5-Spot	20	85	302	River & Gravel Bed	Fresh	14.9	None
236	5	7	5-Spot	10	95	215	Gravel Bed	Fresh	11.6	923
237	1	3	—	20	20	35	Gravel Bed	Fresh	—	—
238	10	50	5-Spot	20	200	600	Penn. Sand	Brine	—	10
239	2	7	5-Spot	20	90	70	Surface	Fresh	2.5	1,500
240	1	3	5-Spot	20	40	50	Surface	Fresh	—	1,500
241	14	18	Line Wells	10	200	250	—	Fresh	5.6	613
242	8	8	—	10	90	90	—	—	6.9	716
243	3	12	Peripheral	—	200	200	Gravel Bed & Produced	Fresh & Brine	32.2	335
244	8	10	Irregular & 5-Spot	12	50	150	Shallow Sand	Fresh	—	—
245	15	17	5-Spot	12	180	300	Shallow Sand	Fresh	—	—
246	3	4	Irregular	3.3	10	15	Shallow Sand	Fresh	—	—
247	1	2	—	—	9	30	Shallow Sand & Produced	Fresh & Brine	25.2	812
248	2	5	Irregular	—	21	70	Shallow Sand & Produced	Fresh & Brine	32.7	827
249	2	6	Peripheral	—	105	123.4	Supply Well	Fresh	—	—
250	8	20	5-Spot	20	250	280	Shallow Sand & Creek	Fresh	4.8	1,500
251	2	12	5-Spot	20	20	100	Shallow Sand & Creek	Fresh	17.6	1,500
252	19	24	5-Spot	20	380	430	Gravel Bed & Produced	Fresh & Brine	2.1	1,500
253	1	2	Irregular	—	30	30	Tar Springs	Brine	12.2	None
254	20	23	5-Spot	20	340	430	Shallow Sand & Creek	Fresh	3.2	1,500
255	1	5	—	—	20	80	Gravel Bed	Fresh	8.5	1,387
256	1	4	—	—	40	20	Gravel Bed	Fresh	24.5	681
257	6	18	5-Spot	20	180	—	Gravel Bed	Fresh	5.6	1,405
258	1	—	—	10	10	—	Gravel Bed	Fresh	39.4	1,235
259	1	2	—	—	100	—	Gravel Bed	Fresh	58.8	1,530

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
3,243	11	—	—	—	—	*Dump flood.	220
3,245	11	21	—	—	—	*Includes primary production since start of flood.	221
1,500	6.7	15.3	310	36.6	3.9 @ 104°F.	*Does not include 1954 data. †Includes primary production since start of flood.	222
1,375	16	—	—	40.2	4.7 @ 70°F.	*As of 1-1-56. †During 1956, injection well used as a straight disposal well.	223
2,050	12	—	—	—	—	*As of 1-1-56. †Injection well shut down 12-11-56.	224
2,000	14	—	—	—	—		225
2,140	13	—	—	33	—	*Includes water production during 1955 only.	226
2,075	13.6	19	182	38.8	—		227
2,230	19	18.2	147	—	—	*Corrected figures.	228
1,729	6	—	—	—	—		229
2,040	11.6	18.9	221	36	4.0		230
2,650	6.5	16	60	—	—	*Includes primary production since start of flood.	231
2,650	10.8	12.7	—	35.5	4.5 @ 95°F.	*Arrow-McBride, Hon-Bump-Crawford water flood.	232
2,800	14.3	13.3	—	33.7	4.7 @ 97°F.	*Arrow-McBride, Hon-Bump-Crawford water flood.	233
2,600	8.9	15.6	—	34.5	6.0 @ 96°F.	*Arrow-McBride, Hon-Bump-Crawford water flood.	234
2,900	9.4	—	—	34.5	4.2 @ 98°F.	*Arrow-McBride, Hon-Bump-Crawford water flood.	235
2,840	18.3	15.0	20	33.1	4.8 @ 70°F.	*Includes injection and production from original pilot flood started in March of 1953.	236
2,695	12	—	—	37.5	3.7 @ 96°F.	*Cooperative pilot flood with Sun. †As of 1-1-56.	237
2,600	12	16	35	—	—		238
2,500	15	17	57	36.1	5.1 @ 94°F.	*Corrected figure. †Includes primary production since start of flood.	239
2,400	12	—	—	—	—	*Total production including 27,684 bbls. due to injection since 1952 on adjacent leases.	240
2,800	30	14	10	41	—	*Production from Jan. to Nov. 1954 is not included. Includes production from flooded Benoist formation.	241
2,700	15	—	—	—	—	*Included in production from Aux Vases formations.	242
2,260	19.5	17.9	120	35.5	—	*Includes primary production since 1-1-54.	243
2,750	12	16	20	—	—	*The status of this flood has not been reported since 1952.	244
2,640	14	17.1	44	—	—	*The status of this flood has not been reported since 1952.	245
2,115	25	20.1	171	—	—	*The status of this flood has not been reported since 1952.	246
2,500	10	—	—	37.5	—		247
2,500	20	18	50	37.5	—		248
2,811	28	—	—	36	—		249
2,520	8.5	17	57	36.1	5.1 @ 94°F.	*Corrected figures.	250
2,400	8	18.5	75	36.2	5 @ 90°F.	*Corrected figures.	251
2,680	18	17	75	36.5	3.8 @ 81°F.		252
2,630	10	17.7	145	—	—		253
2,620	12	17.2	57	37	4.6	*Corrected figure.	254
2,855	10	13	30	32.5	—	*Cooperative pilot flood with Calstar.	255
2,696	12	—	—	32.5	—	*Cooperative pilot flood with Calstar.	256
2,750	23.2	18	20	36.9	—	*Included in Superior's New Harmony field unit after Nov. 1956. Previously subjected to gas injection.	257
2,650	10	—	—	36.9	—	*Included in Superior's New Harmony field unit after Nov. 1956. Previously subjected to gas injection.	258
2,900	5	—	—	36.9	—	*Corrected figure.	259

