

STATE OF OHIO  
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REPORT OF INVESTIGATIONS NO. 13  
PETROLEUM AND NATURAL GAS SERIES NO. 3

**PART 1**

**OIL AND GAS WELL DRILLING STATISTICS FOR 1951**

Compiled By  
ROBERT L. ALKIRE

**PART 2**

**ORISKANY SAND STUDY** By JOHN F. HALL  
**CANTON GAS POOL** By HENRY BELDEN

WELLS DRILLED IN OHIO 1888 - 1951  
OIL AND GAS PRODUCTION CHARTS  
WELL SAMPLE CUTTINGS INDEX

AND  
EXCERPTS FROM PREVIOUS REPORTS

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TABLE OF CONTENTS

Introduction, by Robert L. Alkire. . . . .

Part 1. Ohio Oil and Gas Well Drilling Statistics, 1951: Compiled by Robert L. Alkire  
Summary of oil and gas well drilling, 1951 . . . . .  
Oil and gas discoveries, by counties. . . . .  
Oil and gas discoveries, by sands. . . . .  
Total footage drilled, by counties. . . . .  
Additional drilling during 1951. . . . .  
Drilling permits granted and wells abandoned. . . . .  
Inactive counties. . . . .  
Summary of drilling, by sands. . . . .  
Summary of drilling, by counties. . . . .

Part 2. Statistical review of past drilling and production, Compiled by Robert L. Alkire.  
Wells drilled in Ohio, 1888 1951, by ~~county~~ years (Revised). . . . .  
Natural gas production and consumption in Ohio, 1940 1949, by years. . . . .  
Petroleum production in Ohio, 1876 1951. . . . .

Part 3. Oriskany sand study, by John F. Hall. . . . .

Part 4. The Canton Gas Pool, by Henry Belden. . . . .

Part 5. Excerpts from Ohio Geological Survey Reports:  
(On the Neff gas wells, Knox County), by M. C. Read. . . . .  
(On the Neff gas wells, Knox County), by Edward Orton. . . . .  
The Mecca oil field, by Edward Orton. . . . .  
The Belden or Grafton oil field, by Edward Orton. . . . .

Part 6. Index to oil, gas, and water well sample cuttings, by counties. . . . .  
(add "Compiled by R.A L.)

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## ACKNOWLEDGMENTS

The source data for Part I, Oil and Gas Well Drilling Statistics for 1951, was gathered by members of the Ohio Oil and Gas Scouts and made available through semi-monthly reports published by the Ohio Oil and Gas Association. Additional information was contributed through the courtesy of Mr. J. C. Wilson and Mrs. Elma Coyne from the files of the Division of Mines.

Part II contains two timely reviews, the "Oriskany Sand Study" by Dr. John F. Hall, and the "Canton Gas Pool" by Mr. Henry Belden. Dr. Hall, a member of the Survey staff, initiated this study prior to the recent Oriskany sand gas discoveries in Troy Township, Athens County, and Belpre and Watertown townships, Washington County. His review brings together all information available on this sand in Ohio and should be of considerable value to those who are interested. Mr. Henry Belden is the brother of Marshall Belden who drilled the discovery well in the Canton gas pool. He carefully watched and recorded the development, rise and decline of production, and the economics involved in this typical Clinton sand gas pool. It is to my knowledge the most thorough report covering any gas pool ever developed in Ohio. We are indebted to Henry Belden for preparing this fine review.

The table "Wells Drilled in Ohio 1888-1951" was first presented on pages 45 and 46 of Report of Investigations No. 8 (Petroleum and Natural Gas Series No. 1), 1950. Shortly after the publication of R. I. No. 8 the writer found a small pamphlet, published by the Derrick Publishing Company, entitled "History of the Oil Development in Ohio." This new source of information aided in the clarification of the total number of wells drilled annually prior to 1920. The table has been revised and the new figures are believed to be as accurate as is possible on the basis of all available information.

The "Neff Gas Wells," the "Mecca Oil Field," and the "Belden Oil Field" are excerpts from Survey publications, Volumes III and VI, now out of print.

The well cuttings sample files of the Survey have been organized and catalogued. Here, for the first time, is presented a convenient and informative listing of these samples for all who may wish to refer to them for microscopic study.

The writer is most grateful to all who have contributed their time and effort to make this publication possible. Particular commendation is due to Mr. Gene Garrison, a former member of the Survey staff, for the final organization of well sample cuttings list, to Mr. H. J. Flint for the preparation of maps and charts, Miss Doris Runkle, manuscript typing, and to Miss Ethel Dean for editorial advice.

Robert L. Alkire

## CONTENTS

	Page
Acknowledgments .....	ii
Map of Oil and Gas Fields of Ohio.....	vi

### PART I

#### Ohio Oil and Gas Well Drilling Statistics 1951

Summary of Oil and Gas Well Drilling During 1951.....	1
(Map Showing Areas of Drilling Activity in 1951).....	2
Oil and Gas Discovered During 1951 - by Counties.....	3
Oil and Gas Discovered During 1951 - by Sands.....	5
Total Footage Drilled During 1951 .....	6
Additional Drilling During 1951 .....	7
Chart of Wells Completed and Drilling.....	7
Drilling Permits Granted and Wells Abandoned.....	8
Inactive Counties.....	9
Summary of Drilling By Sands.....	10
Summary of Drilling By Counties .....	17

### PART II

Oriskany Sandy Study By John F. Hall .....	39
Selected Bibliography.....	43
Figure 1 - Map showing approximate sand limits and location of Oriskany sand pools in Ohio.....	44
Table 1 - Oil and Gas Pools.....	45
Figure 2 - Cross Section Index Map .....	46
Figure 2A - Cross Section A-A' Showing "Big Lime"-Oriskany Interval.....	47
Figure 2B - Cross Section B-B' Showing "Big Lime"-Oriskany Interval.....	48
Figure 2C - Cross Section C-C' Showing "Big Lime"-Oriskany Interval.....	49
Figure 2D - Cross Section D-D' Showing "Big Lime"-Oriskany Interval.....	50
Figure 2E - Cross Section E-E' Showing "Big Lime"-Oriskany Interval.....	51
Plate I - Shooting the Oriskany Sand .....	52
Figure 3 - Structural Map on Top of the Oriskany Sand.....	53
Figure 4 - Oriskany Sand Well Location Map.....	54
Table 2 - Selected Oriskany Wells in Ohio .....	55
The Canton Gas Pool By Henry Belden .....	59
Figure 1 - Early Stage of Development of the Canton Pool .....	61
Figure 2 - Drilling Activity in Canton Pool 1945-1951 .....	62
Figure 3 - Average Open Flow of Wells Completed in Canton Pool 1945-1951 .....	63
Figure 4 - Rotary Rig in Canton Pool .....	65
Figure 5 - Production and Rock Pressure Decline in Canton Pool 1945-1951.....	66
Figure 6 - Close Drilling in Canton Pool .....	67
Figure 7 - Luthy Well Burns-Canton Pool.....	68
Excerpts From Ohio Geological Survey Reports .....	71
The Neff Gas Wells .....	71
Report on Geology of Knox County.....	71
The Berea Grit as a Source of Oil and Gas in Ohio.....	76
The Mecca Oil Field.....	78
The Belden or Grafton Oil Field .....	80

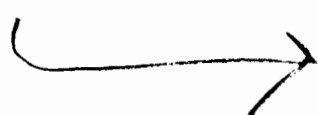
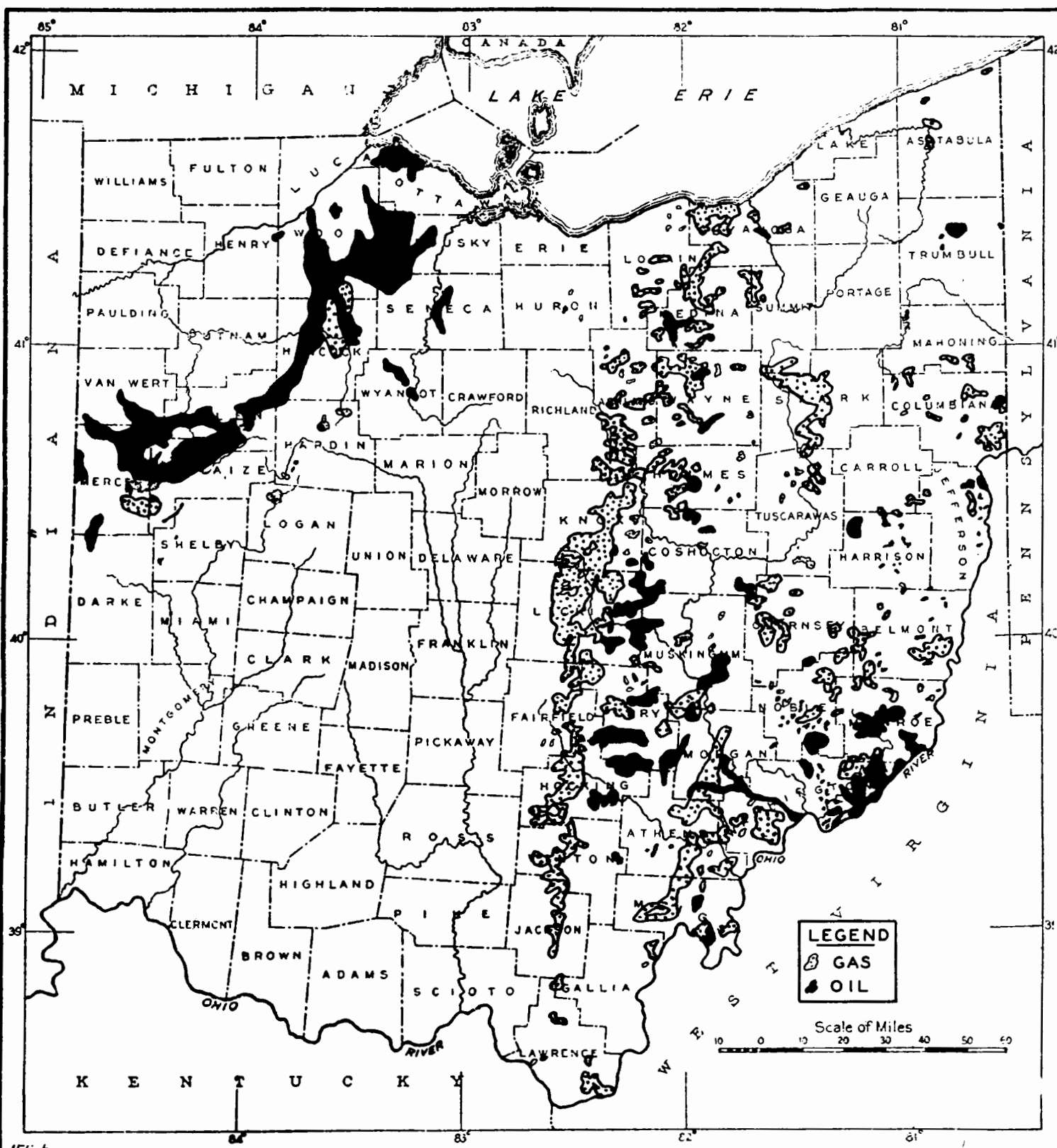
	<b>Page</b>
<b>Wells Drilled in Ohio 1888 - 1951 - Revised .....</b>	<b>82</b>
<b>Natural Gas Production and Consumption in Ohio 1940 - 1949 .....</b>	<b>85</b>
<b>Petroleum Production in Ohio 1876 - 1951 .....</b>	<b>86</b>
<b>Oil, Gas, and Water Well Sample Cuttings.....</b>	<b>87</b>

PART I

OHIO OIL AND GAS DRILLING STATISTICS

1951

# MAP I OIL AND GAS FIELDS OF OHIO



## SUMMARY OF OIL AND GAS WELL DRILLING IN 1951

The trend toward oil well drilling, begun in 1950, continued actively through 1951. The New Castle pool, Coshocton County, maintained its position as the most successful Clinton sand oil area in the State. The principal scene of Berea sand oil drilling was Ashland County. The results from gas well drilling continued to be discouraging. The only discoveries of note during the year occurred at the city of Wooster, Wayne County, and in Belpre and Watertown townships, Washington County. At Wooster the United Steel Fabricators well struck in excess of 3,000,000 cubic feet of gas natural. Offset wells, drilling at the close of the year, should determine the extent of this Clinton discovery. The Oriskany sand gas discoveries in Belpre and Watertown townships indicate the possible presence of the largest gas field found in Ohio in recent years. The distance between the discovery wells in almost twenty miles, which, if proven productive, will add greatly to Ohio's gas reserves.

A total of 1,061 wells were reported drilled in 45 counties in 1951. Of these 626 were successful and 435 resulted in dry holes; an average of 41 per cent failures. Discoveries amounted to 142,611,000 cubic feet of gas and 9,956 barrels of oil per day initial. Footage drilled totaled 2,083,828.

Gas was found in 240 wells in 34 counties with reported open flows totaling 121,401,000 cubic feet per day. In 30 counties 315 new oil wells produced 7,291 barrels during the first 24 hours. Seventy-one combination oil and gas wells were found in 15 counties and were reported to have produced 21,210,000 cubic feet of gas and 2,665 barrels of oil during their initial period.

The largest gas well reported during the year was completed in October by B. H. Putnam on the J. S. Lamp farm, Lot 66, Belpre Township, Washington County. The Oriskany sand was found from 4,080 to 4,116 feet below the surface and produced 750,000 cubic feet natural. After a 90-quart nitroglycerine shot it is reported to have increased to 5,890,000 cubic feet. The initial rock pressure was 1,650 psi.

The largest oil well was drilled by the Sheffield Oil and Gas Company on the Lee Dugan farm in Section 18, Jackson Township, Knox County. The Clinton sand was found from 2,995 to 3,046 feet and yielded 55 barrels natural. The first 24 hours after a 20-quart shot it produced 300 barrels.

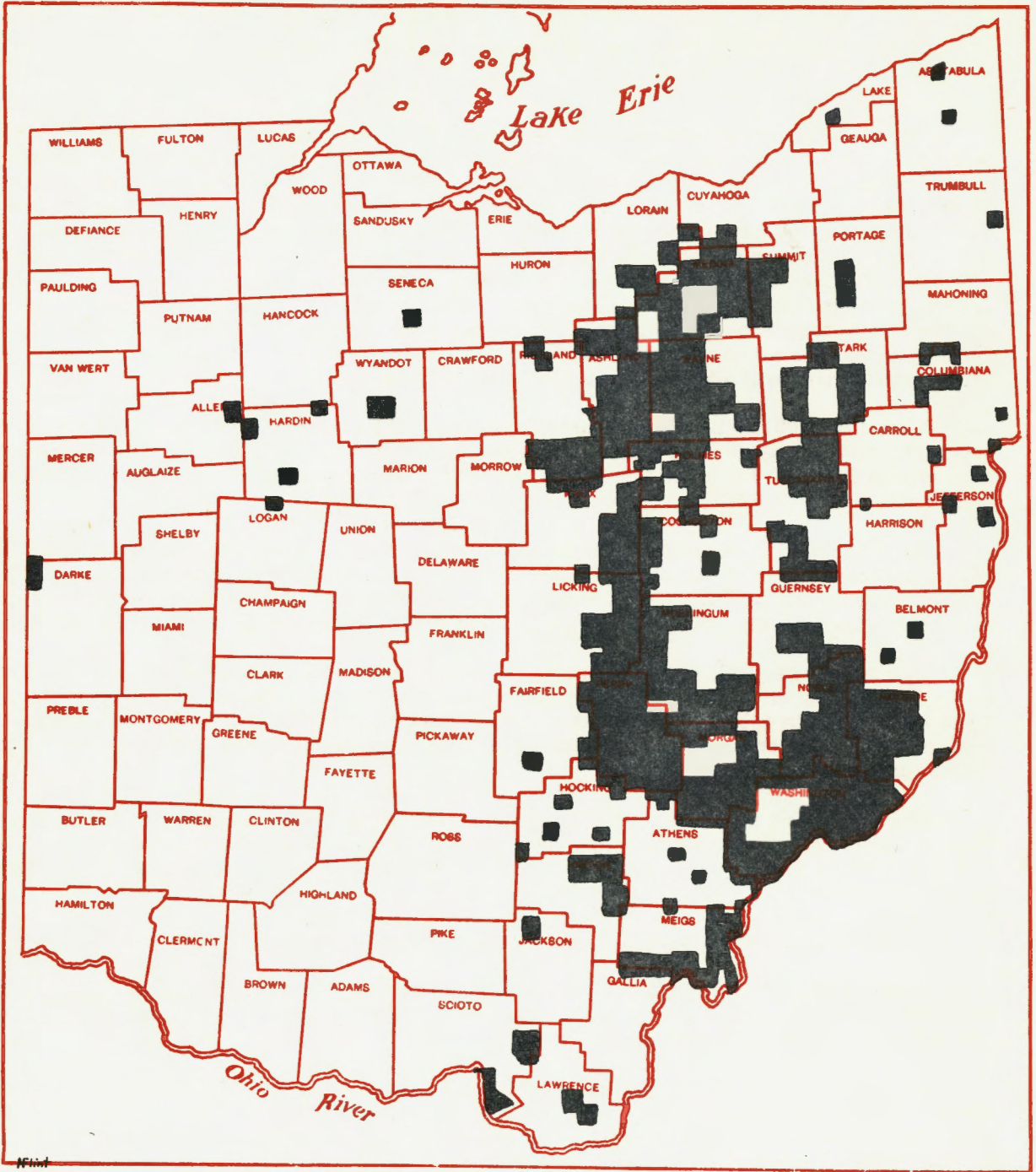
Six wildcat test wells were drilled below the Trenton limestone but all were failures.

Ashland County led the State in total wells drilled (145) by a large margin. Perry and Washington tied for second with 88 each. Coshocton followed with 79, Noble 65, Holmes 58, Monroe and Knox 52 each, and Medina 51.

Perry County led the State in gas discoveries with 16,135,000 cubic feet per day total initial. Medina was second with 13,681,000 and Holmes third with 13,329,000 cubic feet. The four leading counties in new oil discoveries were: Coshocton, 3,290 barrels per day total initial, Ashland 1,165, Licking 1,066, and Knox 1,003.

It should be noted that the above production figures, as well as those which appear elsewhere in Part I of this report, refer only to production during the first 24 hours after completion and do not necessarily reflect annual producing capacity.

MAP 2



AREAS OF DRILLING ACTIVITY IN 1951

# TABLE 1

## NEW OIL AND GAS PRODUCTION DISCOVERED DURING 1951\* - BY COUNTIES

County	GAS		OIL		COMBINATION		Producing Wells	Total MCF	Total Bbls	Dry Holes	Total Wells	Total Feet	Per Cent Dry
	thousand cubic feet of gas		Bbls		Bbls								
	Wells	MCF	Wells	Bbls	Wells	MCF							
Allen	5	1,113	2	45			2	0	0	2	2,730	0	
Ashtabula	1	80	71	1,042	10	715	86	1,828	1,165	59	120,859	40.7	
Athens	6	6,490	4	10			1	80	0	1	8,141	50.0	
Belmont	1	48	1	3			10	6,490	10	3	23,710	23.0	
Carroll	2	152	2	5			2	48	3	4	8,998	66.6	
Columbiana	1	700	7	29			4	152	5	2	5,350	33.3	
Coshocton	7	5,989	40	2,551	14	5,991	8	700	29	6	16,213	42.9	
Cuyahoga	3	1,213					61	11,983	3,290	18	252,428	22.8	
Darke			1	5			3	1,213	0	3	18,250	50.0	
Fairfield	2	50	4	254	3	1,180	1	0	5	0	1,254	100.0	
Guernsey	1	40	2	9			9	1,230	545	6	31,049	40.0	
Hancock	1	150					3	40	9	4	11,111	57.2	
Hardin							1	150	0	0	1,221	0	
Hocking	4	445	4	44	1	145	0	0	0	3	5,246	100.0	
Holmes	21	12,198	10	198	7	1,131	9	590	119	3	34,294	25.0	
Huron							38	13,329	492	20	91,285	34.5	
Jackson	3	185	2	4			0	0	0	1	1,965	100.0	
Jefferson	9	6,465	18	755	5	2,053	0	0	0	2	1,535	100.0	
Knox	1	150					5	185	4	3	8,785	37.5	
Lake	3	496					32	8,518	1,003	20	131,360	38.5	
Lawrence	4	2,959	19	745	9	4,318	1	150	0	0	3,045	0	
Licking	3	1,876	1	7			3	496	0	1	8,157	25.0	
Lorain	2	1,313					32	7,277	1,066	12	117,640	27.3	
Mahoning	19	13,296	11	124	2	385	4	1,876	7	5	23,235	55.5	
Medina	20	6,106	7	62			2	1,313	0	2	2,533	50.0	
Meigs							32	13,681	154	19	113,433	37.3	
Mercer	20	1,573	2	12			27	6,106	62	11	61,615	28.9	
Monroe	7	1,986	12	69	1	50	2	0	12	0	2,378	0	
Morgan	4	2,501	4	17			33	1,623	72	19	80,854	36.5	
Muskingum	8	1,788	5	280			11	1,986	17	13	35,442	54.2	
Noble	18	11,826	17	87	1	150	9	2,501	280	9	53,263	50.0	
Perry	1	238	20	469	11	4,309	26	1,938	88	39	81,063	60.0	
Portage	8	6,932					49	16,135	941	39	258,796	44.3	
Richland							1	238	0	3	17,537	75.0	
Scioto							8	6,932	0	9	41,643	52.9	
Seneca	8	3,592	1	3			0	0	0	3	8,991	100.0	
Stark							8	3,592	0	6	52,669	42.9	

New Oil and Gas Production Discovered During 1951 \* (Continued)

County	GAS		OIL		COMBINATION		Producing Wells	Total MCF	Total Bbls	Dry Holes	Total Wells	Total Feet	Per Cent Dry
	Wells	MCF	Wells	Bbls	Wells	MCF							
Summit	5	4,579	2	8	1	75	30	4,654	38	5	13	31,239	38.5
Trumbull								0	0	2	2	6,235	100.0
Tuscarawas	14	7,616			1	144	3	7,760	3	15	30	88,535	50.0
Vinton			1	3				0	3	3	4	4,085	75.0
Washington	15	10,077	35	142	3	263	20	10,340	162	35	88	96,708	39.8
Wayne	13	7,179	2	8	2	301	15	7,480	23	24	41	101,201	58.5
Wyandot			8	301				0	301	3	11	16,089	27.3
<b>TOTAL</b>	<b>240</b>	<b>121,401</b>	<b>315</b>	<b>7,291</b>	<b>71</b>	<b>21,210</b>	<b>2,665</b>	<b>142,611</b>	<b>9,956</b>	<b>435</b>	<b>1,061</b>	<b>2,083,828</b>	

MCF - Thousand cubic feet of gas

Bbls - standard 42-gallon barrels of oil

AVERAGE OF DRY HOLES - 41 Per Cent

\*Based upon reported production at completion.

# TABLE 2

## NEW OIL AND GAS PRODUCTION DISCOVERED DURING 1951 \* - BY SANDS

Sand	GAS		OIL		COMBINATION		Producing Wells	Total MCF	Total Bbls	Dry Holes	Total Wells	Total Feet	Per Cent Dry
	Wells	MCF	Wells	Bbls	Wells	MCF							
Mitchell							0	0	0	1	1	368	100.0
Peeker			8	39			8	0	39	1	9	6,355	11.1
Cow Run	4	280	13	50			17	280	50	28	45	25,334	62.2
Buell			5	7			5	0	7	1	6	2,211	16.6
Macksburg	2	510	3	9			5	510	9	6	11	8,786	54.5
Stray	5	669	6	14	1	50	12	719	17	6	18	12,320	33.3
Germanatown	3	122	15	87	2	250	20	372	103	5	25	25,977	20.0
Salt	3	228	4	25			7	228	25	5	12	12,860	41.7
Maxton	1	44	1	3			2	44	3	7	9	8,915	77.7
Lime	1	100	4	13			5	100	13	8	13	15,734	65.4
Keener			3	10			3	0	10	3	6	8,772	50.0
Injun			5	43			12	2,316	43	5	17	24,607	29.4
Squaw	7	2,316	1	2			6	625	6	6	12	18,187	50.0
Berea	4	522	1	1	1	103	4	23,387	1,790	161	394	405,345	40.9
Berea	82	21,805	134	1,458	17	1,582	233	23,387	1,790	161	394	405,345	40.9
Shale	6	1,153					6	1,153	0	4	10	27,881	40.0
Oriskany	9	17,169	2	8	1	75	12	17,244	38	6	18	48,119	33.3
Newburg	13	8,414	7	310	2	1,115	22	9,529	591	3	25	60,223	23.0
Clinton	98	67,750	90	4,847	47	18,035	235	85,785	6,846	159	394	1,280,669	40.3
Medina	1	169					1	169	0	11	12	46,966	91.7
Trenton	1	150	14	366			15	150	366	3	18	24,719	16.6
St. Peter							0	0	0	6	6	19,480	100.0
<b>TOTAL</b>	<b>240</b>	<b>121,401</b>	<b>315</b>	<b>7,291</b>	<b>71</b>	<b>21,210</b>	<b>626</b>	<b>142,611</b>	<b>9,956</b>	<b>435</b>	<b>1,061</b>	<b>2,083,828</b>	

Bbls - standard 42-gallon barrels of oil

MCF - thousand cubic feet of gas

AVERAGE OF DRY HOLES - 41 Per Cent

\* Based upon reported production at completion

## TABLE 3

## TOTAL FOOTAGE DRILLED DURING 1951

COUNTY	<u>GAS WELLS</u>	<u>OIL WELLS</u>	<u>COMBINATION WELLS</u>	<u>DRY HOLES</u>
	Feet	Feet	Feet	Feet
Allen		2,730		
Ashland	7,542	50,561	7,666	55,090
Ashtabula	1,955			6,186
Athens	15,255	3,365		5,090
Belmont	860	1,105		7,033
Carroll	1,106	2,253		1,991
Columbiana	956	4,612		10,645
Coshocton	22,262	131,598	46,583	51,985
Cuyahoga	9,110			9,140
Darke		1,254		
Fairfield	1,269	7,865	6,436	15,479
Guernsey	1,034	2,629		7,448
Hancock	1,221			
Hardin				5,246
Hocking	9,526	12,807	3,255	8,706
Holmes	32,482	15,520	12,964	30,319
Huron				1,965
Jackson				1,535
Jefferson	2,326	2,899		3,560
Knox	23,981	41,535	15,139	50,705
Lake	3,045			
Lawrence	7,665			492
Licking	11,923	48,755	27,201	29,761
Lorain	7,623	2,470		13,142
Mahoning	1,188			1,345
Medina	59,521	4,889	3,856	45,167
Meigs	37,634	10,965		13,016
Mercer		2,378		
Monroe	33,556	15,894	855	30,549
Morgan	18,043	2,482		14,917
Muskingum	11,929	15,657		25,677
Noble	11,360	15,771	900	53,032
Perry	53,575	46,685	36,144	122,392
Portage	4,345			13,192
Richland	19,450			22,193
Scioto				8,991
Seneca		1,649		
Stark	32,817			19,852
Summit	10,465	4,283	2,122	14,369
Trumbull				6,235
Tuscarawas	37,451		918	50,166
Vinton		1,257		2,828
Washington	27,736	32,003	4,101	32,868
Wayne	32,108	3,734	6,131	59,237
Wyandot		11,310		4,779
<b>TOTAL</b>	<b>552,319</b>	<b>500,915</b>	<b>174,271</b>	<b>856,323</b>

COMBINED TOTAL 2,083,828 Feet  
Average Depth of all wells drilled 1,964 Feet

# TABLE 4

## ADDITIONAL DRILLING DURING 1951\*

### Wells Drilled Deeper

Horizon	Number	Gas		Oil		Dry	Oil
		MCF	Feet	Bbls	Feet	Feet	
Macksburg to Maxton	2	150	387			404	
Salt to Maxton	1					102	
Salt to Berea	2	100	923			837	
Lime to Berea						631	
Injun to Berea	6	375	2,974	1	360	837	
Keener to Berea	1					530	
Berea to Berea	3	280	103				
Berea to Shale	2	57	475				1,529
Berea to Clinton	1						3,914
Shale to Clinton	1						1,479
Newburg to Clinton	2	135	425	40	538		
Clinton to Medina	4						403
Total	25	1,097	5,287	41	898	10,666	

### Gas Storage Wells

Horizon	Number	Feet
Berea	3	2,496
Oriskany	2	7,909
Clinton	57	144,509
Total	62	154,908

### Secondary Oil Recovery Water Input Wells

Horizon	Number	Feet
Berea	3	1,449

\* Not included elsewhere in production statistics

## NUMBER OF OIL AND GAS WELLS COMPLETED AND DRILLING DURING 1951

### REPORTED BY MONTHS

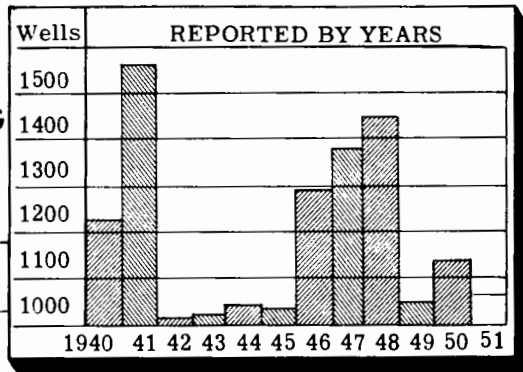
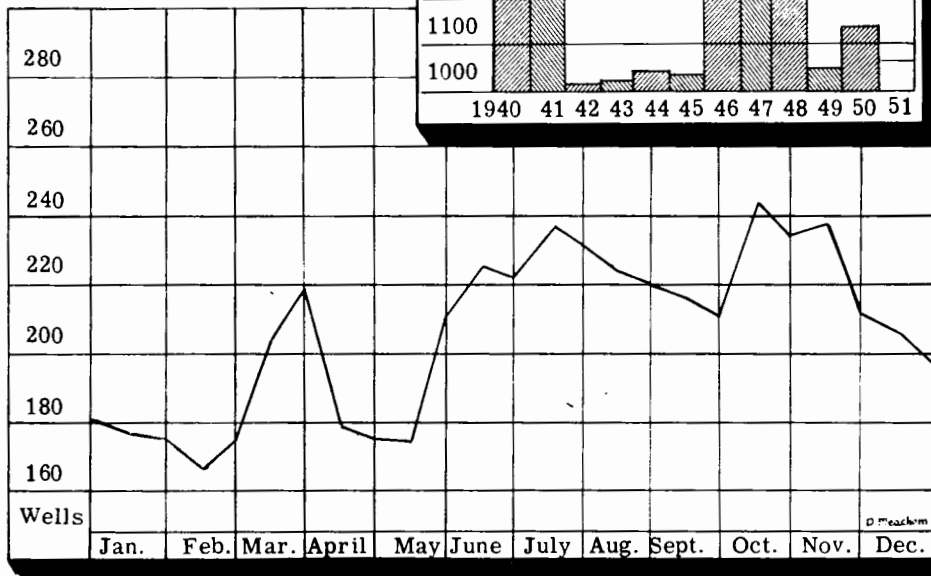


FIGURE 1

## TABLE 5

WELL DRILLING PERMITS AND WELL ABANDONMENT PERMITS  
ISSUED BY THE DIVISION OF MINES FOR YEAR 1951

County	Drilling Permits	New Wells Plugged	Old Wells Plugged	Total Wells Plugged	Wells* Mudded
Allen	10	0	0	0	0
Ashland	43	7	20	27	17
Ashtabula	1	1	1	2	0
Athens	12	2	58	60	3
Belmont	6	5	16	21	0
Carroll	7	2	16	18	0
Columbiana	20	3	25	28	0
Coshocton	49	10	23	33	21
Cuyahoga	1	2	11	13	0
Darke	1	0	0	0	0
Fairfield	6	0	5	5	0
Gallia	0	0	5	5	0
Guernsey	9	2	26	28	2
Hancock	1	0	0	0	0
Hardin	3	1	1	2	0
Harrison	0	0	20	20	0
Hocking	16	1	14	15	4
Holmes	48	10	32	42	1
Jackson	2	2	14	16	0
Jefferson	10	3	45	48	0
Knox	20	2	13	15	0
Lawrence	8	3	14	17	0
Lake	1	0	0	0	0
Licking	24	6	13	19	6
Lorain	3	6	12	18	0
Mahoning	5	1	2	3	0
Medina	67	11	37	48	1
Meigs	43	7	79	86	13
Mercer	4	0	0	0	0
Monroe	59	14	155	169	9
Montgomery	1	0	0	0	0
Morgan	28	11	110	121	10
Muskingum	21	8	76	84	12
Noble	58	32	52	84	5
Perry	70	26	148	174	2
Portage	5	3	2	5	0
Richland	4	0	2	2	0
Seneca	2	0	0	0	0
Scioto	1	1	1	2	0
Stark	16	2	73	75	11
Summit	8	1	27	28	0
Trumbull	1	1	1	2	0
Tuscarawas	29	12	18	30	8
Van Wert	0	0	12	12	0
Vinton	3	1	10	11	0
Washington	100	24	253	277	3
Wayne	16	3	12	15	3
Wood	1	0	1	1	0
Wyandot	6	1	1	2	0
Total	849	227	1,456	1,683	131

\*Annular space in well filled with mud in lieu of casing. Practice permissible to conserve pipe.

## TABLE 6

NO TEST WELLS FOR OIL OR GAS WERE REPORTED  
DRILLED IN 1951 IN THE FOLLOWING COUNTIES

Adams	Highland
Auglaize	Logan
Brown	Lucas
Butler	Madison
Champaign	Marion
Clark	Miami
Clermont	Montgomery
Clinton	Morrow
Crawford	Ottawa
Defiance	Paulding
Delaware	Pickaway
Erie	Pike
Fayette	Preble
Franklin	Putnam
Fulton	Ross
Gallia	Sandusky
Geauga	Shelby
Greene	Union
Hamilton	Van Wert
Harrison	Warren
Henry	Williams
	Wood

## TABLE 7

SUMMARY OF OIL AND GAS WELL DRILLING DURING 1951  
BY SANDS

## Abbreviations:

MCF - thousand cubic feet of gas  
Bbls - standard 42 gallon barrels of oil

MITCHELL SAND

County	<u>GAS</u>			<u>OIL</u>			<u>COMBINATION</u>			<u>DRY HOLE</u>		
	Wells	MCF	Feet	Wells	Bbls	Feet	Wells	MCF	Bbls	Feet	Wells	Feet
Washington											1	368

PEEKER SAND

Morgan				3	7	838						
Washington				5	32	4,267					1	1,250
<u>Totals</u>				8	39	5,105					1	1,250

<u>TOTAL WELLS</u>	9
<u>TOTAL BBLs</u>	39
<u>TOTAL FEET</u>	6,355
<u>PER CENT DRY</u>	11.1

COW RUN SAND

Athens				2	3	548					2	859
Belmont	1	48	860								1	602
Carroll	2	152	1,106									
Lawrence											1	492
Meigs	1	80	340	1	2	676					3	1,343
Monroe				2	8	1,629					2	1,689
Morgan											6	2,367
Muskingum											1	335
Washington				8	37	6,283					12	6,205
<u>Totals</u>	4	280	2,306	13	50	9,136					28	13,892

<u>TOTAL WELLS</u>	45
<u>TOTAL MCF</u>	280
<u>TOTAL BBLs</u>	50
<u>TOTAL FEET</u>	25,334
<u>PER CENT DRY</u>	62.2

BUELL RUN SAND

Monroe											1	365
Noble				2	4	414						
Washington				3	3	1,432						
<u>Totals</u>				5	7	1,846					1	365

<u>TOTAL WELLS</u>	6
<u>TOTAL BBLs</u>	7
<u>TOTAL FEET</u>	2,211
<u>PER CENT DRY</u>	16.6





SQUAW SAND

County	<u>GAS</u>			<u>OIL</u>			<u>COMBINATION</u>				<u>DRY HOLE</u>	
	Wells	MCF	Feet	Wells	Bbls	Feet	Wells	MCF	Bbls	Feet	Wells	Feet
Monroe	2	210	3,256								4	5,950
Noble	2	312	2,876									
Washington				1	2	1,456	1	103	4	1,448	2	3,201
<u>Totals</u>	4	522	6,132	1	2	1,456	1	103	4	1,448	6	9,151
<u>TOTAL WELLS</u>	12											
<u>TOTAL MCF</u>	625											
<u>TOTAL BBLs</u>	6											
<u>TOTAL FEET</u>	18,187											
<u>PER CENT DRY</u>	50.0											

BEREA SAND

Ashland	3	225	2,052	71	1,042	50,561	10	715	123	7,666	53	37,939
Athens	4	503	6,872	2	7	2,817						
Belmont											2	3,528
Carroll				2	5	2,253					2	1,991
Columbiana	1	700	956	7	29	4,612					5	4,452
Coshocton											3	2,879
Fairfield	2	50	1,269									
Guernsey	1	40	1,034	2	9	2,629					3	3,983
Holmes	12	1,765	8,393	7	88	4,984	4	628	200	2,757	14	10,345
Jackson											2	1,535
Jefferson				2	4	2,899					3	3,560
Knox	1	666	798	6	20	4,733					4	2,777
Licking				3	9	2,152					3	2,263
Mahoning	2	1,313	1,188								2	1,345
Medina				11	124	4,889	1	35	5	479	5	2,149
Meigs	12	4,882	26,788	6	60	10,289					5	10,167
Monroe	12	937	23,227	1	4	2,053					6	12,588
Morgan	4	783	6,509	1	10	1,644					6	8,695
Muskingum	1	80	1,305								1	1,300
Noble	5	1,409	7,384	1	2	1,500					18	29,967
Perry	3	936	2,759	9	34	10,022					4	3,907
Stark	1	150	810								2	1,649
Tuscarawas	8	5,071	7,963				1	144	3	918	6	6,183
Vinton				1	3	1,257					3	2,828
Washington	7	1,830	13,608	1	5	2,025	1	60	1	1,650	2	3,836
Wayne	3	465	2,107	1	3	602					7	5,066
<u>Totals</u>	82	21,805	115,022	134	1,458	111,921	17	1,582	332	13,470	161	164,932
<u>TOTAL WELLS</u>	394											
<u>TOTAL MCF</u>	23,387											
<u>TOTAL BBLs</u>	1,790											
<u>TOTAL FEET</u>	405,345											
<u>PER CENT DRY</u>	40.9											



CLINTON SAND

<u>County</u>	<u>GAS</u>			<u>OIL</u>			<u>COMBINATION</u>				<u>DRY HOLES</u>	
	<u>Wells</u>	<u>MCF</u>	<u>Feet</u>	<u>Wells</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>Feet</u>
Ashland	2	888	5,490								6	17,151
Columbiana											1	6,193
Coshocton	6	5,621	19,498	40	2,551	131,498	14	5,991	739	46,583	15	49,106
Cuyahoga	3	1,213	9,110								3	9,140
Fairfield							1	65	10	2,519	3	8,177
Hocking	4	445	9,526	4	44	12,807	1	145	75	3,255	3	8,706
Holmes	4	4,813	12,444	3	110	10,536	3	503	94	10,207	6	19,974
Huron											1	1,965
Knox	7	5,364	20,976	12	735	36,802	5	2,053	248	15,139	16	47,928
Lake	1	150	3,045									
Licking	4	2,959	11,923	14	685	42,228	9	4,318	321	27,201	9	27,498
Lorain	3	1,876	7,623	1	7	2,470					5	13,142
Medina	17	12,319	54,250				1	350	25	3,377	14	43,018
Morgan	2	1,034	7,513									
Muskingum	3	2,421	10,624	5	280	15,657					6	20,053
Perry	15	10,890	50,816	11	435	36,663	11	4,309	472	36,144	27	88,392
Portage	1	238	4,345								3	13,192
Richland	8	6,932	19,450								9	22,193
Scioto											2	4,808
Stark	7	3,442	32,007								4	18,203
Summit											2	8,224
Tuscarawas	6	2,545	29,488								8	38,975
Wayne	5	4,600	15,717				2	301	15	6,131	16	51,469
<u>Totals</u>	<u>98</u>	<u>67,750</u>	<u>323,845</u>	<u>90</u>	<u>4,847</u>	<u>288,761</u>	<u>47</u>	<u>18,035</u>	<u>1,999</u>	<u>150,556</u>	<u>159</u>	<u>517,507</u>

TOTAL WELLS 394  
TOTAL MCF 85,785  
TOTAL BBLs 6,846  
TOTAL FEET 1,280,669  
PER CENT DRY 40.3

MEDINA SAND

Morgan	1	169	4,021								1	3,855
Muskingum											1	3,989
Perry											8	30,093
Tuscarawas											1	5,008
<u>Totals</u>	<u>1</u>	<u>169</u>	<u>4,021</u>								<u>11</u>	<u>42,945</u>

TOTAL WELLS 12  
TOTAL MCF 169  
TOTAL FEET 46,966  
PER CENT DRY 91.7



# TABLE 8

## SUMMARY REPORT BY COUNTIES

The following pages are a detailed review, by counties, of the number of wells drilled, the quantity of gas and/or oil reported produced during the first 24 hours after completion, the dry holes, and the total footage drilled throughout the year of 1951.

The volume of gas and barrels of oil recorded refer only to the initial production developed during the year and are not indicative of the total annual volume of gas or barrels of oil produced by either the new wells or the wells already in existence.

The purpose of this review is to show where the exploration for new oil and gas reserves in Ohio was active and the measure of success or failure attained in each county.

Start table here

71  
~~WELLS DRILLED IN 1951~~

Abbreviations used within the table are:

- MCF - Thousand cubic feet of gas - reported open flow at completion.
- Bbls - Barrels of oil reported for first 24 hours at completion.
- Feet - Total feet (footage) drilled.

