

STATE OF ILLINOIS
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Oil and Gas Development in Illinois in 1939*

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In 1939 Illinois produced 94,302,000 bbl. of oil—almost three times the amount of oil produced at the peak in 1908, when development in the southeastern Illinois field was at its height (Fig. 1). It represents nearly a fourfold increase over the 24,075,000 bbl. produced in 1938 (Table 6).

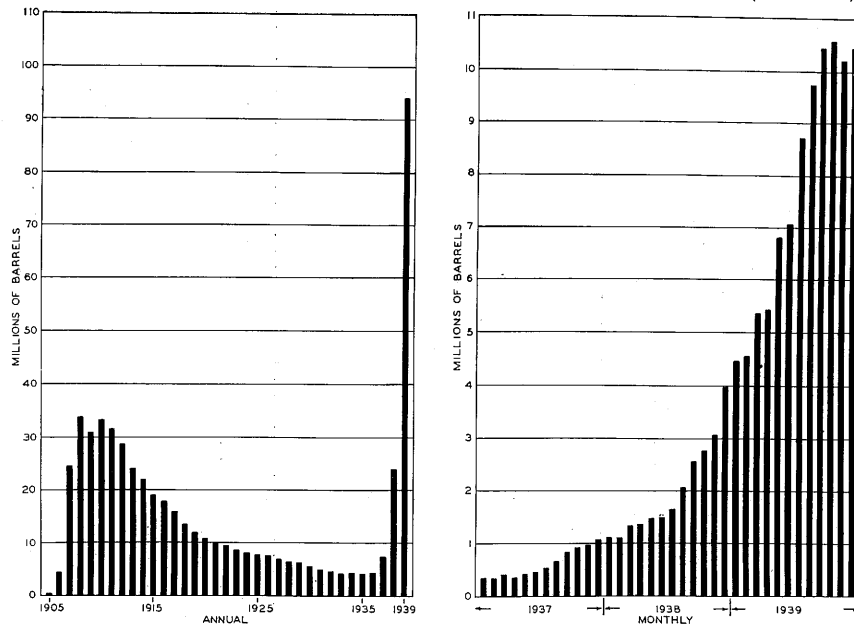


FIG. 1.—PRODUCTION OF OIL IN ILLINOIS.

This rapid increase in oil production in Illinois is largely due to development in the Salem and Loudon fields (Table 1). During 1939 daily production for the state increased from 135,000 to 332,572 bbl. A notable increase in production for 1940 is expected as a result of the drilling of the Devonian limestone in the Salem and Centralia fields,

* Reprinted, with certain additions, from "Recent Development and Technology," Trans. A. I. M. E., vol. 136, pp. 268-80, 1940.

TABLE 1.—Oil and Gas Production in Illinois

Line Number	Field, County	Year of Discovery	Area Proved, Acres		Total Oil Production, Bbl.		Total Gas Production, Millions Cu. Ft.		Number of Oil and/or Gas Wells					
			Oil	Gas ^b	To End of 1939	During 1939	To End of 1939	During 1939	Completed to End of 1939	During 1939			End of 1939	
										Completed	Abandoned	Tempo. Shut Down	Producing Oil ^c	Producing Gas ^c
1	Warrenton-Borton, <i>Edgar</i>	1906	100	0	29,655	625	0	0	22	0	0	1	13	0
2	Westfield (Parker Twp.), <i>Clark, Coles</i>	1904	9,000	55	x	x	x	0	1,624	3	33	24	326	0
3			850	75	x	x	x	0	185	0	0	y	y	0
4			9,000	0	x	x	x	0	1,446	2	0	y	y	0
5			1,500	0	x	x	x	0	13	1	0	y	y	0
6	Siggins (Union Twp.), <i>Cumberland, Clark</i>	1906	3,580	75	x	x	x	0	995	0	51	0	863	0
7			3,135	55	x	x	x	0	854	0	y	0	y	0
8			435	15	x	x	x	0	90	0	y	0	y	0
9			855	105	x	x	x	0	192	0	y	0	y	0
10	York, <i>Cumberland</i>	y	310	40	x	x	x	0	70	0	0	0	44	0
11	Casey, <i>Clark</i>	1906	1,925	55	x	x	x	0	532	0	0	0	488	0
12			190	15	x	x	x	0	41	0	0	0	y	0
13			400	0	x	x	x	0	82	0	0	0	y	0
14			1,525	15	x	x	x	0	319	0	0	0	y	0
15	Martinsville, <i>Clark</i>	1907	710	155	x	x	x	0	213	0	0	0	122	0
16			15	20	x	x	x	0	7	0	0	0	y	0
17			275	35	x	x	x	0	63	0	0	0	y	0
18			105	0	x	x	x	0	21	0	0	0	y	0
19			170	0	x	x	x	0	34	0	0	0	y	0
20			195	0	x	x	x	0	39	0	0	0	y	0
21			5	0	x	x	0	0	1	0	0	0	y	0
22	North Johnson, <i>Clark</i>	1907	1,320	20	x	x	x	x	485	0	15	21	412	0
23			1,115	0	x	x	x	x	296	0	y	y	y	0
24			160	0	x	x	x	x	32	0	y	y	y	0
25			820	5	x	x	x	x	177	0	y	y	y	0
26			215	0	x	x	0	0	44	0	y	y	y	0
27	South Johnson, <i>Clark</i>	1907	1,715	65	x	x	x	x	535	1	8	0	479	0
28			185	5	x	x	x	x	38	0	y	0	y	0
29			295	0	x	x	x	x	59	0	y	0	y	0
30			1,675	35	x	x	x	x	402	1	y	0	y	0
31			845	5	x	x	x	x	170	0	y	0	y	0
32	Bellair, <i>Crawford, Jasper</i> ..	1907	1,300	5	x	x	x	x	486	1	9	0	395	0
33			1,165	0	x	x	x	x	310	1	y	0	y	0
34			315	0	x	x	x	x	65	0	y	0	y	0
35			910	0	x	x	x	x	182	0	y	0	y	0
36	Clark County Division ¹ ...		19,960	475	52,388,000	283,000	x	y	4,987	5,116	46	3,142	0	0
37	Main, ² <i>Crawford</i>	1906	35,135	515	x	x	x	x	7,322	0	198	243	4,912	0
38			340	0	x	x	x	x	68	0	y	y	y	0
39			33,795	510	x	x	x	x	7,141	0	y	y	y	0
40			1,000	0	x	x	x	x	108	0	y	y	y	0
41	New Hebron, <i>Crawford</i>	1909	1,350	210	x	x	x	x	297	1	5	1	173	0
42	Chapman, <i>Crawford</i>	1914	1,045	515	x	x	x	x	193	0	4	0	68	0
43	Parker, <i>Crawford</i>	1907	1,310	30	x	x	x	x	256	0	0	0	221	0
44	Allison-Weger, <i>Crawford</i> ...	y	1,075	20	x	x	x	x	147	1	1	0	65	0
45	Flat Rock, ³ <i>Crawford</i>	y	1,375	545	x	x	x	x	289	0	6	1	143	0
46	Birds, <i>Crawford, Lawrence</i>	y	4,370	115	x	x	x	x	684	0	14	6	459	0

^b Footnotes to column heads and explanation of symbols are given on page 38.

¹ Total of lines 1, 2, 6, 10, 11, 15, 22, 27, 32.

² Includes Kibbie, Oblong, Robinson, and Hardinsville.

³ Includes Swearingen gas.

TABLE 1.—(Continued)

Line Number	Oil-production Methods, End of 1939		Reservoir Pressure, Lb. per Sq. In. ²⁶		Repressuring Operations ^d	Character of Oil		Producing Formation										Deepest Zone Tested to End of 1939	
	Number of Wells		Initial	Avg. at End of 1939		Gravity, A. P. I. at 60° F. ²⁷ Weighted Average	Sulphur, Per Cent	Name	Age ^e	Character ^f	Porosity ^g	Depth Avg. Ft.			Structure ^h	Name	Depth of Hole, Ft.		
	Flowing	Artificial Lift										Top Prod. Zone	Bottoms Prod. Wells	Net Thickness, Avg. Ft.					
1	0	13	x	x		x	Unnamed	Pen	S	Por	159	215	x	ML	Pen	715			
2	0	326	200±	x		34.0	See below							D	St. Peter	3,009			
3	0	y	x	x		30.0	Shallow gas sand	Pen	S	Por	281	376	36	D					
4	0	y	x	x		33.5	Westfield lime	MisL	L	Cav	334	446	x	D					
5	0	y	x	x		37.0	Trenton	Ord	L	Por	2,265	2,568	x	D	Devonian	2,010			
6	0	863	x	x	RP	33.0	See below							D					
7	0	y	x	x		34.0	First Siggins sand	Pen	S	Por	367	465	x	D					
8	0	y	x	x		(33.6)*	Second and third Siggins sand	Pen	S	Por	478	562	x	D					
9	0	y	x	x		(25.7)	Lower Siggins sand	Pen	S	Por	556	590	x	D					
10	0	44	x	x		(30.3)	York sand	Pen	S	Por	588	680	x	AM		960			
11	0	488	x	x	RP	29.2	See below							AM		808			
12	0	y	x	x		(31.9)	Upper gas sand	Pen	S	Por	263	358	x	AM					
13	0	y	x	x		(30.1)	Lower gas sand	Pen	S	Por	309	426	x	AM					
14	0	y	x	x		(33.6)	Casey sand	Pen	S	Por	444	505	x	AM					
15	0	122	x	x		36.8	See below							D	St. Peter	3,411			
16	0	y	x	x		y	Shallow sand	Pen	S	Por	255	411	x	D					
17	0	y	x	x		y	Casey sand	Pen	S	Por	449	511	x	D					
18	0	y	x	x		y	Martinsville	MisL	L	Por	477	506	x	D					
19	0	y	x	x		(38.9)	Carper	MisL	S	Por	1,340	1,418	x	D					
20	0	y	x	x		y	"Niagaran"	Dev	L	Por	1,553	1,596	x	D					
21	0	y	x	x		(39.6)	Trenton	Ord	L	Por	2,708	2,830	x	D					
22	0	412	x	x		31.0	See below							AM	Mis	965			
23	0	y	x	x		y	Claypool sand	Pen	S	Por	416	486	x	AM					
24	0	y	x	x		y	Shallow sands	Pen	S	Por	314	451	x	AM					
25	0	y	x	x		y	Casey sand	Pen	S	Por	465	508	x	AM					
26	0	y	x	x		y	Upper Partlow	Pen	S	Por	534	554	x	AM					
27	0	479	x	x		32.2	See below							AM	Mis	1,160			
28	0	y	x	x		y	Claypool sand	Pen	S	Por	392	549	x	AM					
29	0	y	x	x		y	Casey sand	Pen	S	Por	453	518	x	AM					
30	0	y	x	x		y	Upper Partlow	Pen	S	Por	489	570	x	AM					
31	0	y	x	x		28.5	Lower Partlow	Pen	S	Por	598	618	x	AM					
32	0	395	x	x	RP	33.7	See below							AM	MisL	1,471			
33	0	y	x	x		(32.4)	"500 Ft." sand	Pen	S	Por	561	726	x	AM					
34	0	y	x	x		y	"800 Ft." sand	Pen	S	Por	817	907	x	AM					
35	0	y	x	x		(37.0)	"900 Ft." sand	MisU	S	Por	886	920	x	AM					
36	0	3,142	x	x	RP	33.0	See below								Trenton	4,620			
37	0	4,912	425±	y	RP	33.0	Shallow sand	Pen	S	Por	508	822	x	ML	Trenton	4,620			
38	0	y	x	x		y	Robinson sand	Pen	S	Por	900	960	25±	ML	Trenton	4,620			
39	0	y	x	x		32.8	Oblong	Mis	S,L	Por	1,337	1,416	x	ML	Mis	1,479			
40	0	y	x	x		y								ML					
41	0	173	x	x	RP	30.1	Robinson sand	Pen	S	Por	940	975	x	ML	MisL	2,056			
42	0	68	x	x		y	Robinson sand	Pen	S	Por	995	1,015	x	ML	Mis	2,279			
43	0	221	x	x		y	Robinson sand	Pen	S	Por	1,000	1,025	x	ML	Pen	1,127			
44	0	65	x	x		29.5	Robinson sand	Pen	S	Por	912	930	x	ML	Pen	1,041			
45	0	143	x	x		22.5	Robinson (Flat Rock)	Pen	S	Por	935	945	x	ML	Pen	1,032			
46	0	459	x	x	RP	31.8	Robinson sand	Pen	S	Por	930	950	x	ML	MisL	1,731			

²⁶ Pressures in the southeastern Illinois oil fields are estimated bottom-hole pressures reported in previous Survey publications.

²⁷ All gravities given prior to 1936 (except those in parentheses) were from data for the year 1925 furnished by the Illinois Pipe Line Co. Gravities in parentheses are for particular samples, see Illinois State Geol. Survey Bull. 54, Table 3. The values have been converted from Baumé to A. P. I. gravities.

* See footnote 27.

TABLE 1.—(Continued)

Line Number	Field, County	Year of Discovery	Area Proved, Acres		Total Oil Production, Bbl.		Total Gas Production, Millions Cu. Ft.		Number of Oil and/or Gas Wells				
			Oil	Gas ^b	To End of 1939	During 1939	To End of 1939	During 1939	Completed to End of 1939	During 1939		End of 1939	
										Completed	Abandoned	Tempo. Shut Down ^c	Producing Oil ^e
47	Crawford County Division ^d		45,655	1,945	144,682,000	1,063,000	x	y	9,195	2,228	251	6,041	0
48	Lawrence, Lawrence, Crawford	1906	24,150	1,550	x	x	x	x	4,401	3	23	116	3,167
49			5,015	35	x	x	x	x	1,232	1	y	y	y
50			2,240	0	x	x	x	x	475	0	y	y	y
51			345	1,095	x	x	x	x	243	0	y	y	y
52			15,960	220	x	x	x	x	3,017	0	y	y	y
53			4,020	200	x	x	x	x	685	1	y	y	y
54			6,950	0	x	x	x	x	958	1	y	y	y
55	St. Francisville, Lawrence	y	420	0	x	x	x	x	55	0	0	0	45
56	Lawrence County Division ^e		24,570	1,550	224,436,000	1,304,000	x	y	4,462	3	23	116	3,212
57	Allendale, Wabash	1912	1,680	0	4,743,000	87,000	x	y	427	0	1	0	325
58	Total southeastern fields ^f		91,855	3,970	426,278,655	2,737,625	x	y	19,074	10	368	413	12,720
59	Ayres Gas, Bond	1922	0	325	0	0	180.6	13.6	19	0	1	0	0
60	Greenville Gas, Bond	1910 ^g	0	160	0	0	990.0	0	4	0	0	0	0
61	Bartelso, Clinton	1936	200	0	360,570	107,000	0	0	39	3	0	0	39
62		1939	10	0	3,000	3,000	0	0	1	1	0	0	1
63	Carlyle, Clinton	1911	915	0	3,373,400	29,000	0	0	165	0	0	25	78
64	Frogstown, Clinton	1918 ^h	300	0	x	0	0	0	12	0	0	0	0
65	Ava-Campbell Hill, Jackson	1917 ⁱ	70	370	25,000	0	x	0	35	0	0	0	0
66	Colmar-Plymouth, McDonough, Hancock	1913	2,450	0	2,551,970	136,000	x	y	478	1	0	72	210
67	Decatur, Macon	1937 ¹⁰	10	0	1,000	0	0	0	2	0	0	2	0
68	Carlinville, Macoupin	1909 ¹¹	30	50	x	0	x	0	8	0	0	0	0
69	Gillespie-Benid Gas, Macoupin	1923 ¹²	0	80	0	0	135.8	0	4	0	0	0	0
70	Gillespie-Wyen, Macoupin	1915	40	0	x	0	0	0	22	0	0	12	0
71	Spanish Needle Creek Gas, Macoupin	1915 ¹³	0	80	0	0	14.4	0	7	0	0	0	0
72	Staunton Gas, Macoupin	1916 ¹⁴	0	400	0	0	1,050	0	18	0	0	0	0
73	Collinsville, Madison	1909 ¹⁵	40	0	850	135	0	0	6	1	1	0	0
74	Brown-Langewisch Kuester Junction City, Marion	1910	175	0	x	y	0	0	12	0	0	0	5
75			20	0	x	y	0	0	10	0	0	0	4
76	Sandoval, Marion	1909	770	0	2,665,800	20,000	0	0	123	0	0	0	37
77		1938	135	0	794,000	794,000	0	0	22	21	0	0	22
78	Wamac, Marion, Clinton, Washington	1921	250	0	403,530	21,000	0	0	104	0	3	0	43
79	Litchfield, Montgomery	1879 ¹⁶	100	0	22,000	0	0	0	18	1	0	1	0

^a Total of lines 37, 41, 42, 43, 44, 45, 46.

^b Total of lines 48 and 55.

^c Total of lines 36, 47, 56, 57.

^d Abandoned 1923.

^e Abandoned 1933.

^f Abandoned 1934.

^g Wells drilled in 1922 and 1924, first production in 1937.

^h Abandoned 1925±.

ⁱ Abandoned 1935.

¹⁰ Abandoned 1934.

¹¹ Abandoned 1919.

¹² Abandoned 1921, one well completed and abandoned in 1939.

¹³ Abandoned 1904, one well completed and shut down in 1939.

which began in December 1939. This development has focused interest on Devonian possibilities in both old and new fields that are producing from younger formations.

Of a total of 3675 wells completed in 1939 in Illinois, 2946 produced oil, 24 produced gas and 705 were dry holes. Of the total, 478 are classified as "wildcat" wells, defined as wells drilled outside of proved territory and more than one mile from the nearest production (See table 2). The remainder, or 3197, were drilled in or near proved fields.