TABLE 14.—

Map No.	Field	Operator	Project	General: Formation Sand(S), Lime(L)	General: County
260	New Harmony Consol.	Superior	Kern-Hon Unit	Upper Tar Springs(S)	White
261	New Harmony Consol.	Superior	New Harmony Field Unit	Aux Vases(S)	White (Ill.) Posey (Ind.)
262	New Harmony Consol.	Superior	New Harmony Field Unit	Bethel(S)	White (Ill.) Posey (Ind.)
263	New Harmony Consol.	Superior	Waltersburg Sand Unit	Waltersburg (S)	White (Ill.) Posey (Ind.)
264	New Harmony Consol.	Tidewater	E. S. Dennis "A"	Bethel(S)	White
265	New Harmony Consol.	Tidewater	O. R. Evans	Aux Vases(S)	White
266	New Harmony Consol.	Tidewater	O. R. Evans	Biehl(S)	White
267	New Harmony Consol.	West Drilling	C. W. Raber	Biehl(S)	Wabash
268	New Haven Consol.	Hiawatha	New Haven	Cypress(S)	White
269	New Haven Consol.	Hiawatha	New Haven	Tar Springs(S)	White
270	Odin	Ashland	Odin	Cypress(S)	Marion
271	Olney Consol.	Texas	East Olney	McClosky(L)	Richland
272	Oskaloosa	Texas	Oskaloosa	Benoist(S)	Clay
273	Parkersburg Consol.	Calvert	Parkersburg*	McClosky(L)	Richland
274	Parkersburg Consol.	Ohio	Parkersburg Unit*	McClosky(L)	Richland
275	Patoka	Sohio	Patoka Benoist	Benoist(S)	Marion
276	Patoka	Sohio	Patoka Rosiclare	Rosiclare(S)	Marion
277	Patoka	Sohio	Stein Unit	Cypress(S)	Marion
278	Phillipstown Consol.	C. E. Brehm	Phillipstown Unit "A"	Penn.(S)	White
279	Phillipstown Consol.	C. E. Brehm	Phillipstown Unit "B"	Cypress(S)	White
280	Phillipstown Consol.	British American	N. Calvin	Penn. # 7(S)	White
281	Phillipstown Consol.	Magnolia	Schmidt-Seifried Unit	Biehl(S)	White
282	Phillipstown Consol.	Phillips	Flora	Degonia(S)	White
283	Phillipstown Consol.	Phillips	Laura	Bethel(S)	White
284	Phillipstown Consol.	Skiles	L. O. Cleveland	Tar Springs(S)	White
285	Phillipstown Consol.	Sun	Phillipstown	Clore(S)	White
286	Phillipstown Consol.	Sun	Phillipstown	Tar Springs(S)	White
287	Phillipstown Consol.	S. C. Yingling	Grayville	L. Cypress(S)	White
288	Roland Consol.	Carter	S. W. Roland	Waltersburg(S)	White
289	Roland Consol.	Carter	Stokes Unit	Hardinsburg(S)	White
290	Roland Consol.	T. W. George	Pankey-Morehead Unit	Cypress(S)	Gallatin & White
291	Roland Consol.	Indiana Farm Bureau	Omaha	Waltersburg(S)	Gallatin
292	Roland Consol.	Pure	Stokes-Brownsville Unit	Hardinsburg(S)	White
293	Roland Consol.	Shell	Iron Unit	Hardinsburg(S)	White
294	St. James	H. Rosenthal	Washburn Lease	Cypress(S)	Fayette
295	Ste. Marie	J. R. Randolph	Ste. Marie	McClosky(L)	Jasper
296	Sailor Springs Consol.	Ashland	Bible Grove (Stortzum)	Rosiclare(L)	Effingham
297	Sailor Springs Consol.	Ashland	Bible Grove (Weibking)	McClosky(L)	Effingham
298	Sailor Springs Consol.	Ashland	Bible Grove (Wood)	McClosky(L)	Effingham
299	Sailor Springs Consol.	Ashland	East Flora	McClosky(L)	Clay

(Continued)