ALLEN COUNTY

Sand	<u>First Half</u>			<u>Last Half</u>			<u>Total</u>					
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>OIL WELLS</u>												
Trenton					2		45	2,730	2		45	2,730

ASHLAND COUNTY

<u>GAS WELLS</u>												
Clinton					2	888		5,490	2	888		5,490
Berea	3	225		2,052					3	225		2,052
<u>Totals</u>	3	225		2,052	2	888		5,490	5	1,113		7,542
<u>OIL WELLS</u>												
Berea	37		345	25,938	34		697	24,623	71		1,042	50,561
<u>COMBINATION WELLS</u>												
Berea	4	342	62	3,100	6	373	61	4,566	10	715	123	7,666
<u>DRY HOLES</u>												
Clinton	2			5,010	4			12,141	6			17,151
Berea	28			19,562	25			18,377	53			37,939
<u>Totals</u>	30			24,572	29			30,518	59			55,090

<u>TOTAL WELLS</u>		74				71				145		
<u>TOTAL MCF</u>		567				1,261				1,828		
<u>TOTAL BBLs</u>		407				758				1,165		
<u>TOTAL FEET</u>		55,662				65,197				120,859		

PER CENT DRY - 40.7

GAS STORAGE WELLS - 19 in Clinton, TOTAL FEET: 52,240

SECONDARY OIL RECOVERY INPUT WELLS - 1 in Berea, TOTAL FEET: 537

ASHTABULA COUNTY

Sand	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Shale					1	80		1,955	1	80		1,955
<u>DRY HOLES</u>												
St. Peter	1			6,186					1			6,186
<u>TOTAL WELLS</u> 1 1 2												
<u>TOTAL MCF</u> 80 80												
<u>TOTAL FEET</u> 6,186 1,955 8,141												
<u>PER CENT DRY</u> - 50.0												

ATHENS COUNTY

<u>GAS WELLS</u>												
Berea	2	411		3,684	2	92		3,188	4	503		6,872
Shale	1	487		4,130					1	487		4,130
Oriskany					1	5,500		4,253	1	5,500		4,253
<u>Totals</u>	<u>3</u>	<u>898</u>		<u>7,814</u>	<u>3</u>	<u>5,592</u>		<u>7,441</u>	<u>6</u>	<u>6,490</u>		<u>15,255</u>
<u>OIL WELLS</u>												
Cow Run	1		2	303	1		1	245	2		3	548
Berea	2		7	2,817					2		7	2,817
<u>Totals</u>	<u>3</u>		<u>9</u>	<u>3,120</u>	<u>1</u>		<u>1</u>	<u>245</u>	<u>4</u>		<u>10</u>	<u>3,365</u>
<u>DRY HOLES</u>												
Cow Run	1			337	1			522	2			859
Oriskany					1			4,231	1			4,231
<u>Totals</u>	<u>1</u>			<u>337</u>	<u>2</u>			<u>4,753</u>	<u>3</u>			<u>5,090</u>
<u>TOTAL WELLS</u> 7 6 13												
<u>TOTAL MCF</u> 898 5,592 6,490												
<u>TOTAL BBLs</u> 9 1 10												
<u>TOTAL FEET</u> 11,271 12,439 23,710												
<u>PER CENT DRY</u> - 23.0												



COLUMBIANA COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Berea	1	700		956					1	700		956
<u>OIL WELLS</u>												
Berea	4		20	2,328	3		9	2,284	7		29	4,612
<u>DRY HOLES</u>												
Berea	1			934	4			3,518	5			4,452
Clinton					1			6,193	1			6,193
<u>Totals</u>	<u>1</u>			<u>934</u>	<u>5</u>			<u>9,711</u>	<u>6</u>			<u>10,645</u>
<u>TOTAL WELLS</u>		6				8				14		
<u>TOTAL MCF</u>		700								700		
<u>TOTAL BBLs</u>		20				9				29		
<u>TOTAL FEET</u>		4,218				11,995				16,213		
<u>GAS STORAGE WELLS</u> - 3 in Berea, TOTAL FEET: 2,496; 1 in Oriskany, TOTAL FEET: 3,550												
<u>PER CENT DRY</u> - 42.9												

COSHOCTON COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Clinton					6	5,621		19,498	6	5,621		19,498
Newburg					1	368		2,764	1	368		2,764
<u>Totals</u>					7	5,989		22,262	7	5,989		22,262
<u>OIL WELLS</u>												
Clinton	23		1,348	75,762	17		1,203	55,836	40		2,551	131,598
<u>COMBINATION WELLS</u>												
Clinton	5	2,820	333	16,588	9	3,171	406	29,995	14	5,991	739	46,583
<u>DRY HOLES</u>												
Berea	1			744	2			2,135	3			2,879
Clinton	6			19,397	9			29,709	15			49,106
<u>Totals</u>	7			20,141	11			31,844	18			51,985
<u>TOTAL WELLS</u>		35				44				79		
<u>TOTAL MCF</u>		2,820				9,160				11,980		
<u>TOTAL BBLs</u>		1,681				1,609				3,290		
<u>TOTAL FEET</u>		112,491				139,937				252,428		
<u>PER CENT DRY</u>	-	22.8										

CUYAHOGA COUNTY

<u>GAS WELLS</u>												
Clinton	2	1,013		6,210	1	200		2,900	3	1,213		9,110
<u>DRY HOLES</u>												
Clinton	1			2,722	2			6,418	3			9,140
<u>TOTAL WELLS</u>		3				3				6		
<u>TOTAL MCF</u>		1,013				200				1,213		
<u>TOTAL FEET</u>		8,932				9,318				18,250		
<u>PER CENT DRY</u>	-	50.0										

DARKE COUNTY

<u>OIL WELLS</u>												
Trenton	1		5	1,254					1		5	1,254

FAIRFIELD COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Berea	1	25		650	1	25		619	2	50		1,269
<u>OIL WELLS</u>												
Newburg	1		19	1,961	3		235	5,904	4		254	7,865
<u>COMBINATION WELLS</u>												
Newburg					2	1,115	281	3,917	2	1,115	281	3,917
Clinton					1	65	10	2,519	1	65	10	2,519
<u>Totals</u>					<u>3</u>	<u>1,180</u>	<u>291</u>	<u>6,436</u>	<u>3</u>	<u>1,180</u>	<u>291</u>	<u>6,436</u>
<u>DRY HOLES</u>												
Newburg					2			4,039	2			4,039
Clinton	2			5,425	1			2,752	3			8,177
St. Peter	1			3,263					1			3,263
<u>Totals</u>	<u>3</u>			<u>8,688</u>	<u>3</u>			<u>6,791</u>	<u>6</u>			<u>15,479</u>
<u>TOTAL WELLS</u> 5 10 15												
<u>TOTAL MCF</u> 25 1,205 1,230												
<u>TOTAL BBLs</u> 19 526 545												
<u>TOTAL FEET</u> 11,299 19,750 31,049												
<u>PER CENT DRY</u> - 40.0												

GUERNSEY COUNTY

<u>GAS WELLS</u>												
Berea					1	40		1,034	1	40		1,034
<u>OIL WELLS</u>												
Berea	1		6	1,314	1		3	1,315	2		9	2,629
<u>DRY HOLES</u>												
Berea					3			3,983	3			3,983
Shale	1			3,465					1			3,465
<u>Totals</u>	<u>1</u>			<u>3,465</u>	<u>3</u>			<u>3,983</u>	<u>4</u>			<u>7,448</u>
<u>TOTAL WELLS</u> 2 5 7												
<u>TOTAL MCF</u> 40 40 40												
<u>TOTAL BBLs</u> 6 3 9												
<u>TOTAL FEET</u> 4,779 6,332 11,111												
<u>PER CENT DRY</u> - 57.2												

HANCOCK COUNTY

<u>GAS WELLS</u>												
Trenton	1	150		1,221					1	150		1,221

HARDIN COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>DRY HOLES</u>												
Trenton					1			1,291	1			1,291
St. Peter					2			3,955	2			3,955
<u>Totals</u>					3			5,246	3			5,246

HOCKING COUNTY

<u>GAS WELLS</u>												
Clinton	2	325		4,721	2	120		4,805	4	445		9,526
<u>OIL WELLS</u>												
Clinton	2		24	6,500	2		20	6,307	4		44	12,807
<u>COMBINATION WELLS</u>												
Clinton	1	145	75	3,255					1	145	75	3,255
<u>DRY HOLES</u>												
Clinton					3			8,706	3			8,706
<u>TOTAL WELLS</u>		5				7				12		
<u>TOTAL MCF</u>		470				120				590		
<u>TOTAL BBLs</u>		99				20				119		
<u>TOTAL FEET</u>		14,476				19,818				34,294		
<u>PER CENT DRY</u>		- 25.0										
<u>GAS STORAGE WELLS</u>		- 26										

GAS STORAGE WELLS - 26 in Clinton, TOTAL FEET: 60,815

HOLMES COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Totals</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Berea	5	882		3,740	7	883		4,653	12	1,765		8,393
Oriskany					1	1,100		1,978	1	1,100		1,978
Newburg	3	3,270		7,190	1	1,250		2,477	4	4,520		9,667
Clinton					4	4,813		12,444	4	4,813		12,444
<u>Totals</u>	<u>8</u>	<u>4,152</u>		<u>10,930</u>	<u>13</u>	<u>8,046</u>		<u>21,552</u>	<u>21</u>	<u>12,198</u>		<u>32,482</u>
<u>OIL WELLS</u>												
Berea	4		24	2,814	3		64	2,170	7		88	4,984
Clinton	1		30	3,466	2		80	7,070	3		110	10,536
<u>Totals</u>	<u>5</u>		<u>54</u>	<u>6,280</u>	<u>5</u>		<u>144</u>	<u>9,240</u>	<u>10</u>		<u>198</u>	<u>15,520</u>
<u>COMBINATION WELLS</u>												
Berea	2	275	135	1,407	2	353	65	1,350	4	628	200	2,757
Clinton	1	100	60	3,470	2	403	34	6,737	3	503	94	10,207
<u>Totals</u>	<u>3</u>	<u>375</u>	<u>195</u>	<u>4,877</u>	<u>4</u>	<u>756</u>	<u>99</u>	<u>8,087</u>	<u>7</u>	<u>1,131</u>	<u>294</u>	<u>12,964</u>
<u>DRY HOLES</u>												
Berea	6			4,468	8			5,877	14			10,345
Clinton	1			3,381	5			16,593	6			19,974
<u>Totals</u>	<u>7</u>			<u>7,849</u>	<u>13</u>			<u>22,470</u>	<u>20</u>			<u>30,319</u>
<u>TOTAL WELLS</u> 23												
<u>TOTAL MCF</u> 4,527												
<u>TOTAL BBLs</u> 249												
<u>TOTAL FEET</u> 29,936												
<u>PER CENT DRY</u> - 34.5												

HURON COUNTY

<u>DRY HOLES</u>												
Clinton	1			1,965					1			1,965

JACKSON COUNTY

<u>DRY HOLES</u>												
Berea					2			1,535	2			1,535

JEFFERSON COUNTY

Sand	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	Wells	MCF	Bbls	Feet	Wells	MCF	Bbls	Feet	Wells	MCF	Bbls	Feet
<u>GAS WELLS</u>												
Stray					1	75		590	1	75		590
Salt					1	60		756	1	60		756
Injun					1	50		980	1	50		980
<u>Totals</u>					<u>3</u>	<u>185</u>		<u>2,326</u>	<u>3</u>	<u>185</u>		<u>2,326</u>
<u>OIL WELLS</u>												
Berea					2		4	2,899	2		4	2,899
<u>DRY HOLES</u>												
Berea	2			2,214	1			1,346	3			3,560
<u>TOTAL WELLS</u> 2 6 8												
<u>TOTAL MCF</u> 185 185												
<u>TOTAL BBLs</u> 4 4												
<u>TOTAL FEET</u> 2,214 6,571 8,785												
<u>PER CENT DRY</u> - 37.5												

KNOX COUNTY

<u>GAS WELLS</u>												
Berea					1	666		798	1	666		798
Newburg	1	435		2,207					1	435		2,207
Clinton	4	4,491		12,277	3	873		8,699	7	5,364		20,976
<u>Totals</u>	<u>5</u>	<u>4,926</u>		<u>14,484</u>	<u>4</u>	<u>1,539</u>		<u>9,497</u>	<u>9</u>	<u>6,465</u>		<u>23,981</u>
<u>OIL WELLS</u>												
Berea	3		8	2,331	3		12	2,402	6		20	4,733
Clinton	7		203	21,540	5		532	15,262	12		735	36,802
<u>Totals</u>	<u>10</u>		<u>211</u>	<u>23,871</u>	<u>8</u>		<u>544</u>	<u>17,664</u>	<u>18</u>		<u>755</u>	<u>41,535</u>
<u>COMBINATION WELLS</u>												
Clinton	3	1,450	128	8,841	2	603	120	6,298	5	2,053	248	15,139
<u>DRY HOLES</u>												
Berea	2			1,329	2			1,448	4			2,777
Clinton	3			9,320	13			38,608	16			47,928
<u>Totals</u>	<u>5</u>			<u>10,649</u>	<u>15</u>			<u>40,056</u>	<u>20</u>			<u>50,705</u>
<u>TOTAL WELLS</u> 23 29 52												
<u>TOTAL MCF</u> 6,376 2,142 8,518												
<u>TOTAL BBLs</u> 339 664 1,003												
<u>TOTAL FEET</u> 57,845 73,515 131,360												
<u>PER CENT DRY</u> - 38.5												

LAKE COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Clinton					1	150		3,045	1	150		3,045

LAWRENCE COUNTY

<u>GAS WELLS</u>												
Shale	2	250		5,245	1	246		2,420	3	496		7,665
<u>DRY HOLES</u>												
Cow Run					1			492	1			492
<u>TOTAL WELLS</u>		2				2				4		
<u>TOTAL MCF</u>		250				246				496		
<u>TOTAL FEET</u>			5,245				2,912				8,157	
<u>PER CENT DRY</u>	-	25.0										

LICKING COUNTY

<u>GAS WELLS</u>												
Clinton	2	1,080		6,123	2	1,879		5,800	4	2,959		11,923
<u>OIL WELLS</u>												
Berea					3		9	2,152	3		9	2,152
Newburg	2		51	4,375					2		51	4,375
Clinton	7		355	21,095	7		330	21,133	14		685	42,228
<u>Totals</u>	<u>9</u>		<u>406</u>	<u>25,470</u>	<u>10</u>		<u>339</u>	<u>23,285</u>	<u>17</u>		<u>745</u>	<u>48,755</u>
<u>COMBINATION WELLS</u>												
Clinton	5	2,854	181	15,166	4	1,464	140	12,035	9	4,318	321	27,201
<u>DRY HOLES</u>												
Berea	1			720	2			1,543	3			2,263
Clinton	3			9,076	6			18,422	9			27,498
<u>Totals</u>	<u>4</u>			<u>9,796</u>	<u>8</u>			<u>19,965</u>	<u>12</u>			<u>29,761</u>
<u>TOTAL WELLS</u>		20				24				44		
<u>TOTAL MCF</u>		3,934				3,343				7,277		
<u>TOTAL BBLs</u>		587				479				1,066		
<u>TOTAL FEET</u>		56,555				61,085				117,640		
<u>PER CENT DRY</u>	-	27.3										
<u>DRILLED DEEPER</u>	-	Newburg to Clinton, 40 bbl. , TOTAL FEET: 538										

LORAIN COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Clinton	1	302		2,653	2	1,574		4,970	3	1,876		7,623
<u>OIL WELLS</u>												
Clinton	1		7	2,470					1		7	2,470
<u>DRY HOLES</u>												
Clinton	3			8,020	2			5,122	5			13,142
<u>TOTAL WELLS</u>		5				4				9		
<u>TOTAL MCF</u>		302				1,574				1,876		
<u>TOTAL BBLs</u>			7								7	
<u>TOTAL FEET</u>			13,143			10,092				23,235		
<u>PER CENT DRY</u>	-	55.5										

MAHONING COUNTY

<u>GAS WELLS</u>												
Berea	1	1,243		670	1	70		518	2	1,313		1,188
<u>DRY HOLES</u>												
Berea	1			715	1			630	2			1,345
<u>TOTAL WELLS</u>		2				2				4		
<u>TOTAL MCF</u>		1,243				70				1,313		
<u>TOTAL FEET</u>			1,385			1,148				2,533		
<u>PER CENT DRY</u>	-	50.0										

MEDINA COUNTY

<u>GAS WELLS</u>												
Newburg	2	977		5,271					2	977		5,271
Clinton	7	6,955		22,397	10	5,364		31,853	17	12,319		54,250
<u>Totals</u>	9	7,932		27,668	10	5,364		31,853	19	13,296		59,521
<u>OIL WELLS</u>												
Berea	6		34	2,653	5		90	2,236	11		124	4,889
<u>COMBINATION WELLS</u>												
Berea					1	35	5	479	1	35	5	479
Clinton					1	350	25	3,377	1	350	25	3,377
<u>Totals</u>					2	385	30	3,856	2	385	30	3,856
<u>DRY HOLES</u>												
Berea	3			1,279	2			870	5			2,149
Clinton	2			5,655	12			37,363	14			43,018
<u>Totals</u>	5			6,934	14			38,233	19			45,167
<u>TOTAL WELLS</u>		20				31				51		
<u>TOTAL MCF</u>		7,932				5,749				13,681		
<u>TOTAL BBLs</u>			34			120				154		
<u>TOTAL FEET</u>			37,255			76,178				113,433		
<u>PER CENT DRY</u>	-	37.3										
<u>SECONDARY OIL RECOVERY</u>	-	2	input wells in Berea, TOTAL FEET: 912									

MEIGS COUNTY

Sand	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Stray	2	325		769	1	119		546	3	444		1,315
Cow Run	1	80		340					1	80		340
Macksburg					2	510		1,532	2	510		1,532
Berea	7	3,116		14,251	5	1,766		12,537	12	4,882		26,788
Shale	1	90		3,384					1	90		3,384
Oriskany					1	100		4,275	1	100		4,275
<u>Totals</u>	<u>11</u>	<u>3,611</u>		<u>18,744</u>	<u>9</u>	<u>2,495</u>		<u>18,890</u>	<u>20</u>	<u>6,106</u>		<u>37,634</u>
<u>OIL WELLS</u>												
Cow Run	1		2	676					1		2	676
Berea	2		30	3,549	4		30	6,740	6		60	10,289
<u>Totals</u>	<u>3</u>		<u>32</u>	<u>4,225</u>	<u>4</u>		<u>30</u>	<u>6,740</u>	<u>7</u>		<u>62</u>	<u>10,965</u>
<u>DRY HOLES</u>												
Stray	1			262					1			262
Cow Run	1			590	2			753	3			1,343
Maxton					2			1,244	2			1,244
Berea	2			3,629	3			6,538	5			10,167
<u>Totals</u>	<u>4</u>			<u>4,481</u>	<u>7</u>			<u>8,535</u>	<u>11</u>			<u>13,016</u>
<u>TOTAL WELLS</u>		18				20				38		
<u>TOTAL MCF</u>		3,611				2,495				6,106		
<u>TOTAL BBLs</u>			32				30				62	
<u>TOTAL FEET</u>			27,450			34,165				61,615		
<u>PER CENT DRY - 28.9</u>												
<u>DRILLED DEEPER -</u>												
			1	Berea to Shale	57	M gas,		TOTAL FEET:		475		
			1	" "		dry,	" "	:		1,529		
			1	Salt to Maxton		dry,	" "	:		102		

MERCER COUNTY

<u>OIL WELLS</u>												
Trenton					2		12	2,378	2		12	2,378

MONROE COUNTY

<u>Sand</u>	<u>Wells</u>	<u>First Half</u>			<u>Last Half</u>				<u>Total</u>			
		<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Germantown	1	25		1,050					1	25		1,050
Salt	1	144		965					1	144		965
Maxton					1	44		855	1	44		855
Lime	1	100		1,366					1	100		1,366
Injun	1	53		1,340	1	60		1,497	2	113		2,837
Squaw	1	157		1,656	1	53		1,600	2	210		3,256
Berea	3	345		5,347	9	592		17,880	12	937		23,227
<u>Totals</u>	<u>8</u>	<u>824</u>		<u>11,724</u>	<u>12</u>	<u>749</u>		<u>21,832</u>	<u>20</u>	<u>1,573</u>		<u>33,556</u>
<u>OIL WELLS</u>												
Cow Run	1		5	709	1		3	920	2		8	1,629
Germantown	1		1	1,129					1		1	1,129
Salt	1		10	1,080					1		10	1,080
Lime	1		2	1,240					1		2	1,240
Keener	1		2	1,355	2		8	2,770	3		10	4,125
Injun	2		29	3,038	1		5	1,600	3		34	4,638
Berea					1		4	2,053	1		-4	2,053
<u>Totals</u>	<u>7</u>		<u>49</u>	<u>8,551</u>	<u>5</u>		<u>20</u>	<u>7,343</u>	<u>12</u>		<u>69</u>	<u>15,894</u>
<u>COMBINATION WELLS</u>												
Stray	1	50	3	855					1	50	3	855
<u>DRY HOLES</u>												
Buell					1			365	1			365
Cow Run					2			1,689	2			1,689
Maxton					1			1,140	1			1,140
Keener					3			4,647	3			4,647
Injun					1			1,604	1			1,604
Squaw	3			4,562	1			1,388	4			5,950
Berea	3			5,746	3			6,842	6			12,588
Shale					1			2,566	1			2,566
<u>Totals</u>	<u>6</u>			<u>10,308</u>	<u>13</u>			<u>20,241</u>	<u>19</u>			<u>30,549</u>
<u>TOTAL WELLS</u>		22								30		52
<u>TOTAL MCF</u>		874								749		1,623
<u>TOTAL BBLs</u>		52								20		72
<u>TOTAL FEET</u>		31,438						49,416				80,854
<u>PER CENT DRY</u>	-	36.5										
<u>DRILLED DEEPER</u>												
				1 Salt to Berea 100 M gas,				TOTAL FEET: 923				
				1 " " dry				TOTAL FEET: 837				
				1 Injun to Berea 75 M gas,				TOTAL FEET: 534				
				1 " " 1 bbl. oil				TOTAL FEET: 360				
				1 Keener to Berea dry				TOTAL FEET: 530				

MORGAN COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Berea	3	583		4,908	1	200		1,601	4	783		6,509
Clinton	1	480		3,689	1	554		3,824	2	1,034		7,513
Medina					1	169		4,021	1	169		4,021
<u>Totals</u>	<u>4</u>	<u>1,063</u>		<u>8,597</u>	<u>3</u>	<u>923</u>		<u>9,446</u>	<u>7</u>	<u>1,986</u>		<u>18,043</u>
<u>OIL WELLS</u>												
Peeker	2		4	286	1		3	552	3		7	838
Berea					1		10	1,644	1		10	1,644
<u>Totals</u>	<u>2</u>		<u>4</u>	<u>286</u>	<u>2</u>		<u>13</u>	<u>2,196</u>	<u>4</u>		<u>17</u>	<u>2,482</u>
<u>DRY HOLES</u>												
Cow Run	5			1,742	1			625	6			2,367
Berea	1			1,587	5			7,108	6			8,695
Medina					1			3,855	1			3,855
<u>Totals</u>	<u>6</u>			<u>3,329</u>	<u>7</u>			<u>11,588</u>	<u>13</u>			<u>14,917</u>
<u>TOTAL WELLS</u>		12		12		24						
<u>TOTAL MCF</u>		1,063		923		1,986						
<u>TOTAL BBLs</u>		4		13		17						
<u>TOTAL FEET</u>		12,212		23,230		35,442						
<u>PER CENT DRY</u>		- 54.2										

MUSKINGUM COUNTY

<u>GAS WELLS</u>												
Berea	1	80		1,305					1	80		1,305
Clinton	1	1,500		3,133	2	921		7,491	3	2,421		10,624
<u>Totals</u>	<u>2</u>	<u>1,580</u>		<u>4,438</u>	<u>2</u>	<u>921</u>		<u>7,491</u>	<u>4</u>	<u>2,501</u>		<u>11,929</u>
<u>OIL WELLS</u>												
Clinton	3		176	9,345	2		104	6,312	5		280	15,657
<u>DRY HOLES</u>												
Cow Run	1			335					1			335
Berea	1			1,300					1			1,300
Clinton	3			10,185	3			9,868	6			20,053
Medina					1			3,989	1			3,989
<u>Totals</u>	<u>5</u>			<u>11,820</u>	<u>4</u>			<u>13,857</u>	<u>9</u>			<u>25,677</u>
<u>TOTAL WELLS</u>		10		8		18						
<u>TOTAL MCF</u>		1,580		921		2,501						
<u>TOTAL BBLs</u>		176		104		280						
<u>TOTAL FEET</u>		25,603		27,660		53,263						
<u>PER CENT DRY</u>		- 50.0										
<u>DRILLED DEEPER</u>		- 3 Clinton to Medina - dry, TOTAL FEET: 313										

NOBLE COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Germantown	1	67		1,100					1	67		1,100
Squaw	1	60		1,437	1	252		1,439	2	312		2,876
Berea	4	683		5,744	1	726		1,640	5	1,409		7,384
<u>Totals</u>	<u>6</u>	<u>810</u>		<u>8,281</u>	<u>2</u>	<u>978</u>		<u>3,079</u>	<u>8</u>	<u>1,788</u>		<u>11,360</u>
<u>OIL WELLS</u>												
Buell	2		4	414					2		4	414
Stray	1		2	698					1		2	698
Macksburg					2		6	1,709	2		6	1,709
Germantown	3		7	3,123	7		61	7,497	10		68	10,620
Lime	1		5	830					1		5	830
Berea					1		2	1,500	1		2	1,500
<u>Totals</u>	<u>7</u>		<u>18</u>	<u>5,065</u>	<u>10</u>		<u>69</u>	<u>10,706</u>	<u>17</u>		<u>87</u>	<u>15,771</u>
<u>COMBINATION WELLS</u>												
Germantown	1	150	1	900					1	150	1	900
<u>DRY HOLES</u>												
Stray					1			1,160	1			1,160
Macksburg	2			1,698	2			1,192	4			2,890
Germantown	2			1,715	3			3,212	5			4,927
Maxton	2			2,274	1			1,045	3			3,319
Lime	1			1,100	3			3,855	4			4,955
Injun					3			4,001	3			4,001
Berea	11			18,392	7			11,575	18			29,967
Shale	1			1,813					1			1,813
<u>Totals</u>	<u>19</u>			<u>26,992</u>	<u>20</u>			<u>26,040</u>	<u>39</u>			<u>53,032</u>
<u>TOTAL WELLS</u> 33												
<u>TOTAL MCF</u> 960												
<u>TOTAL BBLs</u> 19												
<u>TOTAL FEET</u> 41,238												
<u>PER CENT DRY</u> - 60.0												
32												
978												
69												
39,825												
65												
1,938												
88												
81,063												

PERRY COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>GAS WELLS</u>												
Berea	3	936		2,759					3	936		2,759
Clinton	7	5,595		22,162	8	5,295		28,654	15	10,890		50,816
<u>Totals</u>	<u>10</u>	<u>6,531</u>		<u>24,921</u>	<u>8</u>	<u>5,295</u>		<u>28,654</u>	<u>18</u>	<u>11,826</u>		<u>53,575</u>
<u>OIL WELLS</u>												
Berea	2		10	2,313	7		24	7,709	9		34	10,022
Clinton	6		215	19,674	5		220	16,989	11		435	36,663
<u>Totals</u>	<u>8</u>		<u>225</u>	<u>21,987</u>	<u>12</u>		<u>244</u>	<u>24,698</u>	<u>20</u>		<u>469</u>	<u>46,685</u>
<u>COMBINATION WELLS</u>												
Clinton	4	2,362	265	13,030	7	1,947	207	23,114	11	4,309	472	36,144
<u>DRY HOLES</u>												
Berea	2			1,703	2			2,204	4			3,907
Clinton	13			42,128	14			46,264	27			88,392
Medina	5			19,107	3			10,986	8			30,093
<u>Totals</u>	<u>20</u>			<u>62,938</u>	<u>19</u>			<u>59,454</u>	<u>39</u>			<u>122,392</u>
<u>TOTAL WELLS</u> 42 46 88												
<u>TOTAL MCF</u> 8,893 7,242 16,135												
<u>TOTAL BBLs</u> 490 451 941												
<u>TOTAL FEET</u> 122,876 135,920 258,796												
<u>PER CENT DRY</u> - 44.3												
<u>DRILLED DEEPER</u> - 1 Shale to Clinton - dry, TOTAL FEET: 1,497												
1 Clinton to Medina - dry, TOTAL FEET: 90												

PORTAGE COUNTY

<u>GAS WELLS</u>												
Clinton					1	238		4,345	1	238		4,345
<u>DRY HOLES</u>												
Clinton	1			4,393	2			8,799	3			13,192
<u>TOTAL WELLS</u> 1 3 4												
<u>TOTAL MCF</u> 4,393 238 238												
<u>TOTAL FEET</u> 4,393 13,144 17,537												
<u>PER CENT DRY</u> - 75.0												

RICHLAND COUNTY

<u>GAS WELLS</u>												
Clinton	3	5,319		7,196	5	1,613		12,254	8	6,932		19,450
<u>DRY HOLES</u>												
Clinton	4			9,910	5			12,283	9			22,193
<u>TOTAL WELLS</u> 7 10 17												
<u>TOTAL MCF</u> 5,319 1,613 6,932												
<u>TOTAL FEET</u> 17,106 24,537 41,643												
<u>PER CENT DRY</u> - 52.9												
<u>GAS STORAGE WELLS</u> - 12 in Clinton, TOTAL FEET: 31,448												

SCIOTO COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>DRY HOLES</u>												
Clinton	2			4,808					2			4,808
St. Peter					1		4,183		1			4,183
<u>Totals</u>	<u>2</u>			<u>4,808</u>	<u>1</u>		<u>4,183</u>		<u>3</u>			<u>8,991</u>

SENECA COUNTY

<u>OIL WELLS</u>												
Trenton					1		3 1,649		1		3	1,649

STARK COUNTY

<u>GAS WELLS</u>												
Berea					1	150	810		1	150		810
Clinton	4	1,841		18,379	3	1,601	13,628		7	3,442		32,007
<u>Totals</u>	<u>4</u>	<u>1,841</u>		<u>18,379</u>	<u>4</u>	<u>1,751</u>	<u>14,438</u>		<u>8</u>	<u>3,592</u>		<u>32,817</u>

<u>DRY HOLES</u>												
Berea	2			1,649					2			1,649
Clinton	1			4,462	3		13,741		4			18,203
<u>Totals</u>	<u>3</u>			<u>6,111</u>	<u>3</u>		<u>13,741</u>		<u>6</u>			<u>19,852</u>

<u>TOTAL WELLS</u>		7				7				14		
<u>TOTAL MCF</u>		1,841				1,751				3,592		
<u>TOTAL FEET</u>		24,490				28,179				52,669		

PER CENT DRY - 42.9

DRILLED DEEPER - 1 Berea to Clinton - dry, TOTAL FEET: 3,914

GAS STORAGE WELLS - 1 Oriskany, TOTAL FEET: 4,359

SUMMIT COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>				
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	
<u>GAS WELLS</u>													
Oriskany					5	4,579		10,465	5	4,579		10,465	
<u>OIL WELLS</u>													
Oriskany	1		4	2,162	1		4	2,121	2		8	4,283	
<u>COMBINATION WELLS</u>													
Oriskany	1	75	30	2,122					1	75	30	2,122	
<u>DRY HOLES</u>													
Oriskany	3			6,145					3			6,145	
Clinton	<u>1</u>			<u>4,440</u>	<u>1</u>			<u>3,784</u>	<u>2</u>			<u>8,224</u>	
<u>Totals</u>	<u>4</u>			<u>10,585</u>	<u>1</u>			<u>3,784</u>	<u>5</u>			<u>14,369</u>	
<u>TOTAL WELLS</u>		6				7				13			
<u>TOTAL MCF</u>		75				4,579				4,654			
<u>TOTAL BBLs</u>		34				4				38			
<u>TOTAL FEET</u>		14,869				16,370				31,239			
<u>PER CENT DRY</u> - 38.5													
<u>DRILLED DEEPER</u> - 1 Newburg to Clinton - 135 M gas, TOTAL FEET: 425													

TRUMBULL COUNTY

<u>DRY HOLES</u>												
Oriskany					2			6,235	2			6,235

TUSCARAWAS COUNTY

<u>GAS WELLS</u>													
Berea	3	1,830		3,071	5	3,241		4,892	8	5,071		7,963	
Clinton	2	<u>1,131</u>		<u>9,770</u>	4	<u>1,414</u>		<u>19,718</u>	6	<u>2,545</u>		<u>29,488</u>	
<u>Totals</u>	<u>5</u>	<u>2,961</u>		<u>12,841</u>	<u>9</u>	<u>4,655</u>		<u>24,610</u>	<u>14</u>	<u>7,616</u>		<u>37,451</u>	
<u>COMBINATION WELLS</u>													
Berea	1	144	3	918					1	144	3	918	
<u>DRY HOLES</u>													
Berea					6			6,183	6			6,183	
Clinton	4			20,164	4			18,811	8			38,975	
Medina	<u>1</u>			<u>5,008</u>					<u>1</u>			<u>5,008</u>	
<u>Totals</u>	<u>5</u>			<u>25,172</u>	<u>10</u>			<u>24,994</u>	<u>15</u>			<u>50,166</u>	
<u>TOTAL WELLS</u>		11				19				30			
<u>TOTAL MCF</u>		3,105				4,655				7,760			
<u>TOTAL BBLs</u>		3								3			
<u>TOTAL FEET</u>		38,931				49,604				88,535			
<u>PER CENT DRY</u> - 50.0													

VINTON COUNTY

<u>Sand</u>	<u>First Half</u>				<u>Last Half</u>				<u>Total</u>			
	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>	<u>Wells</u>	<u>MCF</u>	<u>Bbls</u>	<u>Feet</u>
<u>OIL WELLS</u>												
Berea	1		3	1,257					1		3	1,257
<u>DRY HOLES</u>												
Berea	1			779	2			2,049	3			2,828
<u>TOTAL WELLS</u>		2				2				4		
<u>TOTAL BBLs</u>			3								3	
<u>TOTAL FEET</u>			2,036				2,049				4,085	
<u>PER CENT DRY</u>	- 75.0											

WASHINGTON COUNTY

<u>GAS WELLS</u>												
Stray					1	150		1,264	1	150		1,264
Germantown	1	30		1,050					1	30		1,050
Salt					1	24		1,355	1	24		1,355
Injun					4	2,153		6,327	4	2,153		6,327
Berea	4	960		8,207	3	870		5,401	7	1,830		13,608
Oriskany					1	5,890		4,132	1	5,890		4,132
<u>Totals</u>	<u>5</u>	<u>990</u>		<u>9,257</u>	<u>10</u>	<u>9,087</u>		<u>18,479</u>	<u>15</u>	<u>10,077</u>		<u>27,736</u>
<u>OIL WELLS</u>												
Peeker	3		10	2,305	2		22	1,962	5		32	4,267
Buell	2		2	202	1		1	1,230	3		3	1,432
Stray	2		3	1,011	3		9	2,629	5		12	3,640
Cow Run	2		22	1,146	6		15	5,137	8		37	6,283
Macksburg					1		3	673	1		3	673
Germantown	1		2	1,125	3		16	3,073	4		18	4,198
Salt	3		15	3,214					3		15	3,214
Lime	1		3	1,375	1		3	480	2		6	1,855
Injun	1		7	1,407	1		2	1,553	2		9	2,960
Squaw					1		2	1,456	1		2	1,456
Berea	<u>1</u>		<u>5</u>	<u>2,025</u>					<u>1</u>		<u>5</u>	<u>2,025</u>
<u>Totals</u>	<u>16</u>		<u>69</u>	<u>13,810</u>	<u>19</u>		<u>73</u>	<u>18,193</u>	<u>35</u>		<u>142</u>	<u>32,003</u>

## WASHINGTON COUNTY (cont'd.)

Sand	First Half			Last Half			Total					
	Wells	MCF	Bbls	Feet	Wells	MCF	Bbls	Feet	Wells	MCF	Bbls	Feet
<u>COMBINATION WELLS</u>												
Germantown	1	100	15	1,003					1	100	15	1,003
Squaw					1	103	4	1,448	1	103	4	1,448
Berea					1	60	1	1,650	1	60	1	1,650
<u>Totals</u>	<u>1</u>	<u>100</u>	<u>15</u>	<u>1,003</u>	<u>2</u>	<u>163</u>	<u>5</u>	<u>3,098</u>	<u>3</u>	<u>263</u>	<u>20</u>	<u>4,101</u>
<u>DRY HOLES</u>												
Mitchell					1			368	1			368
Peeker					1			1,250	1			1,250
Stray	2			1,602	2			934	4			2,536
Cow Run	4			2,097	8			4,108	12			6,205
Macksburg					2			1,982	2			1,982
Salt	1			915	4			4,575	5			5,490
Maxton	1			1,252					1			1,252
Lime	1			1,450	3			4,038	4			5,488
Injun					1			1,260	1			1,260
Squaw					2			3,201	2			3,201
Berea	2			3,836					2			3,836
<u>Totals</u>	<u>11</u>			<u>11,152</u>	<u>24</u>			<u>21,716</u>	<u>35</u>			<u>32,868</u>
<u>TOTAL WELLS</u>		33				55				88		
<u>TOTAL MCF</u>		1,090				9,250				10,340		
<u>TOTAL BBLs</u>		84				73				162		
<u>TOTAL FEET</u>		35,222				61,468				96,708		
<u>PER CENT DRY</u> -	39.8											
<u>DRILLED DEEPER</u>												
	1	Lime to Berea	-	dry,								TOTAL FEET: 631
	1	Berea to Berea	-	50 M gas,								TOTAL FEET: 31
	1	" "	-	80 M gas,								TOTAL FEET: 29
	1	" "	-	150 M gas,								TOTAL FEET: 43
	1	Injun to Berea	-	100 M gas,								TOTAL FEET: 817
	1	" "	-	100 M gas,								TOTAL FEET: 789
	1	" "	-	100 M gas,								TOTAL FEET: 834
	1	Macksburg to Maxton	-	150 M gas,								TOTAL FEET: 387
	1	Macksburg to Maxton	-	dry,								TOTAL FEET: 404



**PART II**

**ORISKANY SAND STUDY By John F. Hall**  
**THE CANTON GAS POOL By Henry Belden**

**THE NEFF GAS WELLS**  
**THE MECCA OIL FIELD**  
**THE BELDEN OR GRAFTON OIL FIELD**  
**WELLS DRILLED IN OHIO 1888-1951-REVISED**  
**NATURAL GAS PRODUCTION AND CONSUMPTION IN OHIO**  
**PETROLEUM PRODUCTION IN OHIO 1876-1951**  
**OIL, GAS, AND WATER WELL SAMPLE CUTTINGS**

# ORISKANY SAND STUDY

By  
John F. Hall

## GENERAL STATEMENT

In recent years interest in Oriskany sand gas and oil potentialities have been stimulated in the Appalachian area by the development of the Garrett County, Maryland, and Clinton County, Pennsylvania, gas pools. Because of this activity in the Oriskany, this report has been prepared to present the latest information available concerning this horizon in Ohio.

In 1937 the Appalachian Geological Society published their "Oriskany Sand Symposium" which contained up to that date a rather complete digest of the known Oriskany producing areas and test wells in Ohio. Nothing additional in the way of reviews or listings of wells has appeared since that time. Only in various papers discussing the Oriskany in Pennsylvania and West Virginia has mention of the Ohio areas been forthcoming.

It is not the objective of this review to interpret or predict as to areas of production, but more to present a compilation of the known Oriskany data for the State.

Table II of this report contains a listing of 268 Oriskany wells out of an approximate 1,050 that have recorded the Oriskany sand in the State. This listing includes both Oriskany and Clinton test wells which have recorded a definite Oriskany horizon. Only key wells have been plotted on the accompanying map (Fig. 4) in those areas of concentrated drilling, such as in the Cambridge field, the Parma field, the old Austinburg-Saybrook field, and in various other regions. In areas of scattered drilling, all known Oriskany test wells are listed. An attempt has been made to list at least one well for every township where the Oriskany has been found. There are probably a few missing due to the fact that the well logs of the Oriskany are widely scattered in the files of various companies and organizations. Also the writer has omitted those wells where the status of the Oriskany has been questioned or where no sand has been recorded.

## GENERAL GEOLOGY

The Oriskany sandstone does not outcrop anywhere within the State. Only on the basis of well samples have detailed descriptions been made. At one time or another the Oriskany of eastern Ohio has been called the following: Cambridge gas sand, lime sand, Corniferous lime sand, Monroe lime sand, Jefferson gas rock, and Austinburg.

The sand is white to brownish-gray and fine to medium-coarse-grained. Generally, the sand seems to become more fine-grained along its western limits (Fig. 1). The sand grains vary from angular to sub-rounded, with the larger grains being almost well-rounded. A calcareous or limy cement is almost invariably present, with a dolomitic or siliceous cement being found in a few wells. Chert, glauconite, iron oxide, and zinc sulphide have been reported as accessory minerals.

The Oriskany has a wide range in thickness, from 2 feet to 100 feet, with an average for the State of about 18 feet. Thicknesses in any particular area can be found in the well listings in Table II.

Figure 1 shows the approximate distribution or sand limit of the Oriskany. This map was drawn on the basis of drillers' logs and sand sample studies, where definite sand was recorded. The map is highly generalized and is subject to change, pending subsequent drilling.

Stratigraphically the Oriskany is basal Devonian in age and is considered to be unconformably below the Columbus limestone. On the basis of fossils found in well cuttings from the Cambridge field, the Oriskany (sub-surface) of Ohio correlates with the Oriskany outcrop area in eastern West Virginia and central Pennsylvania. The question as to whether the Oriskany in eastern Ohio correlates with the Sylvania and Hillsboro sandstones of western Ohio has not been settled with any degree of certainty.

The interval between the top of the "Big Lime" (top of the Delaware limestone) and the top of the Oriskany varies considerably over the State. The minimum distance is 80 feet and the maximum 400 feet, with an average of about 160 feet. These various intervals are also included in the well listings in Table II. This wide discrepancy should be expected when one realizes that both the contacts above and below the Oriskany are disconformable.

Cross-sections, A - A', B - B', C - C', D - D', and E - E', in Fig. 2 show that although the "Big Lime"-Oriskany interval increases generally to the north and east, the dip of the Oriskany is normal, and hence those sands of Ashtabula, Lake, Geauga, and Cuyahoga counties known locally as Austinburg are actually Oriskany.