TABLE 1.—(Continued)

Line Number	Oil-Production Methods, End of 1939		Reservoir Pressure, Lb. per Sq. In. ²⁶		Repressuring Operations ^d	Character of Oil		Producing Formation							Deepest Zone Tested to End of 1939		
	Flowing	Artificial Lift	Initial	Avg. at End of 1939		Gravity, A. P. I. at 60° F. ²⁷	Sulphur, Per Cent	Name	Age ^e	Character ^f	Porosity ^g	Depth Avg. Ft.			Structure ^h	Name	Depth of Hole, Ft.
												Top Prod. Zone	Bottoms Prod. Wells	Net Thickness, Avg. Ft.			
47	0	6,041	425±	x		32.3	x		Pen	S	Por				ML	Trenton	4,620
48	0	3,167	650±	x	RP	32.9	x	See below	Mis						A	St. Peter	5,190
49	0	y	x	y		y	x	Bridgeport sand	Pen	S	Por	800	1,000	40	A		
50	0	y	x	x		y	x	Buchanan	Pen	S	Por	1,250	1,265	15	A		
51	0	y	x	x		y	x	"Gas" sand	MisU	S	Por	1,330	1,345	15	A		
52	0	y	600±	x		y	x	Kirkwood	MisU	S	Por	1,400	1,430	30	A		
53	0	y	650	x		y	x	Tracey	MisU	S	Por	1,560	1,580	20	A		
54	0	y	600	x		y	x	McClosky	MisL	S	Por	1,700	1,710	10	A		
55	0	45	600	x		37.3	x	Kirkwood	MisU	S	Por	1,843	1,865	22	ML	Mis	1,900
56	0	3,212	x	x					MisU	S	Por				ML	St. Peter	5,190
57	0	325	x	x	RP	35.1	x	Bieh1 sand	Pen	S	Por	1,425	1,460	20	AM	MisL	2,367
58	0	12,720															
59	0	0	335	x	225		y	Lindley (2d)	MisU	S	Por	940	945	5	A	MisL	1,150
60	0	0	x	x			x	Lindley (1st, 2d)	MisU	S	Por	927	993	x	A	Mis	1,065
61	0	39	x	x		36.2	0.20	Carlyle	MisU	S	Por	984	1,008	24	D	Devonian	2,431
62	0	1	x	x		41.5	0.27	Devonian	Dev	L	Por	2,416	2,431	14	D	Devonian	2,431
63	0	78	x	x	RP	35.2	0.26	Carlyle	MisU	S	Por	1,035	1,055	20	A	Silurian	2,620
64	0	0	x	x		31.9	x	Carlyle	MisU	S	Por	950	957	7	D	Cypress	962
65	0	0	x	x		x	x	Cypress	MisU	S	Por	780	798	18	A	Devonian	2,530
66	0	210	x	x	RP	37.6	0.38	Hoing sand	Dev	S	Por	447	468	21	A	Trenton	805
67	0	0	x	x		39.5	x	"Niagaran"	Dev	L	Por	2,020	2,076	30	N	St. Peter	2,991
68	0	0	135	x		27.7	x	Unnamed	Pen	S	Por	380	398	x	A	Pen	410
69	0	0	155	x				Unnamed	Pen	S	Por	542	555	x	A	Pen	575
70	0	0	x	x				Unnamed	Pen	S	Por	650	670	x	T	Trenton	2,560
71	0	0	x	x				Unnamed	Pen	S	Por	305	405	x	D	Pen	495
72	0	0	145	x				Unnamed	Pen	S	Por	461	491	x	A	Trenton	2,371
73	0	0	x	x		x	x	Devonian-Silurian	Dev-Sil	L	Por	1,305	1,400	20	ML	Silurian	1,500
74	0	5	x	x		32.0	x	Dykstra, Wilson	Pen	S	Por	1,130	1,150	20	D	MisL	2,001
75	0	4	x	x		32.0	x	Cypress	MisU	S	Por	1,658	1,673	15	ML	Devonian	3,344
76	0	37	x	x		34.5	x	Benoist	MisU	S	Por	1,540	1,560	20±	D	Devonian	3,055
77	3	19	y	y		38.0	0.38	Devonian	Dev	L	Por	2,924	2,969	9	D	Devonian	3,055
78	0	43	x	x		30.2	x	Petro	Pen	S	Por	720	760	20	D	MisL	1,760
79	0	0	x	x		21.7	x	Unnamed	Pen	S	Por	664	674	x	D	Pen	681

TABLE 1.—(Continued)

Line Number	Field, County	Year of Discovery	Area Proved, Acres		Total Oil Production, Bbl.		Total Gas Production, Millions Cu. Ft.		Number of Oil and/or Gas Wells					
			Oil	Gas ⁴	To End of 1939	During 1939	To End of 1939	During 1939	Complete to End of 1939	During 1939		End of 1939		
										Completed	Abandoned	Tempo. Shut Down	Producing Oil ⁵	Producing Gas ⁶
80	Waterloo, Monroe.....	1920 ¹⁷	125	0	176,000	10,000	0	0	30	7	0	0	7	0
81	Jacksonville Gas, Morgan.....	1910 ¹⁸	30	1,290	2,100	0	x	0	53	0	0	0	0	0
82	Pike County Gas, Pike.....	1905 ¹⁹	0	8,960	0	0	x	0	68	0	0	0	0	0
83	Sparta, Randolph.....	1888 ²⁰	65	100	x	0	x	0	20	0	0	0	0	0
84	Dupo, St. Clair.....	1928	670	0	1,092,870	146,000	0	0	263	21	1	0	49	0
85	Total for fields prior to Jan. 1, 1937 ²¹		98,095	15,785	437,750,745	4,003,760	2,370.8	13.6	20,617	66	374	523	13,215	6
86	Sorento, Bond.....	1938	10	0	y	y	0	0	0	0	0	0	1	0
87	Flora, Clay.....	1938	290	0	214,000	147,000	0	0	17	8	0	0	17	0
88			10	0	x	x	0	0	1	1	0	0	1	0
89			290	0	x	x	0	0	16	7	0	0	16	0
90	Iola, Clay.....	1939	20	0	y	y	0	0	2	2	0	0	2	0
91	Clay City, Clay, Wayne.....	1937	7,930	0	11,895,000	6,336,000	0	0	379	157	4	6	369	0
92	Hoffman, Clinton.....	1939	10	0	y	y	0	0	1	1	0	0	1	0
93	Centralia, Clinton, Marion.....	1937	2,190	0	5,922,000	2,895,000	0	0	553	27	14	0	539	0
94			30	0	x	x	0	0	21	9	0	0	21	0
95			2,190	0	x	x	0	0	531	17	14	0	517	0
96			10	0	x	x	0	0	1	1	0	0	1	0
97	Mattoon, Coles.....	1939 ²²	10	0	y	y	0	0	1	1	1	0	0	0
98	Cowling, Edwards.....	1939	100	0	25,000	25,000	0	0	11	11	0	0	11	0
99	Grayville, Edwards, White.....	1939	70	0	30,000	30,000	0	0	8	8	0	0	8	0
100	Louden, Fayette.....	1937	16,370	0	20,237,000	18,345,000	0	0	1,334	843	3	2	1,329	0
101			y	0	x	x	0	0	630	377	3	0	627	0
102			y	0	x	x	0	0	283	265	0	0	283	0
103			y	0	x	x	0	0	421	201	0	2	419	0
104	St. James, Fayette.....	1938	1,030	0	494,000	445,000	0	0	76	52	0	0	76	0
105	Whittington, Franklin.....	1939	10	0	y	y	0	0	1	1	0	0	1	0
106	Junction, Gallatin.....	1939	60	0	y	y	0	0	6	6	0	0	6	0
107	Cravat, Jefferson.....	1939	100	0	14,000	14,000	0	0	6	6	0	0	6	0
108	Dix, Jefferson.....	1938	1,250	0	y	y	0	0	57	22	0	0	57	0
109	Elk Prairie, Jefferson.....	1938	10	0	y	y	0	0	1	0	0	0	1	0
110	Ina, Jefferson.....	1938	10	0	y	y	0	0	1	0	0	0	1	0
111	Marcoe, Jefferson.....	1938	10	0	y	y	0	0	2	1	1	0	1	0
112	Roaches, Jefferson.....	1938	110	0	70,000	70,000	0	0	9	7	0	0	9	0
113			y	0	x	x	0	0	4	3	0	0	4	0
114			110	0	x	x	0	0	5	4	0	0	5	0
115	Russellville gas, Lawrence.....	1937	0	1,020	0	0	1,065.1	963.7	32	18	0	0	0	32
116			0	20	0	0	y	y	4	2	0	0	0	4
117			0	1,000	0	0	y	y	28	16	0	0	0	28
118	Patoka, Marion.....	1937	720	0	1,661,000	494,000	0	0	115	0	11	0	104	0
119			710	0	x	x	0	0	114	0	11	0	103	0
120			10	0	x	x	0	0	1	9	0	0	1	0
121	Salem, Marion.....	1938	8,870	0	52,619,000	49,724,000	0	0	1,581	1,088	4	17	1,560	0
122			y	0	x	x	0	0	884	442	4	15	865	0
123			y	0	x	x	0	0	141	120	0	0	141	0
124			y	0	x	x	0	0	544	524	0	2	542	0
125			y	0	x	x	0	0	5	5	0	0	5	0
126			y	0	x	x	0	0	7	7	0	0	7	0
127	Tonti, Marion.....	1939	270	0	910,000	910,000	0	0	35	35	0	0	35	0
128			y	0	x	x	0	0	4	4	0	0	4	0
129			y	0	x	x	0	0	4	4	0	0	4	0

¹⁷ Abandoned 1930, revived 1939.¹⁸ Abandoned 1937.¹⁹ Abandoned 1930.²⁰ Abandoned 1900.²¹ Total of lines 58 to 81 inclusive.²² Abandoned 1939.

TABLE 1.—(Continued)

Line Number	Oil-production Methods, End of 1939		Reservoir Pressure, Lb. per Sq. In. ²⁸		Repressuring Operations ^d	Character of Oil		Producing Formation							Deepest Zone Tested to End of 1939		
	Flowing	Artificial Lift	Initial	Avg. at End of 1939		Gravity, A. P. I. at 60° F., ²⁷ Weighted Average	Sulphur, Per Cent	Name	Age ^e	Character/ ^f	Porosity ^g	Depth Avg. Ft.			Structure ^h	Name	Depth of Hole, Ft.
												Top Prod. Zone	Bottoms Prod. Wells	Net Thickness, Avg. Ft.			
80	0	7	x	x		30.0	x	Trenton	Ord	L	Por	410	460	50	A	Trenton	845
81	0	0	x	x		x	x	Gas sand	Pen	S, SL	Por	330	335	5	ML	Trenton	1,390
82	0	0	x	x		x	x	"Niagaran"	Sil	L	Por	265	275	10	A	St. Peter	893
83	0	0	x	x		x	x	Cypress	MisU	L	Por	850	857	7	D	MisU	985
84	0	49	x	x		32.7	0.70	Trenton	Ord	L	Por	601	651	50	A	Trenton	819
85	3	13,212	x	x		x	x										
86	0	1	x	x		x	x	Devonian	Dev	L	Por	1,800	1,830	y	D	Devonian	1,830
87	0	17	x	x		x	x								D	MisL	3,100
88	0	1	x	x		37.4	x	Bethel	MisU	S	Por	2,788	2,800	12			
89	0	16	x	x		38.5	x	McClosky	MisL	L	Por	2,965	2,978	6			
90	0	2	x	x		x	x	Aux Vases	MisU	L	Por	2,335	2,351	4	D	MisU	2,383
91	5	364	x	x	PM	38.5	x	McClosky	MisL	L	Por	2,995	3,058	9	D	MisL	3,197
92	0	1	x	x		x	x	Bethel	MisU	S	Por	1,324	1,329	5	D	MisL	1,567
93	0	539	x	x		x	x								A	Devonian	2,933
94	0	21	x	x		36.4	x	Cypress	MisU	S	Por	1,200	1,225	19			
95	0	517	x	x		37.4	x	Bethel	MisU	S	Por	1,355	1,378	23			
96	0	1	x	x		x	x	Devonian	Dev	L	Por	2,884	2,933	8			
97	0	0	x	x		44.1	0.16	Cypress	MisU	S	Por	1,835	1,919	25	A?	Devonian	3,307
98	0	11	x	x		37.0	0.38	Cypress	MisU	S	Por	2,626	2,640	15	D	MisL	3,175
99	0	8	x	x		36.0	0.31	McClosky	MisL	L	Por	3,093	3,188	6	D?	MisL	3,269
100	361	968	x	x	PM	x	x								A	Devonian	3,170
101	122	505	x	472		38.5	0.25	Cypress	MisU	S	Por	1,493	1,549	25			
102	96	187	x	406		38.5	x	Stray	MisU	S	Por	1,546	1,571	17			
103	143	276	x	474		38.5	x	Bethel	MisU	S	Por	1,540	1,561	18			
104	0	76	x	500		37.0	0.31	Cypress	MisU	S	Por	1,581	1,600	16			
105	0	1	x	x		40.0	x	McClosky and Rosiclare	MisL	L	Por	2,869	2,878	9	A	Devonian	3,375
106	0	6	x	x		37.2	0.22	Waltersburg	MisU	S	Por	1,763	1,804	15	D	MisL	2,711
107	0	6	x	x		36.0	x	Bethel	MisU	S	Por	2,066	2,076	11	D	MisL	2,356
108	0	57	x	495	PM	38.0	x	Bethel	MisU	S	Por	1,948	1,959	14	A	Devonian	3,650
109	0	1	x	x		x	x	McClosky	MisL	L	Por	2,718	2,751	7	D	MisL	2,958
110	0	1	x	x		x	x	St. Louis	MisL	L	Por	3,002	3,007	5	D	MisL	3,064
111	0	1	x	x		28.0	x	McClosky	MisL	L	Por	2,746	2,765	11	D	MisL	3,066
112	0	9	x	x		x	x								D	MisL	2,285
113	0	4	x	x		37.0	x	Rosiclare	MisL	S	Por	2,187	2,200	14			
114	0	5	x	x		37.0	x	McClosky	MisL	L	Por	2,241	2,257	8			
115	0	380+	x	335		x	x								A	Devonian	3,133
116	0	y	y	y		x	x	Pennsylvania	Pen	S	Por	619	831	12			
117	0	y	y	y		x	x	Buchanan	Pen	S	Por	1,078	1,119	10			
118	0	104	x	x		x	x								A	MisL	1,702
119	0	103	x	x		39.5	x	Bethel	MisU	S	Por	1,424	1,440	16			
120	0	1	x	x		40.9	x	Rosiclare	MisL	S	Por	1,562	1,612	33			
121	260	1,300	x	x	PM	x	x								A	Devonian	3,502
122	183	682	x	272		39.0	0.22	Benoist	MisU	S	Por	1,797	1,835	35			
123	11	130	x	335		38.6	0.21	Aux Vases	MisU	S	Por	1,813	1,865	28			
124	57	485	x	360		39.0	x	McClosky	MisL	L	Por	1,975	2,048	17			
125	2	5	x	250		37.2	x	Salem	MisL	L	Por	2,177	2,254	17			
126	7	0	x	x		42.1	0.28	Devonian	Dev	L	Por	3,343	3,441	30			
127	0	35	x	x		x	x								D	Devonian	3,547
128	0	4	x	x		x	x	Bethel	MisU	S	Por	1,928	1,942	14			
129	0	4	x	x		37.0	x	Aux Vases	MisU	S	Por	2,003	2,038	26			

TABLE 1.—(Continued)