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.–R.		Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	
32, 33	4S–14W	Feb. 1954	192,974	539,128	81,822	264,296	83,565	132,592	260
27, 33, 34	4S–14W	Nov. 1956	39,903	39,903	None	None	*	*	261
27, 33, 34	4S–14W	Nov. 1956*	295,267	3,664,808†	—	652,211†	—	4,232,171‡	262
4, 5, 9, 10	5S–14W	Aug. 1946	2,538,344	15,823,438*	841,951	3,101,079*	942,178	2,549,526*	263
28, 33	4S–14W	July 1951	1,472,334	7,555,163	32,155	418,441	428,318	1,338,739	264
4, 5	4S–14W	Oct. 1949	94,342	911,750	21,708	117,183	19,939	194,991	265
4, 5	4S–14W	Jan. 1956	73,243	73,243	27,086	27,086	7,891	7,891	266
19 24	2S–13W 2S–14W	Oct. 1956	3,220	3,220	90	90	240	240	267
17	7S–11E	July 1954	124,389	400,978	83,708	155,553*	3,650	7,181	268
17	7S–11E	July 1954	40,451	57,261	8,670	16,545*	1,825	3,079	269
1, 12, 13 6, 7, 18	2N– 1E 2N– 2E	Oct. 1949	551,159	3,158,404	53,947	1,146,838	—	—	270
23, 24, 25, 26	4N–10E	Mar. 1951	216,959	1,223,912	29,849	88,066	82,787	198,809	271
26, 27, 34, 35	4N– 5E	Jan. 1953	781,682	2,962,383	160,760	625,228	305,243	658,971	272
16, 21	2N–14W	Jan. 1955	—	107,440†	None	None	—	43,025†	273
29	2N–14W	Mar. 1955	396,500	1,100,590	59,135	64,858	194,952	201,194	274
20, 21, 28, 29	4N– 1E	Sept. 1943	3,799,392	42,968,499	91,221	6,242,118	1,583,377	29,828,856	275
21, 28, 29	4N– 1E	1948	646,029	4,971,170	47,002	1,301,571*	270,519	1,530,492	276
28	4N– 1E	Aug. 1951	123,897	522,498	4,656	50,384*	111,426	345,438	277
30 19, 30	4S–11E 4S–14W	June 1952	54,638	289,993	7,122	58,212*	—	—	278
19	4S–14W	Jan. 1954	19,382*	99,430	10,499	35,584†	—	—	279
31	3S–14W	June 1951	—	1,586,644*	—	917,774*	—	566,284*	280
30, 31	3S–11E	May 1951	117,230	947,751	25,037	390,835*	73,051	318,039	281
24	4S–10E	Sept. 1953	150,662	419,443	12,117	59,449	63,056	184,401	282
19	4S–11E	Mar. 1952	15,355	45,905*	None	None	None	None	283
36	4S–10E	Nov. 1955	41,177	47,704	85	85	None	None	284
6	5S–11E	Dec. 1955	48,608	52,797	23,155	23,155	—	—	285
6	5S–11E	Feb. 1956	18,331	18,331	—	—	—	—	286
20	3S–14W	Aug. 1954	94,673	263,521*	703	18,284	520	1,020	287
14, 15, 16	7S– 8E	June 1955	1,411,476	2,114,825	20,252	20,252	70,886	113,502	288
5	6S– 9E	July 1954	452,422	1,127,172	217,150	251,734	53,123	58,834	289
17, 20	7S– 8E	Oct. 1956	10,600	10,600	None	None	None	None	290
20, 21, 28, 29	7S– 8E	Mar. 1953	1,174,798	3,689,292	275,711	582,379*	334,152	635,652	291
31, 32 6 36 1, 12	5S– 9E 6S– 9E 5S– 8E 6S– 8E	Apr. 1956	1,413,326	1,413,326	28,621	28,621	5,355	5,355	292
23, 24, 25	6S– 8E	Dec. 1950	1,090,952	6,728,893	251,583	1,352,078	818,361	2,061,727	293
30	6N– 3E	Mar. 1954	66,000	202,000*	24,600	80,000*	66,000	202,000*	294
5, 6, 7, 8	5N–14W	Oct. 1948	140,000	1,651,500*	12,708	138,683	30,000	—	295
28	6N– 7E	June 1955	98,820	152,080	4,186	5,342*	—	—	296
29	6N– 7E	July 1954	58,560	171,340	9,482	21,022*	—	—	297
28	6N– 7E	June 1955	47,580	74,500	87	136*	—	—	298
16, 21	3N– 7E	Nov. 1956	15,565	15,565	2,554	2,554*	—	—	299

TABLE 14.—

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head pressure PSI
	Inj.	Prod.			Subjected to inj.	Total				
260	3	7	Split Line	—	121	121	Gravel Bed	Fresh	13.3	1,200
261	13	73	5-Spot	20	2,029	2,029	Shallow Gravel & Produced	Fresh & Brine	—	406
262	29	120	5-Spot	20	2,576	2,576	Shallow Gravel & Produced	Fresh & Brine	—	—
263	6	17	Split Line	—	725	725	Shallow Sand & Produced	Fresh & Brine	23.1	900
264	18	18	5-Spot	10	160	185	Gravel Bed & Produced	Fresh & Brine*	7.5	1,500
265	6	10	5-Spot	20	140	160	Shallow Sand	Fresh	1.8	1,333
266	2	4	Pilot	20	40	110	Shallow Sand	Fresh	6.3	913
267	1	4	—	10	120	120	—	Fresh	3.6	615
268	6	7	—	—	—	—	Water Well	Fresh	5.7	—
269	3	5	—	—	—	—	Water Well	Fresh	3.4	—
270	10	20	Perimeter	—	230	290	Tar Springs	Brine	10.1	635
271	3	13	Flank	—	460	515	Weiler Sand & Produced	Brine	37.4	974
272	10	22	Perimeter	10	407	407	Penn. Sand	Brine	15.1	1,266
273	2*	7	Random	20	160	160	McClosky	Brine	—	—
274	4†	6	Line	—	200	—	—	Brine	54.3	†
275	65	65	5-Spot	10	527	—	Tar Springs	Brine	5.9	395
276	16	11	Perimeter	—	445	445	Tar Springs	Brine	12.3	590
277	5	5	Peripheral	—	61	61	Tar Springs	Brine	5.7	530
278	1	5	Irregular	—	90	90	Penn. Sand	Brine	6.5	—
279	2	6	Irregular	—	80	80	Penn. Sand	Brine	—	—
280	9	15	5-Spot	10	130	130	Produced & 1,300′ Sand	Brine	—	—
281	5	9	5-Spot	20	53	130	Shallow Sand	Fresh	—	—
282	2	5	5-Spot	10	25	70	Shallow Sand & Produced	Fresh & Brine	13.8	1,234
283	1*	2	—	—	16	40	Produced	Brine	—	1,266
284	1	2	Irregular	—	30	30	Penn. Sand	Brine	—	None
285	1	4	—	—	40	135	Produced	Brine	13.3	400
286	1	4	—	—	40	135	Produced	Brine	7.9	1,300
287	3	6	Flank	10	128	128	City Water	Fresh	9.0	1,200
288	7	22	Flank	—	556	577	Penn. Sand	Brine	42.5	83
289	7	7	5-Spot	20	94	209	Bridgeport Sand	Brine	15.3	492
290	2	2	5-Spot	20	40	40	Tar Springs Sand	Brine	4.2	None
291	9	22	Flank	10	336	336	Produced	Brine	25.5	—
292	37	31	5-Spot	20	590	770	Penn. Sand	Brine	9.5	550
293	20	24	5-Spot	20	390	430	Tar Springs	Brine	6.0	508
294	3	9	—	—	95	95	Produced	Fresh & Brine	3.0	200
295	1	14	Spot	—	400	500	Cypress	Brine	—	—
296	1†	2	Irregular	—	60	60	Cypress	Brine	67.7	—
297	1†	3	—	—	30	55	Cypress	Brine	32.1	—
298	1	1	—	—	20	20	Tar Springs	Brine	26.1	—
299	3	9	—	40	160	160	Produced	Brine	16.6	None