Figure 3 is a structure map drawn on the top of the Oriskany sand. It will be noted that the structure is very even and the general dip ranges from 30 feet to 100 feet/mile, with the sand being 500 feet below sea level in the west and at a minus 4,500 feet in the east. No pronounced structures are present, with the exception of a few broad monoclines.

### PRODUCING AREAS AND PRODUCTION

Those areas in Ohio where oil or gas has been produced from the Oriskany are shown on Figure 1. Table I, which accompanies Figure 1, lists the individual pools as to type of production, type of trap, and approximate discovery date. To supplement this chart, a brief history of the more important areas will be discussed.

The first known production in Ohio, or for that matter in eastern United States, from the Oriskany or its equivalents was from the Jefferson gas rock in Ashtabula County in 1899. At a depth of 2,140 feet,  $1\frac{1}{2}$  barrels of 43° A. P. I. oil per day were produced. In 1900, two miles northwest of the oil producing area, a gas sand was found at 1,989 feet. This well yielded considerable gas, with the initial rock pressure being 830 pounds. From this discovery well a field, 3 miles by 1 mile, was developed with a daily production of 2,500 M. The gas was found near the very top of the sand, with salt water below, which soon destroyed the wells.

A second field was developed at Saybrook, Ashtabula County, in 1915 where the pay was found at a depth of 1,975 feet. These wells had a rock pressure of 800 pounds and their initial open flows ranged from 1,300 M to 7,000 M per day. Gas was also found in the Oriskany in Austinburg Township at an average depth of 1,950 feet, with a rock pressure of 750 pounds and daily open flows of 600 M to 8,000 M. Both of these fields had a short life, giving way to water in a few years.

All of the Oriskany fields in Ashtabula County were of the stratigraphic type, as no definite local structures are evident.

In 1922 the Cambridge field was discovered in Jackson Township, Guernsey County. The discovery well was at a depth of 3,470 feet, which was 125 feet below the top of the "Big Lime," and gas was encountered with an open flow of 8,000 M, and a rock pressure of 1,150 pounds. By 1925 eleven wells had been completed in this area and the field had started to go to water.

During 1925 and 1926 the Birds Run and Knox fields were developed in Westland, Adams, and Knox Townships of Guernsey County. Here the Oriskany (locally called Cambridge gas sand or lime sand) averaged 117 feet below the top of the "Big Lime." At a depth of 2,600 feet below sea level a definite water level was established. Up dip from this water and below the gas approximately 80 oil wells were drilled. This oil was of Pennsylvania grade, and initial production ranged from 3 to 200 barrels with an average of 18 barrels per day.

In 1927, the North Salem field in northern Guernsey and southern Tuscarawas counties was discovered. Generally in this area the production was lower than that of the three fields to the south. However, considerable amounts of oil and gas were produced for over three years.

These four fields make up an area of approximately 15,000 acres in which over 270 gas wells and over 140 oil wells were drilled. The Oriskany averaged 11 feet in thickness and was present 115 to 156 feet below the top of the "Big Lime". Due to over drilling the field had a very short life, but during its peak in 1926 the field delivered an average of 190,000 M per day. All four of these fields are of the stratigraphic type, although they were drilled on the Cambridge Arch. However this structure, which exhibits over 250 feet of relief on the surface beds, is not evident at the Oriskany sandstone horizon.

In 1935 a small gas field with a virgin rock pressure of 1,850 pounds was discovered on a closed structure in Madison Township, Columbiana County (Jenkin's field) at an average depth of 3,250 feet below sea level. The open flow of the discovery well was 1,000 M. The Oriskany was 280 feet below the top of the "Big Lime" and 35 feet thick. The field was drilled on an anticlinal dome with about 250 feet of relief in the surface beds. The few wells drilled were soon ruined by water and the field was of little commercial importance.

In 1941 the Mayfield gas field was opened in Cuyahoga County, at a depth of about 1,800 feet, and on an average of 309 feet below the top of the "Big Lime." The Oriskany averages 25 feet in thickness, and the pool is on a small structure. The bulk of the gas produced from this pool actually comes from the underlying Newburg sand.

During the early 1940's an Oriskany field was discovered in Boston and Richfield townships of Summit County. The area produces both oil and gas. Over 30 wells have been drilled, with the bulk of the drilling being carried on during the last five years.

In 1944 a gas field was discovered in eastern Knox Township, Columbiana County, at an average depth of 2,400 feet below sea level. Initial rock pressures were in excess of 1,300 pounds and the field was characterized by high initial volumes. In 1946 a gas field was also discovered a few miles east of the Jenkin's field in Madison Township of Columbiana County. This new field was also on a structural trap. High pressures and large initial volumes encouraged development, but the field was ruined within a year by water.

In 1946 an Oriskany pool was discovered in Vernon Township, Trumbull County. This field produced both oil and gas with an average open flow of 2,500 M at a depth of 2,100 feet below sea level. The oil was down dip from the gas. In this area the Oriskany lies approximately 233 feet below the top of the "Big Lime." Again the Oriskany production was from a stratigraphic type of trap.

In April 1948 the Parma field in Cuyahoga County was discovered. By 1949, 15 productive Oriskany sand wells had been completed. The Oriskany in this field is about 150-200 feet below the top of the "Big Lime" and seems to have an anticlinal structure within the "Big Lime." The depth to the sand is from 1,800 to 1,900 feet.

In October of 1951, the newest Oriskany field was discovered in Troy Township, Athens County. This first or discovery well gaged 2,300 M daily at 4,222 feet, but was plugged due to mechanical difficulties in completing. This well was offset 200 feet and a second well completed with a daily initial open flow of 5,500 M after being shot with 80 quarts; shut-in pressure after 24 hours was 1,675 pounds. The third well drilled in Belpre Township, Washington County,

initialed 6,200 M daily following a 90 quart shot; shut-in pressure after 48 hours was 1,690 pounds.

About 18 miles north-northeast of these wells in Watertown Township, Washington County, a third producer was brought in with an after shot flow of 2,600 M. At the present time, February 1, 1952, eight wells are being drilled in this immediate area.

The discovery statistics for the Oriskany in Ohio for the last four years are as follows:

Oriskany Wells

Year	Total	Wells				Total Gas* MCF	Total Oil* Bbls
		Gas	Combination	Oil	Dry		
1948	37	21	-	6	10	15,540	78
1949	25	10	1	1	13	3,155	9
1950	10	2	3		5	483	63
1951	18	9	1	2	6	17,244	38

\* Initial production

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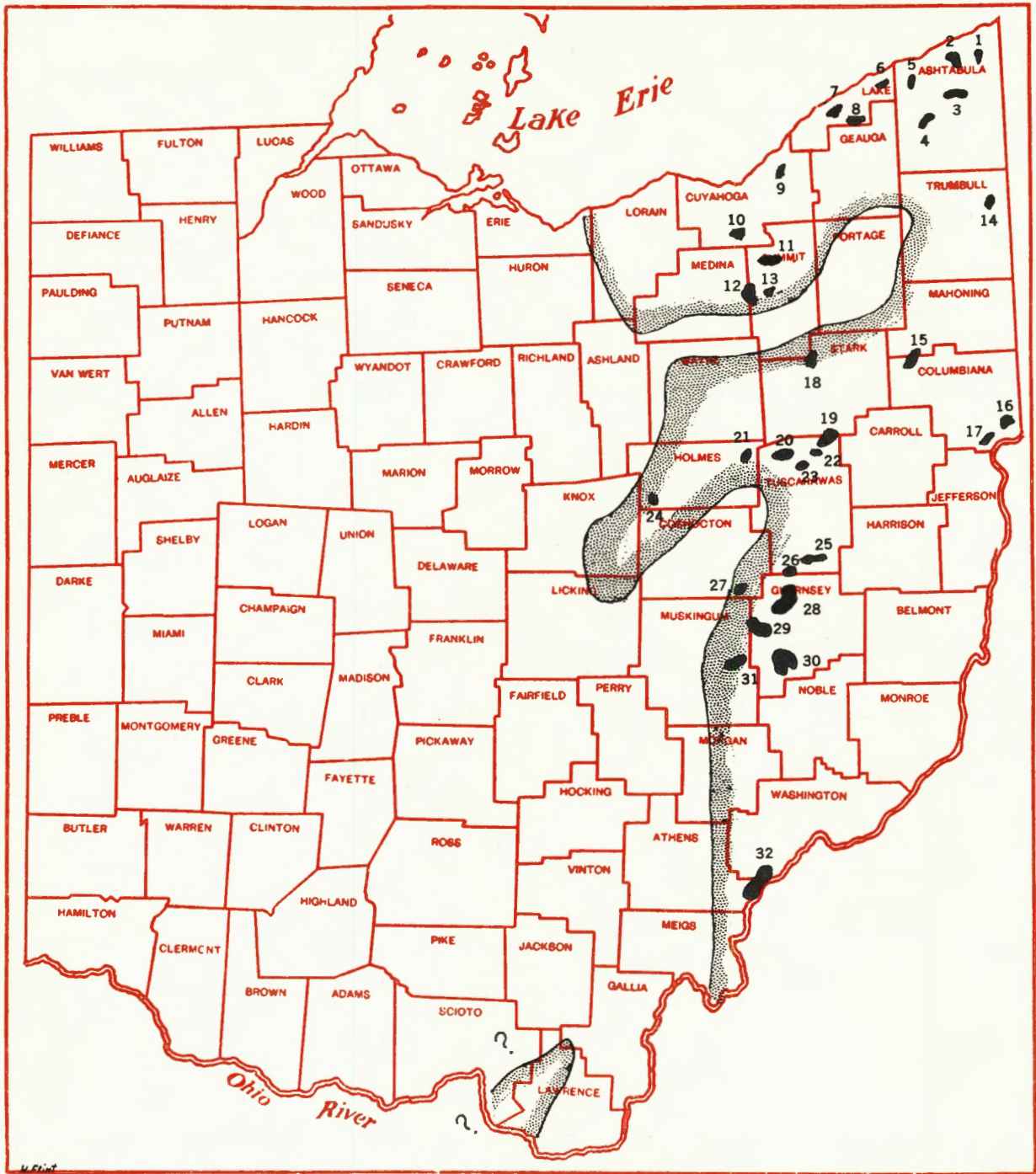


FIGURE 1

ORISKANY SAND STUDY

By  
John F. Hall

APPROXIMATE SAND LIMITS AND LOCATION OF ORISKANY SAND POOLS  
IN OHIO

TABLE I  
ORISKANY SAND STUDY

OIL AND GAS POOLS

# = Stratigraphic Trap; \* = Structural Trap; c = Approximate Date

Map	Pool Name	County	Oil or Gas	Type Accumulation	Discovery Date
1	Conneaut	Ashtabula	Gas	#	1929
2	Saybrook	Ashtabula	Gas	#	1915
3	Austinburg	Ashtabula	Gas	#	1899
4	Eaglesville	Ashtabula	Gas	#	1919
5	Geneva	Ashtabula	Gas	#	—
6	Madison Lake	Lake	Gas	#	1920
7	Mentor	Lake	Gas	#	1915
8	Concord	Lake	Gas	#	1902
9	Mayfield	Cuyahoga	Gas	* - #	1941
10	Parma	Cuyahoga	Gas	* - #	1948
11	Boston	Summit	Oil-Gas	#	1948
12	Hinckley - Granger	Summit - Medina	Gas	#	1941
13	Ghent	Summit	Gas	#	1946
14	Vernon	Trumbull	Oil-Gas	#	1946
15	Knox	Mahoning - Columbiana	Gas	* - #	1944
16	Madison - Columbiana	Columbiana	Gas	*	1946
17	Jenkins - Columbiana	Columbiana	Gas	*	1935
18	Green - Jackson	Stark - Summit	Gas	#	1934
19	Sandyville	Stark - Tuscarawas	Gas	#	1943
20	Franklin	Tuscarawas	Gas	#	c 1937
21	Paint	Holmes	Gas	#	1941
22	Bolivar	Tuscarawas	Gas	#	c 1937
23	Beartown	Tuscarawas	Gas	#	c 1937
24	Richland	Holmes	Gas	#	1941
25	Gilmore	Tuscarawas	Gas	#	1930
26	North Salem	Tuscarawas - Guernsey	Oil-Gas	#	1927
27	Connesville	Coshocton	Gas	#	1929
28	Birds Run	Guernsey	Gas	#	1926
29	Knox	Guernsey	Gas	#	1925
30	Cambridge	Guernsey	Oil-Gas	#	1922
31	Norwich - Philo	Muskingum	Oil	#	1930
32	Belpre - Troy	Athens - Washington	Gas	#	1951

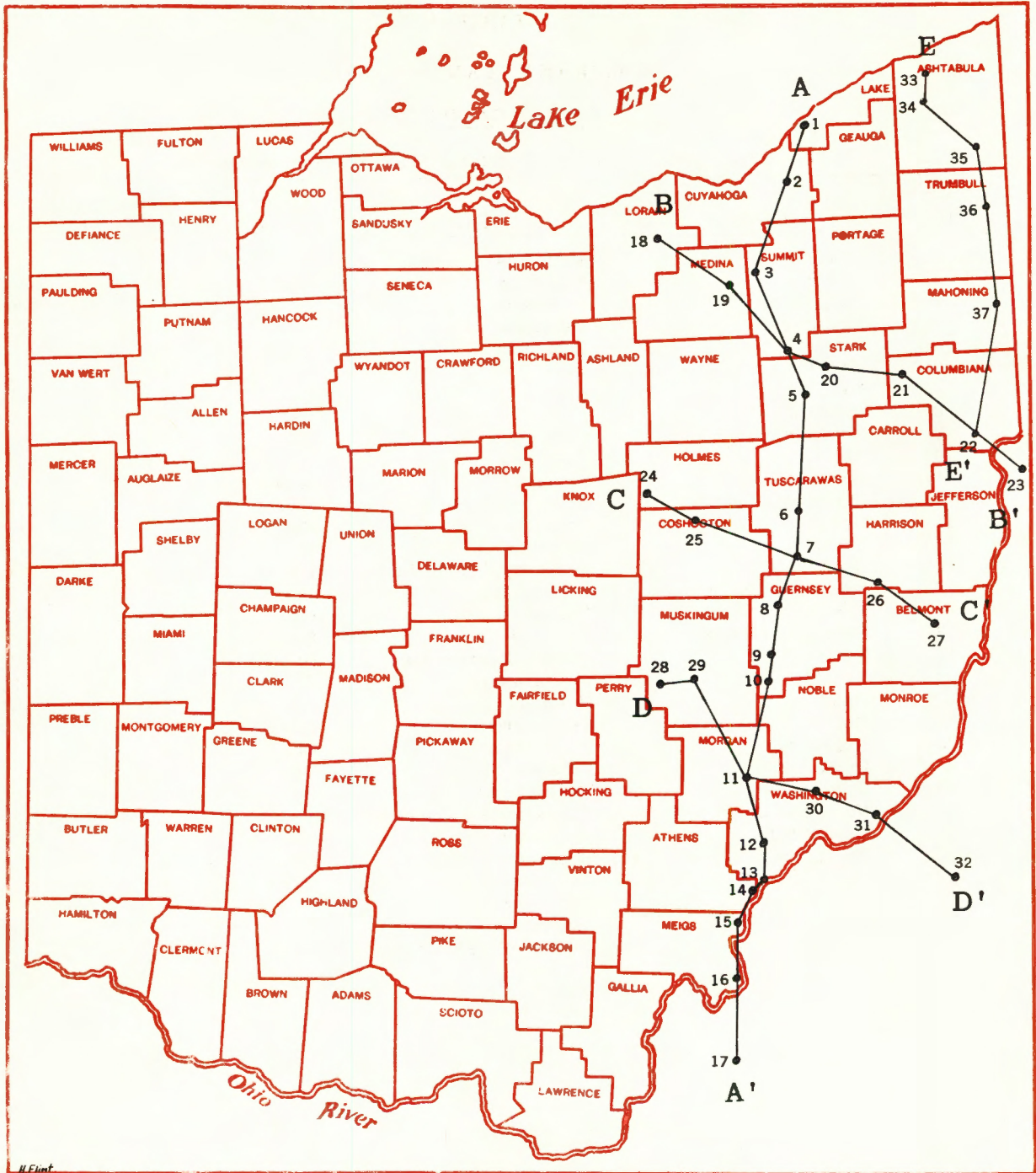
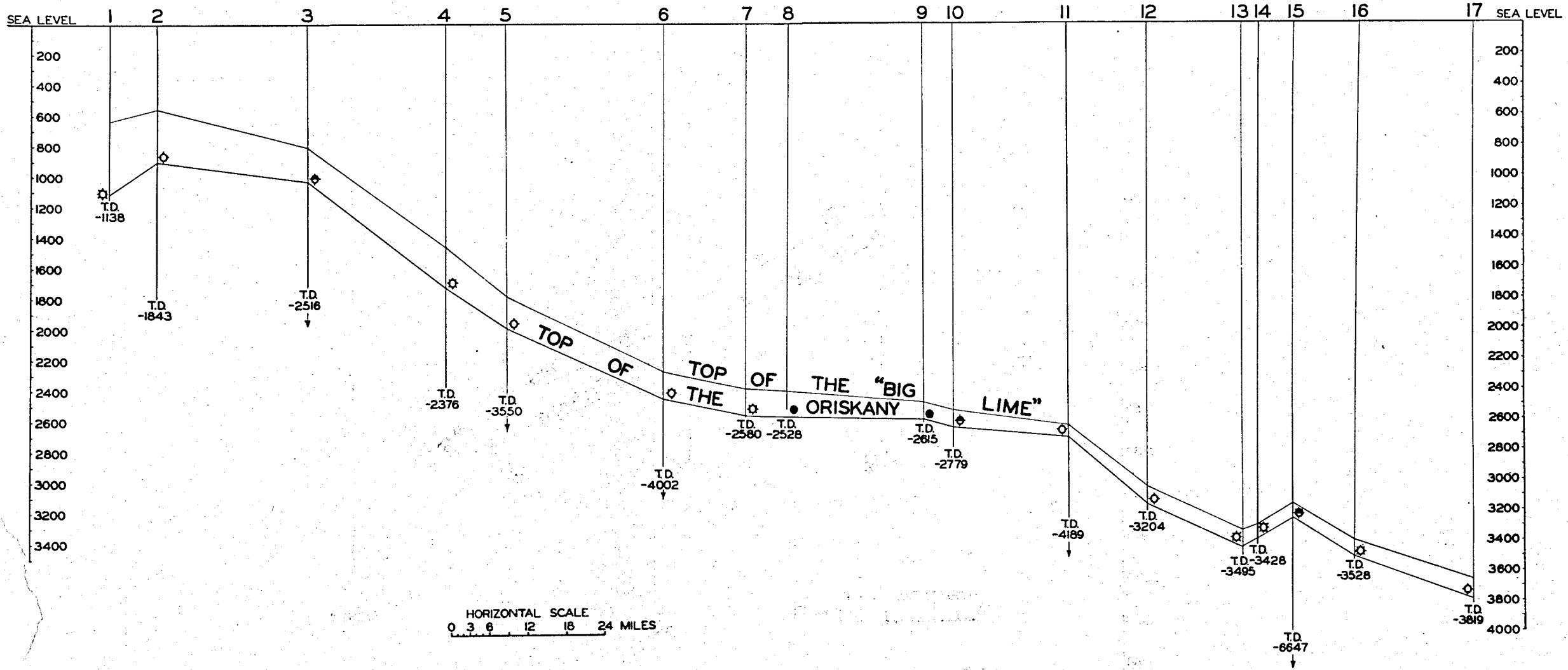


FIGURE 2  
 ORISKANY SAND STUDY

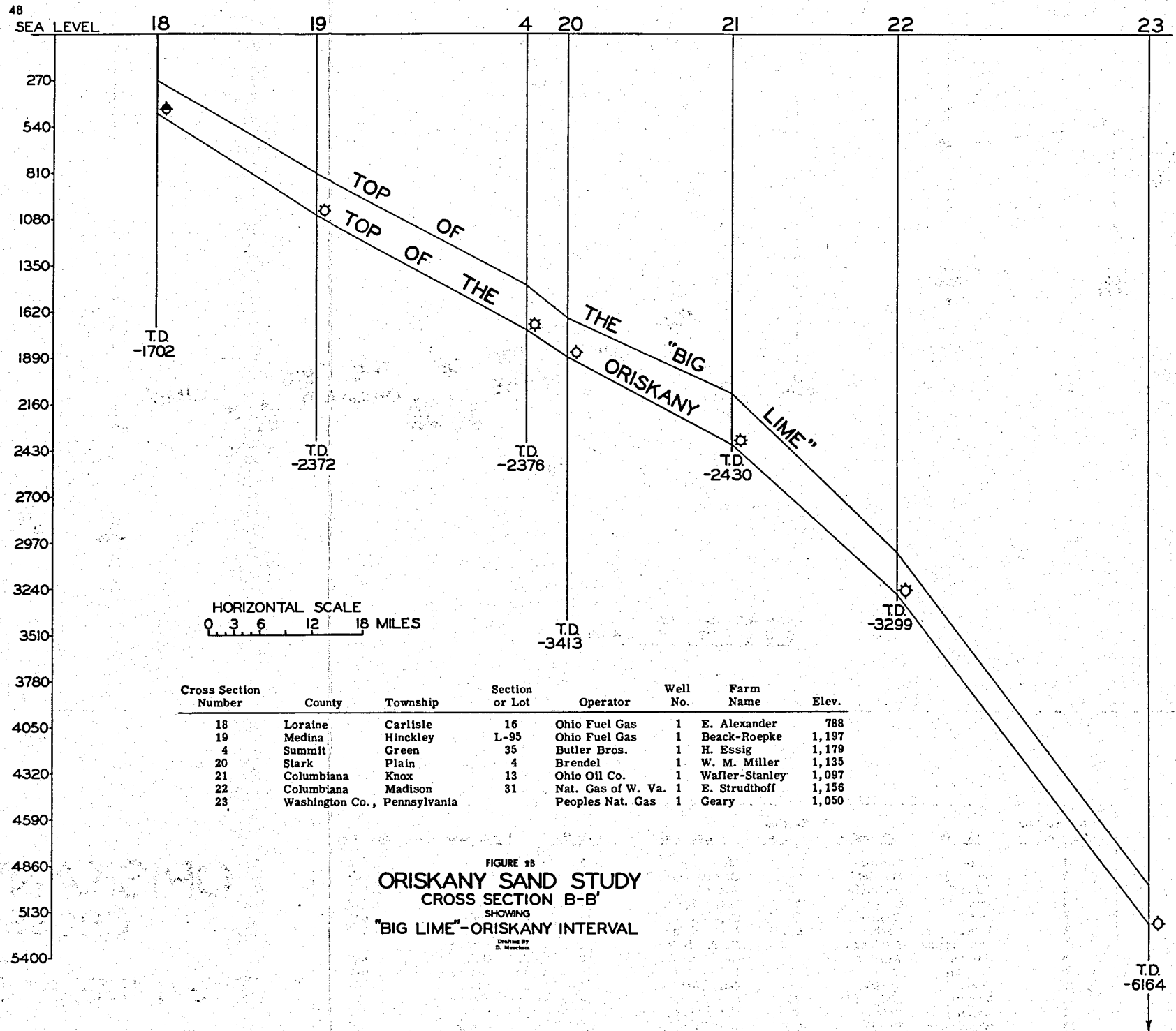
By  
 John F. Hall

CROSS SECTION INDEX



Cross Section Number	County	Township	Section or Lot	Operator	Well No.	Farm Name	Elevation
1	Lake	Mentor		Merkle	2		662
2	Cuyahoga	Mayfield	L-43	Benedum-Trees	2	G. Straight	1,003
3	Summit	Richfield	3	Wiser	1	B. Racek	1,009
4	Summit	Green	35	Butler Bros.	1	H. Essig	1,179
5	Stark	Canton	20	Republic Steel	12	Steel Plant	1,041
6	Tuscarawas	Goshen	L-28	E. B. Walton	1	Coventry Heirs	900
7	Tuscarawas	Washington	L-2	E. P. Mellon	1	W. L. Murphy	905
8	Guernsey	Wheeling	11	Ohio Fuel Gas	2	C. C. Wilson	887
9	Guernsey	Westland	11	Pure Oil	4	White Sisters	1,015
10	Guernsey	Spencer	8	Ohio Fuel Gas	1	L. O. Riddle	896
11	Morgan	Meigsville	22	C. M. Foraker	1	C. W. Dearth	908
12	Washington	Palmer	32	Columbian Carbon	1	T. C. Stallar	787
13	Washington	Belpre	L-66	B. H. Putnam	1	T. S. Lamp	837
14	Athens	Troy	3	B. H. Putnam	1	Wilson	837
15	Meigs	Olive	L-23	Sinclair Praire	1	W. T. Longworth	819
16	Meigs	Lebanon	16	Roy Profit et al.	1	E. O. Taggart	899
17	Mason - West Virginia			Grosscup et al.	1	S. Thomas	676

FIGURE 2A  
**ORISKANY SAND STUDY**  
**CROSS SECTION A-A'**  
 SHOWING  
**"BIG LIME" - ORISKANY INTERVAL**  
 Drafting  
 By  
 D. Meacham



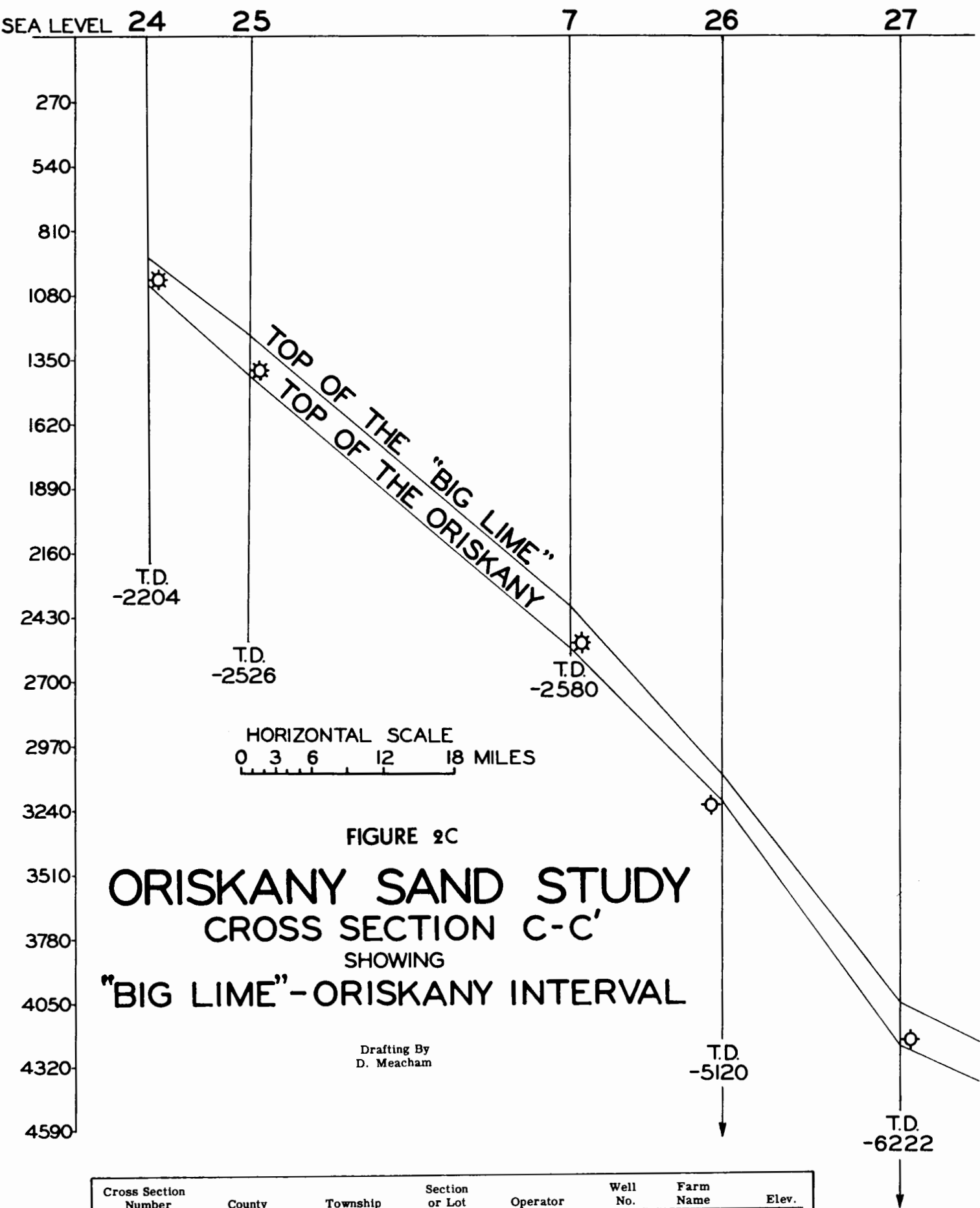


FIGURE 2C

**ORISKANY SAND STUDY**  
**CROSS SECTION C-C'**  
 SHOWING  
**"BIG LIME"-ORISKANY INTERVAL**

Drafting By  
D. Meacham

Cross Section Number	County	Township	Section or Lot	Operator	Well No.	Farm Name	Elev.
24	Holmes	Richland	1	Ohio Fuel Gas	1	A. A. Starrter	1,128
25	Coshocton	Clark	L-20	Ohio Fuel Gas	1	H. Crasky	791
7	Tuscarawas	Washington	L-2	E. P. Mellon	1	W. L. Murphy	905
26	Harrison	Washington	2	Ohio Oil Co.	1	W. H. Blackwell	1,135
27	Belmont	Union	4	Texas Co.	1	L. Gillespie	1,233

SEA LEVEL

28

29

II

30

31

32

180  
360  
540  
720  
900  
1080  
1260  
1440  
1620  
1800  
1980  
2160  
2340  
2520  
2700  
2880  
3060  
3240  
3420  
3600  
3780  
3960  
4140  
4320  
4500  
4680  
4860  
5040  
5220  
5400  
5580  
5760  
5940

T.D.  
-2469

T.D.  
-2966

T.D.  
-4189

T.D.  
-3641

T.D.  
-6888

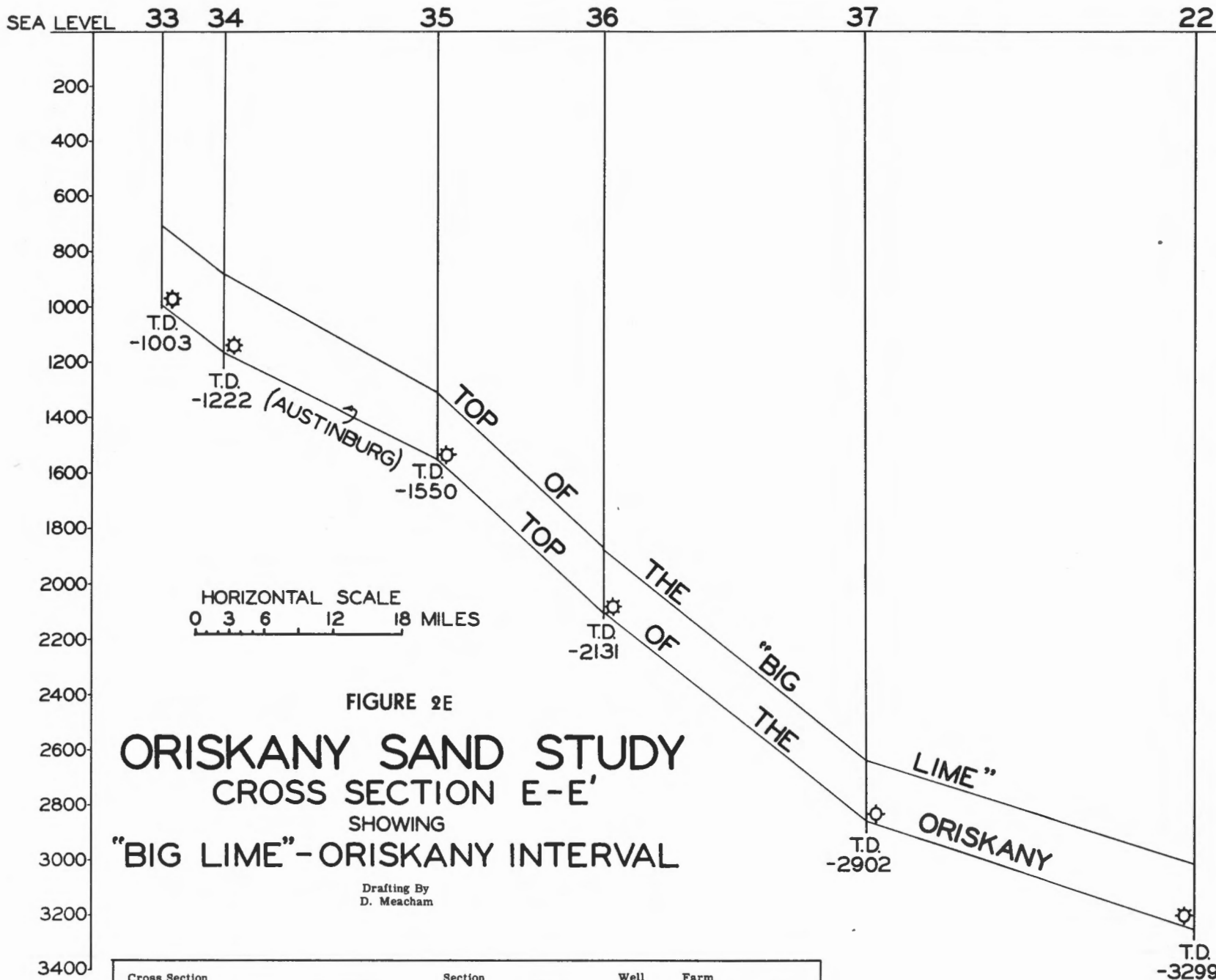
HORIZONTAL SCALE  
0 3 6 12 18 MILES

TOP OF THE "BIG LIME"  
TOP OF THE ORISKANY

FIGURE 2D  
**ORISKANY SAND STUDY**  
**CROSS SECTION D-D'**  
SHOWING  
**"BIG LIME"-ORISKANY INTERVAL**

Drafting By  
D. Meacham

Cross Section No.	County	Township	Section or Lot	Operator	Well No.	Land Owner	Elevation
28	Muskingum	Newton	14	Ohto Fuel Gas	1	Emma Ford	971
29	Muskingum	Wagne	7	Ohto Fuel Gas	1	W. H. Fritz	756
11	Morgan	Meigsville	22	C. M. Foraker	1	C. W. Dearth	908
30	Washington	Adams	L-49	Columbian Carbon	1	C. Augenstein	802
31	Washington	Independence	10	Sylvania Prod. Co.	1-B	Knowlton	1,001
32	Doddridge	West Virginia		Columbian Carbon	1	Lewis Maxwell	1,138



Cross Section Number	County	Township	Section or Lot	Operator	Well WNo.	Farm Name	Elev.
33	Ashtabula	Saybrook	L-25	—	1	David Wilkinson	845
34	Ashtabula	Austinburg	L-70	Northeastern Oil	1	L. Webb	846
35	Ashtabula	Andover	L-1	—	1	Miller	1,081
36	Trumbull	Vernon	5	W. C. Best	1	C. Fenn	1,089
37	Mahoning	Poland	L-77	Phillips et al.	1	R. B. Fenton	1,145
22	Columbiana	Madison	31	Nat. Gas W. Va.	1	E. Strudthoff	1,050

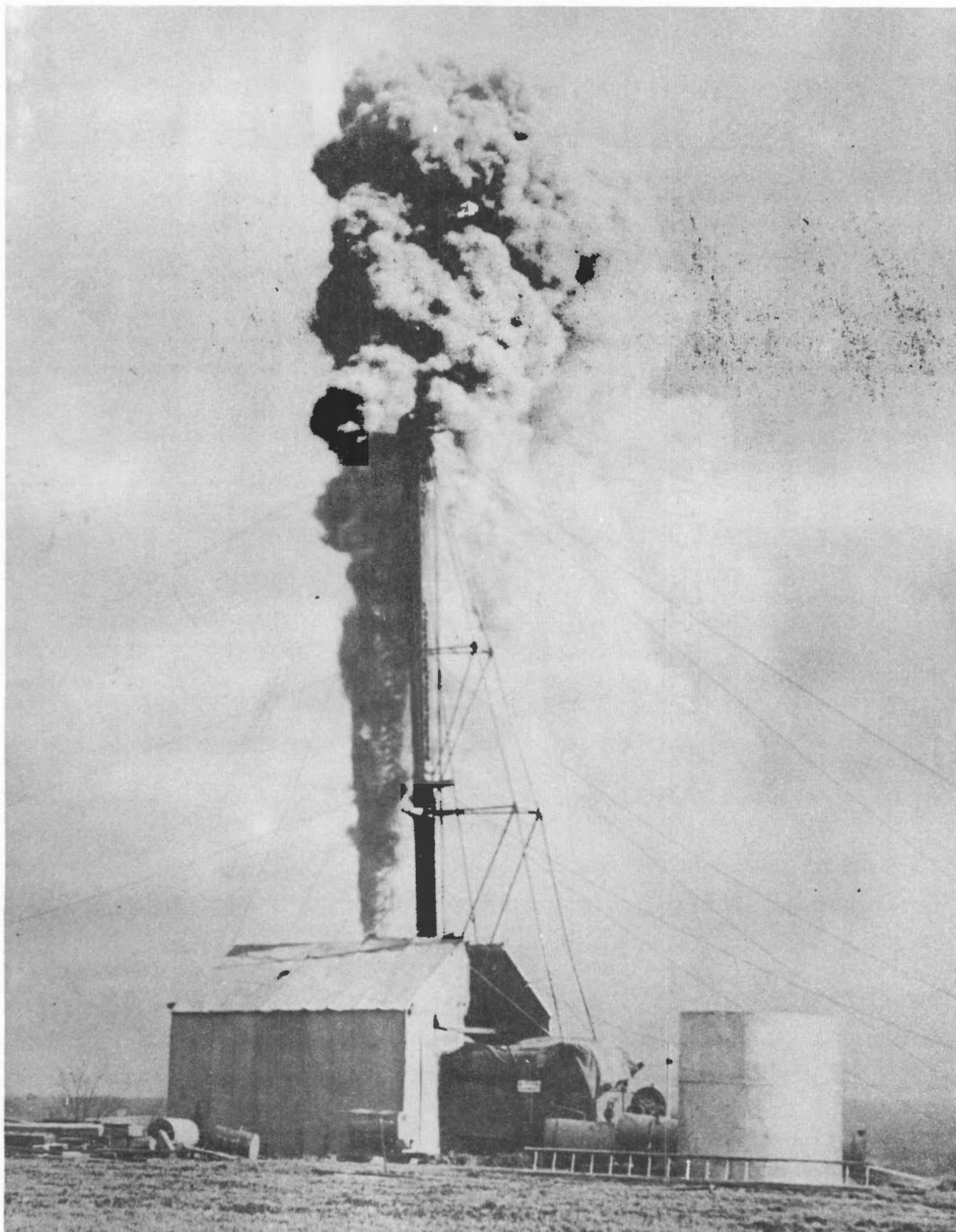
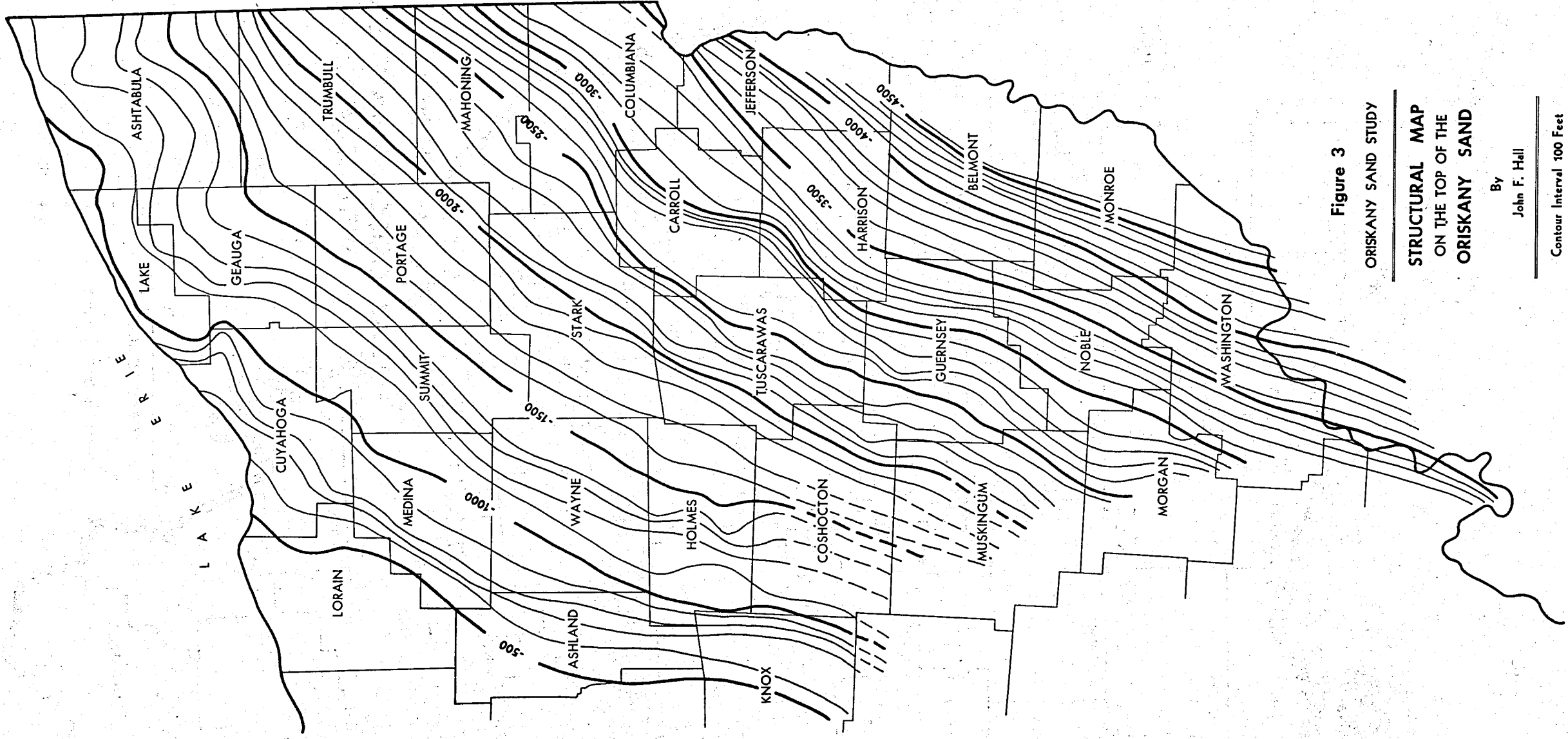