Line Number	Field, County	Year of Discovery	Area Proved, Acres		Total Oil Production, Bbl.		Total Gas Production, Millions Cu. Ft.		Number of Oil and/or Gas Wells					
			Oil	Gas ^b	To End of 1939	During 1939	To End of 1939	During 1939	Completed to End of 1939	During 1939		End of 1939		
										Completed	Abandoned	Tempo. Shut Down	Producing Oil	Producing Gas ^c
130	Fairman, Marion, Clinton	1939	270	0	x	x	0	0	27	27	0	0	27	0
131	Dundas, Richland	1939	160	0	y	y	0	0	11	11	0	0	11	0
132	Dundas, Richland	1939	400	0	y	y	0	0	18	18	0	0	18	0
133	Noble, Richland	1937	3,540	0	6,852,000	1,674,000	0	0	220	69	0	0	210	0
134			920	0	x	x	0	0	49	43	0	1	48	0
135			2,620	0	x	x	0	0	171	26	0	1	162	0
136	Olney, Richland	1937	510	0	753,000	338,000	0	0	36	6	0	0	36	0
137	Schnell, Richland	1938	40	0	y	y	0	0	4	0	0	0	4	0
138	Stewardson, Shelby	1939	10	0	y	y	0	0	1	1	0	0	1	0
139	Griffin, Wabash	1939	690	0	169,000	169,000	0	0	47	47	0	0	47	0
140			y	0	x	x	0	0	4	4	0	0	4	0
141			y	0	x	x	0	0	41	41	0	0	41	0
142			y	0	x	x	0	0	2	2	0	0	2	0
143	East Keensburg, Wabash	1939	10	0	y	y	0	0	1	1	0	0	1	0
144	Keensburg, Wabash	1939	700	0	783,000	783,000	0	0	120	120	0	0	120	0
145			y	0	x	x	0	0	3	3	0	0	3	0
146			y	0	x	x	0	0	117	117	0	0	117	0
147	Mt. Carmel, Wabash	1939	20	0	y	y	0	0	2	2	0	0	2	0
148	Cordes, Washington	1939	1,090	0	468,000	468,000	0	0	95	95	0	0	95	0
149	Dubois, Washington	1939	10	0	y	y	0	0	1	1	0	0	1	0
150	Barnhill, Wayne	1939	750	0	593,000	593,000	0	0	41	41	0	0	41	0
151	Boyleston, Wayne	1938	450	0	218,000	218,000	0	0	25	24	0	0	25	0
152	Cisne, Wayne	1937	960	0	y	y	0	0	47	21	0	1	46	0
153			y	0	x	x	0	0	2	0	0	0	2	0
154			y	0	x	x	0	0	1	1	0	0	1	0
155			900	0	x	x	0	0	44	20	0	0	44	0
156	Enterprise, Wayne	1939	1,450	0	1,269,000	1,269,000	0	0	50	50	0	0	50	0
157			y	0	x	x	0	0	1	1	0	0	1	0
158			1,450	0	x	x	0	0	49	49	0	0	49	0
159	Goldengate, Wayne	1939	30	0	y	y	0	0	3	3	0	0	3	0
160	Leech Twp., Wayne	1938	240	0	105,000	96,000	0	0	9	7	0	0	9	0
161	Mt. Erie, Wayne	1938	10	0	y	y	0	0	1	0	0	0	1	0
162	North Aden, Wayne	1938	1,230	0	1,030,000	725,000	0	0	60	20	0	0	60	0
163	Rinard, Wayne	1937 ²³	10	0	y	y	0	0	1	0	1	0	0	0
164	South Mt. Erie, Wayne	1939	10	0	y	y	0	0	1	1	0	0	1	0
165	Aden, Wayne, Hamilton	1938	200	0	y	y	0	0	5	1	0	0	5	0
166	Calvin, White	1939	20	0	x	x	0	0	2	2	0	0	2	0
167			10	0	x	x	0	0	1	1	0	0	1	0
168			10	0	x	x	0	0	1	1	0	0	1	0
169	Mill Shoals, White	1939	400	0	127,000	127,000	0	0	22	22	0	0	22	0
170			y	0	x	x	0	0	13	13	0	0	13	0
171			400	0	x	x	0	0	9	9	0	0	9	0
172	New Harmony, White	1939	130	0	y	y	0	0	11	11	0	0	11	0
173			120	0	x	x	0	0	10	10	0	0	10	0
174			10	0	x	x	0	0	1	1	0	0	1	0
175	Phillipstown, White	1939	20	0	y	y	0	0	2	2	0	0	2	0
176			10	0	x	x	0	0	1	1	0	0	1	0
177			10	0	x	x	0	0	1	1	0	0	1	0
178	Stokes, White	1939	140	0	60,000	60,000	0	0	7	7	0	0	7	0
179	Storms, White	1939	510	30	31,000	31,000	x	x	17	17	0	0	14	3
180	Total for fields after ²⁴ Jan. 1, 1937		53,190	1,050	113,548,000	90,299,000	1,065.1	963.7	5,089	2,906	47	28	4,979	35
181	Total for Illinois ²⁵		151,285	16,835	551,298,000	94,302,000	3,435.9	977.3	25,706	2,920	421	551	18,194	41

²³ Abandoned 1939.²⁴ Total of lines 86 to 179 inclusive.²⁵ Total of lines 85 and 180.

TABLE 2.—Wildcat Wells Drilled in 1939

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rge. Long.					
1	Adams	28	2 N	7 W	850	St. Peter	W. R. Wilson et al, Adams No. 1	Dry	
2	Adams	12	2 N	5 W	1,003	Ordovician	L. C. Robinson et al, W. C. Fowler No. 1	Dry	
3	Bond	13	4 N	2 W	1,520	Ste. Genevieve	Joe Kest, Jr. et al, Albert Meyer No. 1	Dry	
4	Bond	3	6 N	3 W	2,430	Devonian	Reisig & Quisenberry, M. F. Wilderman No. 1	Dry	
5	Bond	24	4 N	3 W	1,155	Bethel	Eason Oil Co., Joint Land Bank No. 1A	Dry	
6	Bond	12	6 N	5 W	3,154	St. Peter	Joe Kest et al, Saathoff No. 1	Dry	
7	Bond	6	4 N	4 W	2,108	Devonian	George Weinschel, C. Rickher No. 1	Dry	
8	Bond	17	5 N	4 W	2,106	Devonian	H. L. Joly & Jenkins, White & Bane No. 1	Dry	
9	Bond	21	5 N	3 W	2,456	Devonian	Jarvis Bros., Zebb No. 1	Dry	
10	Brown	15	1 S	2 W	642	L. Mississippian	Ripley Oil Trust, P. Reich No. 1	Dry	
11	Brown	9	1 S	2 W	744	"Trenton"	E. E. Goed et al, H. Hopke No. 1	Dry	
12	Brown	15	1 S	2 W	605	"Niagaran"	Chas. Measeley et al, V. Thomas No. 1	Dry	
13	Brown	33	2 S	4 W	415	"Niagaran"	J. W. Fairbairn, Newton No. 1	Dry	
14	Champaign	31	18 N	8 E	1,120	Devonian	Sadorus Oil Co., Nogle No. 1	Dry	
15	Champaign	10	17 N	10 E	1,780	"Trenton"	Sidney Oil & Gas Co., Chas. Wendling No. 1	Dry	
16	Christian	1	14 N	1 W	2,260	Devonian	Oil Development Co., Post No. 1	Dry	
17	Christian	10	13 N	1 W	1,185	Ste. Genevieve	Klerbolker & Heldt, G. T. Smith No. 1	Dry	
18	Christian	13	11 N	1 W	1,405	Cypress	Meyer Marks, Ed Buhs No. 1	Dry	
19	Clark	36	11 N	12 W	2,573	Devonian	Kingwood Oil Co., J. Miller No. 1	Dry	
20	Clark	2	9 N	12 W	1,510	Ste. Genevieve	Breeding et al, C. Gard No. 1	Dry	
21	Clark	20	9 N	14 W	2,585	Devonian	Midwest Oil Co., Cole No. 1	Dry	
22	Clark	20	9 N	14 W	1,027	L. Mississippian	E. R. Brann et al, J. F. Baughman No. 1	Dry	
23	Clark	31	12 N	14 W	1,472	"Niagaran"	Patmin et al, Drake No. 2	Dry	
24	Clark	7	9 N	12 W	802	Pennsylvanian	Harry Dunn et al, Henry Medsker No. 1	Dry	
25	Clark	6	11 N	11 W	875	Pennsylvanian	H. R. Snavelly, S. M. Schoffield No. 1	Dry	
26	Clark	17	9 N	13 W	730	Pennsylvanian	D. R. Gooch et al, Mable Davis No. 1	Dry	
27	Clark	5	9 N	14 W	1,220	L. Mississippian	Paul Kull, Montgomery No. 1	Dry	

28	Clark	14	11 N	14 W	2, 732	"Trenton"	Trenton Rock Oil Co., Black No. 1	Dry
29	Clark	14	11 N	14 W	501	Pennsylvanian	Trenton Rock Oil Co., Black No. 2	Dry
30	Clay	17	5 N	5 E	383	Aux Vases	Dick Duncan, Liggett No. 1	Prod.*
31	Clay	6	5 N	5 E	489	Ste. Genevieve	F. J. Seawright, Chas. Wilson No. 1	Dry
32	Clay	35	4 N	7 E	140	St. Louis	Gulf Refining Co., Palmer No. 1	Dry
33	Clay	21	5 N	5 E	540	Ste. Genevieve	Burnett et al, Smith No. 1	Dry
34	Clay	26	5 N	5 E	685	St. Louis	Kingwood-Gulf, Davis No. 1	Dry
35	Clay	5	2 N	6 E	361	St. Louis	W. Beel, Tackett No. 1	Dry
36	Clay	21	5 N	5 E	393	Aux Vases	D. Burnett, R. E. Smith No. 1	Dry
37	Clay	11	5 N	6 E	078	St. Louis	Kingwood-Continental, Van Dyke No. 1	Dry
38	Clay	18	3 N	7 E	007	Ste. Genevieve	Fred Kroger, Chaney No. 1	Dry
39	Clay	9	5 N	5 E	507	Ste. Genevieve	Taylor Drilling Co., Mullberger No. 1	Dry
40	Clay	6	5 N	5 E	552	Ste. Genevieve	F. J. Seawright, Wilson No. 1	Dry
41	Clay	22	5 N	7 E	983	Ste. Genevieve	Phillips Petroleum Co., Murvin No. 1	Dry
42	Clay	21	5 N	5 E	340	Aux Vases	Riley et al, Smith No. 1	Dry
43	Clay	23	5 N	5 E	474	Ste. Genevieve	Mimerva Oil Co., John Smith No. 1	Dry
44	Clay	14	3 N	7 E	067	Ste. Genevieve	Pyramid Petroleum Corp., Staser No. 1	Dry
45	Clay	13	3 N	7 E	018	Ste. Genevieve	J. W. Leonard, C. O. Roley No. 1	Dry
46	Clay	7	2 N	5 E	015	Ste. Genevieve	Robinson et al, Bryant No. 1	Dry
47	Clinton	3	2 N	2 W	835	Pennsylvanian	H. Flannery, Charles Gerdes No. 1	Dry
48	Clinton	9	1 N	3 W	071	Bethel	Norton & McWilliams, Athoff No. 1	Dry
49	Clinton	11	3 N	3 W	170	Bethel	Noelkemper et al, C. M. Kile No. 1	Dry
50	Clinton	12	3 N	3 W	187	Bethel	Joe Kest et al, Ernest Maibaum No. 1	Dry
51	Clinton	34	3 N	4 W	212	Ste. Genevieve	Landsey Bros. & British American, Boenhoff No. 1	Dry
52	Clinton	26	2 N	1 W	467	Rensault	W. C. McBride, A. Keisler No. 1	Dry
53	Clinton	17	2 N	2 W	243	Bethel	Petroleum Service Ltd, V. Bott No. 1	Dry
54	Clinton	20	1 N	1 W	645	Ste. Genevieve	T. Palmer, A. & E. Bierman No. 1	Dry
55	Clinton	12	1 N	2 W	600	St. Louis	Webb, Neal et al, William Husman No. 1	Dry
56	Clinton	18	1 S	5 W	271	Ste. Genevieve	Harris et al, Hage No. 1	Dry
57	Clinton	12	3 N	1 W	707	Ste. Genevieve	O. W. Burroughs, C. A. Adams No. 1	Dry
58	Clinton	3	1 N	2 W	325	Bethel	Whitcheer Goldschmidt, Burger No. 1	Dry
59	Clinton	12	2 N	4 W	302	Bethel	Elmer Goldschmidt, Burger No. 1	Dry
60	Clinton	2	1 N	2 W	329	Bethel	Bell Oil Co., H. Knollhoff No. 1	Prod.*
61	Clinton	4	1 S	5 W	095	Ste. Genevieve	J. J. Lynn et al, Western Catholic Union No. 1	Dry
62	Coles	22	11 N	10 E	538	Pennsylvanian	W. R. Miller, Griffin No. 1	Prod.*
63	Coles	22	13 N	7 E	222	Devonian	Texas, Tracy No. 1	Dry
64	Coles	30	13 N	8 E	399	Devonian	Kingwood Oil & Gas Co., Tivnen No. 1	Dry

* Discovery well of new pool or extensions; see table 5.

TABLE 2.—(Continued)

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rge. Long.					
65	Coles	4	13 N	14 W	525	Pennsylvanian	Phillips & Kost, Wilson No. 1	Dry	
66	Coles	1	11 N	7 E	1,919	Cypress	Wheeles & Whisenant, Michael No. 1	Prod.*	
67	Coles	2	11 N	7 E	3,307	Devonian	Wheeles & Whisenant, Michael No. 2	Dry	
68	Coles	3	12 N	8 E	2,158	Bethel	Texas Canadian, Miller No. 1	Dry	
69	Coles	21	11 N	10 E	825	Pennsylvanian	W. R. Miller, Stull No. 1	Dry	
70	Coles	12	12 N	8 E	2,356	St. Louis	Dee Brother, Emma James No. 1	Dry	
71	Coles	1	11 N	7 E	1,884	Cypress	Carter Oil Co., Akers No. 1	Dry	
72	Coles	18	12 N	14 W	603	Ste. Genevieve	L. Trulock et al, Trulock No. 1	Dry	
73	Coles	16	11 N	10 E	743	Pennsylvanian	Perry Miller, A. S. Ingram No. 1	Dry	
74	Coles	28	12 N	7 E	2,318	St. Louis	Marvin et al, J. H. Bell No. 1	Dry	
75	Coles	24	11 N	10 E	650	Pennsylvanian	Daugherty & Dunn, J. F. Mitchell No. 1	Dry	
76	Cook	2	42 N	12 E	210	"Niagaran"	Crane et al, Wulf No. 1	Dry	
77	Crawford	2	5 N	14 W	2,664	Ste. Genevieve	Denver Producers & Refiners, Kerst White No. 1	Dry	
78	Crawford	7	8 N	13 W	1,385	Ste. Genevieve	Soard Oil Co., Snyder No. 1	Dry	
79	Crawford	31	8 N	11 W	1,400	Chester	Snavely et al, Hostattler No. 1	Dry	
80	Crawford	23	7 N	11 W	2,960	"Niagaran"	Kingwood Oil Co., Walker No. 1	Dry	
81	Cumberland	7	9 N	7 E	2,485	Ste. Genevieve	O. J. Marshall, Baker No. 1	Dry	
82	Cumberland	15	10 N	7 E	2,050	Lower Chester	Paul Doran et al, H. Haskett No. 1	Dry	
83	Cumberland	21	10 N	7 E	2,326	Ste. Genevieve	Jarvis Brothers, Wilson Estate No. 1	Dry	
84	Cumberland	17	9 N	9 E	2,152	Tar Springs	National Consumers, H. Ward No. 1	Dry	
85	Cumberland	29	9 N	9 E	4,112	Devonian	Union Producing Co., Cox No. 1	Dry	
86	Douglas	33	16 N	9 E	527	Pennsylvanian	Lowellen & Phyllips, Kennedy Bros No. 1	Dry	
87	Douglas	33	16 N	9 E	401	Pennsylvanian	Lowellen & Phyllips, Kennedy Bros No. 2	Dry	
88	Edgar	12	12 N	11 W	2,028	Devonian	Black & Moore, Sturgis No. 1	Dry	
89	Edgar	16	12 N	13 W	727	Ste. Genevieve	Rabe & Henderson, Sarah Wait No. 1	Dry	
90	Edgar	26	13 N	13 W	1,970	"Niagaran"	A. M. Myers, Brinkerhoff No. 1A	Dry	
91	Edgar	12	16 N	14 W	610	L. Mississippian	Burkett, Danton & Burns, W. J. Baum No. 1	Dry	
92	Edgar	13	14 N	14 W	266	Pennsylvanian	Dr. Phillips, Emma Six No. 1	Dry	

93	Edgar	24	14 N	14 W	261	Pennsylvanian	Sanders et al, Weaver No. 1	Dry
94	Edgar	11	12 N	13 W	1, 920	Devonian	M. Weager, H. Wannah No. 1	Dry
95	Edgar	29	13 N	13 W	1, 620	Devonian	A. M. Meyers, Schneider No. 1	Dry
96	Edgar	24	14 N	14 W	298	Pennsylvanian	Sanders & Walton, Weaver No. 2	Dry
97	Edwards	20	1 N	14 W	3, 404	L. Mississippian	Owens & Kinney, Ira B. Hansen No. 1	Dry
98	Edwards	11	1 S	10 E	4, 101	L. Mississippian	Leach Brothers, Albert Lee No. 1	Dry
99	Edwards	13	2 S	10 E	3, 350	Ste. Genevieve	Morrison & Noah, Stafford No. 1	Dry
100	Edwards	22	2 S	10 E	3, 373	Ste. Genevieve	Ohio Oil Co., Ben Edge No. 1	Dry
101	Edwards	4	1 N	14 W	3, 185	Ste. Genevieve	Dye et al, Chas. Lemke No. 1	Dry
102	Edwards	22	2 S	14 W	3, 082	Ste. Genevieve	H. K. Riddle, Fred Schroeder No. 1	Dry
103	Edwards	34	2 S	14 W	3, 075	Ste. Genevieve	Wagoner & Schreiver, Siegert No. 1	Dry
104	Edwards	10	3 S	14 W	2, 648	Cypress	John Pugh, L. V. Smith No. 1	Dry
105	Edwards	11	1 S	10 E	3, 392	Ste. Genevieve	Roach & Voyles, A. Lee No. 2	Dry
106	Edwards	31	2 S	14 W	3, 175	Ste. Genevieve	Longhorn Oil Co., Mary Kroff No. 1	Dry
107	Edwards	34	2 S	14 W	2, 658	Cypress	Howell & Metzner, G. Broster No. 1	Dry
108	Edwards	34	2 S	14 W	3, 082	Golconda	Howell & Politis, G. Broster No. 1B	Dry
109	Edwards	33	1 S	14 W	3, 098	Ste. Genevieve	H. Thorpe, Broster No. 1	Dry
110	Edwards	15	3 S	10 E	3, 374	Ste. Genevieve	Noah-Morrison, W. Brown No. 1	Dry
111	Edwards	34	2 S	14 W	2, 643	Cypress	C. G. McFadden, Bump No. 1	Prod.*
112	Edwards	18	3 S	11 E	3, 269	McClosky	Kingwood Oil Co., Johnson No. 1	Prod.*
113	Edwards	17	1 S	14 W	3, 151	St. Louis	Anderson & Broadus, G. Harms No. 1	Dry
114	Edwards	21	6 N	6 E	2, 955	St. Louis	Kingwood Oil Co., Reichhelm No. 1	Dry
115	Efingham	13	7 N	5 E	2, 690	Ste. Genevieve	Gassman et al, William Wagner No. 1	Dry
116	Efingham	27	6 N	4 E	2, 467	St. Louis	Kingwood Oil Co., Casey No. 1	Dry
117	Efingham	18	8 N	4 E	1, 697	Cypress	Gordon Hauck, Morhead No. 1	Dry
118	Efingham	18	8 N	6 E	2, 566	St. Louis	Kingwood Oil Co., Koester No. 1	Dry
119	Efingham	23	8 N	6 E	2, 511	Ste. Genevieve	Whisenant et al, Webber No. 1	Dry
120	Efingham	26	7 N	7 E	2, 890	Ste. Genevieve	T. P. Henry et al, Miller No. 1	Dry
121	Efingham	17	7 N	7 E	2, 990	St. Louis	Kingwood & Continental, H. Niernerg No. 1	Dry
122	Efingham	8	6 N	5 E	2, 500	Cypress	M. M. Downing et al, Alwerdt No. 1	Dry
123	Efingham	31	6 N	5 E	2, 939	Ste. Genevieve	F. Searwright, F. Wilson No. 1	Dry
124	Efingham	31	8 N	7 E	2, 853	Ste. Genevieve	Phillips Petroleum Co., F. Overbeck No. 1	Dry
125	Efingham	10	6 N	5 E	2, 553	"McClosky"	Mimerva Oil Co., C. M. Reed Estate No. 1	Dry
126	Efingham	29	6 N	7 E	2, 910	"McClosky"	P. Doran, Poehler No. 1	Dry
127	Fayette	8	5 N	3 E	1, 827	Lower Chester	Union Products Co., Mahon No. 1	Dry
128	Fayette	8	7 N	1 E	1, 900	Fredonia	R. J. Reink et al, Pummill No. 1	Dry
129	Fayette	2	4 N	1 W	1, 460	Aux Vases	Palacine Oil Co., Adolph Mueller No. 1	Dry

* Discovery well of new pool or extensions; see table 5.