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,250	13.3	17.3	44	38	5.5 @ 85°F.		260
2,460	8.9	17.9	48	36.4	3.7 @ 96°F.	*Included with Bethel formation's produced water.	261
2,340	12.4	15.4	32	36.8	4.3 @ 94°F.	*Effective date of unit operation. †Figures include cumulative injection and secondary production prior to unit operation. ‡Cumulative water production from all zones within unit area.	262
2,200	43	19.2	475	36.8	2.9 @ 86°F.	*Includes Indiana data. Previously subjected to gas injection.	263
2,700	30	16	50	39	2.2 @ 92°F.	*Two separate injection systems. Previously subjected to gas injection.	264
2,800	24	14.5	50	39	—	Previously subjected to gas injection.	265
1,800	16	12.8	17.1	32	—		266
1,740	15	20.6	39	37	—		267
2,445	10	—	—	—	—	*Includes primary production since start of flood.	268
2,110	11	—	—	—	—	*Includes primary production since start of flood.	269
1,700	15	20	78	38	8.3 @ 69°F.		270
3,100	5.3	13.8	522	36	2.6 @ 99°F.		271
2,600	14.2	15.6	54	37.8	6.4 @ 60°F.		272
3,062	10	—	—	—	—	*Abandoned during 1956 because of large decrease in oil production. †As of 1-1-56.	273
3,150	5	20	—	—	—	*In cooperation with Sinclair. †Dump flood.	274
1,410	27	19	110	39	—		275
1,550	9	18.8	223	40	4.1	*Includes primary production since start of flood.	276
1,280	10	21	32	39	5.5 @ 60°F.	*Includes primary production since start of flood.	277
1,912	23	13	36	38	4.5 @ 84°F.	*Includes primary production since start of flood.	278
2,750	12	—	—	—	—	*Injection shut down June through December 1956. †Includes primary production since start of flood.	279
1,550	29	17.6	86	32	20 @ Res. Tp.	*As of 1-1-56.	280
1,830	—	—	—	32.2	11.2 @ 78°F.	*Includes primary production since start of flood.	281
2,000	15	—	—	37	—		282
2,800	10	15	46	37	—	*Input well shut down between 8-16-54 and 9-13-56.	283
2,300	12	—	—	—	—		284
2,000	10	—	—	—	—		285
2,300	7	—	—	—	—		286
2,800	9.6	18.6	64	34.5	5.2 @ 95°F.	*Corrected figure.	287
2,175	13	19.5	292	30	9.2 @ 83°F.		288
2,530	11.6	18.8	259	38.5	—		289
2,620	20	14	16	—	—		290
1,695	14	19	225	29.2	8 @ 32°F.	*Includes primary production since start of flood. Previously subjected to gas injection.	291
2,628	15.5	17.3	106	38.6	—		292
2,500	25	17.6	152	38.5	—		293
1,595	20	—	—	34	—	*Estimated figures.	294
2,860	7	—	—	—	—	*Dump flood, estimated injection.	295
2,870	4	—	—	37	—	*Includes primary production since start of flood. †Controlled dump flood.	296
2,850	5	—	—	37	—	*Includes primary production since start of flood. †Controlled dump flood.	297
2,850	5	—	—	37	—	*Includes primary production since start of flood.	298
2,950	6	15	800	—	—	*Includes primary production since start of flood.	299

TABLE 14.—

Map No.	Field	Operator	Project	Formation Sand(S), Lime(L)	County
					General
300	Sailor Springs Consol.	Cities Service	Wyatt	Aux Vases(S)	Clay
301	Sailor Springs Consol.	Kingwood	Nadler*	Rosiclare & McClosky(L)	Effingham
302	Sailor Springs Consol.	Magnolia	Sailor Springs Unit	Cypress(S)	Clay
303	Sailor Springs Consol.	W. C. McBride	Goldsby-Dickey	Cypress(S)	Clay
304	Sailor Springs Consol.	W. C. McBride	Duff Cypress*	Cypress(S)	Clay
305	Sailor Springs Consol.	Phillips	Bothwell	Cypress(S)	Clay
306	Salem Consol.	Texas	Rosiclare Sand Unit	Rosiclare(S)	Marion
307	Salem Consol.	Texas	Salem Unit	Benoist(S)	Marion
308	Salem Consol.	Texas	Salem Unit	Devonian(L)	Marion
309	Salem Consol.	Texas	Salem Unit	McClosky(L)	Marion
310	Salem Consol.	Texas	Salem Unit	Renault & AuxVases (S)	Marion
311	Samsville North	Ashland	West Salem	Bethel(S)	Edwards
312	Seminary	Pure	Seminary	McClosky(L)	Richland
313	Siggins	Bell Brothers	Flood #1	U. Siggins(S)	Cumberland
314	Siggins	Leland Fikes	Vevay Park	Siggins(S)	Cumberland
315	Siggins	Forest	Siggins	1st Siggins(S)	Cumberland
316	Siggins	Pure	Union Group	1st & 2nd Siggins(S)	Clark & Cumberland
317	Siggins	Ree	Siggins	Casey(S)	Clark & Cumberland
318	Stanford South	Gulf	South Stanford Unit	Aux Vases(S)	Clay
319	Storms Consol.	Sinclair	Storms Pool Unit	Waltersburg(S)	White
320	Stringtown	N. C. Davies	Stringtown	McClosky(L)	Richland
321	Stringtown	Helmerich & Payne	Stringtown	McClosky(L)	Richland
322	Stringtown	Skelly	Stringtown	McClosky(L)	Richland
323	Thompsonville East	Carter	E. Thompsonville	Aux Vases(S)	Franklin
324	Thompsonville North	Carter	N. Thompsonville	Aux Vases(S)	Franklin
325	Thompsonville North	J. & W. Production	Thompsonville Unit	Aux Vases(S)	Franklin
326	Thompsonville North	J. & W. Production	North Thompsonville Unit	Aux Vases(S)	Franklin
327	Tonti South	Slagter	—	Benoist(S)	Marion
328	Wamac	D. Stinson	Wamac	Petro(S)	Marion
329	Westfield	Forest	Parker*	Gas Sand	Clark
330	Westfield	Ree	Johnson	Gas Sand	Coles & Clark
331	Willow Hill East	M. M. Spickler	—	McClosky(L)	Jasper
332	Woburn Consol.	Arrow Drilling	Spindler	Benoist(S)	Bond
333	York	Trans-Southern	York	Casey(S)	Cumberland