Photo Courtesy of E. Durward Hoag PLATE I

"SHOOTING" THE ORISKANY SAND

B. H. Putnam No. 1 - George Arnold  
Watertown Township, Washington County  
January 20, 1952



**Figure 3**  
**ORISKANY SAND STUDY**  
**STRUCTURAL MAP**  
**ON THE TOP OF THE**  
**ORISKANY SAND**

By  
 John F. Hall

Contour Interval 100 Feet  
 Drafting By H. J. Flint

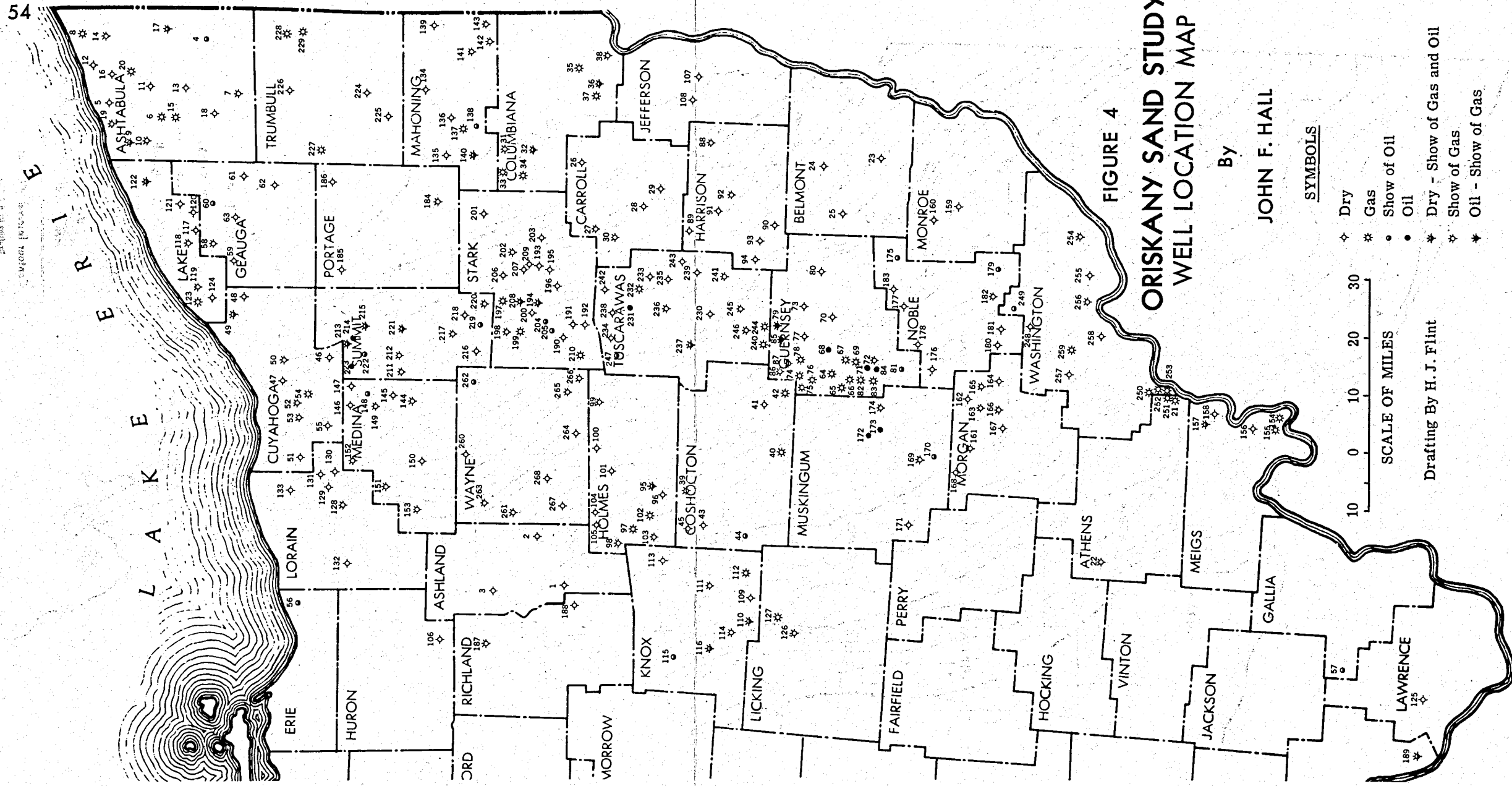
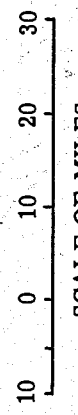


FIGURE 4  
**ORISKANY SAND STUDY**  
 WELL LOCATION MAP

By  
**JOHN F. HALL**

SYMBOLS

- ◇ Dry
- \* Gas
- Show of Oil
- Oil
- \* Dry - Show of Gas and Oil
- \* Show of Gas
- \* Oil - Show of Gas



Drafting By H. J. Flint

## TABLE 2 ORISKANY SAND STUDY -- SELECTED ORISKANY WELLS IN OHIO

Map Number	Operator	Well Number	Farm Name	County	Township	Sec., Lot or Quarter	Surface Elevation	Top of Berea	Top of Big Lime	Top of Oriskany	Thickness of Oriskany	Big Lime-Oriskany Interval	Total Depth	Remarks
1	Ohio Fuel Gas Co.	3	Flecher	Ashland	Green	6	1,336	788	1,700	1,895	15	195	2,798	Water
2	Ohio Fuel Gas Co.	1	Muskingum Watershed Cons.	Ashland	Mohican	23	949	510	1,630	1,785	10	155	2,873	Dry
3	Ohio Fuel Gas Co.	1	C. M. Harper	Ashland	Montgomery	11	1,131	605	1,565	1,800	20	235	2,798	Water
4		-	Andover Well	Ashtabula	Andover	Lot 25	1,065	355	2,428	2,654	17	226	2,671	Austinburg ss. - show oil
5		1	Dan H. Fargo	Ashtabula	Ashtabula	Lot 4	739	---	1,521	1,811	--	290	3,100	Austinburg ss. - water
6	Northeastern Oil and Gas	1	L. Webb	Ashtabula	Austinburg	Lot 70	846	---	1,727	2,016	--	289	2,068	Austinburg ss. - gas
7	Brendel et al.	1	Rozman	Ashtabula	Colebrook	Lot 41	899	---	2,037	2,377	12	340	3,699	Small show of gas
8	H. S. Sheffer	2	Ring	Ashtabula	Conneaut	Lot 48	695	---	1,501	1,782	3	281	1,785	Austinburg ss. - gas, 6, 257 M
9	Nickel-Plate-Int. Salt	1	McGonagle	Ashtabula	Geneva	Lot 16	---	---	1,445	1,747	10	298	2,450	Show oil and gas; some water
10	Northeastern Oil and Gas	1	J. Carter	Ashtabula	Harpersfield	Lot 34	841	---	1,590	1,891	15	301	1,906	Show gas - water
11		-	Bertha Shipka	Ashtabula	Jefferson	Lot 51	872	---	1,760	2,051	10	291	2,090	Austinburg ss. - water
12	Ohio Fuel Gas Co.	1	Nettie and Jesse Rose	Ashtabula	Kingsville	9	777	60	1,614	1,901	36	287	3,148	Austinburg ss. - water
13	Benedum-Trees	1	Geo. Corlett	Ashtabula	Lenox	Lot 4	1,000	---	1,935	2,190	20	255	6,186	Dry
14		-	Flickinger	Ashtabula	Monroe	Lot 13	724	---	1,580	1,875	3	295	3,205	Show of gas; exhausted after 3 hrs. Austinburg ss.
15		2	Brown	Ashtabula	Morgan	Lot 7	872	---	1,738	1,995	--	257	1,997	Gas 2,570 M, Austinburg ss.
16	Helenic Petroleum Co.	1	F. A. Hadlock	Ashtabula	Plymouth	Lot 8	717	---	1,552	1,837	--	285	3,005	Austinburg ss. - dry
17	Ohio Oil Co.	1	Geo. E. Hatton	Ashtabula	Richmond	Lot 15	1,049	---	2,238	2,460	28	222	3,841	Austinburg ss. - show oil and gas, 2,460-65
18	Ohio Fuel Gas Co.	1	Geo. E. Chester	Ashtabula	Rome	Lot 34	878	220	1,880	2,140	9	260	6,004	Austinburg ss. - dry - water
19	Ohio Fuel Gas Co.	1	J. Q. Metcalf	Ashtabula	Saybrook	T-36	651	---	1,370	1,665	2	295	2,930	Small show of gas
20	Ohio Fuel Gas Co.	1	John Dunnick	Ashtabula	Sheffield	Lot 28	897	---	1,835	2,112	13	277	3,429	Austinburg ss. - gas, 701M, 2,112-15
21	B. H. Putnam	2	Wilson-Brawley	Athens	Troy	3	837	1,982	4,132	4,220	10	88	4,265	Gas, 5,000M
22	Ohio Fuel Gas Co.	260	Sunday Creek Coal Co.	Athens	York	26	948	1,155	2,472	2,540	15	68	3,704	Gas, 1M, exhausted in few hours
23	Nat. Gas Co. of W. Virginia	8	T. H. Mobley	Belmont	Smith	19	1,174	2,002	5,451	5,651	52	200	7,887	Dry
24	Texas Co.	1	Lillie Gillespie	Belmont	Union	4	1,233	1,795	5,105	5,309	27	204	7,455	Dry
25	Ohio Fuel Gas Co.	1	O. A. Jones	Belmont	Warren	16	1,055	1,632	4,667	4,839	22	172	4,867	Dry
26	C. A. Smith	1	C. D. Peterson	Carroll	Augusta	17	1,116	881	3,571	3,824	23	253	3,900	Dry
27	Brendel Prod. Co.	1	Whitacre-Greer Fire-Proofing	Carroll	Brown	26	1,108	970	3,438	3,673	--	240	5,355	Show of gas
28	Status Development Co.	1	R. J. McIntire	Carroll	Monroe	29	---	1,037	3,833	4,053	--	220	5,715	Dry
29	John W. Kirk	1	James Stanton	Carroll	Perry	25	1,108	1,192	4,118	4,288	6	170	4,422	Dry
30	Jupiter Oil and Gas Co.	1	Daniel J. Little	Carroll	Rose	3	1,130	1,052	3,527	3,785	6	259	3,820	Show of gas
31	Nat. Gas Co. of W. Virginia	1	Earl S. Santee	Columbiana	Butler	6	1,127	530	3,244	3,544	24	300	3,583	Show of gas at 3,555
32	Nat. Gas Co. of W. Virginia	1	M. C. Randolph	Columbiana	Butler	29 SE	1,190	705	3,485	3,715	10	230	5,872	Show of oil and gas
33	Ohio Oil Co.	1	Lorin C. Stanley et al.	Columbiana	Knox	1	1,133	554	3,221	3,525	26	304	3,551	Gas - 3,750 M. A. S.
34	Ohio Oil Co.	1	Wafler Stanley	Columbiana	Knox	13	1,097	512	3,195	3,492	30	297	3,527	Gas - 890 M
35	L. Smith and Galey	1	T. Prescott et al.	Columbiana	Madison	14	1,006	627	4,050	4,310	17	260	4,327	Gas at 4,312
36	Nat. Gas Co. of W. Virginia	737	Margaret Jenkins	Columbiana	Madison	30	1,298	950	4,295	4,542	12	247	4,570	Show of oil and gas
37	Nat. Gas Co. of W. Virginia	1	W. S. Grotton	Columbiana	Wayne	25	1,166	850	4,156	4,420	22	266	4,444	Gas at 4,428-34
38	East Ohio Gas Co.	1	F. and I. Salsgiver	Columbiana	Yellow Creek	4	1,148	850	4,200	4,464	28	264	4,518	Show of gas
39	Ohio Fuel Gas Co.	1	Henry W. Crosky	Coshocton	Clark	Lot 20	792	654	2,038	2,218	10	180	3,317	Show of gas, 24 M
40	Ohio Fuel Gas Co.	1	C. B. A. Corry	Coshocton	Franklin	17	733	865	2,445	2,575	7	130	2,590	Gas, 684M Nat. at 2,575-79
41	Ohio Fuel Gas Co.	1	Charles Zimmer	Coshocton	Lafayette	SE	823	837	2,795	2,847	12	142	4,265	Dry
42	Ohio Fuel Gas Co.	1	Dev. Carnes	Coshocton	Linton	Lot 18	839	940	2,960	3,091	9	131	3,116	Gas
43	Morrow Oil and Gas	1	E. O. Rodehauer	Coshocton	Newcastle	1	---	805	2,010	2,135	10	125	3,146	Dry
44	Pure Oil Co.	3	A. Van Windle	Coshocton	Perry	14	1,029	870	2,088	2,190	12	102	3,191	Small show of oil
45	Zanesville Tool and Supply Co.	1	R. L. Hays	Coshocton	Tiverton	12	1,210-T	1,010	2,227	2,320	--	93	3,428	Water
46		-	R. S. Singleton	Cuyahoga	Brecksville	Lot 80	640	---	1,405	1,775	--	370	2,210	Water
47	Snyder et al.	3	Mary Buhl	Cuyahoga	Independence	Lot 15	882-T	5	1,451	1,700	20	249	2,717	Dry
48	Benedum-Trees Oil Co.	1	Franz and Eichenberg Unit	Cuyahoga	Mayfield	Lot 20	1,017	---	1,526	1,870	40	344	5,823	Dry
49	Benedum-Trees Oil Co.	1	Ora Parker	Cuyahoga	Mayfield	Lot 41	950	---	1,510	1,758	60	248	2,846	40M gas/show oil; blew down A. S.
50	Wiser Oil Co.	1	Frank Hathaway	Cuyahoga	Newburg	T-2	965-T	138	1,635	1,933	7	298	1,940	Show of gas, 2M
51	Ohio Fuel Gas Co.	1	A. D. Hall	Cuyahoga	Olmstead	Lot 11	780	---	1,190	1,370	55	180	2,722	Water
52	McGrath et al.	3	Geo. W. Hausheer Co.	Cuyahoga	Parma	Lot 34	950-T	70	1,478	1,705	48	227	3,110	Gas, 67M, drowned out
53	Frank Lyons	1	H. L. Harburger	Cuyahoga	Parma	Lot 42	1,086-T	180	1,600	1,805	50	205	3,306	200M at 1,810; 360M at 1,840, drowned out
54	W. C. Best	1	Schroeder	Cuyahoga	Royalton	Lot 11	---	---	1,606	1,776	60	170	1,836	Gas
55	East Ohio Gas Co.	1	Alvine Borchert	Cuyahoga	Strongsville	Lot 33	850-T	---	1,445	1,685	55	240	3,010	Water at 1,685
56	E. R. Edson and Son	1	Wm. Harrisberger	Erie	Vermillion	2	735	---	526	679	3	157	2,100	Show of oil
57	Pfeiffer	1	Lewis J. Smith	Gallia	Greenfield	19	857-T	1,176	2,167	2,219	13	52	3,019	Smell of oil 2,219
58	East Ohio Gas Co.	1	G. W. Crile	Geauga	Chardon	Lot 1	1,031	---	1,780	2,139	12	359	6,101	Show of gas 10M
59	Benedum-Trees Oil Co.	1	M. V. S. White	Geauga	Chester	Lot 5	1,149	110	1,816	2,215	28	399	3,958	Dry
60	Galey et al.	1	C. A. Davis	Geauga	Hambden	Lot 4	1,197	138	2,096	2,474	20	378	2,580	Small show of oil
61		1	Walter Trayer	Geauga	Huntsburg	Lot 69	1,049	---	2,110	2,506	--	386	2,580	Austinburg ss. - water
62	Geauga Mold. Div. Co.	1	Fee	Geauga	Middlefield	Lot 32	---	197	2,240	2,517	--	277	2,600	Small show of gas
63	W. C. Best	1	W. C. Best	Geauga	Munson	Lot 4	1,228	236	2,121	2,525	23	404	3,980	Dry
64	Ohio Fuel Gas Co.	1	R. P. Proudft	Guernsey	Adams	9	1,013	1,180	3,300	3,413	16	113	3,430	Gas, 2,100M
65	Logan Gas Co.	3	S. R. Williams	Guernsey	Adams	13	1,063	1,254	3,298	3,415	11	117	3,426	Gas, 2,200M A. S.
66	Ohio Fuel Gas Co.	1	W. L. Ford	Guernsey	Adams	22	809	1,045	3,140	3,258	10	118	3,269	Gas, 1,200M
67	Ohio Fuel Gas Co.	1	C. F. Danford	Guernsey	Cambridge	Lot 7	860	1,095	3,291	3,407	12	116	3,419	Gas, 1,700M A. S.
68	Preston Oil Co.	1	S. W. Stewart	Guernsey	Cambridge	4	787	1,015	3,240	3,370	7	130	3,377	Oil - 12 bbls.
69	Ohio Fuel Gas Co.	2	D. O'Brian	Guernsey	Cambridge	5 S	868	1,125	3,307	3,431	13	124	3,444	Gas, 3,200M A. S.
70	Frank Strangers et al.	1	J. F. Devold	Guernsey	Center	Lot 11	989	1,302	3,716	3,870	5	154	3,875	Water

TABLE 2 CONT'D

Map Number	Operator	Well Number	Farm Name	County	Township	Sec., Lot or Quart.	Surface Elevation	Top of Berea	Top of Big Lime	Top of Oriskany	Thickness of Oriskany	Big Lime-Orisk. Interval	Total Depth	Remarks
71	Preston Oil Co.	6	J. R. Fulton	Guernsey	Jackson	6	1,125	1,360	3,552	3,671	18	119	3,689	Oil, 105 bbls.
72	Ohio Fuel Gas Co.	3	J. V. Ferguson	Guernsey	Jackson	13	805	1,065	3,315	3,440	8	125	3,448	Show of gas - 1M
73	Charles Reigler et al.	1	Martin Ford	Guernsey	Jefferson	1	848	1,113	3,575	3,742	8	167	3,754	Dry - little water
74	Ohio Fuel Gas Co.	1	Warden and Derr	Guernsey	Knox	2	993	1,140	3,221	3,348	10	127	3,379	Gas, 13,700M A.S.
75	Ohio Fuel Gas Co.	1	Ray Smith et al.	Guernsey	Knox	5	1,071	1,185	3,169	3,299	12	130	3,316	Gas
76	Ohio Fuel Gas Co.	1	J. Glen	Guernsey	Knox	18	822	985	3,046	3,170	11	124	3,181	Gas, 1,470M natural
77	Ohio Fuel Gas Co.	1	F. C. Anderson	Guernsey	Liberty	1	1,011	1,225	3,543	3,711	7	168	3,718	Dry - salt water
78	Ohio Fuel Gas Co.	1	Foster Webb et al.	Guernsey	Liberty	5	858	1,040	3,192	3,342	10	150	3,355	Gas, 1,470M natural
79	Jewell et al.	1	C. Weaver - R. S. Grimes	Guernsey	Monroe	5	1,055	1,195	3,455	3,624	9	169	3,633	Oil - show of gas
80	Wittmer Oil Co.	1	John Gardener	Guernsey	Oxford	8	1,150	1,561	4,424	4,620	40	196	4,724	Dry
81	Ohio Fuel Gas Co.	1	L. O. Riddle	Guernsey	Spencer	8	896	1,360	3,425	3,547	14	122	3,675	Show of oil
82	Leonard Oil and Gas Co.	1	T. A. White	Guernsey	Westland	9	922	1,197	3,302	3,427	15	125	3,432	Gas, 11,700M A.S.
83	Ohio Fuel Gas Co.	2	R. O. Galloway	Guernsey	Westland	12	1,050	1,338	3,450	3,563	10	113	3,575	1,000M natural
84	Pure Oil Co.	2	D. D. Ridgley	Guernsey	Westland	20	880-T	1,179	3,336	3,455	8	119	3,465	Oil, 70 bbls A.S.
85	Preston Oil Co.	5	J. O. Alloway	Guernsey	Wheeling	10	955	1,094	3,372	3,532	6	160	3,538	Oil, 50 bbls A.S. - show of gas
86	Ohio Fuel Gas Co.	1	J. C. Bowers	Guernsey	Wheeling	12	837	942	3,000	3,148	11	148	4,643	Small show of gas
87	Ohio Fuel Gas Co.	1	J. H. Jackson	Guernsey	Wheeling	16	990	1,158	3,302	3,463	7	161	3,480	Show of gas, 30M at 3,464
88	Columbian Carbon Co.	1	G. D. Miller	Harrison	German	23	1,223	1,402	4,588	4,769	43	181	5,250	Show of gas
89	Benedum-Trees Oil Co.	1	A. and R. Patterson	Harrison	Monroe	8	910	960	3,613	3,810	5	197	5,614	Dry
90	Frank Stranger	1	B. B. Barclay	Harrison	Moorefield	29	896-T	1,278	4,164	4,329	10	165	4,339	Water
91	Brendel Prod. Co.	1	Musk. Watershed Dist.	Harrison	Stock	20	953	1,111	3,935	4,086	39	151	5,966	Dry
92	Texas Co.	1	E. A. Mizer	Harrison	Stock	32	921	1,150	4,121	4,298	56	177	6,301	Smell of gas
93	Ohio Oil Co.	1	W. H. Blackwell	Harrison	Washington	2	1,135	1,430	4,234	4,386	22	152	6,255	Water at 4,390
94	East Ohio Gas Co.	1	Warner Phillips	Harrison	Washington	32	1,020	1,255	3,890	4,048	25	158	5,820	Dry
95	Ohio Fuel Gas Co.	1	Zella Quillen	Holmes	Kilbuck	8	780	660	2,040	2,185	15	145	3,354	Show of oil and gas
96	Kemrow Co.	1	Les Carpenter	Holmes	Kilbuck	16	795-T	620	1,950	2,100	15	150	3,220	Dry
97	Ohio Fuel Gas Co.	1	T. D. Martin et al.	Holmes	Knox	19	1,162	900	1,835	1,928	47	93	1,978	Gas
98	Ohio Fuel Gas Co.	1	J. L. Bush	Holmes	Knox	30	1,227	810	1,905	2,005	40	100	2,494	Show of gas and water
99	Ohio Fuel Gas Co.	1	L. J. Voder	Holmes	Palmt	28	1,143	917	2,636	2,800	12	164	4,153	Show of gas
100	Shields, et al.	1	A. P. Flack	Holmes	Praire	3	854	598	1,985	2,265	10	280	3,450	Dry - doubtful Oriskany
101	Ohio Fuel Gas Co.	2	Harry Watson	Holmes	Praire	16	973	700	2,065	2,185	25	130	3,425	Dry
102	Ohio Fuel Gas Co.	1	C. D. Phillips	Holmes	Richland	1	1,036	720	1,964	2,083	4	119	2,587	Gas
103	Ohio Fuel Gas Co.	1	L. B. Owen	Holmes	Richland	5	884	570	1,818	1,932	14	114	3,075	Show of gas
104	Ohio Fuel Gas Co.	1	Hazel Hastings	Holmes	Ripley	28	1,086	760	2,000	2,220	20	220	3,248	Water
105	Ohio Fuel Gas Co.	1	Rachel Bucy	Holmes	Washington	1	1,153	810	1,990	2,200	30	210	3,172	Dry
106	Furbaugh et al.	1	J. W. Kinsell	Huron	Greenwich	Lot 3	-----	233	1,008	1,186	---	178	2,991	Dry
107	Eastern Ohio Devel. Co.	1	Eastern Ohio Devel. Co.	Jefferson	Island Creek	26	1,172	1,473	4,935	5,170	5	235	5,315	Water
108	East Oil and Gas Co.	1	H. R. Muesegas	Jefferson	Salem	22	1,248	1,385	4,734	4,916	22	182	5,000	Dry
109	Ross Riggs et al	1	W. G. Dugan	Knox	Clay	20	1,142	830	1,830	1,918	9	88	2,972	Water
110	Davis and Stout	2	W. Evers	Knox	Clay	25	1,004	580	1,561	1,654	8	89	2,150	Show of oil and gas
111	Davis - Smith	1	Walter Purdy	Knox	Harrison	Lot 4	-----	824	1,873	1,970	10	97	2,928	Show of gas
112	Preston Oil Co.	1	Ollie Harris	Knox	Jackson	18	1,146	904	2,075	2,174	8	99	3,135	Gas, 1,500M natural
113	Harrey Perkins	2	Nancy Priest	Knox	Jefferson	11	-----	533	1,625	1,749	---	125	2,207	Dry
114	Davis - Stout	4	A. D. McCullough	Knox	Morgan	Lot 10	-----	695	1,640	1,728	4	88	1,750	Show of gas, 72M
115	Upham Gas Co.	1	R. O. Kirkpatrick	Knox	Morris	10	1,139	557	1,400	1,493	---	93	1,853	Show of oil
116	C. O. Moore et al.	3	Dale Cochran	Knox	Pleasant	3 Q	1,175-T	680	1,559	1,653	7	94	1,860	Show of oil and gas
117	John T. Galey	1	John Beres	Lake	Concord	Lot 3	708	---	1,367	1,726	26	359	3,128	Water
118	C. A. McMullan	1	C. R. Marley	Lake	Concord	Lot 9	985	---	1,680	2,046	2	360	2,048	Show of gas - water
119		-	Kirtland Country Club	Lake	Kirtland	Lot 16	635	---	1,360	1,730	---	370	2,800	Show of gas
120	East Ohio Gas Co.	1	S. I. Mather	Lake	Leroy	Lot 15	800-T	---	1,662	2,014	6	352	3,626	Dry
121	Benedum-Trees Oil Co.	1	M. Celezic	Lake	Leroy	23	1,009	125	1,752	2,098	13	346	3,612	Water
122	Madison Oil and Gas Co.	2	C. C. Rand	Lake	Madison	Lot 9	685	---	1,370	1,684	---	314	2,954	Austinburg - show oil and gas
123		2	Munson	Lake	Mentor	Lot 10	658	---	1,293	1,663	---	370	1,700	Gas, 500M
124	John Sherwin Sr.	2	John Sherwin Sr.	Lake	Willoughby	Lot 4	655	---	1,300	1,700	---	400	3,070	Austinburg ss. - water
125	Ohio Fuel Gas Co.	3	Geo. E. Carlyle	Lawrence	Elizbeth	25	908	1,480	2,340	2,420	---	80	3,252	Dry
126	Ohio Fuel Gas Co.	1	E. Oliver	Licking	Newton	NE 1/4	958	555	1,500	1,590	---	90	1,997	Show of gas
127	W. Davidson et al.	3	Eli Mills	Licking	Washington	Lot 1	1,145-T	784	1,742	1,827	5	85	1,832	Gas, 200M natural
128	Ohio Fuel Gas Co.	1	Erie Alexander	Lorain	Carlisle	16	788	15	1,054	1,240	10	186	2,490	Show of gas 15M
129	Ohio Fuel Gas Co.	1	A. M. Mitchell	Lorain	Eaton	Lot 11	785	35	1,175	1,365	38	190	2,678	Dry
130	Ohio Fuel Gas Co.	1	C. A. Montague	Lorain	Eaton	Lot 77	788	32	1,110	1,254	21	144	2,580	Dry
131	Ohio Fuel Gas Co.	1	Arthur Carpenter	Lorain	Eaton	Lot 85	779	35	1,090	1,305	70	215	2,554	Water at 1,305
132	Wiser Oil Co.	1	Jerry Whitney	Lorain	Pittsfield	Lot 48	832-T	20	847	1,094	46	247	2,219	Water at 1,094
133	Kemrow Co.	1	Violetta Terrell	Lorain	Ridgeville	7	715-T	---	1,046	1,300	50	254	2,518	Dry
134	East Ohio Gas Co.	1	A. M. Lloyd	Mahoning	Austintown	Lot 55	1,135	432	3,159	3,428	11	269	3,555	Dry
135	Magnolia Petroleum Co.	1	F. M. Fields	Mahoning	Berlin	Lot 19	1,058	404	2,941	3,265	5	324	5,206	Dry
136	Smith Petroleum Co.	1	F. W. Cramer	Mahoning	Ellsworth	14	-----	338	3,026	3,299	15	273	3,377	Dry
137	Ohio Oil Co. and J. T. Galey	1	D. B. McCune	Mahoning	Gosben	11	1,206	563	3,294	3,609	17	315	3,632	Gas, 1,100M at 3,613 natural
138	D. B. McCune	1	Ruby Hollaway	Mahoning	Gosben	14	1,122	473	3,209	3,526	16	317	5,406	Show of oil
139	H. C. Phillips et al.	1	R. and B. Fenton	Mahoning	Poland	Lot 77	1,145	565	3,785	4,012	27	227	4,047	Water
140	Ohio Oil Co.	1	J. C. Warren	Mahoning	Smith	13	1,127	482	3,098	3,428	17	330	5,298	Show of oil and gas
141	East Ohio Gas Co.	1	J. Braunstein	Mahoning	Springfield	16	1,159	663	3,907	4,133	20	228	6,059	Show of gas
142	East Ohio Gas Co.	1	G. B. and R. Smith	Mahoning	Springfield	35	1,104	660	4,027	4,257	27	230	4,402	Small show of gas
143	East Ohio Gas Co.	1	Anna Petrok et al	Mahoning	Springfield	36	1,087	670	4,083	4,299	33	216	4,384	Show of gas at 4,316
144	Reed and Layfield	1	Patton	Medina	Granger	Lot 25	1,084-T	468	1,973	2,132	21	159	2,172	Gas - show
145	Ohio Fuel Gas Co.	1	G. J. Young	Medina	Granger	Lot 83	1,156	468	1,975	2,225	15	250	3,520	Water
146	Ohio Fuel Gas Co.	1	Fred W. Johnson	Medina	Hinckley	Lot 15	932	150	1,605	1,785	20	180	3,195	Dry
147	Ohio Fuel Gas Co.	1	Clara N. McGwinn	Medina	Hinckley	Lot 30	1,075	275	1,785	1,975	39	190	3,402	Dry
148	Ohio Fuel Gas Co.	1	Joe Perkovite	Medina	Hinckley	Lot 49	1,238	423	1,935	2,140	30	205	3,575	Show of oil
149	Ohio Fuel Gas Co.	1	Beack - Roepke	Medina	Hinckley	Lot 95	1,197	539	2,007	2,260	10	253	3,569	Show of gas
150	Ohio Fuel Gas Co.	3	W. M. Reider	Medina	Lafayette	Lot 14	994	405	1,753	1,950	10	197	3,180	Dry
151	Edson	6	H. Metter	Medina	Litchfield	Lot 31	-----	425	1,500	1,680	5	180	2,901	Slight show of gas

TABLE 2 CONT'D

Map Number	Operator	Well Number	Farm Name	County	Township	Sec., Lot, or Quarter	Surface Elevation	Top of Berea	Top of Big Lime	Top of Oriskany	Thickness of Oriskany	Big Lime-Orisk. Interval	Total Depth	Remarks
152	Obermiller	3	August Abrama	Medina	Liverpool	8	838-T	120	1,359	1,500	9	141	1,560	Show of gas, 3M
153	Ohio Fuel Gas Co.	1	H. C. and H. Hange	Medina	Spencer	10	842	100	1,240	1,400	5	160	2,500	Show of gas, 42M
154	Roy Proffitt	1	David Fleming et al.	Meigs	Lebanon	Lot 179	580-T	1,986	4,125	4,223	13	98	4,275	Gas, 100M A. S.
155	Roy Proffitt	1	E. O. Taggart	Meigs	Lebanon	16	899	2,198	4,300	4,404	21	104	4,427	Small producer
156	W. I. Gettman	3	E. O. Taggart	Meigs	Lebanon	17	849	2,175	4,260	4,356	4	96	4,413	Dry
157	Sinclair Prairie	1	W. T. Longworth	Meigs	Olive	Lot 23	819	1,958	3,977	4,057	5	80	7,466	Small show oil and gas
158	B. H. Putnam	1	A. P. Osborne	Meigs	Olive	7-13	838	2,068	4,156	4,240	10	84	4,280	Dry
159	South Penn. Oil	12	Louise Kerr	Monroe	Center	6	1,189	2,112	5,329	5,514	69	187	5,620	Dry
160	Barnesville Devel. Co.	1	A. C. and E. L. Peters	Monroe	Malaga	27	-----	1,902	4,978	5,132	20	154	5,170	Dry
161	Logan Gas	1	Wilkie Huffman	Morgan	Bloom	26	973	1,470	3,247	3,485	--	238	4,664	Show of gas
162	Wittmer Oil and Gas Co.	1	I. E. Morris	Morgan	Bristol	13 S	767	1,456	3,425	3,670	50	245	4,969	Dry
163	Wittmer Oil and Gas Co.	1	W. D. Wortman	Morgan	Bristol	24	781	1,450	3,422	3,685	15	263	4,901	Show of gas, 18M
164	Barnesville Devel. Co.	1	C. E. Combs	Morgan	Center	9	738	1,524	3,610	3,707	12	115	3,719	Water
165	J. E. Morrow and Wittmer Oil	1	M. D. and F. F. Dye	Morgan	Manchester	30	-----	1,584	3,612	3,713	7	101	5,205	Show of gas
166	J. E. Morrow	1	L. F. Murrey	Morgan	Meigsville	12	-----	1,615	3,620	3,710	20	90	5,231	Show of gas, 60M
167	Clyde M. Foraker	1	C. W. Dearth	Morgan	Meigsville	22	908	1,615	3,538	3,623	14	85	5,097	Dry
168	Smith and Smith	4	Charles Bush	Morgan	York	25	-----	1,143	2,690	2,790	12	100	3,998	Dry
169	Industrial Gas Corp.	1	U. S. A. Equitable Savings	Muskingum	Blue Rock	10	864	1,252	2,990	3,208	5	218	4,348	Smell of gas
170	Industrial Gas Corp.	12	U. S. A. Equitable Savings	Muskingum	Blue Rock	15	943	1,340	3,076	3,285	12	211	4,500	Show of oil at 3,289
171	Ohio Fuel Gas Co.	1	Emma Ford	Muskingum	Newton	14	971	980	2,330	2,420	10	90	3,440	Dry
172	Wittmer Oil Co.	1	E. V. Buchanon	Muskingum	Perry	11	986	1,300	3,050	3,157	7	107	3,164	Oil, 30 bbls.
173	Atha Oil Co.	1	L. M. Bryan	Muskingum	Perry	20	1,012	1,322	3,076	3,186	5	110	3,191	Oil, 40 bbls.
174	Atha Oil Co.	1	C. W. Wainwright	Muskingum	Union	18	910	1,330	3,144	3,249	--	105	4,597	Show of gas
175	Sutton-Staggers	2	W. F. Cline	Noble	Beaver	19	1,112	1,698	4,543	4,718	26	175	4,820	Show of oil
176	Penn-Ohio Gas Co.	1	Riley Harding	Noble	Brookville	9	1,035	1,630	3,743	3,865	7	142	5,281	Dry
177	Chaseville Oil Co.	6	D. H. Murphy	Noble	Buffalo	13	1,018-T	1,445	3,984	4,128	17	144	4,179	Dry
178	H. Rey Helvenston	1	Ava Brick Co.	Noble	Buffalo	31	850	1,261	3,614	3,760	10	146	3,780	Dry
179	J. T. Galey	1	Jacob Ullman	Noble	Elk	21	703	1,530	4,512	4,652	60	140	4,728	Show of oil at 4,664
180	Twin Six	1	Florence Mitchell	Noble	Jackson	7	813	1,577	3,843	3,953	3	110	4,012	Dry
181		1	William May	Noble	Jackson	23	846	1,581	4,160	4,303	14	143	4,317	Dry
182		-	Earl Stephens	Noble	Jefferson	8	756	---	4,170	4,310	--	160	4,373	Show of gas at 4,310
183		-	George Frame	Noble	Wayne	4	922	1,200	3,905	4,060	--	155	4,060	Water
184	Brendel Prod. Co.	1	W. T. Flynn	Portage	Atwater	Lot 50	1,045	none	2,755	2,955	--	200	4,868	Show of gas
185	R. B. Weeds	3	J. and F. Brandes	Portage	Aurora	18	1,148-T	---	2,184	2,384	40	200	4,021	Dry
186	W. C. Best	1	J. Novy	Portage	Nelson	Lot 52	-----	126	2,321	2,754	--	433	2,759	Water
187	Ringle and Fierbaugh	1	H. W. White	Richland	Casa	14	1,050-T	143	861	1,030	5	169	1,035	Show of gas
188	Ohio Fuel Gas Co.	2	J. J. Banner	Richland	Monroe	1	1,267	---	1,651	1,800	20	185	2,755	Water
189	Demick of Huntington	1	A. L. Feurt	Scioto	Greene	Lot 19	545	535	1,267	1,348	--	81	1,432	Show of oil and gas
190	M. R. Winkleman	1	C. F. Saalberg	Stark	Bethlehem	5	920-T	666	2,590	2,780	20	190	4,294	Dry
191	Ed. Obermiller	1	R. and C. Slutz	Stark	Bethlehem	11	1,010-T	794	2,865	3,035	30	170	4,580	Water
192	M. B. Belden	1	W. C. Brucks	Stark	Bethlehem	22	995	724	2,754	2,845	10	91	4,437	Dry
193	Republic Steel Corp.	9	Steel Plant	Stark	Canton	2	1,055	658	2,845	3,060	15	215	4,681	Water
194	Brendel Prod. Co.	1	E. Piero	Stark	Canton	6	1,130-T	790	2,822	3,027	26	205	4,588	Show of oil and gas
195	Brendel Prod. Co.	3	R. S. Turowski	Stark	Canton	11	1,115-T	721	2,897	3,090	10	193	4,721	Dry
196	Republic Steel Corp.	12	Steel Plant	Stark	Canton	20	1,041	729	2,830	3,039	26	209	4,591	Dry
197	Ohio Fuel Gas Co.	1	E. W. Rohrer	Stark	Jackson	1	1,085	630	2,603	2,881	13	278	4,126	Gas
198	Brendel Prod. Co.	3	A. and J. Willaman	Stark	Jackson	10	1,181	620	2,605	2,805	50	200	4,366	Show of gas, 150M
199	East Ohio Gas Co.	1	Society of Precious Blood	Stark	Jackson	27	1,120-T	705	2,650	2,887	10	237	2,897	Gas, 281M A. S.
200	M. R. Belden	1	John Syler	Stark	Jackson	36	1,115-T	710	2,765	3,000	35	235	4,538	Dry
201	Lyons et al.	1	I. and B. Snode	Stark	Lexington	20	1,067	550	2,920	3,186	22	266	3,203	Dry
202	Ohio Fuel Gas Co.	1	F. G. Hahn	Stark	Nimishillan	5	1,259	760	2,972	3,245	30	273	4,963	Show of gas
203	Brendel Prod. Co.	1	I. and F. Drowns	Stark	Osnaburg	4	1,140	713	3,040	3,340	15	300	5,068	Water
204	Pfetter	1	C. T. Newton	Stark	Perry	27	1,058-T	742	2,718	2,928	25	210	4,534	Show of oil
205	East Ohio Gas Co.	1	Stark Co. Commission	Stark	Perry	32	980-T	655	2,603	2,810	15	207	4,294	Show of oil
206	Brendel Prod. Co.	1	W. M. Miller	Stark	Plain	4	1,135	690	2,725	3,025	25	300	4,548	Dry
207	East Ohio Gas Co.	2	R. C. Greer	Stark	Plain	22	1,060-T	645	2,780	3,000	8	220	4,681	Dry
208	East Ohio Gas Co.	1	Tarr Community	Stark	Plain	31	1,130-T	745	2,788	3,028	10	232	4,588	Show of oil and gas
209	J. E. Cummingsham	2	Cummingsham	Stark	Plain	35	1,080-T	703	2,866	3,121	22	255	4,725	Water
210	Ohio Fuel Gas Co.	1	L. L. Kilgore	Stark	Sugar Creek	21	1,069	780	2,612	2,805	14	193	2,828	Gas, 560M
211	Wiser Oil Co.	1	S. Gains	Summit	Bath	Lot 41	1,215-T	507	2,055	2,265	50	210	3,691	Show of gas
212	Wiser Oil Co.	1	W. W. Thornton	Summit	Bath	Lot 47	1,010-T	280	1,840	2,030	--	190	3,522	Show of gas, 20M at 2,035
213	W. J. Dempsey	1	Bender	Summit	Boston	Lot 1	-----	120	1,808	1,958	12	150	1,971	Show of oil and gas, 4 bbls.
214	Schaffer	1	Emery	Summit	Boston	Lot 2	-----	---	1,695	1,855	20	160	3,059	Oil
215	Bender	2	Bender	Summit	Boston	Lot 4	-----	---	1,760	1,893	47	133	2,028	Show of oil and gas
216	East Ohio Gas Co.	4	J. S. Synder	Summit	Franklin	27	1,015	557	2,330	2,530	60	200	3,977	Water
217	East Ohio Gas Co.	2	A. H. and C. E. Hans	Summit	Green	7	1,038-T	542	2,350	2,470	10	120	4,030	Show of gas
218	Obermiller et al.	1	Jacob Lanby	Summit	Green	26	1,218-T	705	2,660	2,930	--	270	4,464	Dry
219	East Ohio Gas Co.	1	Y. M. C. A. Akron	Summit	Green	32	1,025-T	604	2,445	2,730	--	285	4,147	Show of oil
220	Butler	2	Essig	Summit	Green	35	1,187	712	2,645	2,902	5	257	4,463	Show of gas, 150M
221	Wiser Oil Co.	1	M. and E. Vanaman	Summit	Northampton	Lot 56	993-T	255	1,940	2,140	--	200	3,753	Small show of oil and gas at 2,171
222	Wiser Oil Co.	1	B. Rocek	Summit	Richfield	Lot 5	1,009	240	1,815	2,035	--	220	3,525	Show of oil
223	Wiser Oil Co.	1	Stauffer estate	Summit	Richfield	Lot 15	1,054	255	1,845	2,070	36	225	3,565	Oil, 12 bbls.
224		1	Warren M. Brown	Trumbull	Howland	Lot 26	870-T	110	2,800	3,040	15	240	3,071	Dry
225	Magnolia Petroleum Co.	1	Don Giovannone	Trumbull	Lordstown	Lot 20	940	250	2,782	3,150	10	368	4,828	Dry
226	Morse Oil and Gas	1	Geauga Realty Co.	Trumbull	Mecca	Lot 2	935	51	2,436	2,751	--	315	4,164	Austinburg ss. - dry
227	Wittmer Oil and Gas Co.	1	Dallas Strock	Trumbull	Southington	14	856	150	2,235	2,558	--	323	4,173	Gas, 300M
228	Hickman et al.	1	Emrick	Trumbull	Vernon	Lot 2	-----	---	3,005	3,239	11	234	3,250	Gas
229	W. C. Best	1	C. Fenn	Trumbull	Vernon	Lot 5	1,085	255	2,964	3,204	4	240	3,220	Gas
230	F. B. Walton	1	A. A. Wohland	Tuscarawas	Clay	Lot 29	815	848	3,152	3,321	3	169	3,324	Dry
231	Hanley and Bird	1	E. G. Becker	Tuscarawas	Dover	Lot 13	1,130-T	1,000	3,186	3,371	24	185	4,919	Oil, 24 bbls./31 hrs.