TABLE 2.—(Continued)

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rge. Long.					
130	Fayette	28	5 N	2 E	1,903	Cypress	George Parker, Mary Lange No. 1	Dry	
131	Fayette	7	5 N	1 W	1,472	Ste. Genevieve	Bruce Martin et al, Davis No. 1	Dry	
132	Fayette	11	5 N	2 E	1,817	Cypress	Schriber & Martin, Magnus No. 1	Dry	
133	Fayette	24	6 N	2 E	1,822	Bethel	L. & G. Oil Co., Stewart No. 1	Dry	
134	Fayette	31	5 N	4 E	2,418	Ste. Genevieve	Garnier et al, C. T. Wade No. 1	Dry	
135	Fayette	19	6 N	1 E	1,794	Ste. Genevieve	C. E. Lange et al, J. C. Bloom No. 1	Dry	
136	Fayette	24	4 N	1 W	1,432	Stray	Max Comrey, Roy Malan No. 1	Dry	
137	Fayette	24	4 N	3 E	1,982	Lower Chester	Lee Drilling Co., Stine No. 1	Dry	
138	Fayette	13	5 N	2 E	2,124	Ste. Genevieve	Powell & McClory, Wallin No. 1	Dry	
139	Fayette	17	6 N	3 E	2,017	Ste. Genevieve	Central States Oil Co., Sperry No. 1	Dry	
140	Fayette	29	7 N	1 W	1,492	Ste. Genevieve	J. Hausman et al, J. Neathery No. 1	Dry	
141	Franklin	20	6 S	4 E	3,435	St. Louis	Gulf Refining Co., U. S. Steel No. 1	Dry	
142	Franklin	19	5 S	2 E	4,688	Devonian	Adams Oil & Gas Co., Old Ben Coal Co. No. 1	Dry	
143	Franklin	19	5 S	3 E	3,068	St. Louis	Gulf Refining Co., E. B. Hinman No. 1	Prod. *	
144	Franklin	4	5 S	2 E	3,097	St. Louis	Gulf Refining Co., Old Ben Coal Co. No. 1	Dry	
145	Franklin	4	5 S	3 E	3,979	Aux Vases	Palacine Oil Co., Old Ben Coal Co. No. 1	Dry	
146	Franklin	26	6 S	5 S	3,101	St. Louis	M. & G. Drilling Co., Franklin Realty Co. No. 1	Dry	
147	Franklin	21	6 S	2 E	2,979	St. Louis	W. R. Hayes, Old Ben Coal Co. No. 1	Dry	
148	Franklin	32	5 S	3 E	3,000	St. Louis	E. S. Atkins, Old Ben Coal Co. No. 1	Dry	
149	Fulton	12	7 N	1 E	4,810	Devonian	Gulf Refining Co., U. S. Fuel Co. No. 2	Dry	
150	Fulton	10	7 N	1 E	758	Devonian	Independent Producers & Refiners, Bernhard No. 1	Dry	
151	Fulton	3	7 N	1 E	590	Devonian	K. & F. Development Co., Kelly Frederick No. 1	Dry	
152	Gallatin	2	8 S	10 E	751	Devonian	Spiker, Fee No. 1	Dry	
153	Gallatin	2	8 S	10 E	346	Pennsylvanian	J. C. Miller et al, Big Barn No. 1A	Dry	
154	Gallatin	11	9 S	10 E	610	Pennsylvanian	J. C. Miller et al, Big Barn No. 1B	Dry	
155	Gallatin	9	9 S	9 E	2,795	Ste. Genevieve	Delta Drilling Co., Stenson No. 1	Dry	
156	Gallatin	21	8 S	8 E	2,980	St. Louis	Northfork Oil Co., Dr. H. Logan No. 1	Dry	
157	Gallatin	5	8 S	10 E	3,010	St. Louis	J. Garfield Buell, Sutton No. 1	Dry	
		4	10 S	8 E	2,750	Ste. Genevieve	Dillon et al, Carol Frohock No. 1	Dry	

158	Gallatin	17	9 S	9 E	1,794	Waltersburg	Coates et al, Green No. 1B	Prod.*
159	Gallatin	16	8 S	10 E	2,960	L. Mississippian	J. G. Buell, Egyptian Lumber Co. No. 1	Dry
160	Gallatin	27	9 S	9 E	2,717	L. Mississippian	Joe Zeppa, Turner No. 1	Dry
161	Gallatin	11	8 S	10 E	2,454	Cypress	Vandenbark, Busick No. 1	Dry
162	Gallatin	22	8 S	10 E	2,478	Cypress	Buford et al, Egyptian Tic & Lumber Co. No. 1	Dry
163	Gallatin	21	9 S	9 E	2,700	St. Louis	Delta Drilling Co., Wineberger No. 1	Dry
164	Greene	1	8 N	14 W	444	Ordovician	Louis C. Simmel, Frank Stelle No. 1	Dry
165	Greene	16	11 N	10 W	1,286	"Trenton"	Owens, F. A. Johnson No. 1	Dry
166	Hamilton	29	6 S	6 E	3,320	Levias	Kingwood Oil Co., Griswold No. 1	Dry
167	Hamilton	6	4 S	7 E	3,526	Ste. Genevieve	Helmerich & Payne, Hamilton County Land Co. No. 1	Dry
168	Hamilton	35	5 S	6 E	3,500	St. Louis	W. C. McBride, Inc., Hurlburgh No. 1	Dry
169	Hamilton	2	4 S	6 E	3,550	Ste. Genevieve	Kingwood Oil Co., Schnuck No. 1	Dry
170	Hamilton	9	7 S	6 E	3,389	St. Louis	Alma Oil & Gas Co., P. Davis No. 1	Dry
171	Hamilton	17	7 S	7 E	3,660	St. Louis	Robinson, R. & W. Porter No. 1	Dry
172	Hancock	15	4 N	5 W	530	"Niagara"	Graves & Cook, S. M. Talbot No. 1	Dry
173	Henderson	17	9 N	4 W	1,235	Oneota	Media Oil Co., Pendarvis No. 1	Dry
174	Jackson	33	7 S	3 W	1,380	Ste. Genevieve	Ben Banner, Dean No. 1	Dry
175	Jasper	2	7 N	10 E	2,711	St. Louis	Kingwood-Bur-Kan, Harrison No. 1	Dry
176	Jasper	24	8 N	9 E	2,737	Ste. Genevieve	O. C. Borah et al, Whelan No. 1	Dry
177	Jasper	7	8 N	10 E	2,776	Ste. Genevieve	Thompson Drilling Co., Bowers No. 1	Dry
178	Jasper	30	6 N	9 E	3,250	Ste. Genevieve	G. J. Grier, T. O. Crause No. 1	Dry
179	Jasper	14	8 N	11 E	2,602	St. Louis	Thompson Drilling Co., Union Central Life Ins. No. 1	Dry
180	Jasper	7	8 N	11 E	1,957	Ste. Genevieve	D. Holland, Huddleston No. 1	Dry
181	Jefferson	14	1 S	1 E	2,117	Renault	Anderson et al, Peoples No. 1	Dry
182	Jefferson	27	2 S	1 E	2,293	Ste. Genevieve	Lundley & Winkler, Martin No. 1	Dry
183	Jefferson	9	2 S	2 E	2,494	Ste. Genevieve	Kingwood, Wayer No. 1	Dry
184	Jefferson	9	4 S	2 E	4,422	Devonian	Benadum-Trees, Interstate Coal Co. No. 1	Dry
185	Jefferson	19	2 S	2 E	2,595	St. Louis	Pyramid Petroleum Co., Troutt No. 1	Dry
186	Jefferson	29	1 S	2 E	2,132	Bethel	Rosenthal, High No. 1	Dry
187	Jefferson	15	2 S	1 E	2,318	Ste. Genevieve	Brogan & Blair, Murman No. 1	Dry
188	Jefferson	29	4 S	2 E	3,115	Ste. Genevieve	Palacine & Eason, Inland Steel Co. No. 1	Dry
189	Jefferson	18	1 S	1 E	1,839	Chester	V. O. Lewis, Bates No. 1	Dry
190	Jefferson	24	2 S	1 E	2,310	Ste. Genevieve	Midfield Oil Co., R. T. Ervine No. 1	Dry
191	Jefferson	21	1 S	2 E	2,200	Ste. Genevieve	Minerva Oil Co., Sargent No. 1	Dry
192	Jefferson	11	2 S	2 E	2,740	Ste. Genevieve	Papoose Oil Co., Schweinfurth No. 1	Dry

* Discovery well of new pool or extensions; see table 5.

TABLE 2.—(Continued)

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rge. Long.					
193	Jefferson	30	4 S	2 E	3,101	St. Louis	Pyramid Petroleum Co., Inland Steel Co. No. 1	Dry	
194	Jefferson	25	2 S	2 E	2,849	Ste. Genevieve	M. B. Armer et al, Paul Gilbert No. 1	Dry	
195	Jefferson	18	3 S	4 E	3,204	St. Louis	Kingwood Oil Co., C. E. Cook No. 1	Dry	
196	Jefferson	23	2 S	1 E	2,342	Ste. Genevieve	W. R. Curry, H. H. Peterson No. 1	Dry	
197	Jefferson	32	3 S	2 E	2,903	St. Louis	Shell Oil Co., Jefferson Oil & Gas Co. No. 1	Dry	
198	Jefferson	16	2 S	1 E	2,279	"McClosky"	Transcontinental Oil Co., Carroll No. 1	Dry	
199	Jefferson	5	2 S	2 E	2,350	"McClosky,"	McQueen et al, Sorenson No. 1	Dry	
200	Jefferson	19	2 S	1 E	2,365	Ste. Genevieve	Wiser Oil Co., Severs No. 1	Dry	
201	Jefferson	9	1 S	1 E	2,084	Bethel	Vawder, Kell No. 1	Prod.*	
202	Jefferson	23	4 S	2 E	3,105	St. Louis	Alma Oil Co., Jefferson Oil & Gas Co. No. 1	Dry	
203	Jefferson	25	2 S	1 E	3,937	Devonian	Shell Oil Co., Ragan No. 1	Dry	
204	Jefferson	21	2 S	4 E	3,095	Ste. Genevieve	Yingling & Hays, Woods No. 1	Dry	
205	Jefferson	34	3 S	3 E	3,046	St. Louis	Oils, Incorporated, Mace No. 1	Dry	
206	Jefferson	36	4 S	1 E	3,167	St. Louis	S. L. Reinhardt, Inland Steel Co. No. 1	Dry	
207	Jefferson	10	1 S	1 E	2,113	Bethel	S. W. McGee, E. E. Holloway No. 1	Dry	
208	Jersey	27	8 N	10 W	1,802	St. Peter	E. M. Gould, Pearce No. 1	Dry	
209	Johnson	22	12 S	2 E	1,747	Salem	Coates et al, Albright No. 1	Dry	
210	Knox	9	11 N	2 E	800	Ordovician	O. H. Hamer, H. Bragg No. 1	Dry	
211	Lawrence	21	2 N	13 W	2,911	St. Louis	Strine et al, Howard Corrie No. 1	Dry	
212	Lawrence	19	3 N	11 W	500	Pennsylvanian	Ketchum & Wilson, R. A. Ackman No. 1	Dry	
213	Lawrence	32	3 N	12 W	2,280	Ste. Genevieve	Edward Gieck, Harry Gutteridge No. 2	Dry	
214	Lawrence	8	4 N	10 W	1,070	Pottsville	Mark et al, White No. 1	Dry	
215	Lawrence	22	3 N	11 W	3,576	Devonian	Harris et al, Downey No. 1	Dry	
216	Lawrence	24	4 N	11 W	1,771	Weiler	Joe Kesl et al, Grace Gillespie No. 3	Dry	
217	Lawrence	21	2 N	13 W	2,770	Aux Vases	Ann Bell Oil Co., Wright No. 1	Dry	
218	Lawrence	15	2 N	13 W	2,769	St. Louis	Ann Bell Oil Co., M. Wright No. 1	Dry	
219	Lawrence	8	4 N	10 W	1,131	Buchanan	Kentucky Natural Gas Co., Carpenter-Bryans No. 1	Dry	

220	Lawrence	28	4 N	11 W	2,520	L. Mississippian	Walter Payne, Patrick Bros. No. 1	Dry
221	Livingston	3	30 N	6 E	1,530	Jordan	Mitchell & Fredenhagen, McWilliams No. 1	Dry
222	McDonough	25	4 N	4 W	410	Hoing sand	Ketcherside & Fisher, S. Hunt No. 1	Dry
223	McDonough	22	7 N	3 W	920	"Trenton"	H. O. Hammett, Casey Jones No. 1	Dry
224	McDonough	22	5 N	3 W	677	"Niagara"	William Fraut, George Kruse No. 1	Dry
225	McDonough	19	6 N	2 W	562	"Niagara"	DeKalb Hybrid Seed Co., John F. Welch No. 1	Dry
226	McDonough	16	7 N	4 W	677	"Niagara"	L. G. Keller, C. E. Wright No. 1	Dry
227	McDonough	34	4 N	3 W	700	"Niagara"	Fowler, Hunter, & Gruse, E. Stoneking No. 1	Dry
228	Macon	21	15 N	2 E	3,175	"Trenton"	Decatur Oil & Gas Co., L. W. Cook No. 1	Dry
229	Macon	17	16 N	2 E	1,125	Shuran	Shake Hill Development Co., John Dipper No. 1	Dry
230	Madison	12	5 N	6 W	1,916	Devonian	Harry Hazlett, Wetzel No. 1	Dry
231	Madison	19	4 N	8 W	1,415	Devonian	Penn-Illinois Oil Co., Hurlbrink No. 1	Dry
232	Madison	8	3 N	8 W	1,394	"Niagara"	Lambert et al, Brookmyer No. 1	Dry
233	Madison	8	3 N	8 W	1,368	Devonian-Silurian	Dr. E. L. Loper, F. Keller No. 1	Dry
234	Madison	2	3 N	5 W	1,092	St. Louis	Bill Morgan et al, Niggli No. 1	Dry
235	Madison	2	3 N	9 W	1,600	"Trenton"	Erie Drilling Co., Kaseburg No. 1	Dry
236	Madison	11	3 N	9 W	1,635	"Trenton"	Fred Cory, J. Hassel No. 1	Dry
237	Marion	6	1 N	1 E	1,170	B. Pennsylvanian	Hansky et al, C. Yoos No. 1	Dry
238	Marion	11	2 N	1 E	2,150	Ste. Genevieve	F. W. Firman, Suggs No. 1	Dry
239	Marion	11	2 N	1 E	1,745	Lower Chester	Oil Royalites, Ltd., Suggs-Meeker No. 1	Dry
240	Marion	36	1 N	2 E	2,409	Ste. Genevieve	Chicago Syndicate, Williams No. 1	Dry
241	Marion	31	3 N	2 E	2,349	St. Louis	Kingwood Oil Co., Loomis No. 1	Dry
242	Marion	5	3 N	3 E	2,480	Fredonia	John Q. Gill, J. A. Broom No. 1	Dry
243	Marion	28	1 N	1 E	2,283	Ste. Genevieve	Hawley Oil & Gas, Coppel No. 1	Dry
244	Marion	32	1 N	1 E	1,923	Bethel	Johnson & Betts, Johnson No. 1	Dry
245	Marion	16	3 N	4 E	2,556	St. Louis	Heenan-Coe, Millican No. 1	Dry
246	Marion	19	1 N	2 E	2,356	Ste. Genevieve	Hordman et al, D. Hess No. 1	Dry
247	Marion	8	2 N	1 E	1,806	Ste. Genevieve	Menhall et al, Hazelwood No. 1	Dry
248	Marion	25	2 N	1 E	2,123	Ste. Genevieve	W. B. Dallas, & D. Shendel, Toulme No. 1	Dry
249	Marion	35	3 N	1 E	2,050	Ste. Genevieve	J. Lickey, Quick No. 1	Dry
250	Marion	20	1 N	4 E	2,990	St. Louis	Papoose Oil Co., J. I. Weems No. 1	Dry
251	Marion	32	1 N	4 E	2,948	Ste. Genevieve	Quisenberry, E. F. Hawkins No. 1	Dry
252	Marion	31	2 N	3 E	2,415	Ste. Genevieve	Pekin Oil & Gas Co., Vurcell No. 1	Dry
253	Marion	34	4 N	2 E	2,075	Bethel	Dorsey Hager, Bachman No. 1	Dry
254	Marion	35	3 N	2 E	2,301	Ste. Genevieve	Kingwood-Romine, Fitzsimmons No. 1	Dry
255	Marion	5	2 N	2 E	2,359	St. Louis	Ed Hollmans, Bedwell No. 1	Dry
256	Marion	9	2 N	2 E	2,165	Ste. Genevieve	F. McCoy, McFadden No. 1	Dry

* Discovery well of new pool or extensions; see table 5.