(Continued)

Information			Production and injection statistics (bbls.)						
			Secondary recovery						
Location		Date first injection	Water injection		Oil production		Water production		Map No.
Section	T.–R.		Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	
13	5N– 7E	Sept. 1953	116,300	284,080	5,667	25,474	65,851	159,355*	300
28	6N– 7E	June 1955	109,500*	202,250	20,358	25,454†	34,102	37,882	301
14, 15, 23	4N– 7E	Mar. 1955	576,947	1,062,732	159,757	290,881	162,600	370,439	302
34	4N– 7E	Sept. 1955	66,864	81,087	1,918	1,918	2,374	2,374*	303
35	4N– 7E	July 1953	60,092	165,618	12,784	42,046	15,294	27,720†	304
14	3N– 7E	Aug. 1956	14,535	14,535	None	None	None	None	305
15	1N– 2E	Apr. 1950	159,270	1,194,354	4,819	66,704	35,192	155,575	306
—	1, 2N–2E	Oct. 1950	35,344,340	110,521,404	3,928,865	10,834,556	18,694,147	31,099,068*	307
—	1, 2N–2E	Oct. 1950	6,511,270	38,665,170	63,640	386,924	1,247,287	11,091,317*	308
—	1, 2N–2E	Apr. 1951	12,177,705	44,426,510	683,434	2,115,999	4,597,797	12,944,199*	309
—	1, 2N–2E	Oct. 1950	8,488,202	15,148,218	224,941	508,316	1,047,933	4,499,294*	310
30	1N–14W	Sept. 1954	68,857	152,072	1,931	5,416*	—	—	311
17, 20	2N–10E	Feb. 1954	244,122	828,729	5,773	20,128	105,030	260,661	312
13	10N–10E	Sept. 1950	34,957	314,926*	21,490	103,967	25,000	110,000	313
25	10N–14W	Dec. 1950	14,353	255,285	201	1,760	24,215	103,295	314
11, 12, 13, 14	10N–10E	June 1942	3,790,290	42,395,427	734,726	7,285,332	—	—	315
7	10N–11E								
18	10N–11E	Dec. 1946	1,168,520	13,001,686	116,923	2,198,198	1,117,691	9,473,646	316
13	10N–14W								
7	10N–11E	Dec. 1951	277,789	1,481,959	58,213	107,114	—	109,608*	317
7	10N–14W								
8, 9, 16, 17	2N– 7E	May 1954	690,414	1,781,524	71,504	346,985	370,220	483,834	318
2, 10, 11, 12, 13, 14, 15, 22, 23, 24	6S– 9E	Mar. 1956	1,608,850	1,608,850	—	—	235,019	235,019	319
31	5N–14W	Dec. 1953	64,419	149,570	4,857	8,806*	69,100	151,851	320
31	5N–14W	Oct. 1954	57,533	111,071	2,630	4,380	15,400	19,500	321
31	5N–14W	Dec. 1953	57,027	115,180	9,133	31,237	47,278	155,597	322
12	7S– 4E	July 1954	133,305	314,774	33,602	45,015	31,061	49,306	323
3, 9, 10	7S– 4E	Oct. 1955	484,123	575,447	13,580	13,580	52,742	55,056	324
10, 15	7S– 4E	Mar. 1954	108,466	548,297*	1,264	20,476	22,226	38,410	325
9	7S– 4E	Jan. 1956	313,370	313,370	1,357	1,357	1,483	1,483	326
4	2N– 2E	Dec. 1953	72,000	144,000*	25,568	61,223	99,000	189,000*	327
30	1N– 1E	May 1954	—	31,731*	—	2,828*	—	None*	328
30	11N–14W	June 1950	42,383	662,675*	3,097	32,853	—	—	329
7, 18	11N–11E	June 1951	138,079	924,545	2,582	8,586	—	23,750*	330
18	11N–14W								
36	7N–10E	June 1952	*	*	*	2,121†	—	—	331
10	6N– 2W	Sept. 1951	—	194,247*	—	10,507†	—	194,247*	332
6	9N–11E	Oct. 1950	39,389	540,684	1,488	12,798*	38,696	169,803	333
Totals of reported figures:			271,276,995	1,014,931,653	29,593,838	111,543,038			