TABLE 2 CONT'D

Map Number	Operator	Well Number	Farm Name	County	Township	Sec., Lot or Quarter	Surface Elevation	Top of Berea	Top of Big Lime	Top of Oriskany	Thickness of Oriskany	Big Lime-Oris. Interval	Total Depth	Remarks
232	Brendel Prod. Co.	2	Emmerson Dessecker	Tuscarawas	Fairfield	15	1,150-T	1,053	3,306	3,498	3	192	5,068	Gas, 133M
233	J. A. Upham	1	Lloyd Murphy	Tuscarawas	Fairfield	22	1,120-T	995	3,495	3,655	10	160	5,313	Dry
234	Ohio Fuel Gas Co.	1	Sarah Weber	Tuscarawas	Franklin	17	1,237	975	2,915	3,080	51	165	4,638	Water
235	J. A. Upham	1	Sarah Oler Heirs	Tuscarawas	Goshen	Lot 22	913-T	937	3,365	3,530	18	165	5,189	Dry
236	F. B. Walton	1	J. Coventry heirs	Tuscarawas	Goshen	Lot 28	900	917	3,185	3,356	9	171	4,902	Show of gas
237	S. J. Brendel Oil and Gas	1	Stone Creek Brick Co.	Tuscarawas	Jefferson	12	1,142	1,083	3,200	3,350	5	150	4,894	Show of oil and gas
238	Ohio Fuel Gas Co.	1	Geo. Duerr	Tuscarawas	Lawrence	Lot 89	936	785	2,975	3,150	20	175	4,731	Water
239	J. A. Upham	1	J. A. McCullem	Tuscarawas	Mill	Lot 8	850-T	900	3,365	3,537	12	172	5,249	Dry
240	Ohio Fuel Gas Co.	1	Harry McFadden	Tuscarawas	Oxford	21	1,089	1,202	3,434	3,599	10	165	3,609	Gas, 634M A.S.
241	Frank Lyons	1	J. Dunlap	Tuscarawas	Rush	12	1,172	1,254	3,700	3,871	9	171	5,486	Show of gas
242	Nat. Gas of West Virginia	1	G. G. Evans	Tuscarawas	Sandy	5	1,020	773	2,970	3,165	10	195	4,806	Water
243	Knox Exploration	1	R. Wengar	Tuscarawas	Union	21	878-T	910	3,490	3,756	11	266	5,356	Dry
244	Ohio Fuel Gas Co.	1	A. Meek	Tuscarawas	Washington	Lot 36	1,102	1,200	3,473	3,642	9	169	3,651	Gas, 1,600M
245	Ohio Fuel Gas Co.	2	C. E. Berger	Tuscarawas	Washington	Lot 31	951	1,025	3,382	3,575	8	193	3,607	Dry
246	Oxford Oil and Gas	1	Daniel Kees	Tuscarawas	Washington	NW 1/4, Bl. 31	992	1,080	3,342	3,517	12	175	3,554	Show of gas
247	Ohio Fuel Gas Co.	1	C. Bartholme	Tuscarawas	Wayne	Lot 4	1,201	927	2,766	2,952	10	186	4,394	Small show of oil
248	Columbian Carbon Co.	1	C. H. Augenstein	Washington	Adams	Lot 49	802	1,668	4,258	4,432	4	174	4,443	Water
249	Earl Stephens	22	Longfellow	Washington	Aurelius	7	680	1,415	4,065	4,205	35	140	4,260	Show of oil
250	B. H. Putnam	1	Ira H. Bell	Washington	Belpre	25	640							Drilling at 3,976
251	B. H. Putnam	1	Lillie Long (Williams)	Washington	Belpre	29	717	1,870	3,975	4,118	35	143	4,174	169M Nat. Hydrotrated to 1,905M
252	B. H. Putnam	1	John A. Walker	Washington	Belpre	29	671	1,827	3,970	4,079	28	109	4,134	105M Nat., 184M A.S., 267M after 2nd shot
253	B. H. Putnam	1	J. S. Lamp	Washington	Belpre	Lot 66	637	1,815	3,965	4,080	36	115	4,132	Gas, 6,000M
254	Sylvania Prod. Co.	1B	Knowlton	Washington	Independence	10	1,001	2,085	5,467	5,667	25	200	7,889	Show of gas
255	Sinclair Prairie Oil Co.	1	Rosanna Hill	Washington	Lawrence	25	894	1,926	4,836	5,121	63	285	5,205	Dry
256	East Ohio Gas Co.	1	D. and E. Hall	Washington	Marietta	17	778	1,995	4,700	4,903	37	203	5,089	Show of gas at 4,905
257	Columbian Carbon Co.	1	J. C. Stollar	Washington	Palmer	32	788	1,743	3,833	3,942	31	109	3,991	Water
258	Ross and Yeager	1	C. Ammon	Washington	Warren	29	930	2,047	4,400	4,548	27	158	4,651	Dry
259	B. H. Putnam	1	George R. Arnold	Washington	Watertown	Lot 60	895	1,932	4,221	4,349	30	128	4,399	Gas, 638M nat., 2,900M A.S.
260	Creston Drilling Co.	2	George Smith	Wayne	Cannah	4	-----	351	1,712	1,856	--	144	2,721	Dry
261	Ohio Fuel Gas Co.	1	N. Hockenberry	Wayne	Chester	31	1,121	685	1,820	2,033	5	213	3,063	Show of gas
262	East Ohio Gas Co.	6	F. W. Galehouse	Wayne	Chippewa	21	953	490	2,097	2,355	5	358	3,636	Show of oil
263	Ohio Fuel Gas Co.	1	W. H. Ewing	Wayne	Congress	34	1,127	670	1,900	2,047	8	147	3,202	Show of gas
264	Ohio Oil Co.	1-A	C. W. Foster	Wayne	Franklin	24	1,110-T	887	2,350	2,665	3	315	3,846	Dry
265	Ohio Fuel Gas Co.	1	W. D. Dodez	Wayne	Paint	10	1,094	795	2,497	2,674	24	178	4,095	Show of gas
266	Ohio Fuel Gas Co.	1	S. W. Speicher	Wayne	Paint	23	1,217	927	2,675	2,855	10	180	4,282	Show of gas
267	Kemrow Co.	1	D. Wharton	Wayne	Plain	33	-----	721	1,954	2,132	18	178	3,219	Dry
268	Ohio Oil Co.	8	J. H. Armstrong	Wayne	Wooster	14	1,119	755	2,188	2,373	5	185	3,219	Dry

T: Surface Elevation from Topographic Map

## THE CANTON GAS POOL

By  
Henry Belden

This is the story of the Canton, Ohio, gas pool. There is no attempt here to come to any definite conclusion. It is merely a chronological history of the development and operation of the pool. It all started on July 7, 1945 when the Stark County Infirmary Well No. 1, drilled by Marsh Belden, was completed at 5,126,000 cubic feet of gas. This pool developed into the first major Clinton sand discovery since the late Twenties when the Brendel Producing Company of Pittsburgh, Pennsylvania, opened the Stark-Summit Pool which lies between Canton and Akron.

Clinton sand production is an old story in Ohio for it has been a known gas sand since early in 1887, when a well being drilled to the Trenton formation at Lancaster, Ohio, encountered production and was completed in the Clinton sand. It is most generally found in Ohio with some production in New York, Ontario, and some "shows" in West Virginia. The belt runs almost north and south throughout the entire length of Ohio and somewhat in the east central portion. The pools are very irregular, large and small, with absolutely no uniformity of pattern or structure. This lack of uniformity has greatly added to the life of Clinton gas in Ohio, since there can be no uniform drilling pattern to follow. There is no water with which to contend, as this sand is not a water-drive formation. Dry holes are scattered throughout the entire expanse of proven acreage. Operators familiar with Clinton drilling expect this, and thus plan on from one-third to one-fourth dry holes. The Clinton is mainly a gas sand, but there have been a number of good oil pools drilled in the state.

Although there are a number of producing formations in the Canton area, including the Berea at 700 feet, the Oriskany at 3,000 feet, and the Newburg at 4,000 feet, the Clinton is the major producing horizon. Usually, when drilling through these sands, there is often oil, gas, and water together. Occasionally, a producer will be completed in one of these other sands, but there was none in the Canton pool.

The Clinton, in this pool, averaged from 30 to 40 feet in thickness with some wells showing gas pays as much as 65 feet. Other pools to the north and west had sand thicknesses averaging from one foot up to 15 feet maximum.

The log of a well drilled in the Canton Pool reads as follows:

Surface	73'	
Injun	285'	to 398'
Berea	712'	to 781' hole full of salt water at 755'
Top of Big Lime	2779'	to
Oriskany	3014'	to 3025' show of oil and water
First Water	3045'	hole full of salt water
Salt	3406'	to 3581'
Newburg	3960'	to 3985' show of gas
Second Water	4170'	one bailer per hour
Bottom of Big Lime	4331'	
Slate	4331'	to 4441'
Packer Shell	4441'	to 4457'
Stray Clinton	4485'	to 4501'
Red Clinton	4501'	to 4540'
White Clinton	4546'	to 4580'
Total Depth	4583'	

Gas Pays:	20,000	cubic feet	- 4520'	to	4523'	- 3'
	83,000	"	"	- 4532'	to	4534' - 2'
	150,000	"	"	- 4536'	to	4540' - 4'
	179,000	"	"	- 4540'	to	4546' - 6'
	521,000	"	"	- 4546'	to	4550' - 4'
	2,193,000	"	"	- 4550'	to	4580' - $\frac{30}{49}'$

#### Shot Record:

65 quarts nitro-glycerin  
 Shot from 4518' to 4583'  
 Before Shot - 2,067,000 cubic feet  
 10 min. after - 6,200,000 cubic feet  
 30 min. after - 5,580,000 cubic feet  
 2 hrs. after - 5,000,000 cubic feet  
 96 hrs. rock pressure - 1400 pounds

#### Casing Record:

10" Drive Pipe	73'
8" Casing	796'
7" Casing	3183' Pulled
5" Casing	4418'
3" Tubing	4583'

The Canton Pool was overlooked for a good many years by reason of the fact that a well drilled on the Canton Drop Forge property, in the south end of Canton, was completed as a dry hole with a good show of gas. This well was drilled by the plant in July of 1933.

The discovery well in the Canton Pool was drilled on the 305 acre Stark County Infirmary tract on the north edge of the Canton Corporation line, Section 33, Plain Township, Stark County. The lease was originally taken by an independent lease man for \$1.00. He tried to sell it to Marsh Belden for a price, but Marsh did not have the money then. It was finally sold to Brendel Producing Company of Pittsburgh for \$615.00. Oddly enough, a representative of Brendel's offered the lease to Belden, who purchased it this time for \$625.00 (Fig. 1).

The Infirmary Well No. 1 was completed July 7, 1945 at an open flow of 5,126,000 cubic feet after being shot with 60 quarts of nitro-glycerin. The initial flow of gas, after drilling through the Clinton sand at a total depth of 4,636 feet, was 2,400,000 cubic feet. The maximum rock pressure ten days after completion was 1,390 pounds.

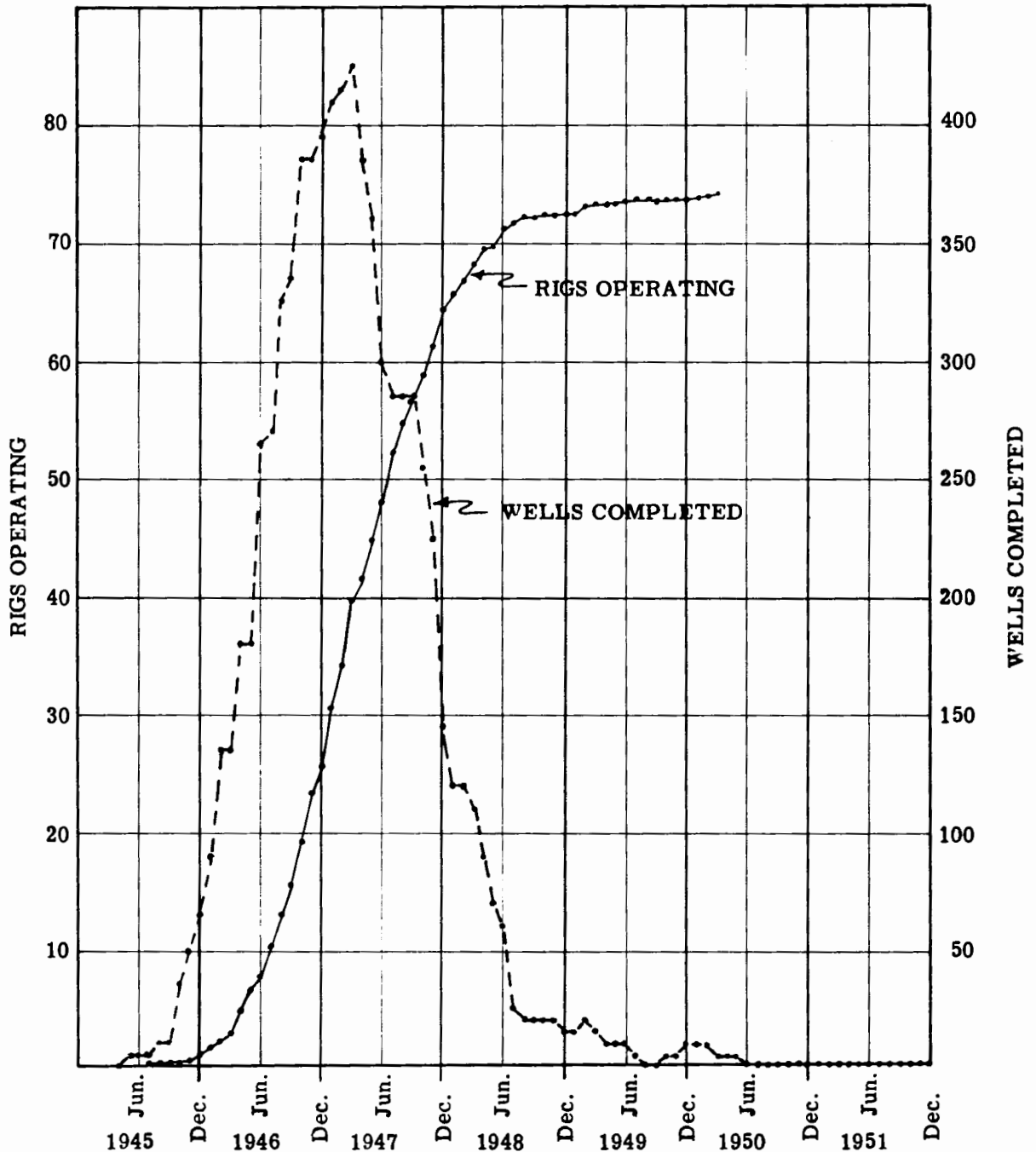
This completion immediately set off a flurry of leasing throughout the complete area in and around Canton. Belden staked a location on the Ida S. Cook property 2,600 feet directly west. This well completed October 29, 1945 at 2,451,000 cubic feet, natural, with a rock pressure of 1,400 pounds. On October 2nd, the East Ohio Gas Company started a well on the Lucco property about 500 feet north of the Infirmary property line and about 2,600 feet north of the Infirmary Well No. 1. This well completed in December at 1,100,000 cubic feet. On October 3rd, Belden started drilling the Hight-Ford south of the old Jackson-Plain Township Pool. This well completed at 1,332,000 cubic feet. The 48-hour rock pressure was 1,275 pounds. On the 10th of October, Ed Obermiller, a local producer, started a well on property owned by Ellis Frank located about 2,150 feet north of the Ida Cook well and 3,400 feet northwest of the Infirmary Well No. 1. This well completed in late December at 840,000 cubic feet after being shot with 80 quarts of nitro-glycerin.

These wells were all started in the immediate vicinity of the discovery well but about three weeks prior to the completion of the Cook Well No. 1, Republic Steel Corporation, located in the northeast section of Canton and owning approximately 480 acres, started their own well.



After the completion of the Cook Well No. 1, the pattern of a town lot boom was rapidly developing. A location was staked about 800 feet north of the Cook well and another one about 1,300 feet southwest. By January of 1946, 8 wells had been completed, 18 rigs were operating, and the average completion of all 8 wells drilled was 2,148,000 cubic feet (Fig. 2).

FIGURE 2  
DRILLING ACTIVITY IN CANTON POOL

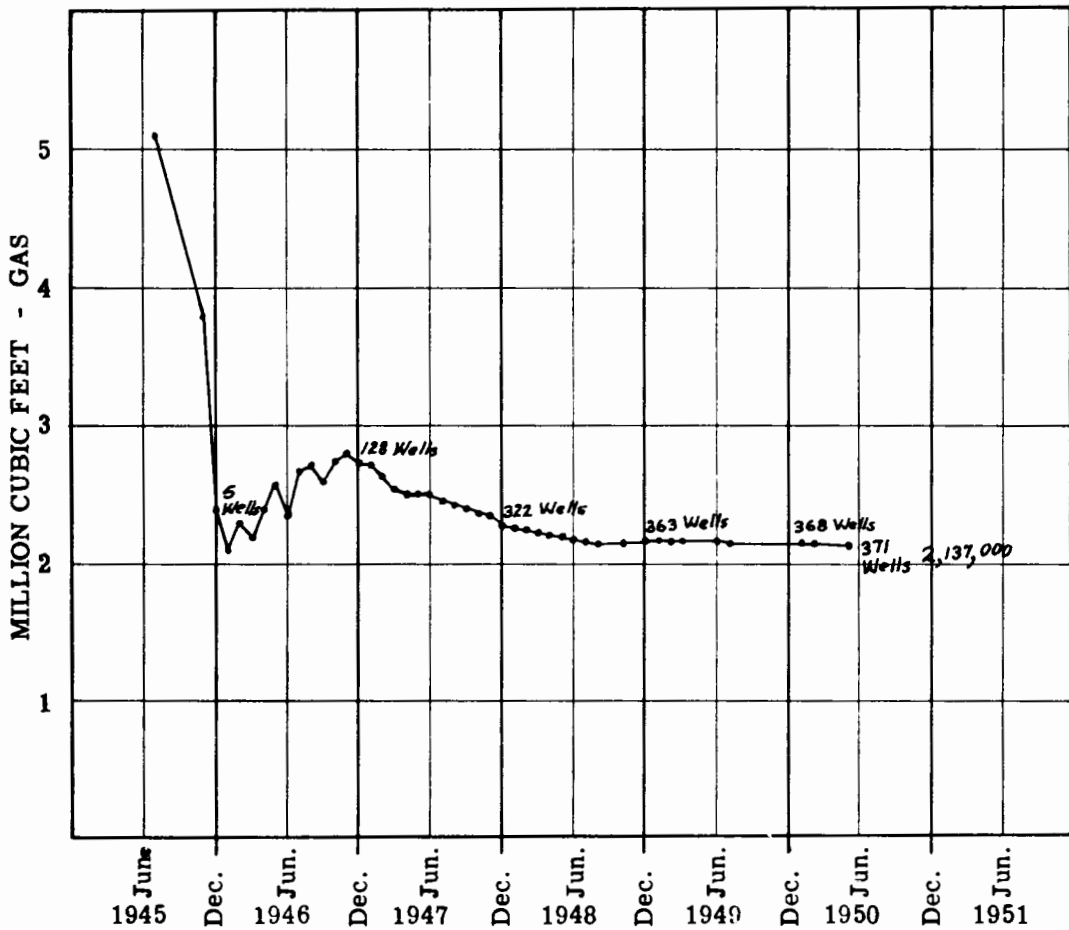


In January of 1946, the Infirmary Well No. 2, which was a south offset to East Ohio's Lucco well, started drilling. An offset north of the Infirmary, about 1,000 feet, was started by another independent. Then, about midway between the Infirmary property and Republic Steel Corporation, another well was started on the property owned by Jake Laughlin. This well completed at approximately 4,000,000 cubic feet with 1,325 pound rock pressure in 40 hours.

The first production from the pool was sold in early December of 1945 from the Infirmary Well No. 1, which produced an average of 2,037,000 cubic feet per day in the line in December. In late January, Frank Lyons, another local independent, started the C. A. Kolp Well No. 1 about one and one-half miles south of the Republic Steel Corporation. This well completed at 4,100,000 cubic feet, natural. The rock pressure in 24 hours was 1,350 pounds. With this well, the complete limits of the Canton Pool were defined. By February of 1946, the Infirmary Well No. 3, located in the northeast corner, 4,350 feet from the No. 1 Well, was drilling. This well, offsetting Obermiller's J. Miller Well No. 1, was located immediately across the street from the Infirmary. Another well was drilling immediately across the street to the north and midway between the No. 2 and No. 3 wells. The No. 4 Infirmary Well was started to offset this one.

FIGURE 3

AVERAGE OPEN FLOW OF WELLS COMPLETED IN CANTON POOL



At this point in the development of the pool, negotiations were started between several of the operators to initiate a spacing program in order that all producers might make a fair return on their investments. Negotiations fell through after several weeks of discussions and the boom was on. By the end of April, 1946, 24 wells had been completed, 36 rigs were operating, and the average completion was up to 2,456,000 cubic feet (Fig. 3). In April of 1946, Belden started the Creighton Well No. 1 located south of the McKinley Airport in the extreme east end of Canton. This well was approximately three miles east of the Infirmary Well No. 1, about one and one-fourth miles northeast of the Republic Steel Well No. 1. This well completed at approximately 6,000,000 cubic feet and proved to be within 3,000 feet west of the ultimate eastern limits of the Canton Pool.

Wells sprung up all through the area now proven between the wells completed. By July of 1946, there were 52 wells completed, 54 rigs running, and the average completion was 2,688,000 cubic feet. It was not until June of 1946 before Republic Steel Corporation started their No. 2 and No. 3 Wells, still on the south side of their property. The No. 2 Well completed at about 5,500,000 cubic feet, natural, and the No. 3 Well at about 134,000 cubic feet after shot. The fifty-third completion of the Canton Pool, located on the Carnes property in Section 6 of Canton Township, immediately west of the Stark County Fairgrounds in the southwest section of Canton City, was the first dry hole. Before this well was completed, another well approximately 1,000 feet north was started and was completed as the second dry hole.

On August 24, 1946, a City Ordinance became effective regulating gas well drilling in the City of Canton. Essentially, the ordinance covered the following: A permit fee of \$200.00, a Surety Bond of \$100,000.00 while drilling was in process, with a substitute of \$100,000.00 insurance policy for personal injury and property damage after the well was completed, was to be put into force for the life of the well. No drilling was to be permitted within 150 feet of a habitable dwelling nor closer than 75 feet to the edge of the nearest street. Safety equipment during completion was also required under the drilling ordinance. The movement of nitroglycerin within the city was regulated.

Until August of 1946, all gas from the field was being sold to the East Ohio Gas Company. At this time, an agreement between Natural Gas Company of West Virginia and Brendel Producing Company, both of Pittsburgh, was in the making; whereby, Brendel would sell gas from its 27 wells now producing or being drilled in the Canton area. Natural Gas Company of West Virginia, a subsidiary of the Columbia Gas System, Inc., serves eastern Ohio, parts of Pennsylvania and West Virginia. The new pipe line would divert gas from this area for use in other sections of Ohio and in neighboring states. The object of Brendel Producing Company was to start its line in the south part of Canton outside the corporation limits and go in opposite directions, ultimately circling the outskirts on both the east and west. The west pipe line was run all the way around Canton outside the corporation line to finally end at a well which was drilled about 1,500 feet north of the Ida Cook Well No. 1. The east line, which was intended to end on the east side of the Infirmary, came to an abrupt end immediately south of Republic Steel, which was about three miles short of where it was intended to go. This was caused by the action of City Council by reason of the fact that they did not wish to have the Canton gas diverted from this area to be used elsewhere. Council refused to allow the pipe line to enter the corporation limits (Fig. 1).

At this particular time, August of 1946, drilling operations had reached a fevered pitch and fast drilling was imperative because of lack of well spacing. A Rotary Drilling rig was moved from Michigan by the Union Rotary Corporation of Mount Pleasant to drill an experimental well for the Belden organization (Fig. 4). By the end of August, the 94-foot steel mast was erected on an offset location to the well being drilled on the west end of the Brendel pipe line. This was the first Rotary drilled well in the Canton district and the second attempted in the State of Ohio. It proved to be the first Clinton gas well completed by Rotary tools in the State. Ultimately, Belden drilled five Rotary holes in the Canton Pool. This first Rotary hole was completed in about 45 days; whereas, normal Cable tool completions were in 60 to 80 days, Trouble was encountered with lost circulation in the gravel and it slowed up this completion considerably. The second hole was completed in about 90 days after having lost one hole at about 3,800

feet. The third well was completed in about 60 days with approximately the same trouble as they had on the second well. The other two wells were completed in approximately 30 days. The drilling cost was about the same as on Cable tool wells.

By the end of October, 96 wells had been completed, 18 during the month, a total of 77 rigs were operating, and the average completion per well was 2,759,000 cubic feet per day. The 96 wells completed were producing in the line over 52,000,000 cubic feet of gas per day.

FIGURE 4

ROTARY RIG IN THE CANTON POOL

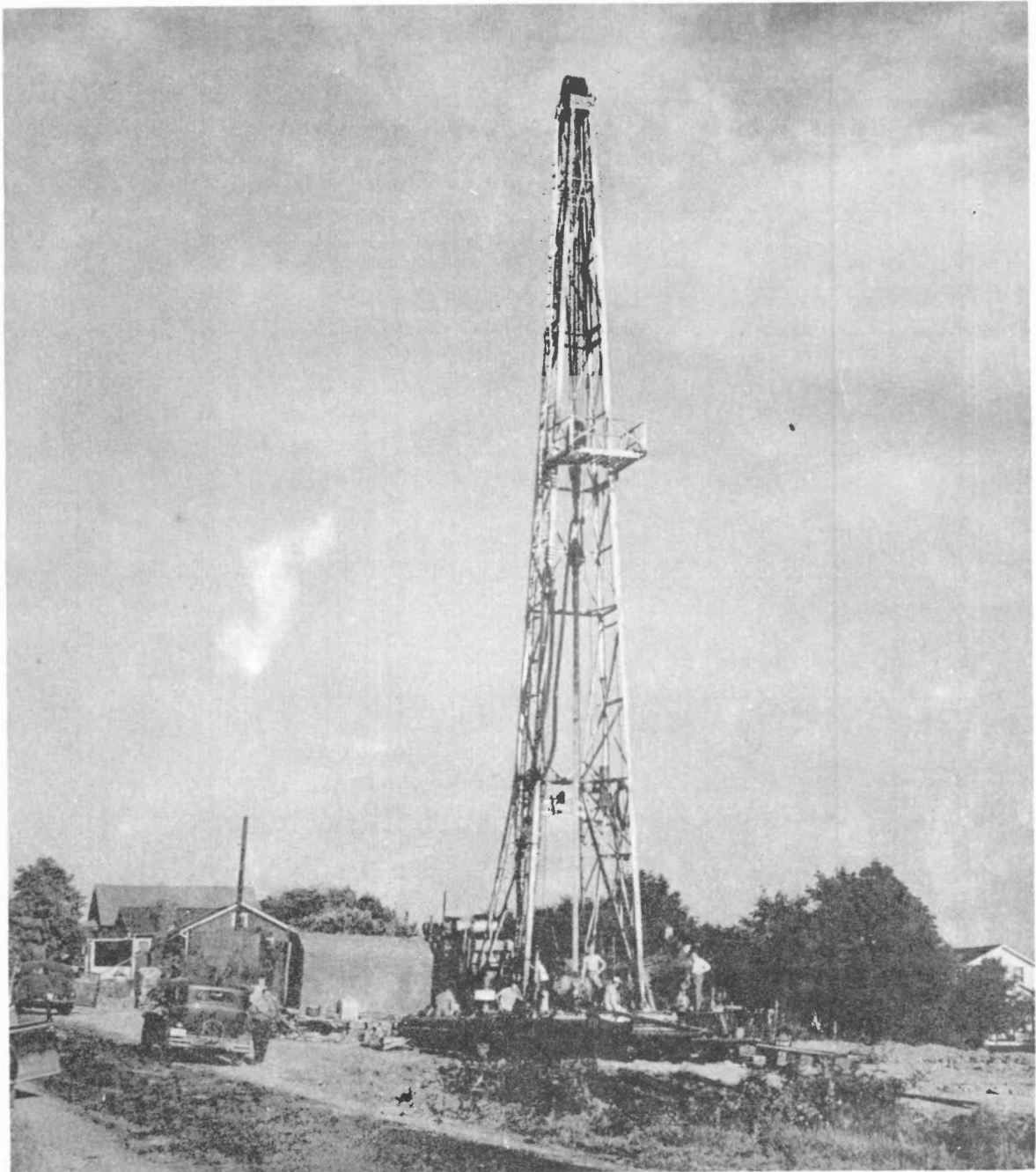
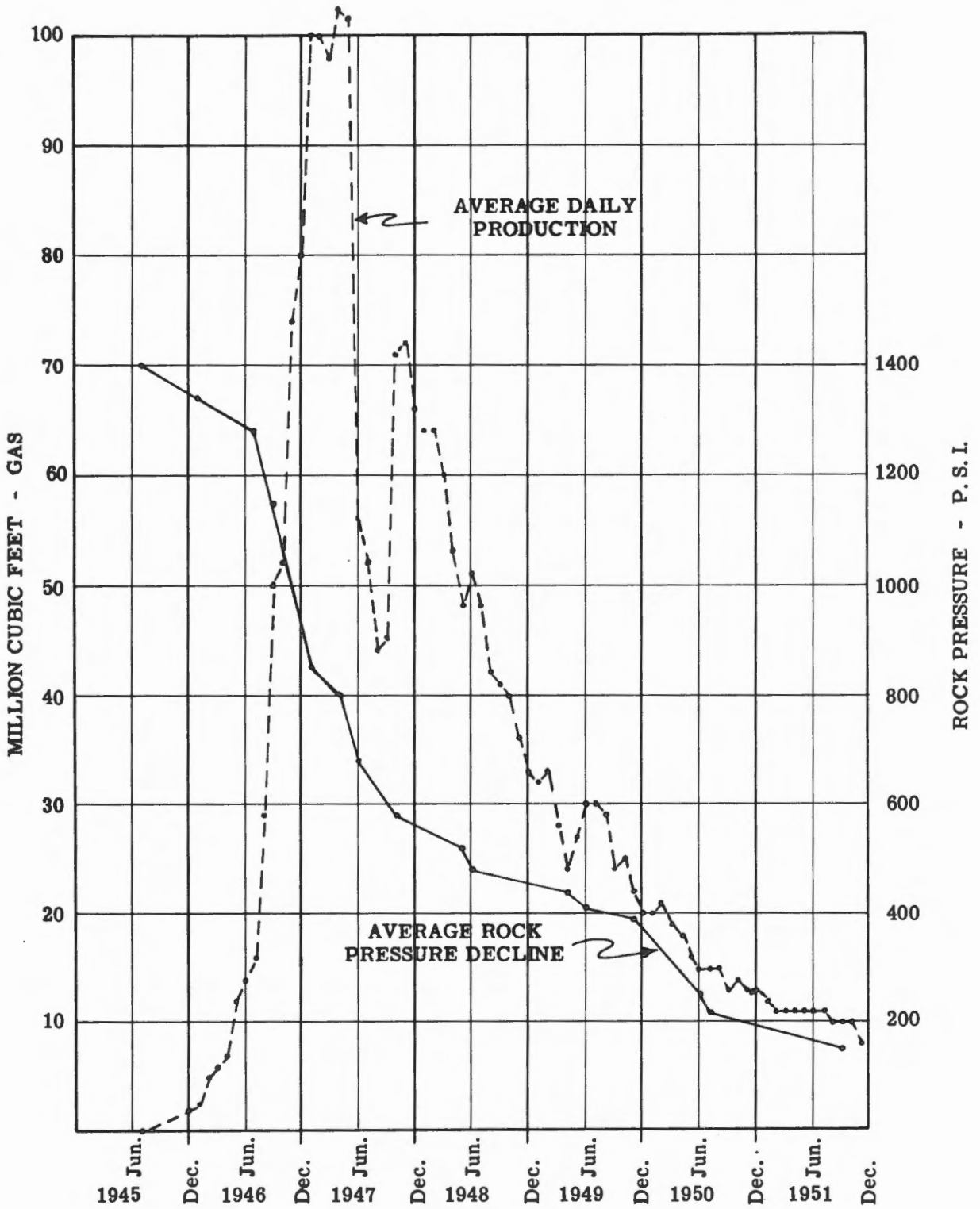


FIGURE 5

## PRODUCTION AND ROCK PRESSURE DECLINE IN CANTON POOL



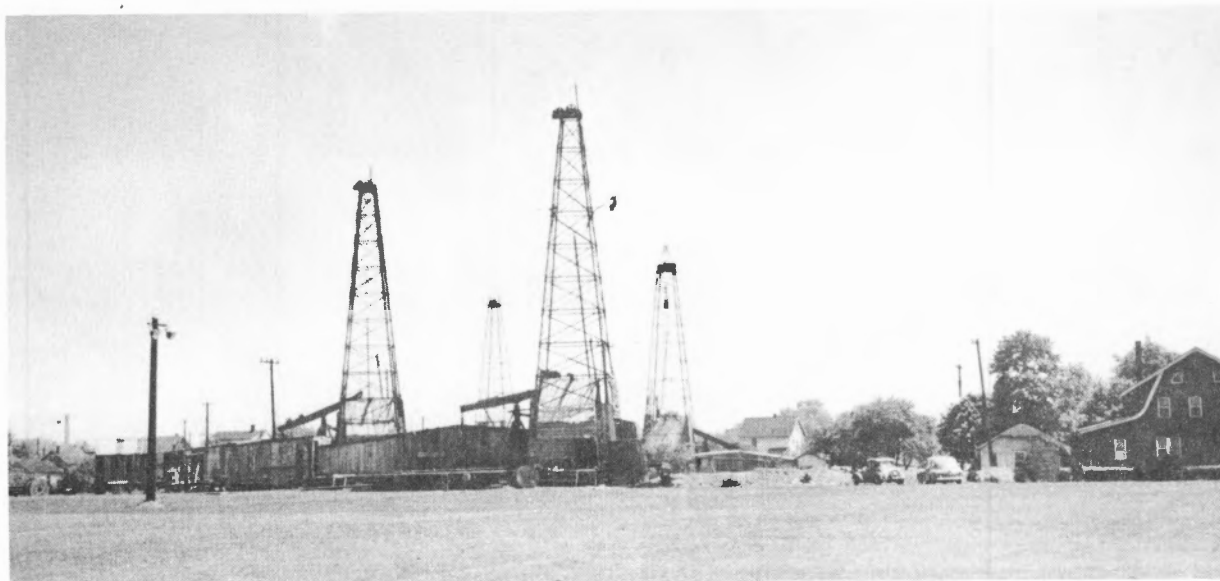
The field at this point had produced approximately three and one-half billion cubic feet of gas. The first Rotary hole was completed at 5,000,000 cubic feet with a rock pressure of 1,100 pounds on October 15th. By November 19th, the rock pressure had dropped to 825 pounds after the well had been on line for only a few days. The effects of close drilling were already beginning to affect rock pressure (Fig. 5). By January of 1947, 150 wells had been completed, 25 for that particular month, 82 rigs were operating, and the average completion was 2,731,000 cubic feet. Out of the 153 wells completed to date, only 9 had been dry holes. The average shut-in figure given, at all times, includes dry holes. All the dry holes drilled to date, except one, were extension attempts. This one was drilled on the Barium Steel Corporation property in the south end of Canton. A 2,600,000 cubic foot well was completed about 2,500 feet west of this dry hole and a 1,000,000 cubic foot well was completed 1,200 feet west. A 7,900,000 cubic foot well was completed about 2,000 feet south. The aforementioned Canton Drop Forge Well was approximately 2,300 feet north.

Approved casing methods were used throughout the entire development of the pool. Mr. K. C. Wilson, Oil and Gas Well Inspector for the Ohio Department of Industrial Relations, Division of Mines, and the local inspectors worked closely with the operators to carry out the purpose and intent of the state regulations.

On September 24, 1946, Belden's Kirk Community Well No. 1 was completed at 1,900,000 cubic feet after shot. Twenty-four hour rock pressure was 1,165 pounds. In February, after the well had produced over 61,000,000 cubic feet of gas, the rock pressure had dropped to 925 pounds. This well was the sixth well to be completed in Section 34, Plain Township. These six wells were completed in the south half of the section. In early March of 1947, Hanley and Bird of Bradford, Pennsylvania, completed their Mahaffey Community Well No. 1 in the north half of Section 34. It completed at 4,917,000 cubic feet with a 48-hour rock pressure of 1,275 pounds. The well produced for about 38 days and was shut in for the summer. This well made the fourteenth completion in Section 34. During the summer shut in and until the latter part of October, 18 more wells were completed in Section 34 at an average of 3,753,000 cubic feet per well (Fig. 6).

FIGURE 6

CLOSE DRILLING IN THE CANTON POOL

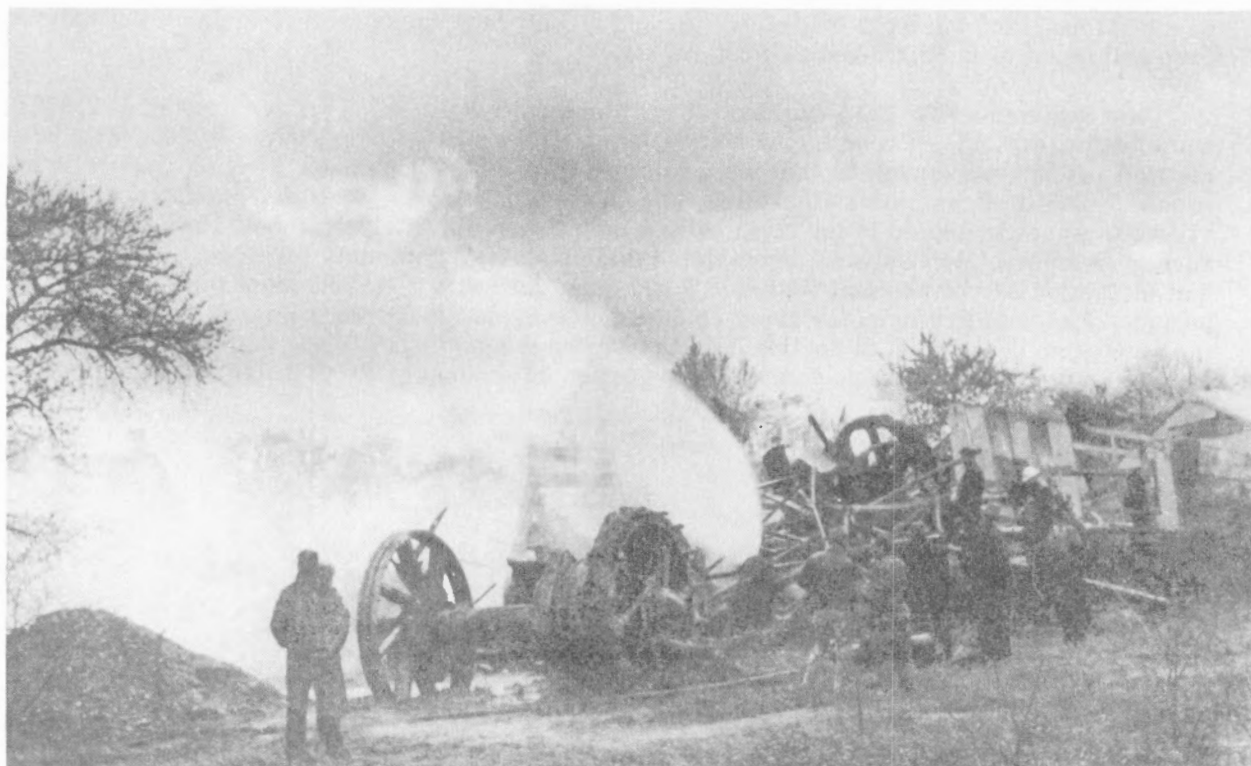


One well, making better than 7,000,000 cubic feet of gas caught on fire and burned for a half day. This well was one out of a total of four fires which occurred during the development of the Canton Pool (Fig. 7). There was no one seriously injured in these fires (Fig. 7).

The rock pressure on the Mahaffey Well dropped from 1,275 pounds to 780 pounds during the period it was shut in for the summer. This well, that completed at somewhat over 4,000,000 cubic feet, lost approximately one-third of its rock pressure by reason of the 18 completions which took place during the summer. By January of 1948, the rock pressure in that general area, northeastern section of the Canton Pool, had dropped to 470 pounds. By June of 1948, it had dropped to approximately 275 pounds. All told, there were 41 wells drilled in Section 34 of Plain Township. Four wells, drilled on 160-acre spacing, probably would have taken all the gas over a period of years at considerably less cost.