TABLE 2.—(Continued)

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rege. Long.					
257	Marion	13	3 N	2 E	2,509	Ste. Genevieve	N. Easley, Humes No. 1	Dry	
258	Marion	21	4 N	4 E	2,419	Ste. Genevieve	T. P. Henry et al, H. Balke No. 1	Dry	
259	Marion	18	3 N	1 E	1,439	Bethel	Shell Oil Co., Lutz No. 1	Prod. *	
260	Marion	33	3 N	2 E	2,193	Ste. Genevieve	Harvey et al, Mercantile Bank No. 1	Prod. *	
261	Marion	3	1 N	1 E	2,021	Ste. Genevieve	Jay Lickey et al, Adams No. 1	Dry	
262	Marion	4	1 N	1 E	1,860	Cypress	Wallace-Wright et al, Bryant No. 1	Dry	
263	Marion	11	1 N	2 E	2,277	"McClosky"	Steele, Foster No. 1	Dry	
264	Marion	10	2 N	1 E	3,369	Devonian	Dunn et al, Meredith No. 1	Dry	
265	Marion	6	2 N	3 E	2,430	"McClosky"	Ewing et al, McMackin No. 1	Dry	
266	Marion	20	3 N	1 E	3,100	Devonian	W. F. Keeley, Mason No. 1	Dry	
267	Marion	20	3 N	1 E	1,580	Bethel	Centralia Refining Co., Henning No. 1	Dry	
268	Marion	4	1 N	1 E	3,344	Chattanooga	Hawley Oil Co., Bryant No. 1	Dry	
269	Marion	1	4 N	4 E	2,692	"McClosky"	Dunbar & Winbate, Franze No. 1	Dry	
270	Monroe	14	2 S	10 W	533	"Trenton"	Crittendon & Noelkemper, Schroeder No. 1	Dry	
271	Monroe	19	1 S	10 W	910	Ordovician	J. E. Cummings, J. H. Boyer No. 1	Dry	
272	Monroe	1	3 S	11 W	750	Ordovician	Bender, Mentel No. 1	Dry	
273	Monroe	11	2 S	11 W	1,364	Ordovician	J. Kestl et al, A. Schmidt No. 1	Dry	
274	Monroe	3	3 S	11 W	750	Ordovician	Columbia Quarry Co., Fee No. 1	Dry	
275	Monroe	1,645†	2 S	10 W	576	"Trenton"	Chas. Judd, O. Kolmer No. 1	Dry	
276	Monroe	1,645†	2 S	10 W	275	L. Mississippian	Remington, Kolmer No. 2	Dry	
277	Monroe	11	3 S	9 W	1,120	Ordovician	Jack Stewart et al, E. Hadey No. 1	Dry	
278	Montgomery	8	8 N	5 W	823	St. Louis	Erie Drilling Co., Schroeder No. 1	Dry	
279	Montgomery	23	12 N	5 W	2,334	"Trenton"	W. O. Allen, Ward No. 1	Dry	
280	Montgomery	31	9 N	4 W	871	L. Mississippian	Fred DeMier, Charles, Kanaday No. 1	Dry	
281	Montgomery	34	10 N	2 W	2,675	Devonian	Cassens et al, Wilkering No. 1	Dry	
282	Montgomery	7	7 N	2 W	750	Pennsylvanian	R. E. Johnston, Fuller No. 1	Dry	
283	Montgomery	11	7 N	3 W	1,065	L. Mississippian	Soliday & Sands, Moon No. 1	Dry	
284	Montgomery	16	10 N	1 W	1,800	Ste. Genevieve	Swords & McDougal, Brewner No. 1	Dry	

285	Montgomery	29	10 N	4 W	527	Pennsylvanian	Marhill, Doyle No. 1	Dry
286	Montgomery	4	9 N	3 W	1,106	Salem	Jack S. Brown, C. W. Hefley No. 1	Dry
287	Morgan	18	13 N	8 W	1,160	Devonian	Underwriters Oil Syndicate, W. H. Diller No. 1	Dry
288	Moultrie	29	13 N	5 E	3,262	Devonian	Seaboard Oil Co., Doy Horn No. 1	Dry
289	Moultrie	9	13 N	6 E	1,950	Ste. Genevieve	Seaboard Oil Co., Purvis No. 1	Dry
290	Moultrie	29	15 N	5 E	1,773	Ste. Genevieve	George Anderson, Ulrich No. 1	Dry
291	Moultrie	29	15 N	5 E	1,887	St. Peter	Signal Hill Oil Co., E. L. Beale No. 1	Dry
292	Peoria	27	8 N	5 E	1,560	St. Peter	Algonia Oil Co., Cramer No. 1	Dry
293	Perry	8	4 S	3 W	1,630	St. Louis	Lundy & Winkler, Stern No. 1	Dry
294	Perry	19	4 S	3 W	1,571	Ste. Genevieve	Sooner Production Co., Harska No. 1	Dry
295	Perry	13	4 S	2 W	1,610	St. Louis	G. H. Blankenship, Ruthkowski No. 1	Dry
296	Perry	4	4 S	1 W	1,275	Weiler	W. R. Hayes et al., H. & F. Collins No. 1	Dry
297	Perry	34	4 S	2 W	830	Menard	Stephens & Ward, Albers No. 1	Dry
298	Perry	3	6 S	4 W	1,350	Bethel	C. H. Blankenship, Rheinecker No. 1	Dry
299	Perry	17	4 S	1 W	1,703	St. Louis	Kingwood Oil Co., Broleman No. 1	Dry
300	Perry	29	4 S	1 W	1,385	Bethel	J. J. Brodice et al., Roundtree No. 1	Dry
301	Perry	34	4 S	3 W	1,619	Ste. Genevieve	E. J. Shaefer, F. Sprague No. 1	Dry
302	Perry	33	5 S	4 W	1,400	Ste. Genevieve	C. E. Watson et al., Thomas Clay No. 1	Dry
303	Perry	8	4 S	1 W	1,604	Ste. Genevieve	E. S. Adkins, Truax-Traer Coal Co. No. 1	Dry
304	Perry	25	5 S	2 W	1,613	St. Louis	Gilliam et al., Brostmeier No. 1	Dry
305	Perry	5	5 S	3 W	1,610	L. Mississippian	L. C. Swimmel, Kinsey No. 1	Dry
306	Perry	13	5 S	3 W	1,582	Ste. Genevieve	Cockran et al., Pyramid Coal Co. No. 1	Dry
307	Perry	35	5 S	3 W	1,665	Ste. Genevieve	Apex Drilling Co., Weaver No. 1	Dry
308	Pike	5	3 S	4 W	1,025	Ordovician	Floyd A. Sargeant, A. Newton No. 1	Dry
309	Pike	4	3 S	4 W	427	'Niagaran'	Leon Beattie et al., Smiley No. 1	Dry
310	Randolph	31	4 S	5 W	1,251	St. Louis	Badger Oil & Gas Co., Schrader No. 1	Dry
311	Randolph	27	6 S	6 W	2,305	'Trenton'	Hamlin et al., Albert Anderson No. 1	Dry
312	Randolph	12	4 S	6 W	1,340	Salem	Dr. Seward, Henry Rehimer No. 1	Dry
313	Randolph	19	4 S	7 W	1,810	Ordovician	Ben Banner, Evers No. 1	Dry
314	Randolph	5	7 S	5 W	1,200	L. Mississippian	Alvin Fisher, Uchtman No. 1	Dry
315	Randolph	7	6 S	5 W	1,640	St. Louis	Kingwood Oil Co., Provine No. 1	Dry
316	Richland	3	2 N	14 W	3,175	Ste. Genevieve	A. C. Leathers et al., A. Yonaka No. 1	Dry
317	Richland	22	2 N	14 W	3,062	Ste. Genevieve	Kitchen & Wilson, R. E. Wilson No. 1	Dry
318	Richland	13	3 N	9 E	3,094	Ste. Genevieve	Leathers et al., Roy Malone No. 1	Dry
319	Richland	21	3 N	14 W	2,585	Tar Springs	Pure Oil Co., Lilly J. Coen No. 1	Dry
320	Richland	2	4 N	9 E	3,052	Ste. Genevieve	Pure Oil Co., H. C. Coen No. 1	Prod.*
321	Richland	36	5 N	9 E	2,930	Ste. Genevieve		

* Discovery well of new pool or extensions; see table 5.

TABLE 2.—(Continued)

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rge. Long.					
322	Richland	29	5 N	10 E	3,117	Ste. Genevieve	Pure Oil Co., Bartlett No. 1	Dry	
323	Richland	30	5 N	10 E	3,456	Salem	Pure Oil Co., M. Heak No. 1	Dry	
324	St. Clair	31	1 S	7 W	1,962	"Trenton"	Paul Moschback, J. C. Miller No. 1	Dry	
325	St. Clair	31	1 N	8 W	1,615	"Trenton"	A. H. Emenhiser, A. Alberts No. 1	Dry	
326	St. Clair	7	1 N	6 W	2,252	Silurian	Algona Petroleum Co., Muehler No. 1	Dry	
327	St. Clair	10	1 S	10 W	837	"Trenton"	Williams et al, Columbia Quarry No. 1	Dry	
328	St. Clair	35	1 N	10 W	630	Ordovician	Gladiator Oil Co., C. Hoffstetter No. 1	Dry	
329	St. Clair	23	2 N	6 W	1,925	Devonian	Matches & Leach, Bear No. 1	Dry	
330	St. Clair	29	2 S	7 W	1,365	Silurian	Tanner & Melburne, Miller Estate No. 1	Dry	
331	St. Clair	2	1 N	6 W	1,050	L. Mississippian	L. W. Pennington & Dunn, Henry Schoene No. 1	Dry	
332	St. Clair	32	2 N	7 W	1,734	Devonian	Dr. James McLlain, J. F. McNulty No. 1	Dry	
333	St. Clair	13	3 S	7 W	1,710	"Trenton"	Carnegy et al, W. A. Winter No. 1	Dry	
334	St. Clair	34	2 S	6 W	2,614	Pennsylvanian	Oil Exploration Co., Wickler No. 1	Dry	
335	Saline	5	8 S	7 E	1,405	Pennsylvanian	Dr. I. W. Sigel et al, Choisser No. 1	Dry	
336	Saline	25	9 S	7 E	2,712	Ste. Genevieve	Kingwood Oil Co., McIntyre No. 1	Dry	
337	Saline	32	7 S	6 E	2,770	Cypress	Carpenter et al, Sloan No. 1	Dry	
338	Saline	11	9 S	7 E	3,045	L. Mississippian	Kingwood Oil Co., Eybon Allyn No. 1	Dry	
339	Saline	11	10 S	6 E	2,585	St. Louis	Kingwood Oil Co., J. Oliver No. 1	Dry	
340	Saline	1	9 S	7 E	2,535	Cypress	T. D. Haypenny, M. W. Swimney No. 1	Dry	
341	Sangamon	28	15 N	6 W	1,903	"Trenton"	A. C. Leathers, Workman No. 1	Dry	
342	Sangamon	11	15 N	3 W	2,730	St. Peter	Millar, G. W. Sample No. 1	Dry	
343	Schuyler	25	1 N	2 W	1,100	"Trenton"	Harry Schwartz, Chas. Thompson No. 1	Dry	
344	Schuyler	2	3 N	3 W	678	Devonian-Silurian	Harry Muller, F. Fellheimer No. 1	Dry	
345	Schuyler	28	1 N	2 W	877	"Trenton"	O. A. Reed, J. P. Long No. 1	Dry	
346	Shelby	7	9 N	5 E	1,974	Bethel	Joe Aylward, E. E. Beckford No. 1	Dry	
347	Shelby	34	10 N	5 E	697	Pennsylvanian	Frank Frederick et al, Fluge No. 1	Dry	
348	Shelby	17	11 N	2 E	1,788	St. Louis	Independent Producers & Refiners, B. Derst No. 1	Dry	
349	Shelby	9	11 N	4 E	2,068	Ste. Genevieve	D. J. Marshall, Harry Riley No. 1	Dry	

350	Shelby	29	10 N	1 E	1,702	Ste. Genevieve	Harris et al, Skinner No. 1	Dry
351	Shelby	27	10 N	5 E	1,969	Aux Vases	J. A. Aylward, Wabash Railroad No. 1	Prod.*
352	Shelby	34	10 N	5 E	2,212	St. Louis	Adams & Gaskey, Fluge No. 1	Dry
353	Shelby	3	9 N	5 E	3,515	Devonian	Kingwood & Continental, Trueblood No. 1	Dry
354	Shelby	20	12 N	2 E	1,715	St. Louis	Independent Producers & Refiners, Hackenburgh No. 1	Dry
355	Shelby	12	13 N	2 E	2,901	Devonian	Illican Oil Corporation, Carr No. 1	Dry
356	Shelby	20	14 N	2 E	575	Pennsylvanian	Rex Developments, Inc., Oscar Odell No. 1	Dry
357	Shelby	6	12 N	3 E	1,803	Ste. Genevieve	Zephyr Drilling Co., Uriah M. Holmes No. 1	Dry
358	Shelby	15	9 N	6 E	2,452	Ste. Genevieve	Elmer Boseke, Zumbahlen No. 1	Dry
359	Shelby	7	10 N	4 E	2,454	Ste. Genevieve	Kingwood Oil Co., Howe No. 1	Dry
360	Shelby	9	10 N	4 E	1,993	Ste. Genevieve	Fletcher et al, Hellick & Willard No. 1	Dry
361	Shelby	20	10 N	6 E	2,330	St. Louis	Gulf Refining Co., C. A. Best No. 1	Dry
362	Shelby	12	9 N	6 E	2,411	Ste. Genevieve	J. Boseke Jr. et al, M. C. Bigler No. 1	Dry
363	Tazewell	2	22 N	3 W	2,310	St. Peter	Hopedale Oil & Gas Co., William Strunk No. 1	Dry
364	Tazewell	18	25 N	3 W	1,390	Maquoketa	Morton Oil & Gas Co., William Strunk No. 1	Dry
365	Wabash	2	1 N	12 W	1,085	Bridgeport	Cecil Keneipp, J. Kogan Heirs No. 1	Dry
366	Wabash	28	1 N	12 W	2,347	Ste. Genevieve	Taylor Drilling Co., Schafer No. 1	Dry
367	Wabash	35	2 N	12 W	1,400	Pennsylvanian	Hoffman, Clyde King No. 2	Dry
368	Wabash	18	2 S	13 W	2,880	Ste. Genevieve	Tide Water Associated Oil Co., Cowling No. 1	Dry
369	Wabash	15	3 S	14 W	3,058	St. Louis	Renwar Oil & Longhorn Oil Co., Edith B. Helm No. 1	Dry
370	Wabash	13	1 S	13 W	1,955	Tar Springs	Washburn, Pfeifer No. 1	Prod.*
371	Wabash	1	2 S	13 W	2,733	Ste. Genevieve	Al. Wilhelm, Baird No. 1	Dry
372	Wabash	19	2 S	13 W	1,719	Pennsylvanian	W. M. Bartlett, C. J. Stansfield No. 1	Prod.*
373	Wabash	25	2 S	14 W	2,852	Ste. Genevieve	Continental Oil Co., Arthur E. Shultz No. 1	Dry
374	Wabash	30	1 S	13 W	2,976	Ste. Genevieve	Hughes et al, Tanquary No. 1	Dry
375	Wabash	9	2 S	13 W	2,424	Cypress	Z. D. Neff, Bump No. 1	Prod.*
376	Wabash	25	2 S	14 W	2,901	Ste. Genevieve	Mammoth Producers & Refiners, Wm. Dunn No. 1	Dry
377	Wabash	13	2 S	14 W	2,970	Ste. Genevieve	Oil Exploration Co., F. Roseker No. 1	Dry
378	Wabash	8	1 N	12 W	2,415	Ste. Genevieve	C. D. Neff, Waldo Litherland No. 1	Dry
379	Wabash	9	3 S	13 W	2,878	St. Louis	Chogape & Cheney, Rosa Woodyard No. 1	Dry
380	Wabash	10	3 S	14 W	3,000	Ste. Genevieve	J. W. Carter et al, A. M. Sigert No. 1	Dry
381	Wabash	9	1 N	13 W	2,765	Ste. Genevieve	Fitzpatrick-Hayes et al, Hinderliter No. 1	Dry
382	Wabash	10	1 S	13 W	2,495	Weiler	Dee Bros. et al, C. S. LeGier No. 1	Dry
383	Wabash	26	1 S	13 W	2,640	Ste. Genevieve	P. Wiggins, Sticker No. 1	Dry
384	Wabash	10	2 S	13 W	2,800	Ste. Genevieve	W. S. Tatum, Lovellette No. 1	Dry

* Discovery well of new pool or extensions; see table 5.