TABLE 14.—

Map No.	Development as of 12-31-56						Injection Water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Avg. bbls. per day per well per ft.	Avg. well-head press-ure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
300	1	2	Irregular	30	9.4	30	Penn. Sand	Brine	34.6	525
301	2	4	Perimeter	20	120	120	Cypress	Brine	—	—
302	11	23	Irregular	—	202	350	Penn. Sand	Brine	—	—
303	1	4	5-Spot	10	10	40	Cypress & Produced	Brine	12.2	162
304	1	4	5-Spot	20	20	50	Tar Springs & Cypress	Brine	13.7	842
305	1	1	—	10	10	20	Produced	Brine	9.7	None
306	3	4	Flank	10	100	100	Penn. Sand	Brine	10.4	765
307	174	542	Peripheral & 25% 5-Spot	20	7,975	7,975	Gravel Bed & Produced	Fresh & Brine	20.0	314
308	26	29	Peripheral	—	5,414	5,414	Gravel Bed, Upper Sand & Produced	Fresh & Brine	36.1	—
309	122	348	Peripheral	—	7,712	7,712	Gravel Bed & Produced	Fresh & Brine	13.7	362
310	84	65	Peripheral	—	4,881	4,881	Gravel Bed & Produced	Fresh & Brine	—	319
311	1	1	—	—	20	35	Produced	Brine	37.7	523
312	2	4	—	—	173	173	Cypress	Brine	41.8	—
313	9	7	5-Spot	4.4	80	80	Surface & Produced	Fresh & Brine	0.7	210
314	2	4	5-Spot	4.4	10	—	Surface & Produced	Fresh & Brine	1.2	None
315	493	407	5-Spot	4.4	1,800	—	Gravel Bed & Produced	Fresh & Brine	0.66	240
316	127	121	5-Spot	4.4	468	575	Surface & Produced	Fresh & Brine	—	245
317	27	20	5-Spot	4.4	135	227	Lake & Produced	Fresh & Brine	0.4	—
318	9	8	5-Spot	20	125	170	Penn. Sand	Brine	1.8	1,420
319	9	93	5-Spot	20	180	1,796	River	Fresh	25.5	—
320	2	3	—	—	80	80	Tar Springs	Brine	8.8	—
321	1	2	—	10	91.5	50	Cypress	Brine	22.5	—
322	1	2	—	—	80	80	Tar Springs & McClosky	Brine	13.0	None
323	3	3	5-Spot	20	30	117	Cypress Sand & Produced	Fresh & Brine	6.8	189
324	5	5	5-Spot	20	80	164	Cypress Sand & Produced	Fresh & Brine	10.6	692
325	4*	8	Modified Peripheral	10	175	190	Lake & Produced	Fresh & Brine	—	1,200
326	6	10	5-Spot & Modified Split Line	10	232	261	Lake & Produced	Fresh & Brine	10.7	200
327	1	3	—	10	25	—	—	Brine	21.9	—
328	4	24	5-Spot	10	10	200	City Water	Fresh	—	—
329	9	12	5-Spot	2.5	20	—	Gravel Bed	Fresh	0.6	125
330	26	13	5-Spot	4.4	70	467	Lake & Produced	Fresh & Brine	0.4	—
331	1	1	—	—	20	20	Produced	Brine	—	—
332	1	4	—	—	20	20	Produced	Brine	—	—
333	3	7	Line Drive	4.4	15	125	Shallow Sand & Produced	Fresh & Brine	3.6	46
	5,307	7,687			92,350	‡				

‡ Includes only 8,800 acres for the Salem Unit.

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,771	9.2	21.9	164	34.2	—	*Corrected figure.	300
2,863	9	—	—	37	—	*Dump flood, estimated injection. †Includes primary production since start of flood.	301
2,600	—	—	—	—	—		302
2,580	15	15.4	17.3	38	—	*Since 3-1-56.	303
2,600	12	19	60	38	—	*Pilot flood. †Since 1-1-55.	304
2,650	10	—	—	36	—		305
2,093	14	11.5	43	36.5	—		306
1,770	28	17.9	150	37	3.9 @ 93°F.	*Since 1-1-52.	307
3,400	19	16.8	300	36.5	—	*Since 1-1-52.	308
1,950	20	15.8	700	37	—	*Since 1-1-52.	309
1,825	Ren. 7	16.5	18	37	Ren. 4.8 @ 93°F.	*Since 1-1-52.	310
	A.V.26	16.3	28	37	A.V.4.4 @ 93°F.		
2,930	5	—	—	—	—	*Includes primary production since start of flood.	311
3,000	8	—	—	36	—		312
320	16	18.9	73	34	12 @ 63°F.	*1954, 1955 & 1956 injection in joint-operated wells not included. Previously subjected to gas injection.	313
600	16	20.3	349	30.1	—		314
400	32	17.5	56	36.6	8 @ 60°F.	Previously subjected to gas injection.	315
1. 404	25	18.5	45	36	8.8 @ 68°F.		316
2. 464	6	18.3	66	36			
447	56	21.5	40.2	33.8	10.5 @ 68°F.	*As of 1-1-56. Previously subjected to gas injection.	317
2,975	11.8	19.8	97	38.8	3.7		318
2,214	25	—	—	33	—		319
3,000	10	18	—	—	—	*Includes primary production since start of flood.	320
3,026	7	—	—	38	—		321
3,002	12	—	—	36	—		322
3,200	18	21.1	98	38	—		323
3,075	25	22	170	—	—		324
3,120	16	19.5	50	38.6	3.5 @ 90°F.	*Injection shut down August through December 1956.	325
3,060	14	21	115	39	3.2 @ 90°F.		326
1,940	9	—	—	—	—	*Estimated since 1-1-55.	327
750	20	21.3	220	35	18.7 @ 60°F.	*As of 1-1-56.	328
270	25	17.9	153	28.1	54 @ 60°F.	*Injection temporarily discontinued for experimental purposes since Nov. 1956. Previously subjected to gas injection.	329
320	35	21.5	86	29	—	*As of 1-1-56.	330
2,615	10	—	—	—	—	*Dump flood not in operation during 1956. †As of 1-1-55.	331
1,006	14	—	—	—	—	*As of 1-1-56. †Includes primary production from start of flood to 1-1-56.	332
590	10	21.9	231.2	30.3	10 @ 75°F.	*Includes primary production since start of flood.	333