FIGURE 7

LUTHY WELL BURNS IN THE CANTON POOL



Another closely drilled area in the Canton Pool was Section 11 of Canton Township, lying directly south of the Republic Steel Corporation. Here, 31 wells were drilled where four probably would have taken all the gas. Much the same rock pressure decline took place in this area as in Section 34 of Plain Township.

Section 34 of Plain township showed clearly what complications the Clinton sand producers have to contend with. An example of this is shown by the dry hole drilled by Frank Brendel on the Mack property. Approximately 900 feet to the south of the Mack, there was completed a 10,000,000 cubic foot well; 700 feet to the west there was a 4,500,000 cubic foot well; 650 feet north was a 2,300,000 cubic foot well, and 500 feet to the east was a 15,000,000 cubic foot well. The Mack Well showed only a smell of gas in the Packer Shell, but there was no Clinton sand. It had pinched out. Another example of this situation shows up in Section 2 of Canton Township, where three wells were drilled about 1,250 feet apart in the form of a triangle, one completing

at 6,000,000 cubic feet, the second completing at 1,532,000 cubic feet, and the third completing at 2,900,000 cubic feet. In this particular case, a house was moved from its foundation in order to conform to the drilling ordinance in effect at the time and a dry hole was completed on this lot in the center of the triangle. Throughout the Canton area, there were a number of examples such as this.

By the end of February, 1947, 18 more wells had been completed, bringing the total up to 171. Seventeen of these wells were delivering gas into the Brendel pipe line; 7 more were delivering gas to the Republic Steel Corporation from wells they had completed on their own property; and 147 wells were under contract to the East Ohio Gas Company. The total production of all wells was approximately 100,000,000 cubic feet per day. There were 83 rigs in operation, and the average completion had dropped slightly to 2,641,000 cubic feet. In March of 1947, a total number of 85 rigs were in operation. By May the average daily production from the pool, including the Brendel line and the Republic Steel wells, was approximately 103,000,000 cubic feet of gas. About sixteen and one-half billion cubic feet of gas had been produced from the

field so far. The average completion had dropped slightly to 2,513,000 cubic feet. By this time, 14 dry holes had been drilled. By the first of October, drilling had started to slow down to a point where 57 rigs were still operating. Two hundred and forty-eight wells had been completed at an average shut in of 2,413,000 cubic feet. The pool had produced approximately twenty-one and one-half billion cubic feet of gas.

The field market price for gas to the producer was increased from 18 cents to 20 cents per thousand cubic feet, effective October 1, 1947. With the increase in the price of gas, it was necessary for the producer to take over the distribution of all royalty interests, which had been taken care of prior to this time by the utility company purchasing the gas.

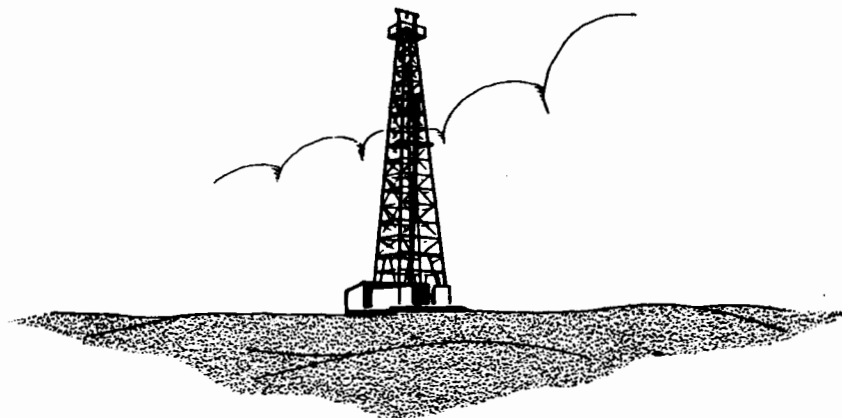
By the last of January, 1948, 328 wells had been completed, 24 rigs were still operating, and the average shut in had dropped to 2,278,000 cubic feet. The pool had produced about thirty billion cubic feet of gas. Ten more dry holes had been added, bringing the total up to 24. From now on, about the only drilling to be done was on isolated spots, clean-up locations, and a few unsuccessful attempts to extend the pool. There was a small flurry of drilling in the southwest section near the Republic Stamping and Enameling Well which had been completed in February of 1946. That area had been pretty well left alone until early in 1948. By September of 1948, 361 wells had been completed but none for that month. This was the first month in which there were no completions since November of 1945. At this time the average completion was 2,164,000 cubic feet, 4 more dry holes had been completed, bringing the total up to 28. The field was producing approximately 45,000,000 cubic feet per day and had produced approximately forty billion cubic feet of gas so far. The last well to be completed in the Canton Field was in May of 1950, bringing the total up to 371 wells, at an average shut in of 2,137,000 cubic feet. Ironically, this well, also, completed the total of 30 dry holes drilled.

The average cost of a well in the Canton area during the Canton boom was around \$25,000.00 to \$28,000.00 completed and ready to turn in the pipe line. On the basis of \$28,000.00 per well, it is estimated that there was somewhat over \$10,400,000.00 invested in the Canton Pool. The gross income at the end of 1951 amounted to about \$11,250,000.00, of which the property owners received about \$1,400,000.00. Another \$1,000,000.00 can be deducted as expenses for well maintenance, taxes, and insurance. So, as close as can be determined, the total net income from the sale of production through 1951 amounts to approximately \$8,850,000.00. This leaves roughly \$2,400,000.00 yet to recover before the investment is paid out.

The acreage encompassed in the Canton Pool and broken down by townships, all of which lie in Stark County, is as follows:

Canton Township	10,000 Acres
Plain Township	6,000 "
Jackson Township	640 "
Nimishillen Township	160 "
Perry Township	160 "
Osnaburg Township	160 "

This makes a total of 17,120 acres or an average of 46 acres per well drilled. The acreage in Nimishillen, Perry, and Osnaburg was non-productive. Four of the 30 dry holes were drilled in this acreage. Nineteen dry holes were drilled out of a total of 207 completions in Canton Township. There were 5 dry holes drilled in Plain Township out of a total of 153. In Jackson Township, there were 2 dry holes out of 7 drilled. As of this writing (February, 1952), there have been 125 wells plugged in the Canton Pool, 61 in Canton Township, 61 in Plain Township, and 3 in Jackson Township. There are still 216 wells producing. The pool is now producing between 6,000,000 cubic feet to 7,000,000 cubic feet per day. The gas remaining to be produced from the pool would be hard to determine, for there are many factors influencing the life of the 216 wells.



EXCERPTS FROM OHIO GEOLOGICAL SURVEY REPORTS

THE NEFF GAS WELLS

Volume III - Chapter LXVII - pp. 340 - 347, 1878

REPORT ON THE GEOLOGY OF KNOX COUNTY

by M. C. Read

Petroleum and Gas

The report upon this county would be incomplete without an acknowledgment of the very important aid derived from the borings for oil on Owl Creek, and a brief account of this interesting work. Some ten years ago the attention of enterprising parties was called to the "oil signs" of the eastern part of Knox county. On the western margin of the coal field were indications of dislocation in the rock strata; gas springs were abundant, and from several places it is reported that oil in small quantities was obtained. A company was organized, territory leased, and since that time something like \$85,000 has been expended in explorations, mainly under the superintendence of Peter Neff, Esq., of Gambier. The registers of the wells, which have been kept with commendable care by Mr. Neff, show that there is a marked disturbance in the strata extending to the lower rocks reached, its apparent extent, however, being exaggerated.

The red or chocolate shales, the lower member of the Sub-carboniferous, constitute a well marked horizon, and enable us to determine the relative position of the different strata in the wells which reach this material.

The location of eight wells is indicated on the accompanying map of the territory around the junction of the Kokosing and Mohican rivers, and the following table gives the depth below the surface of the top of the red shale:

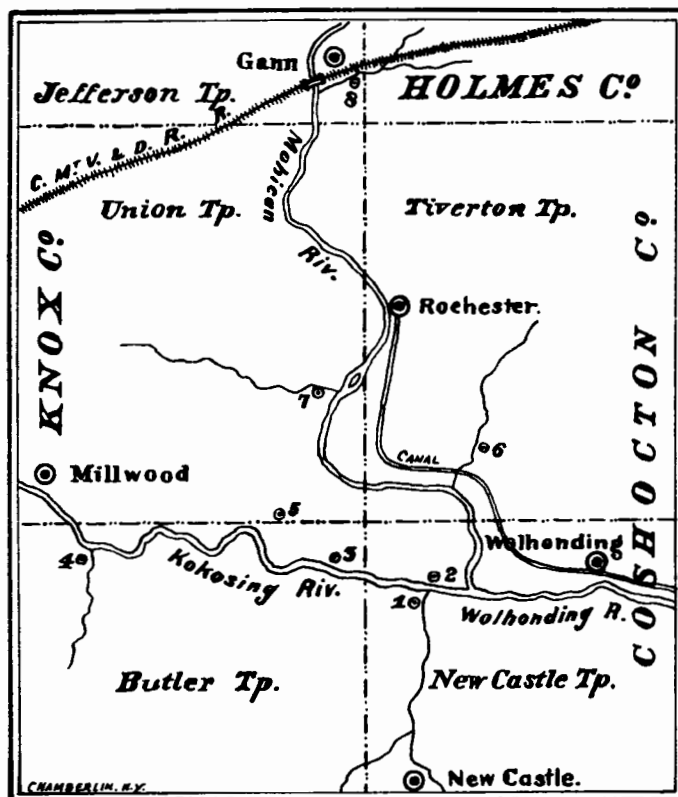
	Ft.
Well No. 1.....	615
" 2.....	615
" 3.....	591
" 4.....	562 (?)
" 5.....	705
" 6.....	575
" 7.....	607
" 8.....	627

By barometrical observations taken as rapidly as practicable, and on a clear day, the elevation of the surface at each of the wells above that of Nos. 1 and 2, is as follows:

	Ft.
No. 3.....	50
" 4.....	125
" 5.....	95
" 6.....	75
" 7.....	25
" 8.....	30

From these data, the dip of the upper surface of the red shale between the different wells, is as follows:

	Ft.
From No. 8 to Nos. 1 and 2 .....	18
" No. 8 to No. 6 .....	33
" No. 4 to Nos. 1 and 2 .....	128 (?)
" No. 5 to Nos. 1 and 2 .....	135
" No. 5 to No. 6 .....	150
" No. 3 to Nos. 1 and 2 .....	74
" No. 7 to No. 6 .....	48
" Nos. 1 and 2 to No. 6 .....	15
" No. 4 to No. 8 .....	160 (?)
" No. 7 to No. 2 .....	33
" No. 7 to No. 8 .....	15
" No. 3 to No. 8 .....	56
" No. 3 to No. 7 .....	41
" No. 3 to No. 6 .....	189



MAP OF KOKOSING OIL DISTRICT

The record of No. 4 is not entirely reliable, and some uncertainty exists as to the depth at which the red shale was then struck, but all the other borings indicate a dip to the north-east, and that the line joining No. 8 and No. 2 is nearly on the line of the strike.

The following is a copy of the register of No. 1, on the south side of the Kokosing, three hundred feet west of its junction with the Mohican, supplemented at the bottom by the register of No. 2, five hundred feet north of it, and on the opposite side of the stream.

Specimens of the borings bearing the number on the right-hand column are deposited in the State Cabinet, at Columbus:

<u>No. of Strata</u>	<u>Material</u>	<u>Thickness</u>	<u>Depth</u>	<u>No. of Sample</u>
1.	Earth.....	10	-	-
2.	Coarse yellow sand-rock.....	7	17	1
3.	Fine sand-rock.....	2	19	2
4.	Drab ".....	3	22	3
5.	Coarse ".....	1	23	4
6.	Coarse ".....	10	33	6 to 13
7.	Coarse ".....	3	36	13
8.	Drab ".....	6	42	14 to 17
9.	Drab " fine.....	2	44	18
10.	Lighter ".....	1	45	19
11.	Coarse ".....	2	47	20
12.	Coarse ".....	2	49	21
13.	Coarse ".....	2	51	22
14.	Coarse ".....	2	53	23
15.	Coarse ".....	2	55	24
16.	Fine, hard, blue sandstone.....	9	64	25
17.	Fine, hard, lighter sandstone.....	2	66	26
18.	Fine, hard, sandstone with pyrites..	2	68	26½
19.	Coarse blue sandstone.....	8	76	27
20.	Fine blue sandstone, with shale partings.....	14	90	28
21.	Fine blue sandstone, with shale partings.....	8	98	29
22.	Bluish gray shale.....	20	118	30
23.	Silicious blue shale.....	4	122	31
24.	Blue shale.....	8	130	32
25.	Hard, fine sandstone.....	12	142	33
26.	Blue argillaceous shale.....	10	152	34
27.	Blue argillaceous shale, lighter.....	12	164	35
28.	Fine, hard sandstone, with pyrites..	4	168	36
29.	Fine, blue sandstone.....	8	176	37
30.	Fine, blue sandstone, with shale bands	10	186	38
31.	Fine-grained micaceous sandstone..	16	202	39
32.	Blue argillaceous shale, with sandy bands.....	12	214	40
33.	Blue argillaceous shale, with sandy bands.....	18	232	41
34.	Blue argillaceous shale, with sandy bands.....	18	250	42
35.	Argillaceous shale.....	8	258	43
36.	Blue grit sandstone.....	6	264	44
37.	Blue grit sandstone, shale bands....	12	276	45
38.	Dark, bluish shale.....	4	280	46
39.	Dark, bluish shale with thin silicious bands.....	20	300	47 and 48
40.	Dark, bluish shale with thin silicious bands.....	10	310	49
41.	Dark, bluish shale with thin silicious bands.....	18	328	50
42.	Dark, bluish shale with thin silicious bands.....	34	362	51

<u>No. of Strata</u>	<u>Material</u>	<u>Thickness</u>	<u>Depth</u>	<u>No. of Sample</u>
43.	Dark, bluish shale with thin silicious bands .....	2	364	52
44.	Dark, bluish shale, with red ferruginous and silicious bands .....	36	400	53
45.	Red sandstone and blue shale in bands	64	464	54
46.	Red sandstone, more silicious .....	36	500	55
47.	Blue argillaceous shale.....	20	520	56
48.	Blue argillaceous shale, with dark sandstone bands.....	24	544	57
49.	Dark shale.....	24	568	58
50.	Dark shale, lighter.....	14	582	59
51.	Dark shale.....	16	598	60
52.	Sand-rock.....	-	-	61
53.	Sand-rock.....	15	613	2-62
54.	Red shale.....	12	625	2-63
	Total Depth.....	625		

In all the wells bored, a similar succession of strata has been pierced. The chocolate, the Erie, and the Huron shales were struck in all wells carried deep enough. The rocks included between these and the Coal Measures present alternations of sand-rock, argillaceous and sandy shales, which, after passing the olive shales that cap the Waverly, present a great variety in the different wells, and forbid all minute systematic subdivision. The most marked and most general alternations are exhibited in the general section of the rocks of the county.

In nearly all the wells bored, gas, oil, and brine have been found in greater or less quantities, and from two of them a remarkably strong flow of gas has issued, which, properly utilized, can be made of great value.

The employment of natural gas elsewhere in the manufacture of iron would indicate the proper use to be made of it were it not that the wells are situated several miles from any railroad or other adequate means of transportation.

The Neff Petroleum Company, which, under the management of Peter Neff, of Gambier, made the explorations for oil, has been recently reorganized under the name of "The Kokosing Oil Company," and has attempted to utilize the gas in a novel manner, which gives promise of complete success. It has expended about \$25,000 in erecting buildings and appliances for the manufacture of carbon-black, and is now obtaining a product not excelled in quality by any thing in the market, except bone or ivory-black, and has demonstrated that the well has a capacity of producing about five hundred pounds per day of No. 1 black, which is said to command, at wholesale, eighty cents per pound. This company has also devised a mode of utilizing the acid-waste of oil refineries, as it makes a very excellent carbon-black from that of ordinary quality, by using with the acid-waste a small amount of the natural gas. With eighteen hundred burners, for the consumption of the natural gas, it produces from forty to fifty pounds of the "Diamond," or No. 1 black, per day, and with twenty-eight burners, for the consumption of the acid-waste, one hundred to one hundred and fifty pounds per day of the "Pearl," or No. 2 black. The fact that the gas has flowed from the well without diminution for ten years gives good promise of its permanency; and the indications now are that by this use of the gas a good return will be secured to the stockholders for all the money so perseveringly expended in sinking the well.

Well No. 2 also yields a steady flow of gas, and from well No. 1 over three thousand barrels of water escape per day.

These wells afford an opportunity of obtaining exact measurements of the thickness of

the Waverly rocks on the margin of the Coal Measures, and aid in determining the character of the successive strata.

Well No. 8, near Genoa Station, in Jefferson township, shows that the Waverly above the red shale is eight hundred and seventy-two feet in thickness, and, including the red shale, is nine hundred and thirty-four feet, the Waverly being here capped with sixty feet of coarse sand-rock, either the Carboniferous Conglomerate or the Massillon sandstone. If this is regarded as the Conglomerate, sixty feet should be added to both the above numbers. Above the sand-rock is sixty feet of shaly sandstone, capped with the cherty limestone, underlain by fire-clay, and a faint outcrop of coal. I am inclined to regard this, as well as the massive sandstone over the lower coal at Newcastle, as the Massillon sandstone, Coals Nos. 1 and No. 2 having disappeared in this direction. The Massillon sandstone rests upon the Waverly, on the hills above Genoa Station, and directly on Coal No. 1, at Newcastle. At wells Nos. 1 and 2 the Waverly is eight hundred and seventy-seven feet thick, the olive shales rising to the coal, under the same rock, at Newcastle. Westward from that point this sandstone rests directly upon the Waverly shales.

At well No. 6, the interval between the lowest known coal, which is certainly near the base of the Coal Measures, and the top of the red shale, is eight hundred and fifty feet. This well commenced in the Waverly at one hundred and fifty-five feet below the lowest coal, passed through Waverly shales to the depth of two hundred and forty feet, then argillaceous shales, with not more than six thin silicious bands, four hundred and fifty-eight feet. At six hundred and ninety-eight feet a hard, fine-grained sand-rock, with oil, was met with, but it was without crevices, and no water flowed from it. The entire absence of the Waverly Conglomerate, and of the second sand-rock, and the predominance of argillaceous shale is quite significant. Westward, the materials in all the wells gradually become coarser; the Waverly Conglomerate, and the other sand-rocks were found in normal position, and the supply of oil in the wells was more abundant. All the indications point to an old shore line, a little to the west during the deposit of the Waverly rocks, along which the coarse sandstones accumulated as shore deposits, while the finer argillaceous shales were deposited in deep water at the east.

In well No. 3 the second sand-rock was struck at two hundred and eighty-five feet, and was six feet deep; the third sand-rock at five hundred and eighty-five feet, was nine feet thick. The red shale was reached at five hundred and ninety-five feet. This well still flows oil, gas and brine; the latter yielding two pounds and ten ounces of salt from eleven quarts of water.

Well No. 4, the "Buckingham Well," yields heavy green oil from the thin sand-rock, which was struck at about five hundred and sixty feet, and is eighty-eight feet thick. The record of this well was imperfectly kept, and the red shale was not certainly located. Mr. Neff, in a supplemental report, puts it at six hundred and twenty-eight feet. If this is correct, there is a reverse dip here to the south-west from well No. 5 to well No. 4, of twenty-eight feet.

In well No. 5, the "Hard Well," the third sand-rock was struck at five hundred and seventy-five feet, and was ten feet thick, yielding gas, oil and water, which still flow from the top of the tube, about eight gallons of oil per day. The red shale was reached at five hundred and eighty feet. If the record of the well is correct, the interval between the top of the red shale and the top of the Huron is sixty-two feet less than at well No. 8 or No. 6.

These borings develop the following interesting facts:

The surface disturbance is much in excess of that of the deeply buried strata, is therefore in part superficial, and covered by the undermining of the surface, as suggested above.

There is a deep seated disturbance involving all the rocks down to and including the Huron shale, which is the great oil producing rock, so that the dip of the strata is substantially northeast. Eastward the silicious rocks gradually give place to argillaceous shales. the

coarse sandstones becoming thin or disappearing altogether. In the opposite direction, or westward, the materials are coarser, and the sand-rocks thicker.

On the eastern margin of the territory explored by boring, gas predominates, and at well No. 2 has flowed for ten years with a continuous pressure of about one hundred and eighty pounds to the inch. Westward, petroleum is more abundant. The oil is thus far nearly all found in the sand-rock directly above the red shales.

The water obtained above the second sand-rock and that below the red shale is fresh; that between the second sand-rock and the red shale is salt, and affords a suggestion as to the probable source of the coloring material in the red shale—iron deposited by the salt water.

The results obtained suggest further explorations in the south-eastern part of the district for gas, and in the western part for oil. With the new uses developed for natural gas, it is difficult to decide which would be the more valuable.

Volume VI – Chapter IV – pp. 340-343, 1888

THE BEREA GRIT AS A SOURCE OF OIL AND GAS IN OHIO

by Edward Orton

The Neff Gas Wells

The most thorough search for petroleum in Central Ohio during the oil excitement of 1865 to 1875, was conducted by Peter Neff, Esq., in the eastern portion of Knox county, and in adjacent territory. No single field in the state has ever been explored at as large an expenditure as this, and from a portion of it there has been realized a considerable return. This is an exceptional fact in outlays of this kind. Most of these investments are permanent. The search for oil was practically a failure, but instead of oil, large volumes of gas were discovered in several wells, and a novel but important use of the gas was for the first established here on this discovery. The wells were the most notable in their production of gas that had recently been found in the state, if indeed they had ever been equaled in this respect, and thus they became widely celebrated. Furthermore, they were made the subjects of special examination and report by the leading geologists of this part of the country, viz., Newberry and Winchell, and they have thus secured a large measure of prominence in the literature of oil and gas. At a later date, when the survey of the state was in progress, an excellent report upon the field was prepared by M. C. Read, Esq.

It is not possible to add a great deal to these several sources of information in regard to these wells, but the present chapter on the oil and gas production of the Berea grit in Ohio would be obviously and inexcusably incomplete without some account of the present status of this well-known field.

It is seen that the gas-rock on which they all depend is unmistakably the Berea grit. That the stratum is here affected by the structural peculiarities that are elsewhere associated with the production of oil and gas, scarcely admits of a doubt. The approximate measurements of Mr. Read (taken by an aneroid barometer) which appear in his report, seem to support such a view, but careful determinations by the spirit level are necessary to furnish a proper basis for any reliable statement as to arch or terrace here. The topography of the region is quite bold and well-marked, but there is nothing in it that cannot be well enough accounted for through the ordinary agencies of erosion and atmospheric waste. It is, of course, entirely possible that the watersheds of the present drainage systems are low arches or anticlinals, but this must be proved, not assumed. The presumption is against it. The pressure

of the newer fields upon the limited resources of the Survey, during the last three years, has rendered it impossible to give to these questions the attention that they well deserve, but it is greatly to be desired that the extensive and reliable data accumulated by Mr. Neff in his prolonged investigations, shall yet be fully utilized by being incorporated into a system of accurate measurements covering the entire field. Whenever this work is done, it is well-nigh certain that the secret of the unusual production of this district will be brought to light, and at the same time a valuable contribution will be made to the general subject of petroleum and gas accumulations.

Drilling leases are held on a large territory by Mr. Neff and his associates, and the terms of the leases require new wells to be occasionally put down. Within the last seven years two or three have been added to those previously sunk. Eleven have been drilled in all.

A little cluster of wells, picturesquely located at the junction of the Kokosing and Mohican rivers, monopolizes the economic interest of the entire series. Two of the wells were drilled in 1865, and have been producing gas ever since, much of the time under most disadvantageous conditions. Two of them are of more recent date.

It is here that Mr. Neff established the first works, so far as known, for the manufacture of lamp-black from natural gas. The idea was his own, and he worked out with great ingenuity and perseverance, its practical and successful embodiment in a fairly equipped manufactory. The interest is now quite a large one in western Pennsylvania, and the present yield of the pioneer wells makes but an insignificant fraction of the total production, but all the essential steps of the manufacture, as it now exists, were worked out here and at the beginning. Mr. Neff's location was unfavorable on account of the distance from all lines of transportation, but all disadvantages were for a time overcome.

The quality of the lamp-black, furnished by this process, is recognized as of the highest excellence. Nothing, in fact, is left to be desired. For many years the Neff works have supplied stock to Harper and Bros., the New York Tribune, and other equally well-known printing and publishing houses. The product has also been exported in considerable quantities to Germany and England.

The history of the early wells is to be found in Mr. Read's account already referred to. A few facts recently obtained can, however, be profitably added here. These facts chiefly bear on the life of the wells.

Well No. 1 was drilled in 1865. It is the famous "geyser well" of the early literature to which reference has been made. It was counted at the time that the well was brought in as the most remarkable display of gaseous energy that had ever been put on record in the state. Just how it would compare with the great gas wells of our own day, it is impossible to say, but it would probably be found decidedly inferior to our first-class wells in both volume and pressure. It was allowed to stand without being cased for a number of years until its energy was largely spent. It is now producing, as measured in May, 1887, by the anemometer, 65,000 to 70,000 cubic feet of gas per day, the temperature of the gas being at the time of measurement 62° F.

Well No. 2, also drilled in 1865, was left neglected for nine years. It was then tubed and packed and has been in service ever since. It is now producing 164,376 cubic feet of gas, temperature 59° F., per day.

Wells Nos. 9 and 11, drilled since 1880, are producing respectively 71,000 and 104,000 cubic feet per day.

The combined production of the four wells can be counted 400,000 cubic feet per day, the temperature of the gas being 60° F.

The wells require constant care to keep them free from salt-water, which enters from

the Berea grit, in company with the gas. The last two wells not only require frequent pumping, but throw more or less salt-water constantly. The older wells require the removal of the salt-water every three or four days. The price of the manufactured lamp-black has been reduced from forty cents to twelve cents per pound by the competition introduced. Under these conditions there is no standing ground for small wells.

It remains to add that this somewhat scanty production of gas is the best supply at present furnished by the Berea grit in the state, outside of the Macksburg field and a few points in Washington county. There are some important facts in the history now set forth, touching the duration of the supply. The two leading wells of the series, Nos. 1 and 2, are now twenty-two years old. More than this, both were sadly neglected in their youth. That anything of the original flow should remain after the repressive action of a water column resting upon the gas-rock for years without relief, seems surprising. The native energy of the flow is well attested by its return and its continuance in the volumes already measured and reported.

There is good reason to believe, not only that this field is by no means exhausted, but also that there are other possibilities of the same sort yet undiscovered in this portion of the state. At the same time we cannot forget that the present development stands for a large outlay, and that while individual wells may, perhaps, be found to make return for the money expended upon them, the account of the field is very far from being balanced. All would, however, be changed if any one of the county towns in central Ohio should secure such a supply as Mr. Neff has so skillfully found a use for in the isolated valley of the Walhonding.

Volume VI - Chapter IV - pp. 328 - 332, 1888

#### THE MECCA OIL FIELD

by Edward Orton

Beginning in Trumbull County, in northeastern Ohio, we find the Berea grit a productive rock, even where it rises to day. The Mecca oil field has been a well-known center of small production since 1860. This production is still maintained, though on an insignificant and ever-shrinking scale.

The township of Mecca embraces a flat-lying tract, the average elevation of which above the sea is not far from 900 feet. Its surface is made up of drift clays that have a thickness of from five to fifty feet. In the vicinity of West Mecca, the underlying rock is a sandstone which crops out to a small extent in the valley of Musquito Creek, and which can be reached at any point by shafts of a few feet in depth. The early settlers were obliged to sink their wells into this sandstone, and the water obtained often carried globules of dark-colored petroleum that would form a film over the surface. From early times the oil was saved in a small way and used for the same purposes as the Seneca oil of New York. But in 1860, when the interest in the Oil Creek region of Pennsylvania was at its height, the facts in regard to West Mecca oil became widely known, and a whirlwind of speculative excitement invaded this hitherto quiet neighborhood. Wells were drilled here by the hundred, some say by the thousand; and for a few months the Mecca field was a factor of some importance in the infant industry of petroleum production. The total number of wells drilled is estimated at 2,000 to 2,500 by persons well acquainted with the field. The oil was at once recognized as of very different quality from that of the Pennsylvania field. It was a heavy oil, its gravity being 26 to 28 B. It endured an excellent cold test, and, in a word, was found to be adapted in every respect to the highest uses as a lubricant. Its great value was soon learned, and the price rose for a little while to \$50.00 per barrel. Although it soon receded from these extreme figures, it has been from that day to this worth many times more in the market than any other natural oil. What little is produced now finds ready sale at \$15.00 per barrel.

The wells do not exceed fifty feet in depth. In early times they were put down by hand, but latterly they have been drilled by portable machines that can be hauled from farm to farm by two or three yoke of cattle. The total expense of drilling is covered by a production of 50 to 60 gallons of oil, and the expense of pumping is reduced in like manner to very low terms, portable steam-pumps being sometimes moved from one well to another a few times a year, and in one case a wind-pump is used for raising the oil.

Estimates of the production of the field vary widely. One conservative estimate makes 5,000 barrels the maximum production for a single year, but other estimates make the amount very much larger than this. Single wells are known to have produced from fifty to seventy barrels a day for several months in succession, and some of these wells are credited with a total production of 3,000 barrels. Wells are seldom pumped for more than three months after they are drilled. After that the oil is removed in a primitive way by the sand-pump, the supply continuing indefinitely, so far as present experience goes.

The territory within which oil has been found in paying quantity can probably all be included in a tract five miles long by three miles wide, but half of the production of the field in its best days was derived from a single farm, and the bulk of the oil at all times has come from a few hundred acres at most. In the early days of this production a little gas was found associated with the oil, but the abundant puncturing of the rock that has gone forward here, long ago exhausted this supply on the West Mecca side. A small amount of gas is still found on the east side of Musquito Creek.

In the spring of 1884 a shaft was sunk on the Cowdery farm, on the west half of Section 4, to the oil horizon, the object being to obtain a larger supply of oil. It was held by the projectors of the enterprise that inasmuch as every well in this immediate territory yielded oil, the shaft would secure a production as much greater than a single well as its area should exceed that of a single well. The wells were usually drilled eight inches in diameter. The shaft was made six by eight feet. It furnished an excellent section of the Berea grit. The rock was struck at a depth of seven feet. The first bed which was found was four feet thick. It consisted of uneven bedded sandstone, and is known as the "bogus rock." It always carries a little oil, and for that matter the lower portions of the boulder clay are often saturated with oil. Under the "bogus rock" there was found thirty feet of shaly sandstone, blue in color, and with many black streaks of vegetable origin, such as are common in the Berea grit in its northern outcrop. This section is known as "flagstone," and is generally rather close-grained, and somewhat impervious to water. At a depth of forty-three feet the oil-rock, so-called, was reached. It consisted here of two or three beds of false-bedded sandstone, the lower one of which is very loosely cemented. The oil-sand had a total thickness of about nine feet. Water came into the shaft in large quantity at several seams or crevices in these lower beds, and the oil was brought along by it in drops, which found their way to the soft sandstone below, in which they were temporarily stored. When the oil is pumped by a steam-pump this loose sand is often brought with it, and the main trouble that is taken in preparing the oil for use consists in the removal of this sand. When the bottom of the oil-rock was reached at a depth of fifty-three feet, three entries or tunnels were driven at right angles to each other, north, east, and west respectively. While the work was going forward several tons of sand were raised every day, and a large amount of water was also pumped. A small quantity of oil was produced in both sand and water, but the result was not such as was expected by the projectors of the enterprise, and the novel scheme of mining for oil by regular entries driven into the oil reservoir was soon abandoned. This, however, was not strictly the first attempt that has been made to mine for oil.

The oil-rock has been already described as full of fresh water. A large volume is always found at the bottom of the oil-sand which the driller calls "Lake Erie." Seams occur, however, in the lower part of the oil-rock that reduce the level of the surface water in the wells. These seams are known as "let-offs." The accumulation of the oil is intimately connected with the movements of the water in the rock. The best production occurs after the spring rains, or after heavy summer showers. The rain seems to wash the oil from the body of the rock and to bring it into circulation. The oil goes wherever the water does.

The section that was obtained from the shaft, and which has been given above, is not quite a normal one. There is in it a larger measure of the upper or flagstone beds, than is usually found. In most of the West Mecca wells there are only about ten feet of this so-called flagstone; under this, the oil-sand, with a thickness of ten to fifteen feet is found. Under the oil-sand, again, is found the "water sand," which is sometimes as much as seventy to eighty feet thick. The Berea grit in this vicinity is thus seen to have a thickness of a hundred feet, or even more. It is always overlain by a thin but very black fossiliferous bed of the Berea shale. An excellent section is furnished in the banks and the bed of Walnut Creek, within the limits of the village of Cortland, and a half-mile below. At the junction of Walnut and Musquito Creeks, the flag-rock that makes the upper bed of the Berea is found in the bed of the stream. It is covered by eight feet of Berea shale, very black and crowded with its characteristic fossils.

The forty feet immediately above the Berea shale are made up of beds of fine-grained stone separated by thicker beds of shale or soapstone—an alternation of materials which is characteristic of this part of the Cuyahoga shale. Above this division are found quite heavy courses of fine-grained stone, over which twelve feet of dark shale occur. Above the shale is the horizon of the famous Warren flagstone. There are twenty feet found in the present section referable to this horizon, but the quality of the rock at this point is inferior.

This valuable stratum is thus seen to have its place about seventy feet above the surface of the Berea grit. Sections entirely similar to this have been penetrated in a number of wells drilled at and near Cortland for either water or gas.

Four wells have been drilled at Mecca quite deep into the Ohio shale, one of them, the Grover well, to a depth of 1,135 feet.

The series traversed consisted of beds of black shale alternating with blue or gray shale, after the usual fashion. They yielded a little gas and oil at various horizons, according to the traditions, but nothing of great value was found in them, and none of them are productive at the present time. Above the Warren flagstone the Cuyahoga shale continues as soft rock until the conglomerate sandstone is reached upon the high ground.

The Mecca field is unique. It has been an interesting one, but it has had its day. There is not value enough in it to warrant the expenditure that would be required to carefully explore its structure. In fact, it is almost impossible at this time to obtain the data essential to an explanation. The proper time to acquire such knowledge was when the development of the field was at its height. It is not unreasonable to suppose that other similar fields will be found in this general region.

Volume VI - Chapter IV - pp. 332 - 333, 1888

#### THE BELDEN OR GRAFTON OIL-FIELD

by Edward Orton

An exhausted field of shallow oil of a type similar to Mecca oil is found at Belden, Lorain county. It is better known as the Grafton field. It was discovered twenty-five years ago, in drilling for salt.

The general section at this point is as follows:

Drift.....	5 to	15 feet
Blue soapstone (Lower beds Cuyahoga shale).....	70 to	80 feet

Dark shale, almost black. Berea shale.....	10 to 25 feet
Oil-sand, Berea grit .....	5 to 170 "
Average thickness . . . . .	50 to 60 "
White clay, or putty streak.....	2 to 5 "
Red soapstone. Bedford shale.....	30 to 50 "

There have been drilled here a score or more of these shallow wells.

The deepest of them was about 320 feet deep, but all the oil has been obtained from a depth of 120 to 140 feet. The Berea grit when fully expanded furnishes a section as follows:

Blue and flinty rock. Flagstone .....	30 feet
White sand-rock.....	40 "
White and fine sand, "flour rock".....	40 "
Dark-blue and coarse rock. Hard at bottom .....	4 to 5 "

The stratum is largely worked at the Black River quarries in Grafton, three miles to the northward, but at this point its thickness is much reduced. These wells were at one time made to yield, by constant care and attention, 2,000 barrels of oil per year. One of the wells, indeed, produced 145 barrels in the first twenty-four hours. Two others yielded respectively 130 and 90 barrels for their first day: but a good average of the wells in their best production, was from three to five barrels per day. The oil is a lubricating oil, of twenty-five to thirty-two degrees of gravity. It is of good quality, but it is scarcely equal to the Mecca oil. That portion which lies in the surface of the oil-rock is heavier than that which comes from below. The oil-rock also carries quite a strong brine in place of fresh water, as at Mecca. The use of the topedo has not been found to improve the production of the wells. The pores of the sand-rock seem ample already to carry all the oil that the rock contains.

The field is now practically abandoned. A few barrels of oil can be got out at any time and almost anywhere in this immediate district, but it costs more than it is worth. The shales underneath the Berea grit at this point are probably about 1,400 feet in thickness. No careful examination has been attempted of the structure of the Belden field. The opportunity for such an examination is now lost, as at Mecca, inasmuch as the production has almost entirely ceased.