TABLE 2.—(Continued)

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rge. Long.					
385	Wabash	11	2 S	13 W	2,714	Ste. Genevieve	Marvel Oil Co., Beall No. 1	Prod.*	
386	Wabash	33	2 S	13 W	510	Pennsylvanian	Jackson & Green, Garst No. 1	Dry	
387	Warren	11	8 N	2 W	1,050	"Trenton"	John Memkin, Chas. Simmons No. 1	Dry	
388	Washington	24	3 S	3 W	1,473	Ste. Genevieve	American Seismograph Co., Martin Leibrock No. 1	Dry	
389	Washington	22	1 S	1 W	765	Pennsylvanian	Pitchford et al, Hafer No. 1	Dry	
390	Washington	16	1 S	2 W	1,680	Chester	Shell Petroleum Corp., Hake No. 1	Dry	
391	Washington	35	2 S	3 W	1,625	Ste. Genevieve	Taylor Drilling Co., Weibe No. 1	Dry	
392	Washington	14	3 S	3 W	1,331	Bethel	G. H. Blankenship, J. L. Dennis No. 1	Prod.*	
393	Washington	25	3 S	5 W	1,713	Fredonia	Jepp & Skidmore, Hoelscher No. 1	Dry	
394	Washington	8	3 S	1 W	1,880	Ste. Genevieve	J. L. Henderson, Kornegger No. 1	Dry	
395	Washington	15	2 S	1 W	1,379	Ste. Genevieve	Morgan & Deaton, D. W. Dawkins No. 1	Dry	
396	Washington	2	3 S	3 W	1,379	Bethel	Pollack, Leibrock No. 1	Dry	
397	Washington	16	3 S	3 W	1,380	Renault	Beavers et al, Saucey No. 1	Dry	
398	Washington	28	3 S	3 W	1,339	Bethel	Wilson et al, Bergha Greenburg No. 1	Dry	
399	Washington	35	3 S	3 W	1,310	Bethel	J. J. Broadus, Howard Chapman No. 1	Dry	
400	Washington	32	3 S	4 W	2,567	Devonian	Phillips Petroleum Co., Humleth No. 1	Dry	
401	Washington	4	1 S	1 W	1,866	St. Louis	Gulf Refining Co., G. W. Baldwin No. 1	Dry	
402	Washington	12	2 S	1 W	1,899	Ste. Genevieve	Zephyr Drilling Co., Dr. T. J. Long No. 1	Dry	
403	Washington	10	2 S	4 W	1,355	L. Mississippian	Harry Harter, Flanaus No. 1	Dry	
404	Washington	5	3 S	3 W	1,309	Bethel	J. N. Webster et al, Oexeman No. 1	Dry	
405	Washington	10	3 S	3 W	1,305	Bethel	W. R. Curry, P. N. W. Krughoff No. 1	Dry	
406	Washington	7	2 S	4 W	1,296	Aux Vases	Max Conrey, Joint Stock Land Bank No. 1	Dry	
407	Washington	12	2 S	4 W	1,490	St. Louis	Ed Robinson et al, Brinkman No. 1	Dry	
408	Washington	33	3 S	1 W	1,655	Ste. Genevieve	Amour et al, Newdeokor No. 1	Dry	
409	Washington	11	3 S	1 W	1,866	Ste. Genevieve	R. F. Jeter et al, J. Orlick No. 1	Dry	
410	Washington	21	3 S	1 W	1,820	St. Louis	Comanche Oil Co., Zgonia No. 1	Dry	
411	Washington	20	3 S	3 W	1,343	Bethel	C. E. Woldridge, Lyons No. 1	Dry	
412	Washington	15	1 S	1 W	3,362	Devonian	Kingwood Oil Co., Brink No. 1	Dry	

413	Washington	19	3 S	1 W	1,370	Bethel	Shell Oil Co., M. Dix No. 1	Prod.*
414	Washington	23	3 S	1 W	3,102	Devonian	J. Pugh Drilling Co., Kruger No. 1	Dry
415	Washington	28	1 S	1 W	1,592	Bethel	Chicago Syndicate, I. C. Railroad No. 1	Dry
416	Washington	19	3 S	1 W	1,511	Pennsylvanian	Hardman, Rozauski No. 1	Dry
417	Washington	33	3 S	1 W	1,348	Bethel	Armer et al, Norwicki No. 1	Dry
418	Washington	8	3 S	2 W	1,666	St. Louis	Cochran, Kula No. 1	Dry
419	Wayne	10	1 S	6 E	3,300	St. Louis	St. Louis Syndicate, McLane No. 1	Dry
420	Wayne	8	2 S	8 E	3,357	Ste. Genevieve	F. R. Stoker, Blackburn No. 1	Dry
421	Wayne	21	2 N	7 E	3,172	Ste. Genevieve	Thompson Drilling Co., Bruscoe No. 1	Dry
422	Wayne	27	2 S	8 E	3,409	"McClosky"	Carl Robinson, Felix No. 1	Prod.*
423	Wayne	16	3 S	5 E	3,402	Ste. Genevieve	Dr. Moore, Moore No. 1	Prod.*
424	Wayne	3	1 N	8 E	3,100	"McClosky"	Witcher Drilling Co., Fitch No. 1	Dry
425	Wayne	11	1 N	8 E	3,198	Ste. Genevieve	C. C. Harwell et al, Elson Fitch No. 1	Dry
426	Wayne	27	2 S	8 E	3,507	Ste. Genevieve	Weinert, Inc., Leslie Cunningham No. 1	Prod.*
427	Wayne	30	2 S	9 E	3,441	"McClosky"	New Penn Development Co., Wagner No. 1	Dry
428	Wayne	11	1 N	9 E	3,456	Ste. Genevieve	Kingwood Oil & Held, Gibbs No. 1	Dry
429	Wayne	28	2 S	8 E	3,450	Ste. Genevieve	H. H. Weinert, Inc., Cunningham No. 2	Dry
430	Wayne	28	2 S	6 E	3,402	Ste. Genevieve	Whitty et al, Duke No. 1	Dry
431	Wayne	7	3 S	9 E	3,423	Ste. Genevieve	Iroquois Oil & Gas Co., Winzenberger No. 1	Dry
432	Wayne	21	2 S	9 E	3,373	Ste. Genevieve	New Penn Development Co., J. E. Baker No. 1	Dry
433	Wayne	14	2 S	8 E	3,364	Ste. Genevieve	Earl Robinson, Leech No. 1	Dry
434	Wayne	15	2 S	8 E	3,360	Ste. Genevieve	Earl Robinson, Carter No. 1	Dry
435	Wayne	14	2 S	8 E	3,437	Ste. Genevieve	Earl Robinson, Leech No. 1	Dry
436	Wayne	21	2 S	9 E	3,409	Cypress	New Penn Development Co., C. A. French No. 1	Dry
437	Wayne	2	3 S	8 E	3,510	Ste. Genevieve	Stengel, Earl Sheldon No. 1	Dry
438	Wayne	28	1 S	8 E	3,367	Ste. Genevieve	Ill. Mid Continent, Vaughn Heirs No. 1	Dry
439	Wayne	10	3 S	7 E	3,520	Ste. Genevieve	Ill. Mid Continent, Cope No. 1	Dry
440	Wayne	10	1 N	8 E	3,312	Ste. Genevieve	Pryor & McIntosh, Alva Simpson No. 1	Dry
441	Wayne	6	3 S	6 E	3,422	Ste. Genevieve	R. O. Harding, F. H. Simpson No. 1	Dry
442	Wayne	1	3 S	9 E	1,700	Pennsylvanian	Hayes, Schneidman & Soebbing, Murphy No. 1	Dry
443	Wayne	23	1 S	8 E	3,206	Ste. Genevieve	Kenyon, G. T. Vaughn No. 1	Prod.*
444	Wayne	25	2 N	8 E	3,132	Ste. Genevieve	Cayuna Oil Co., Brough No. 1A	Prod.*
445	Wayne	9	2 S	8 E	3,832	Salem	Wiser Oil Co., Shannon No. 1	Dry
446	Wayne	23	2 S	8 E	3,404	Ste. Genevieve	Stocker, McCreighton No. 1	Dry
447	White	4	7 S	8 E	3,080	Ste. Genevieve	Anderson, Stewart No. 1	Dry
448	White	18	4 S	8 E	3,608	L. Mississippian	Pyramid Petroleum Co., Gilbert Wade No. 1	Dry
							Robinson, Cora Springer No. 1	Dry

* Discovery well of new pool or extensions; see table 5.

TABLE 2.—(Continued)

No.	County	Location			Total Depth (Feet)	Deepest Horizon Tested	Drilled By	Farm Name	Remarks
		Sec. Survey	Twp. Lat.	Rge. Long.					
449	White	22	4 S	10 E	3,275	St. Louis	Price & Massey, Sam J. Higginson No. 1	Dry	
450	White	26	4 S	14 W	3,063	Ste. Genevieve	Superior Oil Co., Fitton No. 1	Dry	
451	White	35	6 S	10 E	3,053	St. Louis	Arab. Petroleum Corp., Roy E. Pearce No. 1	Dry	
452	White	15	5 S	14 W	3,040	Ste. Genevieve	Superior Oil Co., S. Stum No. 1	Dry	
453	White	14	5 S	8 E	3,455	Ste. Genevieve	Myers S. Marks, J. P. Smith No. 1	Dry	
454	White	31	3 S	8 E	3,405	"McClosky"	Nation et al, Belvia McIntosh No. 1	Prod.*	
455	White	18	5 S	14 W	3,017	"McClosky"	Sun Oil Co., Ford No. 1	Prod.*	
456	White	14	6 S	9 E	2,992	Waltersburg	Eason Oil Co., Storms Heirs No. 1	Prod.*	
457	White	12	6 S	8 E	3,132	"McClosky"	Penn-Illinois Oil & Gas Co., Pyle No. 1	Prod.*	
458	White	31	3 S	11 E	3,098	Ste. Genevieve	Kingwood Oil Co., Metcalf No. 1	Dry	
459	White	33	3 S	14 W	3,101	Ste. Genevieve	Pace & German, How No. 1	Dry	
460	White	12	4 S	8 E	3,554	Ste. Genevieve	Ben Nation, C. O. Garrett No. 1	Dry	
461	White	12	4 S	10 E	3,201	"McClosky"	J. W. Carter et al, Johnson No. 1	Prod.*	
462	White	10	4 S	14 W	2,768	Bethel	J. W. Pearson et al, T. E. Boultinghouse No. 1	Dry	
463	White	34	4 S	14 W	2,990	Ste. Genevieve	Ivan White et al, H. C. Ford No. 1	Dry	
464	White	1	5 S	10 E	2,964	Aux Vases	Sun Oil Co., Garner No. 1	Prod.*	
465	White	19	4 S	14 W	2,621	Glen Dean	Eason Oil Co., C. C. Hughes No. 1	Dry	
466	White	35	4 S	9 E	3,404	Ste. Genevieve	C. A. Everts, J. W. Brown No. 1	Dry	
467	White	10	5 S	10 E	3,108	Ste. Genevieve	Ford et al, Givens No. 1	Dry	
468	White	28	5 S	10 E	3,138	Ste. Genevieve	Continental Oil Co., G. P. Hanna No. 1	Dry	
469	White	20	3 S	10 E	3,345	Ste. Genevieve	Urban Oil Co., Woodard No. 1	Dry	
470	White	30	4 S	11 E	3,025	Ste. Genevieve	Marmoth Producers & Refiners, Belle Fitzgerald No. 1	Dry	
471	White	12	7 S	9 E	3,175	Ste. Genevieve	A. C. Wilson, Bayley Dagley No. 1	Dry	
472	White	19	4 S	14 W	3,250	Ste. Genevieve	Helmerich, Payne & Eason, Hughes No. 1	Dry	
473	White	18	6 S	10 E	3,060	Ste. Genevieve	W. R. Hayes, Osman No. 1	Dry	
474	Williamson	21	9 S	2 E	1,363	Palestine	Ray Shipman et al, Chamness No. 1	Dry	
475	Williamson	21	9 S	4 E	2,886	St. Louis	J. Curtiss Starr, Marie Carney Trustee No. 1	Dry	

476	Williamson	21	10 S	4 E	2,397	Ste. Genevieve	Reece & Roberts, T. Arnold No. 1	Dry
477	Williamson	9	9 S	2 E	2,500	Ste. Genevieve	J. H. Williams et al, Smothers No. 1	Dry
478	Williamson	4	10 S	3 E	2,462	Ste. Genevieve	Adams & Doran, Moore No. 1	Dry

* Discovery well of new pool or extensions; see table 5.

† Claim number of original Land Survey.

Of the 478 wildcat wells 30 were successful in discovering oil or gas in commercial quantities, either new fields or extensions of old fields. The results of an investigation to ascertain the reason for the locations of as many as possible of the wildcat wells are set forth in the following table:

Reason for Drilling	Total Number	Successful	Per Cent	Reason for Drilling	Total Number	Successful	Per Cent
Geology and geophysics.	173	24	14	Not based on geologic or geophysical information Unknown.....	239	6	3
Geochemical.....	1	0	0		65	0	0
				Total.....	478	30	6

ECONOMIC DATA

On the basis of posted prices, the total value of the oil produced in 1939 was approximately \$94,835,500. The average price calculated from the available data on production and prices for the state was slightly more than \$1.00 per barrel. This does not take into consideration the fact that some oil was sold under the posted price. If data on the amount and price of this oil were available, they would make both the total value and the average price somewhat lower than mentioned above. Posted prices for Illinois crude oil in 1939 were as follows:

Beginning Date.....	Oct. 13, 1938	June 8, 1939	Aug. 16, 1939	Sept. 13, 1939
Old fields.....	\$1.05	\$0.95	\$0.95	\$0.95
Central basin fields.....	1.15	1.05	1.05	1.05
Salem.....	1.15	1.05	0.85	0.95

Beginning Date.....	Oct. 10, 1939	Oct. 21, 1939	Dec. 31, 1939
Old fields.....	\$0.95	\$0.95	\$0.95
Central basin fields.....	1.05	1.05	1.05
Salem.....	0.95	1.05	1.05
Griffin: sandstone production.....	0.95	0.95	0.95
McClosky "sand" production.....	0.85	0.85	0.85

In 1939 a total of 7,521,986 ft. of hole was drilled in the state. Of this amount 6,079,423 ft. was drilled in producing wells. If an average cost of \$3.00 per foot is assumed, it is calculated that the total investment in drilling was \$22,565,958, including both producing wells and dry holes. The average depth of all wells drilled in the state in 1939 was

2025 ft. and the average initial daily production of the oil wells was 378 bbl. (For details see Tables 2 and 3.)

PIPE LINES AND REFINERIES

There was much pipe-line construction in Illinois in 1939 (Fig. 2); 341 miles of 10-in. line was laid for transporting crude oil, and 255 miles of 8-in. line for transporting gasoline. The Texas-Empire Pipe Line Co. constructed a 10-in. line from the Salem field in Marion County to Heyworth, Ill., where it joins the main line, a distance of approximately 123 miles. The capacity of the line was 40,000 bbl. daily but plans are now under way to construct 42 miles of 10-in. loop between the Salem field and the Heyworth station and 38 miles of 12-in. loop on the trunk line from the Heyworth station to the Wilmington station. These additional loops will increase the capacity of the Salem-Heyworth line from 40,000 to 65,000 bbl. per day estimated and of the trunk line from Heyworth to Wilmington from 80,000 to 95,000 bbl. per day estimated.

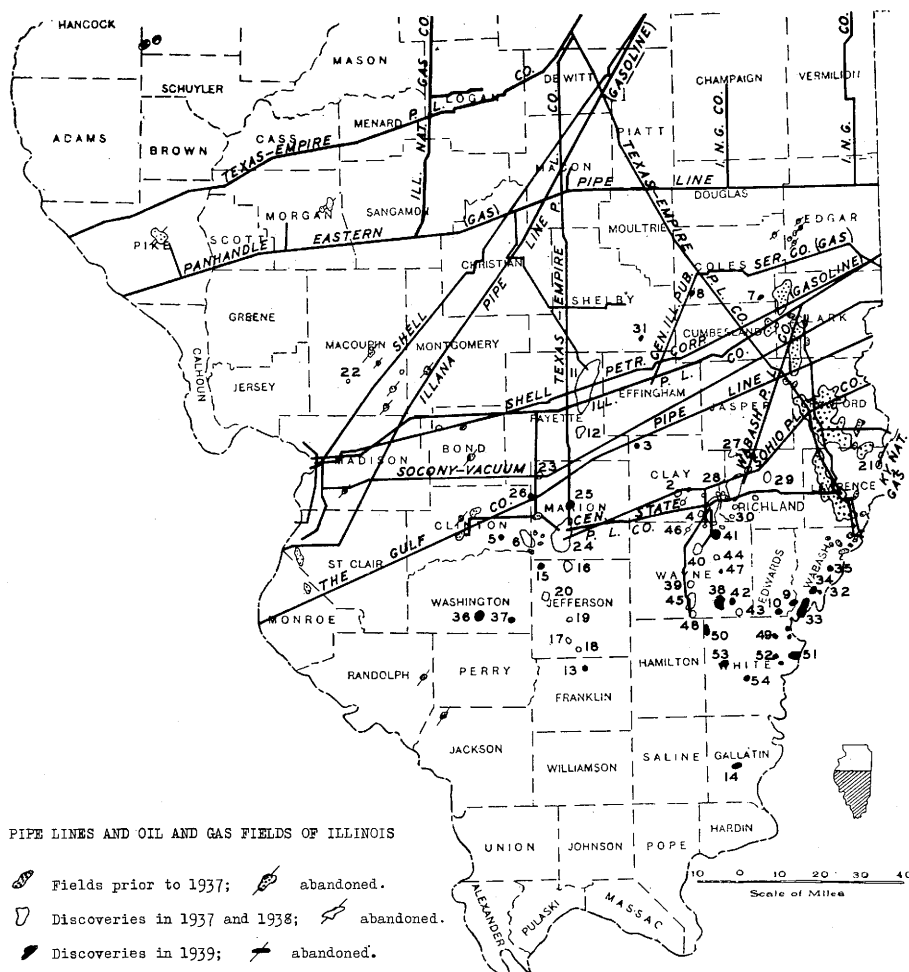
Socony-Vacuum constructed a 10-in. line from its Mitchell station between East St. Louis and Wood River, Ill., through Illinois and Indiana to Lima, Ohio. Approximately 147 miles of the line is in Illinois. Its daily capacity is reported to be 40,000 barrels.