TABLE 15.—ILLINOIS WATERFLOOD

Map No.	Field	Operator	Project	Formation Sand(S), Lime(L)	County
					General
13	Albion Consol.	Superior	South Albion*	Bridgeport(S)	Edwards
334	Barnhill Consol.	Wayne Development	Walter	McClosky(L)	Wayne
335	Berryville Consol.	Phillips	Tarply	McClosky(L)	Wabash
336	Berryville Consol.	Phillips	Townsend	McClosky(L)	Wabash
337	Casey	Calvan American	Shawver	Casey(S)	Clark
338	Centerville East	Lesh Drilling	Centerville East	Rosiclare(L)	White
339	Centralia	Sohio	Copple Town	Trenton(L)	Clinton
60	Clay City Consol.	Gulf	Winona	McClosky(L)	Wayne
340	Lawrence	Calvan American	Waller	Cypress(S)	Lawrence
341	Lawrence	Ree	Snyder	Cypress(S)	Lawrence
342	Main Consol.	Ree	Meserve	Robinson(S)	Crawford
343	Main Consol.	Skiles	Correll-Curley	Robinson #4(S)	Crawford
344	Main Consol.	Skiles	Walter Comm.	Robinson #1 & #3(S)	Crawford
195	Main Consol.	Skiles	Weger	Robinson(S)	Crawford
345	Martinsville	J. B. Buchman	—	Carper(S)	Clark
346	Martinsville	Magnolia	Carper	Carper(S)	Clark
347	Martinsville	Magnolia	Casey	Casey(S)	Clark
348	Maunie South	Magnolia	Tar Springs Unit #2	Tar Springs(S)	White
349	New Harmony Consol.	Sun	Ford "A"	McClosky(L)	White
273	Parkersburg Consol.	Calvert	Parkersburg	McClosky(L)	Richland
350	Phillipstown Consol.	Sun	Phillipstown	Tar Springs(S)	White
351	Storms Consol.	Mabee	—	Waltersburg(S)	White
352	Westfield	Ree	Hawkins	Gas Sand(S)	Clark

PROJECTS REPORTED ABANDONED

Information				Production and injection statistics (bbls.)			
Location		Date first injection	Date abandoned	Cumulative water injection	Cumulative secondary recovery oil production	Cumulative water production	Map No.
Section	T.-R.						
1, 11, 12	3S–10E	Aug. 1946	*	*	*	*	13
26	2S–8E	Dec. 1950	Jan. 1955	143,565	—	118,901	334
2	1N–14W	Sept. 1952	Feb. 1953	34,688	None	102,551	335
35	2N–14W	Feb. 1952	July 1953	49,834	None	86,354	336
23, 24	10N–14W	Aug. 1953	July 1954	48,586	1,814	—	337
12	4S–9E	June 1954	Dec. 1955	*	4,437	3,650†	338
35	2N–1W	Nov. 1951	*	236,134	34,025†	20,779	339
12	1S–8E	Aug. 1955	Oct. 1956	25,000	None	300	60
5, 6	2N–11W	Mar. 1953	Nov. 1955	827,519	12,299	—	340
30	3N–11W	Oct. 1952	— 1955	15,796*	567*	69,350*	341
11	6N–13W	Nov. 1953	May 1955	250,500	1,183	39,083	342
10	7N–12W	July 1951	Sept. 1955	1,207,325	29,756	226,810	343
1	6N–13W	Dec. 1951	Dec. 1952	25,821	None	29,000	344
36	7N–13W						
18, 19	5N–11W	Nov. 1952	July 1956	776,693	8,545	108,610	195
13, 24	5N–12W						
31	10W–13W	Oct. 1952	— 1954	282,697*	None	4,800*	345
30	10N–13W	Jan. 1951	Feb. 1955	1,110,949	10,376	9,605	346
19	10N–13W	Aug. 1950	Feb. 1955	872,185	2,345	33,505	347
24	6S–10E	Nov. 1949	— 1955	639,215	60,344	208,636	348
19	6S–11E						
18	5S–14W	May 1948	July 1952	57,823	13,076	626	349
16, 21	2N–14W	Jan. 1955	— 1956	107,440*	None	43,025*	273
6	5S–11E	Jan. 1953	May 1954	57,598	None	251,333	350
22	6S–9E	July 1951	June 1953	90,110	None	—	351
20, 21	11N–14W	Aug. 1951	— 1954	265,199*	1,982*	44,000*	352
Totals of reported figures:				7,124,677	180,749	1,400,918	

TABLE 15.—

Map No.	Maximum development during operation						Injection water		
	No. wells		Injection pattern	Spacing acres per input well	Productive acreage		Source	Type	Depth feet
	Inj.	Prod.			Subjected to inj.	Total			
13	*	*	—	—	203	—	Produced	Brine	1,900
334	1	2	—	10	40	40	Cypress	Brine	3,450
335	1	2	—	—	14	30	Produced & Tar Springs	Brine	2,890
336	1	2	—	—	27	30	Produced & Tar Springs	Brine	2,890
337	9	4	5-Spot	4.4	13	215	Shallow Sand	Fresh	450
338	1*	1	—	—	20	20	Tar Springs	Brine	3,366
339	2	12	—	20	160	200	Devonian	Brine	3,950
60	1	1	—	12.5	12.5	50	Tar Springs	Brine	3,115
340	8	8	5-Spot	10	35	625	Gravel Bed	Brine	1,535
341	1	2	—	—	10	230	Tar Springs	Brine	1,580
342	4	4	5-Spot	10	—	525	Penn. Sand	Brine	950
343	18	17	5-Spot	10	180	—	Creek & Penn. Sand	Fresh & Brine	1,035
344	5	6	5-Spot	10	40	—	Upper Penn. Sand	Brine	950 1,010
195	9	11	5-Spot	10	90	110	Creek & Produced	Fresh & Brine	900
345	2	6	5-Spot	20	40	40	Shallow Sand	Fresh	1,346
346	4	1	5-Spot	10	10	50	Gravel Bed	Fresh	1,334
347	8	3	5-Spot	10	23	110	Gravel Bed	Fresh	464
348	3	2	5-Spot	20	50	50	Gravel Bed	Fresh & Brine	2,275
349	1	1	Spot	—	40	40	Gravel Bed	Fresh	2,900
273	2	7	—	20	160	160	McClosky	Brine	3,062
350	1*	9	—	—	10	—	Produced	Brine	2,248
351	1	2	—	—	40	40	Penn. Sand	Brine	2,241
352	15	8	5-Spot	4.4	40	360	Devonian & Produced	Fresh & Brine	290