## WELLS DRILLED IN OHIO 1888 - 1951 - REVISED\*

Data from U. S. Bureau of Mines Mineral Year Books,  
The Derrick's Handbooks of Petroleum and  
the A. I. M. E. Annual Reviews

C & E - Central and Eastern Ohio						NW - Northwestern Ohio					
YEAR	OIL	GAS	DRY	TOTAL	PER CENT DRY	YEAR	OIL	GAS	DRY	TOTAL	PER CENT DRY
Prior to 1888						1897					
C & E	3,788			3,788 <sup>a</sup>		C & E	499	88	246	833	
NW	1,503	731 <sup>b</sup>		2,234		NW	2,265	490 <sup>b</sup>		2,755	
Total	5,291	731		6,022		Total	2,764	578	246	3,588	
1888						1898					
C & E		75		75		C & E	366	120	172	658	
NW	514	28 <sup>b</sup>		542		NW	2,485	367 <sup>b</sup>		2,852	
Total	514	103		617		Total	2,851	487	172	3,510	
1889						1899					
C & E	839	83	98	1,020		C & E	1,796	134	408	2,338	
NW	648	20	34	702		NW	4,056	413 <sup>b</sup>		4,469	
Total	1,487	103	132	1,722		Total	5,852	547	408	6,807	
1890						1900					
C & E	346	<sup>c</sup>	96	442 <sup>d</sup>		C & E	988	97	457	1,542	
NW	2,010	141 <sup>b</sup>		2,151		NW	4,535	478 <sup>b</sup>		5,013	
Total	2,356	141	96	2,593		Total	5,523	575	457	6,555	
1891						1901					
C & E	137	<sup>c</sup>	56	193 <sup>d</sup>		C & E	922	113	573	1,608	
NW	1,326	246 <sup>b</sup>		1,572		NW	3,220	304 <sup>b</sup>		3,524	
Total	1,463	246	56	1,765		Total	4,142	417	573	5,132	
1892						1902					
C & E	86	<sup>c</sup>	38	124 <sup>d</sup>		C & E	1,172	266	649	2,087	
NW	1,277	188 <sup>b</sup>		1,465		NW	3,971	242 <sup>b</sup>		4,213	
Total	1,363	188	38	1,589		Total	5,143	508	649	6,300	
1893						1903					
C & E	190	<sup>c</sup>	46	236 <sup>d</sup>		C & E	1,518	290	777	2,585	
NW	1,557	320 <sup>b</sup>		1,877		NW	3,773	299 <sup>b</sup>		4,072	
Total	1,747	320	46	2,113		Total	5,291	589	777	6,657	
1894						1904					
C & E	215	<sup>c</sup>	85	300 <sup>d</sup>		C & E	1,499	334	858	2,691	
NW	2,561	440 <sup>b</sup>		3,001		NW	2,908	233 <sup>b</sup>		3,141	
Total	2,776	440	85	3,301		Total	4,407	567	858	5,832	
1895						1905					
C & E	461	<sup>c</sup>	127	588 <sup>d</sup>		C & E	1,107	342	680	2,129	
NW	4,729	830 <sup>b</sup>		5,559		NW	1,427	151 <sup>b</sup>		1,578	
Total	5,190	830	127	6,147		Total	2,534	493	680	3,707	
1896						1906					
C & E	620	641 <sup>e</sup>	856 <sup>f</sup>	2,117		C & E	1,031	337	681	2,049	
NW	3,713	626 <sup>b</sup>		4,339		NW	1,373	162 <sup>b</sup>		1,535	
Total	4,333	1,267	856	6,456		Total	2,404	499	681	3,584	

YEAR	OIL	GAS	DRY	TOTAL	PER CENT DRY	YEAR	OIL	GAS	DRY	TOTAL	PER CENT DRY
1907						1919					
C & E	825	431	611	1,867		C & E	2,143	343	585	3,071	
NW	761	129 <sup>b</sup>		890		NW	328	57 <sup>b</sup>		385	
Total	1,586	560	611	2,757		Total	2,471	400	585	3,456	17
1908						1920					
C & E	837	398	695	1,930		C & E	1,502	354	722	2,578	
NW	768	80 <sup>b</sup>		848		NW	478	87 <sup>b</sup>		565	
Total	1,605	478	695	2,778		Total	1,980	441	722	3,143	23
1909						1921					
C & E	1,460	548	966	2,974		C & E	898	405	531	1,834	
NW	788	85 <sup>b</sup>		873		NW	372		89	461	
Total	2,248	633	966	3,847		Total	1,270	405	620	2,295	27
1910						1922					
C & E	945	542	670	2,157		C & E	1,046	482	546	2,074	
NW	515	57 <sup>b</sup>		572		NW	449	12	61	522	
Total	1,460	599	670	2,729		Total	1,495	494	607	2,596	24
1911						1923					
C & E	1,225	518	507	2,250		C & E	688	469	462	1,619	
NW	495	32 <sup>b</sup>		527		NW	605	17	75	697	
Total	1,720	550	507	2,777		Total	1,293	486	537	2,316	23
1912						1924					
C & E	846	2,130 <sup>g</sup>	956 <sup>h</sup>	3,932		C & E	656	519	376	1,551	
NW	481	70 <sup>b</sup>		551		NW	487	42	63	592	
Total	1,327	2,200	956	4,483		Total	1,143	561	439	2,143	20
1913						1925					
C & E	1,246	342	603	2,191		C & E	721	421	325	1,467	
NW	882	90 <sup>b</sup>		972	19	NW	512	26	89	627	
Total	2,128	432	603	3,163		Total	1,233	447	414	2,094	20
1914						1926					
C & E	863	664	517	2,044		C & E	812	484	348	1,644	
NW	776	68	17	861	18	NW	413	13	34	460	
Total	1,639	732	534	2,905		Total	1,225	497	382	2,104	18
1915						1927					
C & E	677	761	472	1,910		C & E	626	433	302	1,361	
NW	224	10	26	260	23	NW	211	16	35	262	
Total	901	771	498	2,170		Total	837	449	337	1,623	21
1916						1928					
C & E	927	402	525	1,854		C & E	660	496	340	1,496	
NW	620	79 <sup>b</sup>		699	21	NW	130	19	55	204	
Total	1,547	481	525	2,553		Total	790	515	395	1,700	23
1917						1929					
C & E	868	461	504	1,833		C & E	1,009	776	594	2,379	
NW	475	60 <sup>b</sup>		535	22	NW	126	25	40	191	
Total	1,343	521	504	2,368		Total	1,135	801	634	2,570	25
1918						1930					
C & E	803	439	446	1,688		C & E	815	581	533	1,929	
NW	419	47 <sup>b</sup>		466	21	NW	94	72	39	205	
Total	1,222	486	446	2,154		Total	909	653	572	2,134	27

YEAR	OIL	GAS	DRY	TOTAL	PER CENT DRY	YEAR	OIL	GAS	DRY	TOTAL
1931						1941				
C & E	280	385	263	928		Total	333	701	527	1,561
NW	34	90	24	148		1942				
Total	314	475	287	1,076	27	Total	181	471	356	1,008
1932						1943				
C & E	230	216	200	646		Total	170	455	391	1,016
NW	49	51	24	124		1944				
Total	279	267	224	770	29	Total	169	478	393	1,040
1933						1945				
C & E	158	245	153	556		Total	220	429	385	1,034
NW	51	42	30	123		1946				
Total	209	287	183	679	27	Total	338	547	408	1,293
1934						1947				
C & E	402	412	242	1,056		Total	317	582	484	1,383
NW	48	21	34	103		1948				
Total	450	433	276	1,159	24	Total	493	428	534	1,455
1935						1949				
C & F	256	216	170	642		Total	334 <sup>j</sup>	292	426	1,052 <sup>k</sup>
NW	43	29	22	94		1950				
Total	299	245	192	736	26	Total	384 <sup>j</sup>	282	475	1,141 <sup>k</sup>
1936						1951				
C & E	310	372	237	919		Total	386	240	435	1,061
NW	35	37	9	81		TOTAL	108,207	33,160	28,367	169,734
Total	345	409	246	1,000	25					
1937										
Total	316	497	432	1,245	35					
1938										
Total	189	433	288	910	32					
1939										
Total	216	497	319	1,032	31					
1940										
Total	327	491	410	1,228	33					

a - Gas and Dry not available

b - Also includes Dry

c - Not available

d - Southeastern Ohio only

e - Total drilled in Central Ohio prior to 1897

f - Includes 207 drilled in Central Ohio prior to 1897

g - Includes 1,778 shallow gas wells drilled in Central and Northeastern Ohio prior to 1913

h - Includes 496 shallow dry holes drilled in Central and Northeastern Ohio prior to 1913

j - Combination wells included

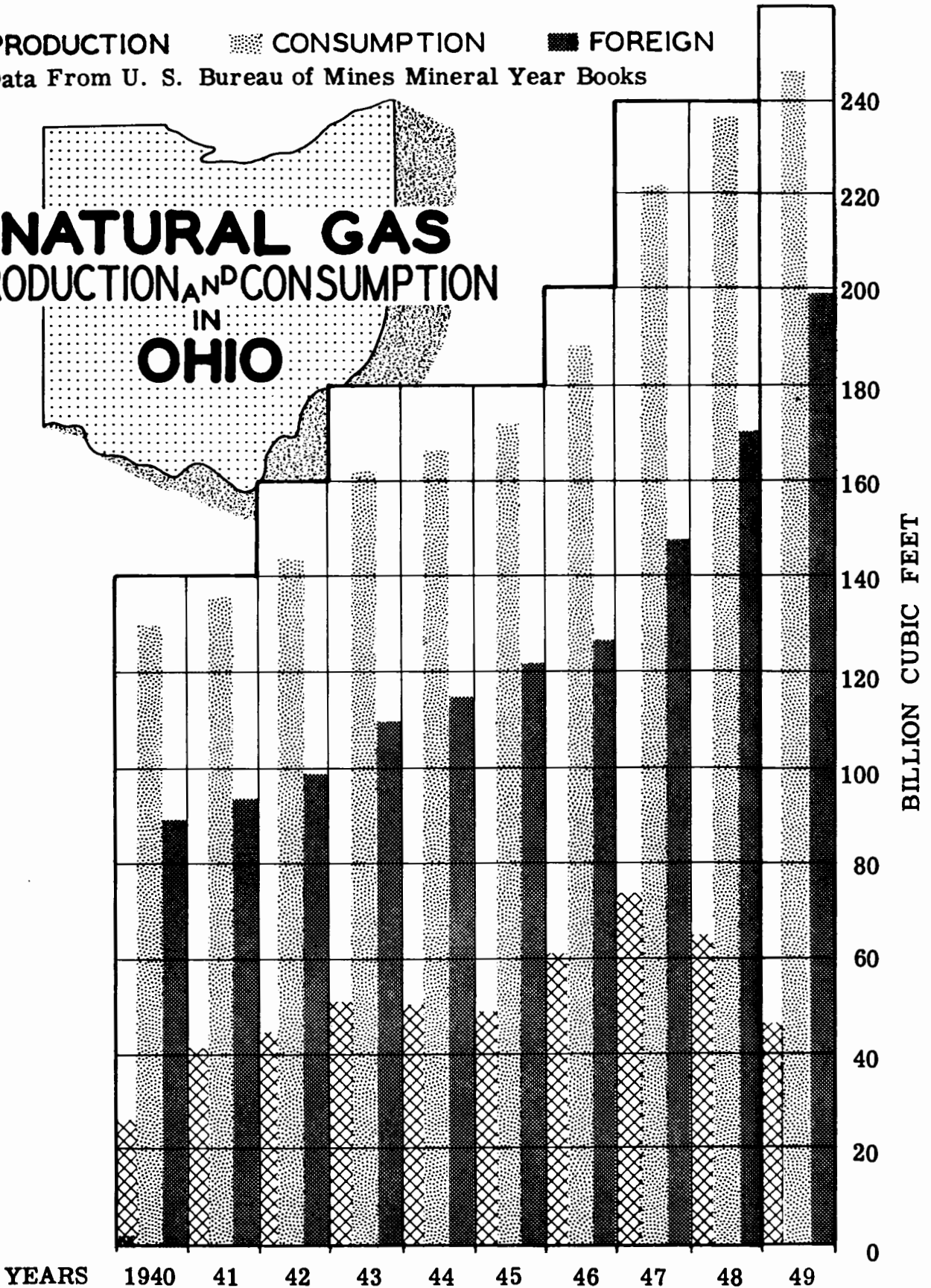
k - Division of Geological Survey

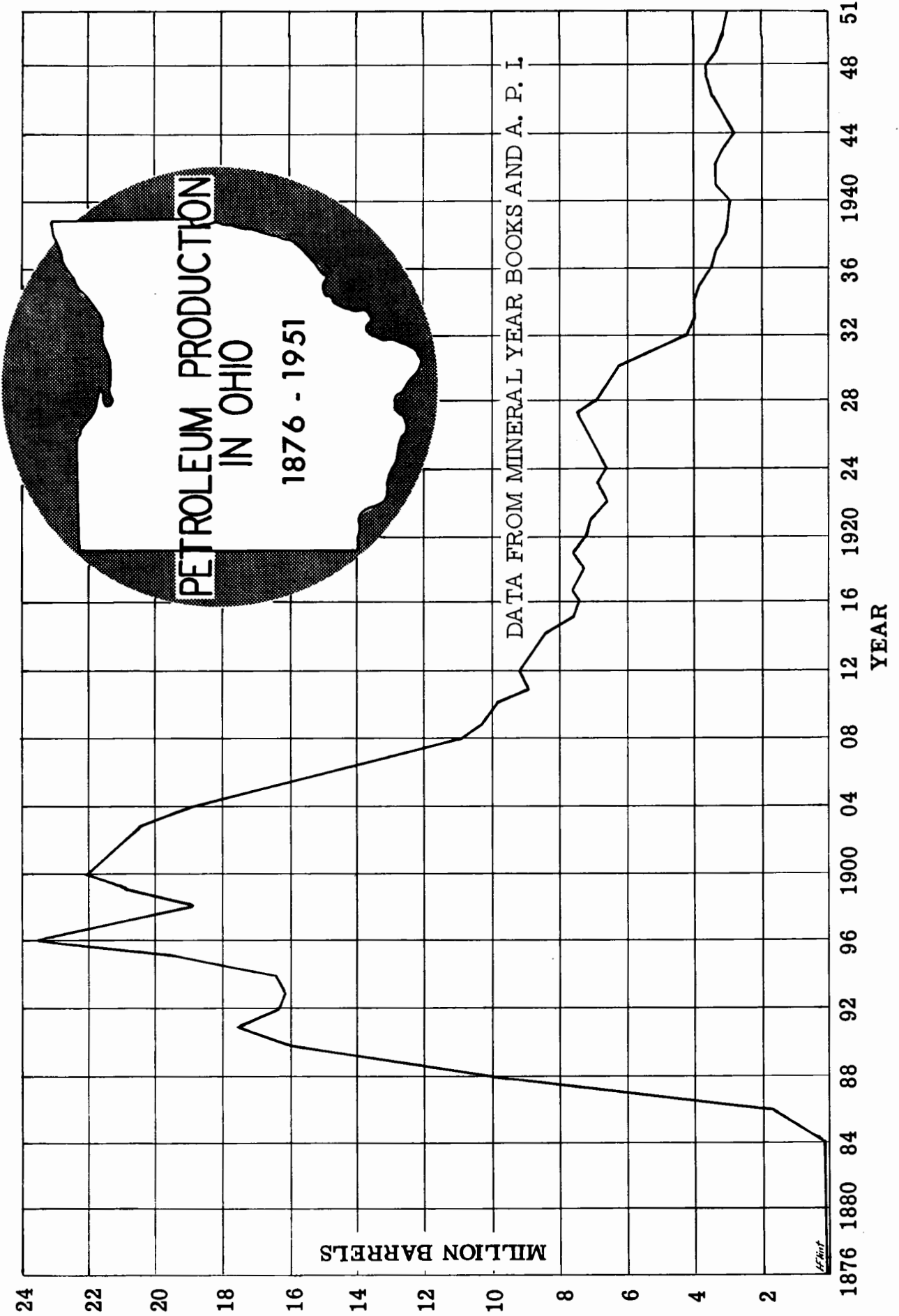
\* This table first appeared on pages 45 and 46 of Petroleum and Natural Gas Series No. 1 (Report of Investigations No. 6). Additional information has been found, principally in the Derrick's Handbooks of Petroleum, which alters the annual total wells drilled for the years up to 1920. Although some confusion still exists it is believed the present table is more correct than the previous.

✕ PRODUCTION    ▨ CONSUMPTION    ■ FOREIGN

Data From U. S. Bureau of Mines Mineral Year Books

# NATURAL GAS PRODUCTION AND CONSUMPTION IN OHIO





# OIL, GAS, AND WATER WELL SAMPLE CUTTINGS

## INTRODUCTION

The following pages list the oil, gas, and water well drill cuttings on file at the Division of Geological Survey, Orton Hall, Ohio State University, Columbus. These samples are stored in paper bags in cartons and are readily accessible to anyone interested in their examination.

The order in which the samples are listed is as follows: county, township, section, lot or quarter, company, well number, farm, date completed, total depth, range of samples on file, samples missing within the range, geologic range of the samples, and the Division of Mines or Division of Water reference number. In the majority of instances the geologic range is estimated from the driller's log as very few of the samples have been carefully analyzed.

The Division of Geological Survey is very grateful to the Ohio Oil Company, Ohio Fuel Gas Company, East Ohio Gas Company, Sun Oil Company, Preston Oil Company, Pure Oil Company, Hanley and Bird, B. H. Putnam, U. S. Geological Survey, and many others for their excellent cooperation through the years. They have made this sample collection possible. With the enlarged facilities and additional personnel now available, the Survey looks forward to closer cooperation and increased service to the oil and gas operators and to the presentation of new publications based upon studies of subsurface geological problems in Ohio.

## Adams County

- Franklin Twp., N  $\frac{1}{2}$  Twp., Sample No. 46  
Ohio Oil Co. #1 Thomas Tira  
Date Completed: 6-26-39, Total Depth: 2,162  
Sample Range: 1,446 - 2,162  
Samples Missing: None  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No.: None
- Tiffin Twp., Lot 2,465, Sample No. 231  
Copas and Mosier #1 Mosier and son  
Date Completed: 8-9-49, Total Depth: 1,200  
Sample Range: 0 - 1,200  
Samples Missing: 220-225; 1,028 - 1,034  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No.: None

## Allen County

- American Twp., City of Lima, Sample No. 461  
Standard Oil Co., Water well #35  
Date Completed: 6-18-51, Total Depth: 300  
Sample Range: 38 -300  
Samples Missing: None  
Division of Water No.: None
- \_\_\_\_\_, City of Lima, Sample No. 372  
\_\_\_\_\_, No. — T. F. and M. Levinces  
Date Completed: \_\_\_\_\_. Total Depth: \_\_\_\_  
Sample Range: 0 - 1,311  
Samples Missing: 400 - 1,215  
No log available  
Geologic Sample Range: Surface - Trenton  
Division of Mines No.: None
- Spencer Twp., \_\_\_\_\_, Sample No. 372  
Wiell and Johnston # — J. L. Jamison  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_  
Sample Range: 80 - 1,235  
Samples Missing: 1,210 - 1,230  
Geologic Sample Range: Surface - Trenton  
No log available  
Division of Mines No.: None

## Ashland County

- Hanover Twp., Sec. 13, Sample No. 355  
Ohio Fuel Gas Co. #1 M. M. Derr  
Date Completed: 9-21-36, Total Depth: 2,858  
Sample Range: 2,726 - 2,850  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 65
- Jackson Twp., Sec. 3, Sample No. 158  
Harmon et al. #2 C. L. McFerrin  
Date Completed: 7-15-46, Total Depth: 2,884  
Sample Range: 2,771 - 2,884  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Jackson Twp., Sec. 5, Sample No. 341  
Ohio Fuel Gas Co. #1 J. K. McDowell  
Date Completed: 8-13-40, Total Depth: 2,901  
Sample Range: 2,740 - 2,902  
Samples Missing: 2,785-2,795; 2,823 - 2,828  
Geologic Sample Range: Clinton  
Division of Mines No.: 127

Jackson Twp., Sec. 5, Sample No. 343  
Ohio Fuel Gas Co. #2 J. K. McDowell  
Date Completed: 3-25-41, Total Depth: 2,932  
Sample Range: 2,760 - 2,932  
Samples Missing: 2,816-2,853; 2,860-2,902  
Geologic Sample Range: Clinton  
Division of Mines No.: 133

Jackson Twp., Sec. 16, Sample No. 345  
Ohio Fuel Gas Co. #1 M. Buchanan  
Date Completed: 6-28-41, Total Depth: 2,975  
Sample Range: 2,810 - 2,975  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 139

Jackson Twp., Sec. 21, Sample No. 343  
Nwon Gas Co. (Pete Burus Prop.) #— G. N. Cook  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_  
Sample Range: 0 - 2,743  
Samples Missing: 500-575; 845-895; 2,125-2,135;  
2,150-2,155; 2,250-2,280  
Geologic Sample Range: Surface - Clinton  
No log available  
Division of Mines No.: None

Jackson Twp., Sec. 22, Sample No. 341  
Ohio Fuel Gas Co. #1 L. D. Hall  
Date Completed: 6-6-38, Total Depth: 2,895  
Sample Range: 2,806 - 2,878  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 108

Jackson Twp., Sec. 22, Sample No. 344  
Ohio Fuel Gas Co. #2 L. D. Hall  
Date Completed: 5-7-40, Total Depth: 2,964  
Sample Range: 2,822 - 2,893  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 125

Jackson Twp., Sec. 22, Sample No. 344  
Ohio Fuel Gas Co. #1 J. W. Kline  
Date Completed: 8-14-37, Total Depth: 2,933  
Sample Range: 2,802 - 2,898  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 93

Jackson Twp., Sec. 22, Sample No. 344  
Ohio Fuel Gas Co. #1 L. Franks  
Date Completed: 6-13-41, Total Depth: 2,974  
Sample Range: 2,825 - 2,907  
Samples Missing: 2,852 - 2,859  
Geologic Sample Range: Clinton  
Division of Mines No.: 138

**Jackson Twp. , Section 23, Sample No. 158**

F. Lyons #1 M. Fleming et al.  
 Date Completed: 7-23-46, Total Depth: 3,102  
 Sample Range: 2,879 - 3,050  
 Samples Missing: 2,980 - 2,990  
 Geologic Sample Range: Clinton  
 Division of Mines No. : None

**Jackson Twp. , Section 33, Sample No. 355**

Ohio Fuel Gas Co. #1 Mary Stanislawski  
 Date Completed: 6-12-36, Total Depth: 2,944  
 Sample Range: 2,774 - 2,944  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 58

**Lake Twp. , Section 2, Sample No. 341**

Ohio Fuel Gas Co. #2 E. A. Morris  
 Date Completed: 11-14-38, Total Depth: 3,084  
 Sample Range: 2,993 - 3,084  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 113

**Lake Twp. , Section 2, Sample No. 342**

Ohio Fuel Gas Co. #1 S. Mauer  
 Date Completed: 1-25-39, Total Depth: 3,070  
 Sample Range: 2,939 - 3,070  
 Samples Missing: 2,964 - 2,988  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 118

**Lake Twp. , Section 3, Sample No. 325**

Waltz et al. #1 Mosher  
 Date Completed: ———, Total Depth: ———  
 Sample Range: 708 - 789  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 No log available  
 Division of Mines No. : None

**Lake Twp. , Section 3, Sample No. 325**

Waltz et al. #2 Mosher  
 Date Completed: ———, Total Depth: ———  
 Sample Range: 689 - 739  
 Samples Missing: Random samples  
 Geologic Sample Range: Berea  
 No log available  
 Division of Mines No. : None

**Lake Twp. , Section 3, Sample No. 342**

Waltz et al. #1 Arnold  
 Date Completed: ———, Total Depth: ———  
 Sample Range: 713 - 839  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 No log available  
 Division of Mines No. : None

**Lake Twp. , Section 16, Sample No. 342**

Ohio Fuel Gas Co. , #1 A. H. Koop  
 Date Completed: 12-9-42, Total Depth: 3,019  
 Sample Range: 2,877 - 2,985  
 Samples Missing: 2,900 - 2,945  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 199

**Lake Twp. , Section 23, Sample No. 344**

Ohio Fuel Gas Co. #1 E. L. Butler  
 Date Completed: 11-25-42, Total Depth: 3,125  
 Sample Range: 2,994 - 3,077  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 198

**Lake Twp. , Section 23, Sample No. 345**

Ohio Fuel Gas Co. #1 A. Mosher  
 Date Completed: 6-16-42, Total Depth: 2,954  
 Sample Range: 2,824 - 2,954  
 Samples Missing: 2,891 - 2,901  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 160

**Mohican Twp. , Section 5, Sample No. 346**

Vermillion Oil and Gas Co. #1 at Jeromesville  
 Date Completed: ———, Total Depth: ———  
 Sample Range: 520 - 2,305  
 Samples Missing: 640-1,050; 1,625 - 1,650  
 Geologic Sample Range: Berea - "Big Lime"  
 No log available  
 Division of Mines No. : None

**Mohican Twp. , Section 4, Sample No. 345**

Ohio Fuel Gas Co. #2 R. Sells  
 Date Completed: 8-28-41, Total Depth: 2,986  
 Sample Range: 2,833 - 2,986  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 145

**Mohican Twp. , Section 21, Sample No. 344**

Ohio Fuel Gas Co. #1 H. Metcalf  
 Date Completed: 6-2-43, Total Depth: 2,959  
 Sample Range: 2,843 - 2,939  
 Samples Missing: 2,921 - 2,928  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 206

**Mohican Twp. , Section 22, Sample No. 341**

Ohio Fuel Gas Co. #1 E. Hootman  
 Date Completed: 12-24-40, Total Depth: 2,874  
 Sample Range: 2,742 - 2,838  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 131

**Mohican Twp. , Section 22, Sample No. 342**

Ohio Fuel Gas Co. #2 Hootman and Crumlick  
 Date Completed: 4-22-41, Total Depth: 2,881  
 Sample Range: 2,777 - 2,878  
 Samples Missing: 2,833-2,840; 2,861-2,871  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 134

**Mohican Twp. , Section 22, Sample No. 341**

Ohio Fuel Gas Co. #1 G. W. Eagle  
 Date Completed: 6-20-40, Total Depth: 2,927  
 Sample Range: 2,770 - 2,894  
 Samples Missing: 2,855 - 2,882  
 Division of Mines No. : 124

- Mohican Twp., Sec. 22, Sample No. 345  
Ohio Fuel Gas Co. #1 J. Crumlick  
Date Completed: 4-7-42, Total Depth: 2,940  
Sample Range: 2,789 - 2,929  
Samples Missing: 2,870 - 2,873  
Geologic Sample Range: Clinton  
Division of Mines No.: 156
- Mohican Twp., Sec. 22, Sample No. 355  
Ohio Fuel Gas Co. #1 E. A. Young  
Date Completed: 6-30-36, Total Depth: 2,865  
Sample Range: 2,712 - 2,865  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 53
- Mohican Twp., Sec. 23, Sample No. 344  
Ohio Fuel Gas Co. #1 Musk. Watershed Cons.  
Dist.  
Date Completed: 5-23-41, Total Depth: 2,873  
Sample Range: 2,726 - 2,875  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 136
- Mohican Twp., Sec. 35, Sample No. 342  
Ohio Fuel Gas Co. #1 J. Lisle  
Date Completed: 7-10-40, Total Depth: 2,996  
Sample Range: 2,864 - 2,970  
Samples Missing: 2,869 - 2,876; 2,905 - 2,909;  
2,911 - 2,917  
Geologic Sample Range: Clinton  
Division of Mines No.: 126
- Mohican Twp., Sec. 35, Sample No. 345  
Ohio Fuel Gas Co. #1 Raubenolt  
Date Completed: 7-21-41, Total Depth: 3,047  
Sample Range: 2,907 - 3,031  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 140
- Orange Twp., Sec. 16, Sample No. 341  
Ohio Fuel Gas Co. #2 R. Fishpaw  
Date Completed: 6-2-37, Total Depth: 2,627  
Sample Range: 2,485 - 2,627  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 86
- Orange Twp., Sec. 24, Sample No. 341  
Ohio Fuel Gas Co. #3 M. Gantz  
Date Completed: 4-30-41, Total Depth: 2,895  
Sample Range: 2,743 - 2,860  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 137
- Perry Twp., Sec. 26, Sample No. 345  
Ohio Fuel Gas Co. #1 E. W. Firestone  
Date Completed: 1-15-42, Total Depth: 2,963  
Sample Range: 2,799 - 2,963  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 155
- Perry Twp., Sec. 26, Sample No. 325  
E. Waltz #2 C. Robinson  
Date Completed: 11-8-49, Total Depth: 681  
Sample Range: 569 - 606  
Samples Missing: None  
Geologic Sample Range: Berea  
Division of Mines No.: 509
- Perry Twp., Sec. 35, Sample No. 340  
Ohio Fuel Gas Co. #1 B. Ryland  
Date Completed: 6-20-42, Total Depth: 3,007  
Sample Range: 2,752 - 3,007  
Samples Missing: 2,861 - 2,915  
Geologic Sample Range: Clinton  
Division of Mines No.: 161
- Ruggles Twp., Sec. 1, Lot 11, Sample No. 213  
Fierbaugh and Ringler #1 Hilliker  
Date Completed: 7-12-48, Total Depth: 2,561  
Sample Range: 2,370 - 2,561  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 359
- Ruggles Twp., Sec. 1, Lot 14, Sample No. 149  
Ohio Oil Co. #1 S. V. Krause  
Date Completed: 3-29-45, Total Depth: 5,251  
Sample Range: 140 - 5,251  
Samples Missing: 3,428 - 3,447  
Geologic Sample Range: Surface-L. Magnesian  
Division of Mines No.: 246
- Ruggles Twp., Sec. 1, Lot 23, Sample No. 207  
Fierbaugh and Ringler #1 H. and T. Backus  
Date Completed: 5-24-48, Total Depth: 2,502  
Sample Range: 1,308 - 2,472  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No.: 362
- Ruggles Twp., Sec. 1, Lot 24, Sample No. 194  
Fierbaugh and Ringler #1 M. E. Clouser  
Date Completed: 3-7-48, Total Depth: 4,504  
Sample Range: 444 - 4,488  
Samples Missing: 449 - 474; 546 - 715; 721 - 845;  
853 - 1,070, 1,075 - 1,175, 1,183 - 1,260,  
2,383 - 2,395; 2,505 - 2,518; 2,523 - 2,543;  
2,554 - 2,576; 2,599 - 3,714  
Geologic Sample Range: Berea - St. Peter  
Division of Mines No.: None
- Ruggles Twp. Sec. 1, Lot 24, Sample No. 206  
Fierbaugh and Ringler #2 M. E. Clouser  
Date Completed: 3-7-48, Total Depth: 2,486  
Sample Range: 40 - 2,466  
Samples Missing: 514 - 590  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 354
- Ruggles Twp., Sec. 1, Lot 24, Sample No. 384  
Fierbaugh and Ringler #3 M. E. Clouser  
Date Completed: 10-11-48, Total Depth: 2,489  
Sample Range: 2,136 - 2,490  
Samples Missing: None  
Geologic Sample Range: Newburg - Clinton  
Division of Mines No.: None

- Ruggles Twp., Section 1, Lot 25, Sample No. 211  
Ohio Oil Co. #1 C. C. Clawson (E. Hawk)  
Date Completed: 7-19-48, Total Depth: 2,469  
Sample Range: 421 - 2,469  
Samples Missing: None  
Geologic Sample Range: Berea - Clinton  
Division of Mines No.: None
- Ruggles Twp., Section 1, Lot 37, Sample No. 382  
Fierbaugh and Ringler #1 W. Bauer  
Date Completed: 1-6-50, Total Depth: 2,475  
Sample Range: 405 - 2,475  
Samples Missing: 515 - 1,235  
Geologic Sample Range: Berea - Clinton  
Division of Mines No.: 380
- Ruggles Twp., Section 1, Lot 44, Sample No. 370  
Fierbaugh and Ringler #1 Peters  
Date Completed: 4-3-49, Total Depth: 2,475  
Sample Range: 1,261 - 2,465  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No.: 372
- Ruggles Twp., Section 3, Lot 2, Sample No. 383  
Fierbaugh and Ringler #1 J. Duta et al.  
Date Completed: 6-24-49, Total Depth: 2,200  
Sample Range: 150 - 2,115  
Samples Missing: 460 - 660  
Geologic Sample Range: Berea - Clinton  
Division of Mines No.: None
- Ruggles Twp., Section 4, Lot 29, Sample No. 214  
Fierbaugh and Ringler #1 D. E. Beach  
Date Completed: 4-8-48, Total Depth: 2,400  
Sample Range: 43 - 2,400  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 356
- Ruggles Twp., Section 24, Lot 24, Sample No. 184  
Ohio Oil Co. #1 E. H. Nelson  
Date Completed: 5-4-48, Total Depth: 2,494  
Sample Range: 485 - 2,508  
Samples Missing: 741 - 1,112; 1,489 - 1,504  
Geologic Sample Range: Berea - Clinton  
Division of Mines No.: 357
- Sullivan Twp., Lot 20, Sample No. 342  
Ohio Fuel Gas Co. #1 A. Pettitt  
Date Completed: 7-21-41, Total Depth: 2,912  
Sample Range: 2,747 - 2,894  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 143
- Sullivan Twp., Lot 27, Sample No. 340  
Ohio Fuel Gas Co. #1 Aetna Life Ins. Co.  
Date Completed: 9-9-42, Total Depth: 2,779  
Sample Range: 2,591 - 2,747  
Samples Missing: 2,640 - 2,682; 2,708 - 2,716  
Geologic Sample Range: Clinton  
Division of Mines No.: 190
- Sullivan Twp., Lot 49, Sample No. 341  
Ohio Fuel Gas Co. #1 F. E. Beard  
Date Completed: 7-8-37, Total Depth: 2,673  
Sample Range: 2,533 - 2,672  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 91
- Sullivan Twp., Lot 54, Sample No. 345  
Ohio Fuel Gas Co. #1 C. W. Holbrook  
Date Completed: 9-6-41, Total Depth: 2,684  
Sample Range: 2,516 - 2,659  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 148
- Troy Twp., Lot 2, Sample No. 218  
Ohio Oil Co. #1 W. Phelps et al.  
Date Completed: 11-19-48, Total Depth: 2,603  
Sample Range: 400 - 2,500  
Samples Missing: 601 - 1,250; 2,453 - 2,466;  
2,474 - 2,483  
Geologic Sample Range: Berea - Clinton  
Division of Mines No.: 367
- Troy Twp., Lot 3, Sample No. 185  
Ohio Oil Co. #1 R. O. Wonders  
Date Completed: 6-11-48, Total Depth: 2,503  
Sample Range: 0 - 2,497  
Samples Missing: 656 - 1,305  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 358
- Troy Twp., Lot 3, Sample No. 220  
Fierbaugh and Ringler #1 G. H. Johnson  
Date Completed: 8-26-48, Total Depth: 2,520  
Sample Range: 2,374 - 2,508  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None
- Troy Twp., Lot 24, Sample No. 342  
Orange Oil and Gas Co. #1 J. L. and G. Davidson  
Date Completed: 4-28-37, Total Depth: 2,567  
Sample Range: 2,399 - 2,567  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 85
- Troy Twp., Lot 24, Sample No. 219  
Ohio Oil Co. #1 P. Lentz  
Date Completed: 9-1-48, Total Depth: 2,600  
Sample Range: 0 - 2,600  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 363
- Troy Twp., Lot 52, Sample No. 217  
Fierbaugh and Ringler #1 D. W. Stentz  
Date Completed: 8-17-48, Total Depth: 2,576  
Sample Range: 1,440 - 2,533  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No.: None

Vermillion Twp., Section 11, Sample No. 340  
Ohio Fuel Gas Co. #1 M. Address  
Date Completed: 8-31-42, Total Depth: 2,786  
Sample Range: 2,607 - 2,736  
Samples Missing: 2,687 - 2,716; 2,726 - 2,734  
Geologic Sample Range: Clinton  
Division of Mines No.: 188

Vermillion Twp., Section 14, Sample No. 340  
Ohio Fuel Gas Co. #1 W. H. Bell  
Date Completed: 7-21-42, Total Depth: 2,858  
Sample Range: 2,683 - 2,858  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 163

Vermillion Twp., Section 15, Sample No. 340  
Ohio Fuel Gas Co. #1 D. Ailer  
Date Completed: 8-20-42, Total Depth: 2,789  
Sample Range: 2,637 - 2,745  
Samples Missing: 2,722 - 2,728  
Geologic Sample Range: Clinton  
Division of Mines No.: 186

Vermillion Twp., Section 19, Sample No. 345  
Ohio Fuel Gas Co. #1 R. Wilson  
Date Completed: 5-19-42, Total Depth: 2,730  
Sample Range: 2,627 - 2,720  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 157

Vermillion Twp., Section 19, Sample No. 340  
Ohio Fuel Gas Co. #1 G. McCready  
Date Completed: 9-23-42, Total Depth: 2,783  
Sample Range: 2,629 - 2,760  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 191

Vermillion Twp., Section 19, Sample No. 340  
Ohio Fuel Gas Co. #1 T. L. Bartley  
Date Completed: 7-28-42, Total Depth: 2,682  
Sample Range: 2,571 - 2,682  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 164

Vermillion Twp., Section 19, Sample No. 342  
Ohio Fuel Gas Co. #1 E. H. Arnold  
Date Completed: 7-16-42, Total Depth: 2,790  
Sample Range: 2,630 - 2,746  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 162

Vermillion Twp., Section 30, Sample No. 344  
Ohio Fuel Gas Co. #2 D. R. Harlan  
Date Completed: 6-7-43, Total Depth: 2,639  
Sample Range: 2,473 - 2,633  
Samples Missing: 2,483 - 2,535; 2,622 - 2,624  
Geologic Sample Range: Clinton  
Division of Mines No.: 207

## Ashtabula County

Conneaut Twp., Tract 4, Sample No. 27  
Ohio Oil Co. #17 C. A. Childs  
Date Completed: 1942, Total Depth: 727  
Sample Range: 50 - 727  
Samples Missing: 200-210; 535-540; 560-565;  
695-697

Geologic Sample Range: Ohio shale  
No log available  
Division of Mines No.: None

Conneaut Twp., Tract 205, Sample No. 25  
Ohio Oil Co. #15 J. Johnson  
Date Completed: 1942, Total Depth: 541  
Sample Range: 60 - 541  
Samples Missing: None  
Geologic Sample Range: Ohio shale  
No log available  
Division of Mines No.: None

Conneaut Twp., Tract 205, Sample No. 28  
Ohio Oil Co. #18 J. Johnson  
Date Completed: 1942, Total Depth: 508  
Sample Range: 40 - 509  
Samples Missing: None  
Geologic Sample Range: Ohio shale  
No log available  
Division of Mines No.: None

Conneaut Twp., Tract 213, Sample No. 26  
Ohio Oil Co. #16 B. F. Thompson  
Date Completed: 1942, Total Depth: 598  
Sample Range: 20 - 598  
Samples Missing: None  
Geologic Sample Range: Ohio shale  
No log available  
Division of Mines No.: None

Harpersfield Twp., Lot 43, Sample No. 68  
Magnolia Pet. Co. #1 Breyley Brothers  
Date Completed: 11-30-40, Total Depth: 3,341  
Sample Range: 195 - 3,341  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 3

Kingsville Twp., Section 9, Sample No. 289  
Ohio Fuel Gas Co. #1 Nellie Rose  
Date Completed: 8-29-30, Total Depth: 3,148  
Sample Range: 2,775 - 3,148  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Lenox Twp., Lot 4, Sample No. 440  
Benedum-Trees Oil Co. #1 Geo. Corlett  
Date Completed: 4-26-51, Total Depth: 6,186  
Sample Range: 400 - 6,186  
Samples Missing: 846-853; 1,043-1,048; 2,357-  
2,360; 2,883-2,895; 2,978-2,989; 3,765-3,778;  
4,494-4,505; 5,008-5,018; 5,452-5,455;  
6,005-6,018  
Geologic Sample Range: Ohio shale - St. Peter  
Division of Mines No.: None

Morgan Twp., \_\_\_\_\_, Sample No. 388  
 \_\_\_\_\_ #1 Fulton  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 570 - 2,030  
 Samples Missing: Random samples  
 Geologic Sample Range: Ohio shale - "Big Lime"  
 No log available  
 Division of Mines No.: None

Richmond Twp., Lot 15, Sample No. 6  
 Ohio Oil Co. #1 Hatton Bros.  
 Date Completed: 11-26-41, Total Depth: 3,841  
 Sample Range: 0 - 3,830  
 Samples Missing: 175 - 202; 2,229 - 2,238;  
 2,440 - 2,442; 3,155 - 3,165  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No.: 2

Rome Twp., Lot 34, Sample No. 172  
 Ohio Fuel Gas Co. #1 G. E. Chester  
 Date Completed: 6-6-30, Total Depth: 6,004  
 Sample Range: 3,593 - 5,230  
 Samples Missing: 4,386 - 4,392  
 Geologic Sample Range: Medina - St. Peter  
 Division of Mines No.: None

Saybrook Twp., Tract 36, Sample No. 8  
 Ohio Oil Co. #1 J. Q. Metcalf  
 Date Completed: 7-15-41, Total Depth: 2,930  
 Sample Range: 0 - 2,930  
 Samples Missing: None  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No.: 4

Sheffield Twp., Lot 19, Sample No. 201  
 Ohio Fuel Gas Co. #1 G. W. Kelsey  
 Date Completed: 5-23-30, Total Depth: 5,582  
 Sample Range: 2,800 - 5,250  
 Samples Missing: 2,805-2,910; 3,280-3,305;  
 3,495-3,500; 4,080-4,085; 4,940-4,960; 4,990-  
 5,000; 5,055-5,070; 5,090-5,100; 5,165-5,180;  
 5,180-5,190; 5,220-5,230  
 Geologic Sample Range: "Big Lime" - St. Peter  
 Division of Mines No.: None

#### Athens County

Trimble Twp., Section 23, Sample No. 132  
 J. Morrow #38 Republic Coal Co.  
 Date Completed: 6-18-48, Total Depth: 3,735  
 Sample Range: 3,567 - 3,724  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: None

#### Belmont County

Pease Twp., Section 33, Sample No. 45  
 Water Well at Dorothy Mine  
 Date Completed: 1951, Total Depth: 810  
 Sample Range: 0-655  
 Samples Missing: 145-155; 282-295; 411-430; 454-  
 485; 516-558; 570-590; 600-610  
 Division of Water No.: 473

Pultney Twp., Section 30, Sample No. 252  
 Imperial Glass Corp. #1 City of Bellaire  
 Date Completed: 1-12-49, Total Depth: 4,506  
 Sample Range: 958 - 4,496  
 Samples Missing: 2,500-2,511; 2,704-2,715;  
 3,197-3,211; 3,385-3,402; 3,417-3,428; 3,529-  
 3,539; 3,557-3,568; 3,679-3,724; 3,806-3,822;  
 3,854-3,866; 3,892-3,921; 3,946-3,956; 4,073-  
 4,083; 4,095-4,105; 4,179-4,207; 4,234-4,254;  
 4,325-4,335; 4,367-4,416; 4,445-4,467  
 Geologic Sample Range: "Big Injun" - Ohio shale  
 Division of Mines No.: 169

Smith Twp., Section 19, Sample No. 40  
 National Gas Co. of W. Va. #8 T. Mobley  
 Date Completed: 2-7-41, Total Depth: 7,887  
 Sample Range: 675 - 7,887  
 Samples Missing: 5,751 - 5,860; 6,389 - 6,406;  
 7,559 - 7,565  
 Geologic Sample Range: Upper Conemaugh-Clinton  
 Division of Mines No.: 108

Somerset Twp., Section 10, Sample No. 433  
 Huntsman and Peters #1 F. F. Huntsman and  
 J. T. Skinner  
 Date Completed: 5-7-48, Total Depth: 1,967  
 Sample Range: 1,888 - 1,967  
 Samples Missing: 1,932 - 1,936  
 Geologic Sample Range: Lower Cuyahoga - Berea  
 Division of Mines No.: None

Somerset Twp., Section 20, Sample No. 360  
 A. C. Peters #1 F. L. Carpenter  
 Date Completed: 5-16-25, Total Depth: 1,893  
 Sample Range: 1,879½ - 1,890  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: None

Union Twp., Section 4, Sample No. 166  
 The Texas Co. #1 L. Gillespie  
 Date Completed: 3-15-45, Total Depth: 7,455  
 Sample Range: 200 - 7,455  
 Samples Missing: None  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No.: 129

Union Twp., Section 4, Sample No. 439  
 T. R. Buell #1 H. B. Clark  
 Date Completed: 12-8-50, Total Depth: 1,823  
 Sample Range: 135 - 1,823  
 Samples Missing: 1,338 - 1,347; 1,450 - 1,460;  
 1,770 - 1,781  
 Geologic Sample Range: Surface - Berea  
 Division of Mines No.: 195

Union Twp., Section 8, Sample No. 431  
 St. Clair Oil Co. #2 L. Martin  
 Date Completed: 8-30-50, Total Depth: 1,750  
 Sample Range: 686 - 1,745  
 Samples Missing: Random samples from 686-780  
 and from 1,625 - 1,729; missing from 780 -  
 1,625; 1,632 - 1,714  
 Geologic Sample Range: Allegheny - Berea  
 Division of Mines No.: 190

## Butler County

Wayne Twp., Section 27, Sample No. 174  
 V. L. Treadway #1 Pierson-Belsford  
 Date Completed: 1946, Total Depth: 710  
 Sample Range: 280 - 710  
 Samples Missing: None  
 Geologic Sample Range: Maysville - Trenton  
 Division of Mines No.: None

## Carroll County

Augusta Twp., Section 17, Sample No. 418  
 C. A. Smith #1 C. D. Peterson (Deager)  
 Date Completed: 11-26-45, Total Depth: 3,900  
 Sample Range: 3,576 - 3,884  
 Samples Missing: 3,608 - 3,633; 3,778 - 3,784  
 Geologic Sample Range: Top of "Big Lime"-  
 Oriskany  
 Division of Mines No.: 82

Monroe Twp., Section 9, Sample No. 71  
 Brendel Prod. Co. #1 S. W. Tipton  
 Date Completed: 5-31-41, Total Depth: 5,496  
 Sample Range: 1,956 - 5,455  
 Samples Missing: 3,866 - 3,880  
 Geologic Sample Range: Ohio shale - Clinton  
 Division of Mines No.: 57

Rose Twp., Section 3, Sample No. 304  
 Jupiter Oil and Gas Co. #1 D. J. Little  
 Date Completed: 1-25-28, Total Depth: 3,830  
 Sample Range: 3,445 - 3,691  
 Samples Missing: None  
 Geologic Sample Range: "Big Lime" - Oriskany  
 Division of Mines No.: 399-A

Rose Twp., Section 15, Sample No. 349  
 O. H. Mowls et al. #1 O. H. Mowls  
 Date Completed: 9-27-48, Total Depth: 1,079  
 Sample Range: 580 - 1,079  
 Samples Missing: Random samples  
 Geologic Sample Range: "Big Injun" - Berea  
 Division of Mines No.: 116

## Champaign County

Adams Twp., Section 25, Sample No. 391  
 W. E. Baumgardner #1 W. E. Baumgardner  
 Date Completed: 12-1-49, Total Depth: 1,444  
 Sample Range: 270 - 1,411  
 Samples Missing: 270 - 300; 300 - 325; 325 - 345;  
 864 - 869; 1,020 - 1,040; 1,080 - 1,088;  
 1,375 - 1,380  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No.: None