Sohio Pipe Line Co. constructed 71 miles of 10-in. line from the Salem field to its station at Stoy, Ill., in the old Crawford County field. The line from Stoy, Ill., to Olean, N. Y., was formerly owned by the Tide Water Associated Oil Co. but recently was purchased by the Sohio Pipe Line Company.

The Illana Pipe Line Co. constructed 255 miles of 8-in. gasoline line in Illinois from East St. Louis, Ill., to East Chicago, Ind. This line connects with the Phillips Petroleum Company's gasoline line from Borger, Texas, at the East St. Louis terminal. A 500,000-bbl. storage capacity has been provided at East Chicago.

In addition to construction of trunk lines in the state, other lines were "looped" in order to increase their capacity and short lines from the fields to pumping stations and railroad loading racks were constructed.

A number of small refineries were constructed at various points in the Illinois basin as a result of the increased production. Their location close to producing areas gives them the advantage of obtaining crude oil at low prices and furnishes an outlet for production from many independent operators. At the end of the year, 29 refineries were operating in the state with a total daily capacity of 193,350 bbl. Of the total number of refineries, 17 have a daily capacity of 2000 bbl. or less. Ten refineries have both skimming and cracking units. Crude oil produced in Illinois fields is marketed mainly in the refineries of the Central Refining district



NEW FIELDS

- | | | |
|----------------------------------|--------------------------------|---------------------------|
| 1. Bond: Sorento | 21. Lawrence: Russellville gas | 36. Washington: Cordes* |
| 2. Clay: Flora | 22. Macoupin: Plainview gas | 37. Dubois* |
| 3. Iola* | 23. Marion: Patoka | 38. Wayne: Barn Hill* |
| 4. Clay, Wayne: Clay City | 24. Salem-Lake Centralia | 39. Boyleston |
| 5. Clinton: Hoffman* | 25. Tonti* | 40. Cisne |
| 6. Clinton, Marion: Centralia | 26. Marion, Clinton: Fairman* | 41. Enterprise* |
| 7. Coles: Hutton* | 27. Richland: Dundas* | 42. Goldengate* |
| 8. Mattoon* | 28. Noble | 43. Leech Twp. |
| 9. Edwards: Cowling* | 29. Olney | 44. Mt. Erie |
| 10. Edwards, White: Grayville* | 30. Schnell | 45. North Aden |
| 11. Fayette: Loudon-Beecher City | 31. Shelby: Stewardson* | 46. Rinard |
| 12. St. James | 32. Wabash: East Keensburg* | 47. South Mt. Erie* |
| 13. Franklin: Whittington* | 33. Griffin* | 48. Wayne, Hamilton: Aden |
| 14. Gallatin: Junction* | 34. Keensburg* | 49. White: Calvin* |
| 15. Jefferson: Cravat* | 35. Mt. Carmel* | 50. Mill Shoals* |
| 16. Dix | | 51. New Harmony* |
| 17. Elk Prairie | | 52. Phillipstown* |
| 18. Ina | | 53. Stokes* |
| 19. Marcoe | | 54. Storms* |
| 20. Roaches | | |

* Discoveries and extensions in 1939.

JANUARY 1, 1940

ILLINOIS STATE GEOLOGICAL SURVEY

FIG. 2—PIPE LINES AND OIL AND GAS FIELDS OF ILLINOIS.

(refineries in Illinois, Indiana, Kentucky, Michigan and Ohio). For December 1939 the runs to stills in this district were 17,848,000 bbl. Of this amount Illinois production was 60.1 per cent as compared to 30.9 per cent for January 1939. Stocks of crude petroleum on hand in Illinois Dec. 31, 1939, were 12,983,000 bbl. as compared with 11,752,000 bbl. on Dec. 31, 1938. Stocks of refined products in the Central Refining district compared with the previous year are as follows:

	Dec. 31, 1939	Dec. 31, 1938
Gasoline.....	13,621,000	12,119,000
Gas oil and distillate fuel.....	3,681,000	3,427,000
Residual fuel oil.....	2,964,000	4,025,000

EXPLORATION METHODS

Subsurface geology and geophysics, largely the reflection seismograph, are still the principal methods used in guiding exploration and development. Soil analysis as a means of exploration was conducted in various areas in the state. Gravimeters and magnetometers are being used to a small extent and structure test drilling is carried on by a few companies.

The extent of reflection seismograph surveys for 1939 in Illinois is indicated by the following tabulation:

Date	Number of seismograph parties active in Illinois
Jan. 1, 1939	11
Apr. 1, 1939	12
July 1, 1939	13
Oct. 1, 1939	15
Jan. 1, 1940	7

A total of approximately 295 townships or 10,620 square miles were fairly well covered by seismograph surveys in southern Illinois in 1939. Although much of the area covered overlapped that covered during 1938, particularly in the deeper part of the Illinois basin, seismograph surveys were extended outwards from the central basin area during 1939 over a large area to the west of the third principal meridian, mainly in Christian, Montgomery, Bond, Washington, and Perry counties, to the south in Williamson, Saline, and Gallatin counties, and to the east in Crawford, Lawrence, and Wabash counties.

Development in 1939 was largely in the Salem and Loudon fields and in White and Wabash Counties where a number of new fields in the younger productive formations were discovered (Table 4). December

1939 marked the beginning of Devonian limestone development in the Salem field. The Kingwood Oil Co. and Bell-Shanafelt No. 18A. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, T. 2 N., R. 2 E., was the discovery well in this formation in the Salem field (Table 5). The well reached the top of the

TABLE 3.—*Summary of Drilling and Initial Production in Illinois for 1939*

County	Number of Wells Drilled in 1939			Total Initial Production		Footage Drilled in 1939	
	Total Completed	Total Producing		Oil, Bbl.	Gas, Millions Cu. Ft.	Total	Producing Wells
		Oil	Gas				
Adams.....	2	0	0	0	0	1,853	0
Bond.....	7	0	0	0	0	14,929	0
Brown.....	4	0	0	0	0	2,406	0
Champaign.....	2	0	0	0	0	2,900	0
Christian.....	4	0	0	0	0	4,850	0
Clark.....	20	4	0	150	0	21,883	5,351
Clay.....	159	136	0	66,725	0	484,954	422,153
Clinton.....	62	35	0	3,135	0	81,105	46,733
Coles.....	17	3	0	33	0	27,286	3,301
Cook.....	1	0	0	0	0	210	0
Crawford.....	7	2	0	12	0	11,901	2,562
Cumberland.....	11	0	0	0	0	19,914	0
Douglas.....	2	0	0	0	0	928	0
Edgar.....	9	0	0	0	0	9,900	0
Edwards.....	34	17	0	2,443	0	98,946	48,189
Effingham.....	13	0	0	0	0	34,521	0
Fayette.....	960	895	0	236,037	0	1,506,441	1,395,934
Franklin.....	9	1	0	199	0	31,251	3,068
Fulton.....	3	0	0	0	0	2,099	0
Gallatin.....	19	6	0	319	0	39,344	9,025
Greene.....	2	0	0	0	0	1,730	0
Hamilton.....	7	1	0	72	0	27,707	3,381
Hancock.....	3	1	0	3	0	1,295	382
Henderson.....	1	0	0	0	0	1,235	0
Jackson.....	1	0	0	0	0	1,380	0
Jasper.....	8	1	0	10	0	18,117	722
Jefferson.....	73	36	0	4,963	0	167,136	73,640
Jersey.....	1	0	0	0	0	1,802	0
Johnson.....	1	0	0	0	0	1,747	0
Knox.....	1	0	0	0	0	800	0
Lawrence.....	41	3	18	68	159.4	55,639	23,676
Livingston.....	1	0	0	0	0	1,530	0
McDonough.....	7	1	0	1	0	3,946	512
Macon.....	2	0	0	0	0	5,300	0
Macoupin.....	4	0	3	0	0.7	2,904	1,364
Madison.....	9	1	0	25	0	11,720	1,300
Marion.....	1,242	1,155	0	667,813	0	2,449,707	2,277,051
Monroe.....	16	7	0	200	0	10,272	3,164
Montgomery.....	11	1	0	2	0	14,883	680
Morgan.....	1	0	0	0	0	1,160	0
Moultrie.....	4	0	0	0	0	8,872	0
Peoria.....	1	0	0	0	0	1,562	0
Perry.....	16	0	0	0	0	22,450	0
Pike.....	2	0	0	0	0	1,452	0
Randolph.....	7	0	0	0	0	9,546	0
Richland.....	102	91	0	26,697	0	279,741	246,240
St. Clair.....	38	21	0	1,403	0	36,939	12,817
Saline.....	7	0	0	0	0	17,835	0
Sangamon.....	2	0	0	0	0	4,633	0
Schuyler.....	3	0	0	0	0	2,655	0
Shelby.....	17	1	0	28	0	34,559	1,969
Tazewell.....	2	0	0	0	0	3,700	0
Wabash.....	217	170	0	28,733	0	537,130	418,576
Warren.....	1	0	0	0	0	1,050	0
Washington.....	133	96	0	7,660	0	181,702	123,297
Wayne.....	237	193	0	56,186	0	893,323	761,200
White.....	104	68	3	15,033	109.8	295,598	193,136
Williamson.....	5	0	0	0	0	11,608	0
	3,675	2,946	24	1,117,750	269.9	7,521,986	6,079,423

TABLE 4.—Data on New Fields, January 1, 1940

County and Field	Pro- ducing Wells	Dry Holes ¹	Drilling Wells	Rigs Standing	Rigging Up	New Loca- tions	Acres	Approximate Cumu- lative Production to Dec. 31, 1939		Approximate Pro- duction 1939		Total Initial Production	
								Oil, Bbl.	Gas, Millions Cu. Ft.	Oil, Bbl.	Gas, Millions Cu. Ft.	Oil, Bbl.	Gas, Millions Cu. Ft.
Bond; Sorento.....	1	0	0	2	0	1	10	y	0	y	0	0	0
Clay; Flora.....	17	6	0	0	0	1	290	214,000	0	147,000	0	424	0
Iola.....	2	3	0	0	0	0	20	y	0	y	0	42	0
Clay, Wayne; Clay City.....	375	18	2	8	0	0	7,980	11,895,000	0	6,336,000	0	72,157	0
Clinton; Hoffman.....	1	0	0	0	0	0	10	y	0	y	0	42	0
Clinton; Marion.....													
Centralia.....	539	44	5	2	7	0	2,190	5,922,000	0	2,895,000	0	2,145	0
Edwards; Cowling.....	11	1	0	2	1	0	100	23,000	0	23,000	0	1,429	0
Edwards; White.....													
Grayville.....	8	0	0	0	3	1	70	30,000	0	30,000	0	1,111	0
Fayette:													
Louden-Beecher City.....	1,331	74	5	39	4	5	16,370	20,237,000	0	18,345,000	0	299,514	0
St. James.....	76	4	2	8	0	2	1,030	494,000	0	445,000	0	7,523	0
Franklin; Whittington.....	1	0	0	0	0	0	10	y	0	y	0	399	0
Franklin; Junction.....	6	0	0	2	0	0	60	y	0	y	0	319	0
Gallatin; Junction.....	6	0	0	4	0	0	100	14,000	0	14,000	0	301	0
Jefferson; Cravat.....	57	0	0	0	0	0	1,250	y	0	y	0	3,323	0
Dix.....	1	0	0	0	0	0	10	y	0	y	0	0	0
Elk Prairie ²	1	2	0	0	0	0	10	y	0	y	0	0	0
Ina.....	1	1	0	0	0	0	10	y	0	y	0	18	0
Marcoc.....	1	3	0	0	0	0	10	y	0	y	0	0	0
Roaches.....	9	3	1	1	0	0	110	70,000	0	70,000	0	916	0
Lawrence:													
Russellville gas.....	32	6	0	1	0	0	1,020	0	1,065.1	0	963.7	0	159.5
Marion; Patoka.....	104	20	0	1	0	0	720	1,661,000	0	494,000	0	0	0
Salem-Lake Centralia.....	1,577	57	19	55	18	10	8,870	52,619,000	0	49,724,000	0	627,187	0
Tonti.....	35	8	0	1	1	0	270	910,000	0	910,000	0	12,433	0
Marion, Clinton:													
Fairman.....	11	1	0	6	0	0	160	y	0	y	0	1,331	0
Richland; Dundas.....	18	0	4	5	0	1	400	y	0	y	0	16,971	0
Noble.....	212	33	0	2	0	0	3,540	6,852,000	0	1,674,000	0	9,104	0
Olney.....	36	11	0	0	0	0	510	753,000	0	338,000	0	622	0

TABLE 4.—(Continued)

County and Field	Pro- ducing Wells	Dry Holes ²	Drilling Wells	Rigs Standing	Rigging Up	New Loca- tions	Acres	Approximate Cumu- lative Production to Dec. 31, 1939		Approximate Pro- duction 1939		Total Initial Production	
								Oil, Bbl.	Gas, Millions Cu. Ft.	Oil, Bbl.	Gas, Millions Cu. Ft.	Oil, Bbl.	Gas, Millions Cu. Ft.
Schnel	4	5	0	0	0	0	40	/	0	/	0	0	0
Shelby: Stewardson	1	0	0	0	0	0	10	/	0	/	0	0	0
Wabash: Griffin	47	14	2	7	2	2	690	169,000	0	169,000	6,283	0	28
East Keokuk	1	0	0	1	0	0	10	/	0	/	0	0	0
Keokuk	120	12	3	8	4	0	700	783,000	0	783,000	22,133	0	287
Mt. Carmel	2	0	0	1	0	0	20	/	0	/	0	0	0
Washington: Cordes	95	6	0	3	2	0	1,090	468,000	0	468,000	7,414	0	50
Dubois	1	1	1	0	0	0	10	/	0	/	0	0	0
Wayne: Barn Hill	41	5	0	1	4	0	750	593,000	0	593,000	16,664	0	46
Boyleston	25	4	0	0	2	1	450	218,000	0	218,000	7,523	0	0
Cisne	47	0	0	1	1	0	960	1,269,000	0	1,269,000	4,874	0	0
Enterprise	50	3	0	2	2	0	1,450	105,000	0	96,000	17,542	0	0
Goldengate	3	0	0	0	0	0	30	/	0	/	0	0	0
Leech Twp.	9	1	2	1	0	0	240	/	0	/	0	0	0
Mt. Erie	1	0	0	0	0	0	10	/	0	/	0	0	0
North Aden	60	9	0	0	0	0	1,230	1,030,000	0	725,000	1,791	0	0
South Mt. Erie	1	0	0	0	0	0	10	/	0	/	0	0	0
Wayne, Hamilton: Aden	5	2	0	0	0	0	200	/	0	/	0	0	0
White: Calvin	2	1	0	0	0	0	20	/	0	/	0	0	72
Mill Shoals	22	1	5	0	3	0	400	127,000	0	127,000	2,655	0	0
New Harmony	11	0	2	1	0	0	130	/	0	/	0	0	0
Phillipstown	2	0	1	1	1	0	20	/	0	/	0	0	0
Stokes	7	1	2	1	0	0	140	/	0	/	0	0	0
Storms	174	2	1	23	3	3	540	60,000	0	60,000	2,011	0	0
Total	5,042	361	57	197	59	27	54,220 ⁵	113,548,000	1,065.1	90,299,000	963.7	1,089,028	269.3

¹ Fields discovered since Jan. 1, 1937, with the exception of the following, which have been abandoned: Mattoon, Coles County; Rinard, Wayne County.

² Within $\frac{1}{4}$ mile of production.

³ Inactive.

⁴ Three gas wells.

⁵ Includes 1050 acres natural gas production; 1020 acres Russellville gas field; 30 acres Storms field

⁶ Gas not marketed.

⁷ Not available for publication.