(Continued)

Reservoir statistics (Average values)					Remarks	Map No.
Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
20	19.7	304	32.5	6.3 @ 95°F.	*Abandoned & converted to disposal project in 1952, but reinstated as an active flood during 1956. See Table 14.	13
18	—	—	—	—		334
10	—	—	—	—		335
10	—	—	—	—		336
21.5	22.4	108	31.8	13.6 @ 65°F.		337
7	—	—	43	—	*Dump flood. †From 1-1-55 to 12-4-55.	338
22	10	—	39.8	2.7	*Pilot flood, reported as abandoned in March, 1953. †Includes primary production from 11-51 to 3-53.	339
8	12	—	40.1	—		60
50	18.5	70	39.5	5 @ 85°F.		340
25	21.2	125	38.6	4.1 @ 85°F.	*As of 1-1-55.	341
22.7	21.9	89	—	10 @ 79°F.		342
20	22.2	100	33	13.5		343
{10 15}	20.1	93	36	12.5 @ reservoir temp.		344
20	17	37	—	—		195
40	16	11	30	—	*As of 1-1-54.	345
—	—	—	—	—		346
—	—	—	—	—		347
—	—	—	—	—		348
7	—	—	38	—		349
10	—	—	—	—	*As of 1-1-56.	273
10	—	—	34.5	—	*Abandoned after unsuccessful input well fracture treatment.	350
15	—	—	—	—		351
30	22	120	30	28 @ 62°F.	*As of 1-1-54.	352

TABLE 16.—ILLINOIS PRESSURE MAINTENANCE PROJECTS

Map No.	General Information				
	Field	Operator	Project	Formation Sand(S), Lime(L)	County
353	Albion Consol.	Calvert	South Albion Lower Biehl	Biehl(S)	Edwards
354	Beaver Creek	Conrey & Conrey	Wrone	Benoist(S)	Bond
355	Bone Gap Consol.	V. R. Gallagher	—	Waltersburg(S)	Edwards
38	Boyd	Superior	Boyd Repressure*	Benoist(S)	Jefferson
356	Enfield South	Ryan	S. Enfield Unit #1	Aux Vases(S)	White
357	Louden	Carter	Louden Devonian	Devonian(L)	Fayette
358	Omaha	Carter	Omaha	Palestine(S)	Gallatin
359	Phillipstown Consol.	National Assoc. Pet.	Stokes "B" #3	Benoist(S)	White
360	Salem Consol.	Carter	Dix (R. & P. M.)	Bethel(S)	Jefferson

‡ Includes both primary and any additional oil obtained by pressure maintenance.

TABLE 16.—

Map No.	Development as of 12-31-56					Injection water		
	No. of wells		Injection pattern	Productive acres		Source	Type	Av. wellhead pressure PSI
	Inj.	Prod.		Subjected to inj.	Total			
353	2	7	Peripheral	60	119	Produced	Brine	—
354	1	4	—	40	50	Produced	Brine	—
355	1	11	—	40	120	Produced	Brine	450
38	4	85	Peripheral	1,564	1,564	Surface & Produced	Fresh & Brine	—
356	2	5	—	150	300	Subsurface & Produced	Fresh & Brine	700
357	7	57	Peripheral	2,600	2,600	Produced	Brine	135
358	1	16	Flank	280	280	Produced	Brine	150
359	1	8	—	80	80	Produced	Brine	1,175
360	4	63	Peripheral	1,200	1,200	Tar Springs & Produced	Brine	237

USING WATER INJECTION DURING 1956

Location		Date first injection	Production and injection statistics (bbls.)						Map No.
			Water injection		Oil production‡		Water production		
Section	T.–R.		Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	Total 1956	Cumulative 12–31–56	
35, 36	2S–10E	Apr. 1951	209,254	803,575*	59,443	545,994	26,632	544,051*	353
1	3S–10E								
36	4N–3W	July 1953	—	26,609*	—	14,477*	—	—	354
18	1S–14W	June 1952	105,334	648,123	31,666	290,358	105,334	648,123	355
13, 24, 25	1S–1E								
18, 19, 20, 30	1S–2E	June 1945	*	9,714,450*	*	9,776,513†	*	10,865,715*	38
29, 32	5S–8E	Jan. 1955	82,699	183,080	25,604	126,889	—	—	356
—	8N–3E	Sept. 1943	12,006,245	122,248,861	494,909	16,213,170*	10,095,459	113,811,951*	357
33	7S–8E								
4	8S–8E	Oct. 1944	172,955	1,225,732	79,672	2,123,497*	138,523	1,257,928	358
26	4S–10E	June 1956	64,421	64,421	—	—	64,421	64,421	359
3, 4, 9, 10, 15, 16	1S–2E	Jan. 1948	900,398	4,625,289	436,709	7,993,264	520,352	4,006,540	360
Totals of reported figures:			13,541,306	139,540,140	1,128,003	37,084,162	10,950,721	131,198,729	

(Continued)

Reservoir statistics (Average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity percent	Permeability millidarcys	Oil Gravity API	Oil viscosity centipoises		
2,080	9.2	16.8	384	32.3	10.4 @ 85°F.	*Since May 1952.	353
1,140	8	20.7	208	32.4	—	*As of 1-1-56.	354
2,310	20	18	120	34.6	5.6 @ 85°F.		355
2,065	17.3	17.5	173	39.5	3.2 @ 90°F.	*Converted to water flood status 1-1-55. All figures as of 1-1-55. †Includes Aux Vases production up to 1-1-55.	38
3,260	8	21.5	142	—	3.5 @ 101°F.		356
3,100	—	—	—	29	6.5 @ 96°F.	*Corrected figures.	357
1,700	17	18.9	427	27	17 @ 76°F.	*Corrected figure.	358
2,858	8	—	—	38	—		359
1,950	12	16.4	128	39	2.5 @ 87°F.		360

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