TABLE 5.—Discovery Wells of New Fields and Extensions in Illinois for 1939

Field	County	Company and Farm	Location	Total Depth, Ft.	Producing formation		Initial Production, Bbl.	Date of Discovery	Number of Wells in Pool 1-3-40
					Depth to Top, Ft.	Name			
Barnhill	Wayne	Carl Robinson, Felix No. 1	SW SE SE 27-28-8E	3,409	3,386	McClosky "sand"	460	2-7-39	41
Calvin	White	J. W. Carter et al., Johnson No. 1	SW NE NE 12-8-10E	3,201	3,194	McClosky "sand"	210	10-10-39	2
Clay City	Wayne	Wiser Oil, Shannon No. 1A1	CW NE SW 25-2N-8E	3,132	3,048	McClosky "sand"	190	12-12-39	2
Cordus	Washington	G. H. Blankenship, Dennis No. 1	NE SW NE 14-35-31W	1,239	1,228	Bethel sandstone	25	2-7-39	95
Cowling	Edwards	C. C. McFadden, Bump No. 1	CSF SW 34-25-11W	2,643	2,643	Cypress sandstone	240	10-10-39	11
Cravat	Jefferson	Vayder, Kell No. 1	NW SW NE 9-18-1E	2,084	2,065	Bethel sandstone	72	8-8-39	6
Dubois	Washington	Shell, Dix No. 1	CW NE NE 10-35-1W	1,370	1,369	Bethel sandstone	46	11-28-39	1
Dundas	Richland	Pure, Coen No. 1	SE SE SE 26-4-10E	2,980	2,880	McClosky "sand"	1,488	9-6-39	18
E. Keensburg	Webesh	Marvel Oil, Beall No. 1	CNE NW 3-28-33W	2,714	2,703	McClosky "sand"	287	12-12-39	1
Faterprise	Wayne	Witcher, Fitch No. 1	CNE SE 3-28-33W	3,100	3,087	McClosky "sand"	194	4-18-39	50
Fairman	Marion	Shell, Lutz No. 1	NW NW SE 18-8-1E	1,459	1,429	Bethel sandstone	107	11-7-39	11
Goldengate	Wayne	New Penn Dex, Wagner No. 1	NW NW SE 30-25-1E	3,441	3,432	McClosky "sand"	20	3-7-39	3
Grayville	Edwards	Kingwood, Johnson No. 1	SE SE NE 16-35-13E	3,269	3,096	McClosky "sand"	415	9-6-39	8
Griffin	Wayne	W. N. Bartlett, Stamford No. 1	SW SE SE 16-35-13W	1,719	1,713	Pennsylvanian sandstone	210	6-13-39	47
Hoffman	Webesh	Bell Oil, H. K. Alford No. 1	NE SE SW 2-25-13W	1,829	1,824	Bethel sandstone	42	12-30-39	1
Huffman	Clinton	W. R. Miller, Griffin No. 1	SE NE SE 22-11-10E	2,558	2,523	Pennsylvanian sandstone	10	4-25-39	24
Hutton	Coles	Duncan, Liggert No. 1	SE NE SE 22-11-10E	2,383	2,356	Aux Vases sandstone	42	5-2-39	2
Junction	Gallatin	Coates et al., Greche No. 2	SW SE SE 17-41-5E	1,794	1,757	Watersburg sandstone	130	5-16-39	6
Keensburg	Webesh	Neff, Bump, No. 1	NW SE NW 9-25-13W	2,424	2,387	Cypress sandstone	286	7-25-39	2
Mt. Carmel	Webesh	Washburn, Pfeifer No. 1	SW SW SW 15-15-14W	1,955	1,940	Tar Springs sandstone	44	6-27-39	2
Mattoon	Coles	Wheeler & Wiseman, Micheal No. 1	SW SW NW 15-11N-7E	1,919	1,835	Cypress sandstone	18	2-21-39	4
Mill Shoals	White	Nation et al., McCosh No. 1	SE SW 31-38-8E	3,405	3,360	McClosky "sand"	76	7-11-39	22
New Harmony	White	Sun Oil, Ford No. 1	NW NE E 18-65-14W	3,017	2,998	McClosky "sand"	20	7-11-39	11
Phillipstown	White	Sun Oil, Ford No. 1	SW SE SW 18-65-14W	2,964	2,942	Aux Vases sandstone	20	10-24-39	3
S. Mt. Erie	Wayne	Cayuna Oil, Brown No. 1	SE SE SW 18-65-10E	3,206	3,129	McClosky "sand"	30	12-5-39	1
Stewardson	Shelby	J. W. Hayward, Wabash R. R. Right of Way No. 1	ON ¹ /2N ¹ /2 27-10N-5E	1,969	1,942	Aux Vases sandstone	28	4-18-39	1
Stokes	White	Pennell, O. & G., Pyle No. 1	E SE NE 12-65-8E	3,132	3,082	McClosky "sand"	423	10-3-39	7
Storns	White	Eason Oil, Storns Heirs No. 1	CW SE SW 14-65-9E	2,992	2,215	Watersburg sandstone	123 ³	7-11-39	2
Tooth	Marion	Harvey et al., Mercantile Bank No. 1	NE SE 33-3N-2E	2,193	2,160	McClosky "sand"	157	5-2-39	35
Whittington	Franklin	Gulf Ref., Hinman No. 1	SE SW NE 19-55-3E	3,068	2,869	McClosky "sand" and St. Louis limestone	199	7-5-39	1

¹ Extension.
² 14 oil, 8 gas.
³ Million cubic feet of gas.
⁴ Abandoned.

TABLE 6.—Discovery Wells in Deeper Formations in Areas of Previous Production

Field	County	Company and Farm	Location	Total Depth, Ft.	Producing formation		Initial Production, Bbl.	Date of Discovery	Number of Wells in Pool 1-3-40
					Depth to Top, Ft.	Name			
Bartleso	Clinton	Paul Mosebach, Robbin No. 1	SE SW SE 5-1N-3W	2,431	2,416	Devonian limestone	162	12-5-39	1
Centralia	Clinton and Marion	Lilly, Gum No. 1	SW SE NE 13-1N-1W	2,933	2,884	Devonian limestone	782	12-31-39	1
Salem	Marion	Magnolia, W. B. Young No. 24	NW SW NW 20-2N-2E	2,230	2,204	Salem limestone	288	11-28-39	5
Salem	Marion	Kingwood and Bell, Shanafelt No. 15A	NE NW NE 20-2N-2E	3,502	3,345	Devonian limestone	3,024	11-21-39	7

Devonian limestone at a depth of 3345 ft. The initial production was 3024 bbl. In the Salem field the producing zone is porous dolomite consisting of an average of 30 ft. of pay, which is encountered 50 to 55 ft. below the top of the limestone. Many wells record as much as 20 ft. of poor saturation overlying 20 ft. of good saturation. The average initial production from the first wells was approximately 3300 bbl. No water was produced with the oil.

There was considerable development of the Devonian limestone in the Sandoval pool in central western Marion County, where the Bethel sandstone (Benoiist sand) has produced for many years. The discovery well in the Devonian limestone was drilled in December, 1938 and the development of this formation in the field was carried on throughout the year. By the end of the year 22 wells had been completed in the field with an average initial production of 1450 bbl. A considerable quantity of water is produced with the oil in the field; a well drilled near the southern limit of the producing area had an initial production of 600 bbl. of oil and 1400 bbl. of water. To the end of 1939 the Devonian limestone in the field had produced approximately 794,000 bbl. of oil.

In December, 1939, wells were drilled to the Devonian limestone in the Centralia and Bartleso fields in Clinton County and both were producers (Table 5).

These recent Devonian limestone discoveries will be followed by the drilling of many Devonian wells in these fields and will encourage deeper exploration in both new and old fields where production is obtained from younger formations and where the deeper formations have not been tested. During the past year, 190 wells were drilled to the Devonian or deeper in the state. Of this number 61 wells were drilled in producing fields; the remainder were "wild-cat" wells.

NATURAL GAS

Gas was marketed from two fields in Illinois during 1939, the Russellville field in Lawrence County and the Ayers field in

Bond County. The Russellville gas field, in northeastern Lawrence County, includes 920 productive acres and produced 963,712,000 cu. ft. during the year. The field was discovered in 1937 and had produced 1,065,112,000 cu. ft. of gas to the end of 1939. Production is obtained from the Buchanan sandstone of Pennsylvanian age. The gas is "dry" and the average B. t. u. value is 950. The Ayers gas field in north central Bond County includes 325 productive acres and produced 13,626,000 cu. ft. during 1939. The field was discovered in 1922 and had produced 180,626,000 cu. ft. of gas to the end of 1939. Production is obtained from Aux Vases sandstone of the Chester series. The gas is "dry" and the B. t. u. value is 1050.

In July 1939 the Eason Oil Company's Storms Heirs No. 1 well was drilled in sec. 14, T. 6 S., R. 9 E., White County, and was completed as a gas well in the Waltersburg sandstone of the Chester series at a depth of 2215 ft. The well had an initial production of 12,300,000 cu. ft. of gas. Other wells drilled later produced both gas and oil. On March 5 five wells were producing gas and 30 wells producing gas and oil in the Storms field. The initial gas production of all the wells in the field was from

TABLE 7.—*Illinois Completions and Production since January 1, 1936*

Date	Comple- tions	Producing Wells	Production (Thousands of Barrels)		
			New Fields	Old Fields	Total ²
1936.....	92	52			4,445
1937.....	449	292	2,884	4,542	7,426
1938.....	2,541	2,010	19,811	4,264	24,075
1939					
January.....	240	208	4,194	252	4,446
February.....	241	200	4,300	242	4,542
March.....	282	205	5,116	264	5,380
April.....	210	167	5,157	258	5,415
May.....	316	263	6,575	274	6,849
June.....	386	311	6,819	264	7,083
July.....	273	221	8,457	280	8,737
August.....	377	310	9,569	283	9,852
September.....	320	244	10,172	271	10,443
October.....	319	266	10,322	279	10,601
November.....	363	286	9,955	267	10,222
December.....	348	289	10,465	267	10,732
	3,675	2,970	91,101 ¹	3,201	94,302

¹ Includes new Devonian production from old fields.

² U. S. Bureau of Mines monthly petroleum statements.

4 to 30 million cu. ft. of gas. When the oil wells were drilled the gas was then released and burned in flares. It has been reported that approximately 100,000,000 cu. ft. of gas is being burned daily in this field. A small amount is used in drilling and pumping operations, and in heat-treatment of the oil produced from the field. The gas is "dry" and the heat value is 930 B.t.u. per cubic foot.

A considerable quantity of gas is being produced with the oil in the Salem field, in southwestern Marion County. The field, which is almost two years old, had produced approximately 75,000,000 bbl. of oil to the end of March, 1940. Oil is produced from the Bethel and Aux Vases sandstones of the Chester series, the McClosky "sand" and the Salem limestone of Lower Mississippian age, and the Devonian limestone. Natural gas is produced with the oil from each producing formation. A comparison of the estimated total amount of gas produced by each up to the end of February, 1940 is as follows: Bethel sandstone, 35 per cent; Aux Vases sandstone, 9; Salem limestone, 1; McClosky "sand," 30; Devonian limestone, 25.

A recent estimate of the amount of gas produced in the Salem field is 250,000,000 cu. ft. daily. It is also estimated that approximately half of the ultimate gas production has been produced from the formations now producing oil. A small amount of the gas is used for repressuring, drilling, and heating purposes, the remainder is burned in flares. The gas is "wet" and the average B.t.u. value is approximately 1600 per cubic foot. There is an average yield of from 1 to 1 $\frac{1}{4}$ gal. of natural gasoline from 1000 cu. ft. of gas.

In the Loudon field, in northeastern Fayette County, natural gas is likewise produced with the oil. The Loudon field is more than two years old, and to the end of March, 1940 had produced approximately 26,500,000 bbl. of oil. Production is obtained from the Cypress, Paint Creek Stray, and Bethel sandstones of the Chester series. Natural gas is produced throughout the pool; however, there is a "gas cap" in the north part centering from sec. 28, T. 8 N., R. 3 E., northeast to sec. 15, T. 8 N., R. 3 E. There is an average yield of from 1.3 to 1.5 gal. of natural gasoline from 1000 cu. ft. of natural gas from the field.

It is estimated that approximately 30,000,000 cu. ft. of gas is produced daily in the field. Of this amount 1,000,000 cu. ft. is used for repressuring, and it is estimated that 3,000,000 cu. ft. is used for lease operations, 3,500,000 for fuel, and the remaining 22,500,000 cu. ft. is burned in flares.

In other new fields in the state a small amount of natural gas is produced with the oil. The amount of gas now produced is very small in the first McClosky "sand" fields in the central basin area as compared to the production when the fields were first developed. Although there has been an increase in the gas-oil ratio in these fields, oil production has declined to such a low figure that the natural gas production is insignificant. The estimated average gas-oil ratio for many of these fields is 1000 cu. ft. of gas per barrel of oil. Part of the gas is used on the leases for pumping and heating purposes, the remainder is burned in flares.

During the latter part of the year 1938 and early in 1939, five shallow gas wells were completed in Hillyard township, T. 8 N., R. 8 W., near Plainview, Macoupin County. The wells were completed in the basal Pennsylvanian sandstone at an average depth of 440 ft. The initial production ranged from 125,000 to 750,000 cu. ft. per day. The gas is "dry" and has an average calculated B.t.u. value of 806 per cubic foot. The gas has not yet been marketed. There are three abandoned gas fields in Macoupin County—Spanish Needle Creek, Gillespie-Bend,

and Staunton (Table 1). These had a total productive area of 560 acres and during the life of the fields they produced a total of 1,200,000,000 cu. ft. of gas. The gas was marketed in near-by cities within the county. The last field was abandoned in 1935.

IMPROVED RECOVERY METHODS

Repressuring.—A repressuring project by the Texas Company in the Salem field was continued in 1939. At the end of the year approximately one million cubic feet of gas daily was being injected into 11 gas-input wells. Three new input wells were added during the year. No data as to the results in increased recovery are available as yet.

In the northern part of the Loudon field the Carter Oil Co. has 39 gas-input wells in T. 8 N., R. 3 E., Fayette County. Of this total, 5 input wells were completed in 1938 and on Jan. 1, 1939 an accumulated volume of 2,636,000 cu. ft. of residue gas was returned to the reservoir through these wells. On Jan. 1, 1940, the accumulated injection volume to all sands was estimated to be 92,000,000 cu. ft. This project is in an early stage and is not intended to increase actual measured daily production at present.

Water-flooding.—In the Clay City field, which is producing from the McClosky sand, the Pure Oil Co. started an experimental water-flooding project on the B. Travis lease, sec. 33, T. 3 N., R. 8 E., Clay County. Water was first injected in the B. Travis No. 1 well on Sept. 28, 1939, at an initial rate of about 1300 bbl. per day, and on Jan. 1, 1940, an estimated 100,000 bbl. had been used. As the project has been in operation for only a short time, no data on its results could be obtained.

During 1939 there was little change in repressuring or water-flooding operations in the old southeastern Illinois field or in the old fields of western and southwestern Illinois. The fact that production was curtailed approximately one-third throughout the year was unfavorable to the initiation of new projects or to the expansion of old ones.

LEGISLATION

Two new statutes affecting the oil and gas industry were enacted by the State of Illinois in 1939. These are House Bill No. 1079, approved July 11, 1939, "An Act to require the reporting of information essential for the sealing of wells to prevent escape of oil, gas, salt or fresh water or other materials from one stratum to another through such wells" and House Bill No. 1080 filed without signature, July 21, 1939, "An Act to amend Sections 2, 3, 4, 5, and 6 of 'An Act in relation to sinking, filling and operating of wells for oil, gas, water or other purposes,' approved May 16, 1905, as amended." The new laws require that permits to drill be issued by the Department of Mines and Minerals, Springfield, before drilling is started. They provide for the filing of well logs with the State Geological Survey within 30 days of completion, for the saving of well cuttings for geologic study in wells designated by the Survey and for making cores available for study by the Survey. The method prescribed for plugging abandoned wells has been amended in accordance with modern practice. The plugging laws are administered by the Department of Mines and Minerals, Springfield.

Unlike most of the major oil-producing states, Illinois does not have any comprehensive law providing for the conservation of oil and gas. Although the greater number of the oil-producing operations are being carried on efficiently, the existence of wasteful practices in some areas must be recognized. The burning of large quantities of natural gas in flares, particularly in the Salem pool, represents a loss of reservoir energy, which if utilized by returning the gas to the oil sand would result in a substantially greater ultimate recovery of oil. The drilling of too many wells in a small area, as for example in parts of the Salem pool and on town lots in Centralia, is not only an economic loss but will also result in physical waste through the premature abandonment of wells.

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EXPLANATION OF TABLE 1

The field is the unit in table 1. Each space may represent one of four possibilities; either it is not applicable to the particular field, or the proper entry is not determinable, or the proper entry may be determinable but is not determinable from data available to the author, or the proper entry is determinable. Spaces that are not applicable are left blank; in spaces where the proper entries are determinable from data available to the author, *y* is inserted; in spaces where the proper entries are determinable by the author, such entries are made; *y* implies a hope that in some future year a definite figure will be available.

The entry of an O is a positive declaration.

The quantity of gas includes gas sold or otherwise marketed. Gas blown into the air, burned as flares or otherwise wasted is not included.

Under the columns on "Depth," the average depth to the top of the productive zone and to the bottom of the productive well, when subtracted, does not necessarily give the approximate thickness of the productive zone.

In classifying wells as to producing methods, all wells that are not "flowing" are entered in the column headed "Artificial Lift."

FOOTNOTES TO COLUMN HEADINGS—TABLE 1

^a The old Southeastern fields are listed in geographic order from north to south; all others are listed alphabetically by counties.

^b Areas where both oil and gas are produced, unless gas is marketed outside the field, are included in the column headed "Oil."

^c Wells producing both oil and gas are classified as "Producing Oil." Gas wells are those producing gas, but include those producing wet gas, from which casinghead gasoline may be produced.

^d Letters indicate type of operation: PM, pressure maintenance from early life of field; RP, field repressuring in its later life.

^e Cam, Cambrian; Ord, Ordovician; Sil, Silurian; Dev, Devonian; Mis, Mississippian; MisL, Lower Mississippian; MisU, Upper Mississippian; Pen, Pennsylvanian.

^f S, sandstone; L, limestone; LS, Limestone, sandy.

^g "Por" indicates that the reservoir rock is of pore type; "cav", cavernous type.

^h A, anticline; AM, accumulation due to both anticlinal and monoclinical structure; ML, monocline-lens; D, dome; T, terrace; N, nose.