Jackson Twp., Section 31, Sample No. 453  
 Water Well at Christianburg  
 Date Completed: 1949, Total Depth: 120  
 Sample Range: 62 - 120  
 Samples Missing: None  
 Division of Water No.: 230

## Clark County

Green Twp., Section 5, Sample No. 323  
 Water Well on H. C. Moore Farm  
 Date Completed: 12-18-48, Total Depth: 223  
 Sample Range: 0 - 223  
 Samples Missing: None  
 Division of Water No.: 396

Madison Twp., ———, Sample No. 476  
 T. D. Friend #1 Mattison  
 Date Completed: 6-14-26, Total Depth: 4,647½  
 Sample Range: 1,415 - 4,622  
 Samples Missing: None  
 Geologic Sample Range: Trenton- Pre-Cambrian  
 Economic Museum No.: 16440  
 Division of Mines No.: None

Mad River Twp., Section 18, Sample No. 422  
 Water Well at L. E. Valley Dairy Co.  
 Date Completed: 10-13-50, Total Depth: 210  
 Sample Range: 41 - 210  
 Samples Missing: 56 - 60  
 Division of Water No.: 518

Springfield Twp., Section 9, Sample No. 323  
 Water Well at Clark County Fairground  
 Date Completed: 7-49, Total Depth: 165  
 Sample Range: 107 - 165  
 Samples Missing: None  
 Division of Water No.: 356

## Clinton County

Green Twp., ———, Sample No. 482  
 G. R. Conard et al. #1 Village of New Vienna  
 Date Completed: Prior 1888, Total Depth: 1,788  
 Sample Range: 75 - 1,785  
 Samples Missing: None, random  
 Geologic Sample Range: Clinton - St. Peter  
 Economic Museum No.: 18919  
 Division of Mines No.: None

## Columbiana County

Butler Twp., Section 6, Sample No. 179  
 Natural Gas of W. Va. #1 E. S. Santee  
 Date Completed: 4-2-46, Total Depth: 3,583  
 Sample Range: 3,413 - 3,583  
 Samples Missing: None  
 Geologic Sample Range: Oriskany  
 Division of Mines No.: 192

Butler Twp., Section 7, Sample No. 282  
 Natural Gas Co. of W. Va. #1 J. Wuthrick  
 Date Completed: 9-17-45, Total Depth: 5,654  
 Sample Range: 1,845 - 5,665  
 Samples Missing: None  
 Geologic Sample Range: Ohio shale - Clinton  
 Division of Mines No.: 162

- Butler Twp., Section 29, Sample No. 238  
 Natural Gas Co. of W. Va. #1 S. Drotleff  
 Date Completed: 5-28-45, Total Depth: 5,872 ?  
 Sample Range: 705 - 5,872  
 Samples Missing: None  
 Geologic Sample Range: Berea - Clinton  
 Division of Mines No.: 141
- Hanover Twp., Section 10, Sample No. 378  
 F. Lyons #1 N. B. Wright  
 Date Completed: 5-24-46, Total Depth: 5,915  
 Sample Range: 5,785 - 5,880  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 194
- Knox Twp., Section 1, Sample No. 36  
 Ohio Oil Co. #1 Smith - Wyss  
 Date Completed: 10-18-45, Total Depth: 3,553  
 Sample Range: 85 - 3,135  
 Samples Missing: None  
 Geologic Sample Range: Surface - Ohio shale  
 Division of Mines No.: 179
- Knox Twp., Section 1, Sample No. 273  
 Ohio Oil Co. #1 L. Stanley  
 Date Completed: 11-21-45, Total Depth: 3,551  
 Sample Range: 1,265 - 3,538  
 Samples Missing: None  
 Geologic Sample Range: Ohio shale - Oriskany  
 Division of Mines No.: 186
- Knox Twp., Section 11, Sample No. 113  
 Ohio Oil Co. #1 D. Schoeni et al.  
 Date Completed: 9-10-45, Total Depth: 3,602  
 Sample Range: 618 - 3,568  
 Samples Missing: 1,005 - 3,107  
 Geologic Sample Range: Berea - "Big Lime"  
 Division of Mines No.: 180
- Knox Twp., Section 12, Sample No. 34  
 Ohio Oil Co. #1 R. Stoffer  
 Date Completed: 8-25-45, Total Depth: 3,566  
 Sample Range: 547 - 3,566  
 Samples Missing: 599 - 608; 678 - 930; 1,004-3,048;  
 3,374 - 3,516  
 Geologic Sample Range: Berea - Oriskany  
 Division of Mines No.: 171
- Knox Twp., Section 12, Sample No. 37  
 Ohio Oil Co. #1 A. S. and D. A. Denny  
 Date Completed: 10-4-45, Total Depth: 3,555  
 Sample Range: 700 - 3,555  
 Samples Missing: None  
 Geologic Sample Range: Ohio shale - Oriskany  
 Division of Mines No.: 172
- Knox Twp., Section 12, Sample No. 110  
 Ohio Oil Co. and Smith-Galey #1 R. L. Denny et al.  
 Date Completed: 11-15-49, Total Depth: 5,400  
 Sample Range: 0 - 5,400  
 Samples Missing: 524-560; 3,608-3,614; 5,276-  
 5,285; 5,459-5,362; 5,368-5,387  
 Division of Mines No.: 153
- Knox Twp., Section 13, Sample No. 227  
 Ohio Oil Co. #1 Wafler - Stanley  
 Date Completed: 7-9-45, Total Depth: 3,527  
 Sample Range: 0 - 3,527  
 Samples Missing: 1,005 - 3,044  
 Geologic Sample Range: Surface - Oriskany  
 Division of Mines No.: 152
- Knox Twp., Section 14, Sample No. 148  
 Ohio Oil Co. #1 J. F. Barnett  
 Date Completed: 12-18-44, Total Depth: 3,596  
 Sample Range: 150 - 3,595  
 Samples Missing: 245 - 296  
 Geologic Sample Range: Surface - Oriskany  
 Division of Mines No.: 144
- Knox Twp., Section 14, Sample No. 222  
 Ohio Oil Co. #1 A. R. Burbick  
 Date Completed: 8-5-45, Total Depth: 3,540  
 Sample Range: 553 - 1,013  
 Samples Missing: 559 - 733; 774 - 812  
 Geologic Sample Range: Berea - Ohio shale  
 Division of Mines No.: 163
- Knox Twp., Section 14, Sample No. 226  
 Ohio Oil Co. #1 Carter-Kutz et al.  
 Date Completed: 7-16-45, Total Depth: 3,533  
 Sample Range: 87 - 3,499  
 Samples Missing: 1,010 - 3,040  
 Geologic Sample Range: Surface - "Big Lime"  
 Division of Mines No.: 154
- Knox Twp., Section 23, Sample No. 103  
 Ohio Oil Co. #1 S. L. Sturgeon et al.  
 Date Completed: 11-16-45, Total Depth: 5,543  
 Sample Range: 230 - 5,543  
 Samples Missing: 1,003 - 3,239  
 Geologic Sample Range: Big Injun - Medina  
 Division of Mines No.: 170
- Madison Twp., Section 14, Sample No. 421  
 Smith, Smith and Galey #1 T. Prescott et al.  
 Date Completed: 8-21-46, Total Depth: 4,327  
 Sample Range: 1,882 - 4,312  
 Samples Missing: 1,907-2,041; 2,056-2,295; 2,582-  
 2,607; 2,941-2,956; 3,132-4,057; 4,247-4,279  
 Geologic Sample Range: Ohio shale - Oriskany  
 Division of Mines No.: 219
- Madison Twp., Section 14, Sample No. 181  
 Eberly et al. #1 F. Bennett  
 Date Completed: 7-24-46, Total Depth: 4,428  
 Sample Range: 111 - 777  
 Samples Missing: None  
 Geologic Sample Range: Surface - Berea  
 Division of Mines No.: 201
- Madison Twp., Section 14, Sample No. 419  
 Galey-Smith-J. A. Fox #1 C. C. Thompson (Blazer)  
 Date Completed: 10-31-46, Total Depth: 4,330  
 Sample Range: 487 - 4,321  
 Samples Missing: 496-600; 750-4,000; 4,234-4,243  
 Geologic Sample Range: Cuyahoga - Oriskany  
 Division of Mines No. 216

Madison Twp. , Section 22, Sample No. 183  
Ohio Oil Co. #1 G. L. Powell  
Date Completed: 1-24-46, Total Depth: 4, 474  
Sample Range: 20 - 4, 473  
Samples Missing: 1, 003 - 3, 050; 3, 225 - 3, 464;  
4, 031 - 4, 070  
Geologic Sample Range: Surface - Oriskany  
Division of Mines No. : 187

Madison Twp. , Section 23, Sample No. 420  
Galey-Smith(cont. J. A. Fox) #1 W. McFarland  
Date Completed: 1-1-47, Total Depth: 4, 484  
Sample Range: 740 - 4, 484  
Samples Missing: 842 - 4, 210; 4, 310 - 4, 324;  
4, 428 - 4, 434; 4, 458 - 4, 464  
Geologic Sample Range: Cuyahoga - Oriskany  
Division of Mines No. : 223

West Twp. , Section 11, Sample No. 401  
Natural Gas Co. of W. Va. #1 G. W. Reamer  
Date Completed: 8-14-20, Total Depth: 5, 801  
Sample Range: 4, 785 - 5, 790  
Samples Missing: Random samples  
Geologic Sample Range: "Big Lime" - Medina  
Division of Mines No. : 567-A

Yellow Creek Twp. . Section 23, Sample No. 182  
Eberly et al. #2 Falconer  
Date Completed: 1-30-47, Total Depth: 4, 508  
Sample Range: 735 - 876  
Samples Missing: None  
Geologic Sample Range: Berea  
Division of Mines No. : 202

#### Coshocton County

Bethlehem Twp. , 4th Quarter, Sample No. 381  
Northern Ordnance Inc. #1 J. N. Burrell  
Date Completed: 5-17-44, Total Depth: 3, 619  
Sample Range: 3, 340 - 3, 619  
Samples Missing: None  
Geologic Sample Range: Clinton - Medina  
Division of Mines No. : 98

Bethlehem Twp. , Lot 20, 2nd Quarter, Sample No. 328  
Ohio Fuel Gas Co. #1 I. J. Croul  
Date Completed: 7-27-36, Total Depth: 3, 545  
Sample Range: 3, 291 - 3, 496  
Samples Missing: 3, 371 - 3, 384  
Geologic Sample Range: Clinton  
Division of Mines No. : 2

Clark Twp. , Section 23, Sample No. 145  
Ohio Oil Co. #1 McCord et al.  
Date Completed: 10-23-43, Total Depth: 3, 838  
Sample Range: 476 - 3, 731  
Samples Missing: 3, 192 - 3, 265  
Geologic Sample Range: Big Injun - Clinton  
Division of Mines No. : 84

Clark Twp. , Lot 20, Sample No. 141  
Ohio Oil Co. #1 Chaney - Meyer  
Date Completed: 11-1-43, Total Depth: 3, 314

Sample Range: 0 - 2, 215  
Samples Missing: 802 - 1, 995  
Geologic Sample Range: Surface - Ohio shale  
Division of Mines No. : 83

Clark Twp. , Lot 20, Sample No. 159  
Ohio Oil Co. #1 Chaney-Meyer, Unit #2  
Date Completed: 4-11-44, Total Depth: 5, 660  
Sample Range: 2, 171 - 5, 660  
Samples Missing: 2, 443 - 2, 456; 3, 069 - 3, 075  
Geologic Sample Range: "Big Lime" - Trenton  
Division of Mines No. : 96

Clark Twp. , Lot 21, Sample No. 123  
Ohio Oil Co. #1 B. W. Schopfer  
Date Completed: 4-10-43, Total Depth: 3, 317  
Sample Range: 10 - 3, 317  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 72

Clark Twp. , Lot 27, Sample No. 143  
Ohio Oil Co. #1 Myer - Moler  
Date Completed: 1-8-44, Total Depth: 3, 602  
Sample Range: 2, 970 - 3, 600  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No. : 88

Clark Twp. , Tract 6, Sample No. 101  
Ohio Oil Co. #1 C. Conkle  
Date Completed: 6-20-42, Total Depth: 3, 580  
Sample Range: 0 - 3, 580  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 54

Clark Twp. , Tract 12, Sample No. 122  
Ohio Oil Co. # A-1 C. R. Guthrie  
Date Completed: 3-11-43, Total Depth: 3, 572  
Sample Range: 100 - 3, 572  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 73

Clark Twp. , Tract 12, Sample No. 142  
Ohio Oil Co. # B-1 C. R. Guthrie  
Date Completed: 11-8-43, Total Depth: 3, 611  
Sample Range: 0 - 3, 591  
Samples Missing: 1, 050 - 2, 742  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 89

Clark Twp. , Tract 21, Sample No. 111  
Ohio Oil Co. #1 C. R. Guthrie  
Date Completed: 11-23-42, Total Depth: 3, 387  
Sample Range: 32 - 3, 387  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 64

Clark Twp. , Tract 22, Sample No. 130  
Ohio Oil Co. #1 L. Teeling  
Date Completed: 6-30-43, Total Depth: 3, 300  
Sample Range: 190 - 805

- Samples Missing: None  
Geologic Sample Range: Surface - Ohio shale  
Division of Mines No. : 75
- Clark Twp. , Tract 22, Sample No. 129  
Ohio Oil Co. #2 L. Teeling  
Date Completed: 7-14-43, Total Depth: 3, 377  
Sample Range: 142 - 3, 377  
Samples Missing: 850 - 2, 078  
Geologic Sample Record: Surface - Clinton  
Division of Mines No. : 75
- Clark Twp. , Tract 28, Sample No. 140  
Ohio Oil Co. #1 Gilmer - Randles  
Date Completed: 7-29-43, Total Depth: 3, 408  
Sample Range: 0 - 3, 408  
Samples Missing: 805 - 2, 004; 2, 515 - 2, 530  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 78
- Clark Twp. , 1st Quarter, Sample No. 359  
Pure Oil Co. #3 Agnes Hall  
Date Completed: 10-2-24, Total Depth: 3, 427  
Sample Range: 3, 358 - 3, 408  
Samples Missing: 3, 378 - 3, 393; 3, 398 - 3, 403  
Geologic Sample Range: Clinton  
Division of Mines No. : 167-A
- Crawford Twp. , Lot 30, Sample No. 328  
Wittmer Oil and Gas Co. #1 F. P. Balder  
Date Completed: 6-1-38, Total Depth: 4, 167  
Sample Range: 3, 970 - 4, 069  
Samples Missing: 3, 985 - 3, 996  
Geologic Sample Range: Clinton  
Division of Mines No. : 15
- Jackson Twp. , Section 18, Sample No. 84  
South Penn. Nat. Gas Co. #1 Z. McCoy et al.  
Date Completed: 11-6-43, Total Depth: 3, 913  
Sample Range: 56 - 3, 538  
Samples Missing: 1, 301 - 1, 311; 1, 600 - 1, 610  
Geologic Sample Range: Surface - "Big Lime"  
Division of Mines No. : 87
- Jackson Twp. , Section 23, Sample No. 350  
Ohio Fuel Gas Co. #1 D. Davis Estate  
Date Completed: 12-5-43, Total Depth: 3, 812  
Sample Range: 3, 585 - 3, 775  
Samples Missing: 3, 595 - 3, 600; 3, 634 - 3, 640;  
3, 651 - 3, 659  
Geologic Sample Range: Clinton  
Division of Mines No. : 90
- Tiverton Twp. , Section 20, Sample No. 205  
Enterprise Oil Co. #1 W. A. Rahn  
Date Completed: 3-26-49, Total Depth: 3, 422  
Sample Range: 3, 349 - 3, 422  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 247
- Tiverton Twp. , Section 20, Sample No. 205  
Enterprise Oil Co. #1 C. Conkle  
Date Completed: 10-13-49, Total Depth: 3, 400  
Sample Range: 3, 184 - 3, 369
- Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 256
- Virginia Twp. , Section 14, Sample No. 350  
S. E. Large #1 G. W. Morris  
Date Completed: 2-1-44, Total Depth: 3, 671  
Sample Range: 867 - 903  
Samples Missing: None  
Geologic Sample Range: Berea  
Division of Mines No. : 95
- Cuyahoga County
- City of Cleveland, Sample No. 357  
———— #1 W. M. Kingsley  
Date Completed: ———, Total Depth: ———  
Sample Range: 0 - 1, 320  
Samples Missing: Random samples  
Geologic Sample Range: Surface - Ohio shale  
No log available  
Division of Mines No. : None
- Mayfield Twp. , Village of Mayfield, Sample No. 60  
Benedum-Trees Oil Co. #1 V. Boylston  
Date Completed: 3-21-40, Total Depth: 2, 834  
Sample Range: 0 - 2, 830  
Samples Missing: 223-234; 340-365; 1, 775-1, 785  
Geologic Sample Range: Surface - Newburg  
Division of Mines No. : 57
- Mayfield Twp. , Lot 20, Sample No. 268  
Benedum-Trees Oil Co. #1 Franz-Eichenberg Unit  
Date Completed: 8-13-49, Total Depth: 5, 823  
Sample Range: 2, 753 - 5, 740  
Samples Missing: 4, 350 - 4, 365  
Geologic Sample Range: Newburg - St. Peter  
Division of Mines No. : 117
- Olmstead Twp. , Tract 3, Sample No. 357  
Ohio Fuel Gas Co. #1 F. W. Muche  
Date Completed: 10-29-36, Total Depth: 2, 743  
Sample Range: 2, 575 - 2, 743  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 16
- Parma Twp. , Lot 40, Sample No. 325  
W. C. Best #3 Green  
Date Completed: 10-1-49, Total Depth: 3, 150  
Sample Range: 1, 721 - 3, 149  
Samples Missing: 1, 787-1, 804; 1, 836-2, 264;  
2, 335-2, 742; 2, 866-2, 876; 2, 910-2, 920  
Geologic Sample Range: "Big Lime"  
Division of Mines No. : 130
- Strongsville Twp. , Lot 42, Sample No. 357  
Ohio Fuel Gas Co. #1 N. Crumpler  
Date Completed: 8-20-36, Total Depth: 3, 208  
Sample Range: 3, 062 - 3, 208  
Samples Missing: 3, 150 - 3, 156  
Geologic Sample Range: Clinton  
Division of Mines No. : 15

## Darke County

## Greenville Twp., Section 1, Sample No. 371

# — E. Barnes

Date Completed: 5-26-06, Total Depth: ———

Sample Range: 2, 220 - 2, 850

Samples Missing: 2, 320-2, 340; 2, 440-2, 460;  
2, 570-2, 585; 2, 630-2, 650; 2, 785-2, 805

Geologic Sample Range: L. Magnesian - Cambrian

No log available

Division of Mines No.: None

1, 565; 1, 575; 1, 860; 1, 870; 1, 880; 1, 890; 1, 940;  
1, 950; 1, 985; 2, 025; 2, 040; 2, 065; 2, 075; 2, 310;  
2, 335; 2, 380; 2, 425; 2, 460; 2, 485; 2, 495; 2, 570;  
2, 600; 2, 635; 2, 915; 3, 370; 3, 410; 3, 520; 3, 620;  
3, 730

Geologic Sample Range: Columbus-Pre-Cambrian

Economic Museum No.: 18055

Division of Mines No.: 1

## Erie County

## Greenville Twp., Section 27, Sample No. 323

Water Well at Village of Greenville

Date Completed: 5-49, Total Depth: 172

Sample Range: 92 - 172

Samples Missing: None

Division of Water No.: 163

## Oxford Twp., Section 3, Sample No. 272

Sentinel Enterprises #1 W. Mack

Date Completed: 8-49, Total Depth: 2, 965

Sample Range: 129 - 2, 957

Samples Missing: None

Geologic Sample Range: Surface - St. Peter

Division of Mines No.: 1

## Greenville Twp., Greenville, Sample No. 471

Water Well at Miami Valley Coop. Milk Prod.

Date Completed: 3-48, Total Depth: 190

Sample Range: 84 - 190

Samples Missing: None

Division of Water No.: 72

## Fairfield County

## Amanda Twp., Section 30, Sample No. 438

Lancaster Nat. Gas Dept. #1 E. Brown

Date Completed: 5-1-51, Total Depth: 3, 263

Sample Range: 0 - 3, 263

Samples Missing: 374 - 381; 2, 962 - 2, 970

Geologic Sample Range: Surface - St. Peter

Division of Mines No.: 195

## Defiance County

## Adams Twp., Section 34, Sample No. 377

Water Well at Richland-Adams Twp. School

Date Completed: ———, Total Depth: ———

Sample Range: 95 - 295

Samples Missing: Random samples

No log available

Division of Water No.: None

## Berne Twp., ———, Sample No. 410

Clinton Gas and Oil Co. # — Bauer

Date Completed: ———, Total Depth: ———

Sample Range: 2, 122 - 2, 236

Samples Missing: None

No log available

Economic Museum No.: 11336

Division of Mines No.: None

## Delaware County

## Orange Twp., R. 18W. -T. 3N., 3rd Qtr., Sample No. 430

Water Well # — Peoples Broadcasting Co.

Date Completed: 6-26-50, Total Depth: 305

Sample Range: 184 - 295

Samples Missing: None

Division of Water No.: 295

## Pleasant Twp., Section 20, Sample No. 364

Lancaster Nat. Gas Dept. #3 Arthur Ewing

Date Completed: 1925, Total Depth: 4, 058

Sample Range: 3, 310 - 3, 975

Samples Missing: 3, 310 - 3, 800; 3, 940 - 3, 950

Geologic Sample Range: Trenton - St. Peter

Division of Mines No.: None

## Orange Twp., R. 18W. -T3N, 3rd Qtr., Sample No. 454

Water Well #3 Peoples Broadcasting Co.

Date Completed: 10-48, Total Depth: 228

Sample Range: 0 - 228

Samples Missing: None

Division of Water No.: 76

## Pleasant Twp., Section 34, Sample No. 280

Lancaster Nat. Gas Dept. #4 G. W. Miller

Date Completed: 11-7-50, Total Depth: 2, 293

Sample Range: 20 - 2, 240

Samples Missing: 120-160; 760-820; 1, 860 - 1, 880

Geologic Sample Range: Surface - Clinton

Division of Mines No.: None

## Orange Twp., Lot 11, Sample No. 402

C. L. Wise #1 H. E. Vance

Date Completed: 5-15-37, Total Depth: 4, 291

Sample Range: 520 - 4, 290

Samples Missing: 790; 810; 820; 840; 850; 910;

955; 975; 990; 1, 015; 1, 030; 1, 045; 1, 120;

1, 155; 1, 190; 1, 200; 1, 220; 1, 240; 1, 255; 1, 270;

1, 320; 1, 335; 1, 360; 1, 370; 1, 385; 1, 415; 1, 430;

1, 445; 1, 460; 1, 475; 1, 490; 1, 510; 1, 525; 1, 540;

## Richland Twp., Section 28, Sample No. 364

Perry Sturn et al. #1 W. O. Folk Heirs

Date Completed: 8-23-24, Total Depth: 2, 715

Sample Range: 2, 686 - 2, 706

Samples Missing: None

Geologic Sample Range: Clinton

Division of Mines No.: None

Richland Twp., Section 28, Sample No. 364  
 J. Morrow #1 P. Sturm  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 2, 702 - 2, 718  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 No log available  
 Division of Mines No. : None

Hamilton Twp., Section 28, Sample No. 398  
 S.B. Hartman #1 S. B. Hartman  
 Date Completed: 1905, Total Depth: 3, 656  
 Sample Range: 2, 569 - 3, 530  
 Samples Missing: Long samples  
 Geologic Sample Range: Trenton - Cambrian  
 No log available  
 Economic Museum No. : 16443  
 Division of Mines No. : None

Rush Creek Twp., \_\_\_\_\_, Sample No. 281  
 \_\_\_\_\_ # — J. E. Stermer  
 Date Completed: \_\_\_\_\_ Total Depth: \_\_\_\_\_  
 Sample Range: 0-2, 457  
 Samples Missing: 575 - 595; 656 - 676; 2, 045 -  
 2, 075; 2, 250 - 2, 295  
 Geologic Sample Range: Surface - "Big Lime"  
 No log available  
 Division of Mines No. : None

Madison Twp., Section 15, Sample No. 369  
 Dowler Oil and Gas Co. #1 E. J. Simms  
 Date Completed: 10-39, Total Depth: 2, 903  
 Sample Range: 1, 045 - 2, 903  
 Samples Missing: 1, 056 $\frac{1}{2}$ -1, 109; 1, 142 $\frac{1}{2}$  - 1, 151;  
 1, 160 - 1, 172; 1, 187 - 1, 230; 1, 240 - 2, 658;  
 2, 707 - 2, 724  
 Geologic Sample Range: Medina - St. Peter  
 Division of Mines No. : None

Rush Creek Twp., \_\_\_\_\_, Sample No. 397  
 \_\_\_\_\_ #8 Holliday  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 790 - 2, 769  
 Samples Missing: Random samples  
 Geologic Sample Range: Berea - Clinton  
 No log available  
 Economic Museum No. : 11940  
 Division of Mines No. : None

Perry Twp., 2nd Quarter, Sample No. 369  
 Water Well on J. Nash farm  
 Date Completed: 1-24-50, Total Depth: 143  
 Sample Range: 20 - 143  
 Samples Missing: 30 - 50  
 Division of Water No. : 1055

Perry Twp., R. 9, T. 1, 4th Qtr. Sample No. 428  
 Water Well on Scioto Country Club  
 Date Completed: 5-10-49, Total Depth: 250  
 Sample Range: 40 - 250  
 Samples Missing: 137 - 150  
 Division of Water No. : 874

#### Franklin County

City of Columbus, Sample No. 448  
 Water Well at M. and R. Diabetic Lab.  
 Date Completed: 8-44, Total Depth: 530  
 Sample Range: 186 - 385  
 Samples Missing: 188 - 195; 310 - 385  
 Division of Water No. : 599

City of Columbus, Sample No. 406  
 Kilbourne and Jacobs #1 Kilbourne and Jacobs  
 Date Completed: 1891, Total Depth: 2, 035  
 Sample Range: 148 - 2, 025  
 Samples Missing: 225 - 260; 280 - 315; 315 - 360;  
 500 - 540; 730 - 785  
 Geologic Sample Range: Surface - Utica  
 Economic Museum No. : 5925; 5979  
 Division of Mines No. : None

City of Columbus, Sample No. 424  
 Disposal Well at D. L. Auld Co.  
 Date Completed: 7-50, Total Depth: 350  
 Sample Range: 60 - 350  
 Samples Missing: 320 - 325  
 Division of Water No. : 79

City of Columbus, Sample No. 445  
 Water Well at Ohio Nat. Bank Drive-In  
 Date Completed: 1950, Total Depth: 170  
 Sample Range: 25 - 170  
 Samples Missing: 40 - 43; 55 - 69  
 Division of Water No. : 1399

#### Fulton County

Amboy Twp., Section 11, Sample No. 416  
 Water Well at Metamora  
 Date Completed: 1946, Total Depth: \_\_\_\_\_  
 Sample Range: 132 - 1, 294  
 Samples Missing: 539 - 560; 583 - 590  
 Division of Water No. : 19

Amboy Twp., Section 26, Sample No. 309  
 N. L. Stevens #1 St. Marys Church (Assumption)  
 Date Completed: 11-30-46, Total Depth: 1, 254  
 Sample Range: 122 - 1, 252  
 Samples Missing: None  
 Geologic Sample Range: Surface - Niagaran  
 Division of Mines No. : None

Clinton Twp., Section 20, Sample No. 306  
 N. L. Stevens #2 W. J. Weber  
 Date Completed: 4-17-43, Total Depth: 2, 280  
 Sample Range: 152 - 2, 284  
 Samples Missing: None  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No. : None

Clinton Twp., Section 29, Sample No. 239  
 N. L. Stevens #1 Bruner  
 Date Completed: 8-21-46, Total Depth: 2, 184  
 Sample Range: 170 - 2, 183  
 Samples Missing: None

Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None

German Twp., Section 13, Sample No. 51  
N. L. Stevens #1 E. Roth (Igerman)  
Date Completed: 9-7-36, Total Depth: 2,256  
Sample Range: 177 - 2,257  
Samples Missing: 805 - 810; 1,080 - 1,085;  
1,090 - 1,095; 1,490 - 1,495  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None

Swan Creek Twp., Section 10, Sample No. 107  
C. Stevens-Yasdick and Pember #1 Baker  
Date Completed: 9-14-42, Total Depth: 1,965  
Sample Range: 72 - 1,965  
Samples Missing: 1,050 - 1,060; 1,100 - 1,120;  
1,510 - 1,520  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None

#### Gallia County

Cheshire Twp., at Cheshire, Sample No. 365  
#1 Thompson  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 1,150 - 1,550  
Samples Missing: 1,390 - 1,410  
Geologic Sample Range: Logan - Berea  
No log available  
Division of Mines No. : None

#### Geauga County

Auburn Twp., Lot 5, Tract 1, Sample No. 294  
Ohio Fuel Gas Co. #1 A. C. Brewster  
Date Completed: 8-24-44, Total Depth: 4,544  
Sample Range: 2,518 - 4,544  
Samples Missing: 2,815 - 2,835; 2,870 - 3,762  
Geologic Sample Range: "Big Lime" - Utica  
Division of Mines No. : 4

Chardon Twp., Lot 1, Sample No. 64  
East Ohio Gas Co. #1 G. W. Crile  
Date Completed: 2-7-41, Total Depth: 6,101  
Sample Range: 716 - 6,101  
Samples Missing: 3,670 - 4,010  
Geologic Sample Range: Ohio shale - St. Peter  
Division of Mines No. : None

Chardon Twp., \_\_\_\_\_ Sample No. 362  
Water Well on J. W. Parker farm  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 35 - 99  
Samples Missing: None  
No log available  
Division of Water No. : None

Chardon Twp., \_\_\_\_\_ Sample No. 362  
Water Well on D. Barttell farm  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 1 - 87  
Samples Missing: None  
No log available  
Division of Water No. : None

Chardon Twp., \_\_\_\_\_, Sample No. 452  
Water Well #2 at Chardon Deep Springs  
Date Completed: 9-50, Total Depth: 374  
Sample Range: 185 - 290  
Samples Missing: 245 - 260  
Division of Water No. : 967

Chardon Twp., Lot 19, Tract 1, Sample No. 3  
Benedum Trees Oil Co. #1 J. L. Conner(S. Mather)  
Date Completed: 10-28-39, Total Depth: 4,313  
Sample Range: 153 - 4,173  
Samples Missing: 163-2,028; 2,631-2,659; 2,730-  
2,798; 2,875-2,953; 2,960-3,110; 3,229-3,250  
Geologic Sample Range: Surface - Utica  
Division of Mines No. : None

Chester Twp., Lot 5, Tract 2, Sample No. 193  
Benedum-Trees Oil Co. #1 M. V. S. White  
Date Completed: 11-22-40, Total Depth: 3,958  
Sample Range: 110 - 3,938  
Samples Missing: 125-1,245; 2,388-2,442; 2,458-  
2,520; 2,601-2,620; 3,224-3,247; 3,576-3,589;  
3,848-3,878  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 2

Chester Twp., Lot 26, Tract 1, Sample No. 409  
J. T. Galey et al. #1 L. O. Battles  
Date Completed: 12-29-48, Total Depth: 3,815  
Sample Range: 40 - 3,816  
Samples Missing: 150-155; 208-228; 259-710;  
1,060-1,100; 3,014-3,054; 3,383-3,387;  
3,602-3,610  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 7

Hamden Twp., NE $\frac{1}{4}$ , Sample No. 417  
Coen, Galey, et al. #1 A. F. Davis  
Date Completed: 5-26-49, Total Depth: 2,547  
Sample Range: 38 - 2,505  
Samples Missing: 115-117; 228-1,950; 2,063-2,066  
Geologic Sample Range: Surface - "Big Lime"  
Division of Mines No. : 9

Montville Twp., \_\_\_\_\_, Sample No. 362  
Water Well on G. Zeverfle farm  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 97  
Samples Missing: 53 - 55  
No log available  
Division of Water No. : None

Newberry Twp., Section 9, Sample No. 296  
Northern Ordnance Co. #1 E. Y. Coppedge  
Date Completed: 8-23-44, Total Depth: 4,000  
Sample Range: 3,564 - 3,979  
Samples Missing: None  
Geologic Sample Range: Oriskany - Clinton  
Division of Mines No. : 3

#### Greene County

Caesar Creek Twp., Lot 2238, Sample No. 56  
Sun Oil Co. #1 E. M. Marshal

- Date Completed: 12-22-39, Total Depth: 1, 725  
 Sample Range: 20 - 1, 725  
 Samples Missing: None  
 Geologic Sample Range: Surface - St. Peter  
 Division of Mines No.: None
- Caesar Creek Twp., Lot 2473, Sample No. 366  
 Sun Oil Co. #1 W. N. Henry  
 Date Completed: 4-15-40, Total Depth: 1, 958  
 Sample Range: 1, 762 - 1, 821  
 Samples Missing: None  
 Geologic Sample Range: St. Peter  
 Division of Mines No.: None
- Miami Twp., Section 19, Sample No. 270  
 Mid-West Development Co. #1 A. E. Peterson  
 Date Completed: 2-2-38, Total Depth: 1, 846  
 Sample Range: 14 - 1, 846  
 Samples Missing: 165 - 1, 240  
 Geologic Sample Range: Surface - St. Peter  
 Division of Mines No.: None
- Miami Twp., Section 21, Sample No. 323  
 Water Well at City of Yellow Springs  
 Date Completed: 12-28-48, Total Depth: 113  
 Sample Range: 52 - 113  
 Samples Missing: None  
 Division of Water No.: 163
- Miami Twp., Section 24, Sample No. 469  
 Water Well at Morris Bean Co.  
 Date Completed: 4-48, Total Depth: 75  
 Sample Range: 0 - 75  
 Samples Missing: None  
 Division of Water No.: 95
- Ross Twp., Lot 1352, Sample No. 455  
 Water Well SW of Salina  
 Date Completed: 10-6-45, Total Depth: 150  
 Sample Range: 105 - 150  
 Samples Missing: None  
 Division of Water No.: 165
- Spring Valley Twp., Lot 1044, Sample No. 290  
 D. R. Buchanan et al. #1 S. Poague  
 Date Completed: 1939, Total Depth: 1, 575  
 Sample Range: 909 - 1, 575  
 Samples Missing: None  
 Geologic Sample Range: Utica - St. Peter  
 Division of Mines No.: None
- Guernsey County
- Adams Twp., Section 16, Sample No. 7  
 Ohio Oil Co. #1 R. H. Marshall  
 Date Completed: 5-27-41, Total Depth: 4, 902  
 Sample Range: 0 - 4, 902  
 Samples Missing: 424 - 455; 1, 031 - 1, 037  
 Geologic Sample Range: Surface - Medina  
 Division of Mines No.: 799-A
- Center Twp., Section 2, Sample No. 118  
 Ohio Oil Co. #1 P. Fitzgerald  
 Date Completed: 5-14-43, Total Depth: 5, 476  
 Sample Range: 0 - 5, 476  
 Samples Missing: 484-500; 831-841; 1, 657-1, 667;  
 1, 760-1, 798; 2, 100-2, 137; 2, 432-2, 442;  
 2, 765-2, 775; 3, 220-3, 230; 4, 920-4, 930  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No.: 334
- Liberty Twp., Section 16, Sample No. 360  
 G. Jewell and P. Bell #1 W. S. Mathers  
 Date Completed: 1-22-41, Total Depth: 1, 638  
 Sample Range: 1, 490 - 1, 638  
 Samples Missing: 1, 496 - 1, 503; 1, 507 - 1, 523;  
 1, 605 - 1, 612  
 Geologic Sample Range: Ohio shale  
 Division of Mines No.: 281
- Washington Twp., Section 8, Sample No. 360  
 Ohio Fuel Gas Co. #1 D. T. Harding  
 Date Completed: 12-6-38, Total Depth: 1, 397  
 Sample Range: 1, 312 - 1, 386  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 191
- Westland Twp., 3rd Quarter, Sample No. 293  
 Ohio Fuel Gas Co. #1 T. H. Neptune  
 Date Completed: 10-22-47, Total Depth: 3, 522  
 Sample Range: 2, 489 - 3, 522  
 Samples Missing: None  
 Geologic Sample Range: Ohio shale - Oriskany  
 Division of Mines No.: 434
- Wills Twp., Section 11, Sample No. 328  
 Water Well at St. Ursula Church  
 Date Completed: 8-3-48, Total Depth: 237  
 Sample Range: 0 - 237  
 Samples Missing: None  
 Division of Water No.: 24
- Hancock County
- Allen Twp., Section 32, Sample No. 301  
 Sun Oil Co. #1 J. Heimhofer  
 Date Completed: 4-6-38, Total Depth: 1, 875  
 Sample Range: 60 - 1, 875  
 Samples Missing: None  
 Geologic Sample Range: Surface - St. Peter  
 Division of Mines No.: 13
- Big Lick Twp., Section 14, Sample No. 55  
 Sun Oil Co. #1 Chas. Heminger  
 Date Completed: 10-14-37, Total Depth: 2, 030  
 Sample Range: 90 - 2, 020  
 Samples Missing: 760 - 771  
 Geologic Sample Range: Surface - St. Peter  
 Division of Mines No.: 6
- Blanchard Twp., Section 27, Sample No. 93  
 \_\_\_\_\_ #1 Turley  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 1, 315 - 1, 557  
 Samples Missing: 1, 354 - 1, 554  
 Geologic Sample Range: Trenton  
 No log available  
 Division of Mines No.: None

- Delaware Twp., Section 34, Sample No. 232  
 B. L. Sheldon #1 C. Hinebaugh  
 Date Completed: 11-20-36, Total Depth: 1,384  
 Sample Range: 515 - 1,343  
 Samples Missing: Random samples  
 Geologic Sample Range: Richmond - Trenton  
 Division of Mines No.: 4
- Eagle Twp., Section 17, Sample No. 180  
 Frank Dever #1 Johnson  
 Date Completed: 3-47, Total Depth: 1,350  
 Sample Range: 400 - 1,350  
 Samples Missing: None  
 Geologic Sample Range: "Big Lime" - Trenton  
 Division of Mines No.: None
- Eagle Twp., Section 23, Sample No. 180  
 H. Marquart #1 D. Marquart  
 Date Completed: 7-47, Total Depth: 1,310  
 Sample Range: 1,270 - 1,310  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: 18
- Liberty Twp., At Findlay, Sample No. 404  
 G. L. Cusac #1 C. L. Casterline  
 Date Completed: 10-23-04, Total Depth: 1,158  
 Sample Range: 50 - 1,150  
 Samples Missing: 200 - 220; 225 - 235  
 Geologic Sample Range: Surface - Trenton  
 Economic Museum No.: 19247  
 Division of Mines No.: None
- Liberty Twp., Section 1, Sample No. 314  
 Krites #2 Fruth  
 Date Completed: 10-17-43, Total Depth: 1,405  
 Sample Range: 300 - 1,405  
 Samples Missing: None  
 Geologic Sample Range: Richmond - Trenton  
 Division of Mines No.: None
- Liberty Twp., Section 9, Sample No. 405  
 Ohio Oil Co. #17 J. G. Grubb  
 Date Completed: 1-22-13, Total Depth: 2,470  
 Sample Range: 350 - 2,441  
 Samples Missing: 350-538; 1,558-1,600; 1,600-1,672; 1,795-1,834; 1,876-1,917; 2,210-2,230; 2,230-2,260; 2,365-2,441  
 Geologic Sample Range: Surface - Cambrian  
 Economic Museum No.: 19245  
 Division of Mines No.: None
- Liberty Twp., Section 13, Sample No. 197  
 R. Strauch #1 R. Strauch  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 0 - 1,201  
 Samples Missing: 800 - 810  
 Geologic Sample Range: Surface - Trenton  
 No log available  
 Division of Mines No.: None
- Liberty Twp., Section 23, Sample No. 180  
 R. Strauch #1 W. J. Creighton  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 1,258 - 1,278  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 No log available  
 Division of Mines No.: None
- Liberty Twp., Section 25, Sample No. 180  
 Sheldon #1 Brown  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 375 - 1,240  
 Samples Missing: None  
 Geologic Sample Range: Richmond - Trenton  
 No log available  
 Division of Mines No.: None
- Marion Twp., Section 3, Sample No. 477  
 J. E. Fennerty et al. #1 D. L. Norris  
 Date Completed: 1912, Total Depth: 2,980  
 Sample Range: 2,760 - 2,980  
 Samples Missing: None  
 Geologic Sample Range: Cambrian-Pre-Cambrian  
 Economic Museum No.: 19246  
 Division of Mines No.: None
- Marion Twp., Section 33, Sample No. 88  
 R. Strauch #1 E. Snyder  
 Date Completed: \_\_\_\_\_, Total Depth: 805  
 Sample Range: 26 - 635  
 Samples Missing: Random  
 Geologic Sample Range: Surface - Medina  
 No log available  
 Division of Mines No.: None
- Portage Twp., Section 31, Sample No. 371  
 Bradford Oil Co. #8 J. E. Fennerly  
 Date Completed: 1904, Total Depth: 1,414  
 Sample Range: 4 - 1,414  
 Samples Missing: 500 - 515; 1,065 - 1,165; 1,339 - 1,359  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No.: None
- Washington Twp., Section 2, Sample No. 299  
 Travelers Oil Co., #1 McCauley Heirs  
 Date Completed: \_\_\_\_\_, Total Depth: 1,943  
 Sample Range: 1,583 - 1,930  
 Samples Missing: None  
 Geologic Sample Range: Trenton - St. Peter  
 Division of Mines No.: None
- Washington Twp., Section 30, Sample No. 371  
 Water Well on S. Huffman Farm  
 Date Completed: 1904, Total Depth: 105½  
 Sample Range: 1 - 105½  
 Samples Missing: 35 - 49  
 No log available  
 Division of Water No.: None

## Hardin County

Pleasant Twp., Section 2, Sample No. 446

Water Well at City of Kenton  
Date Completed: 3-51, Total Depth: 175  
Sample Range: 75 - 175  
Samples Missing: None  
Division of Water No.: None

Taylor Creek Twp., Lot 9999, Sample No. 464

E. C. Ward #1 M. I. Wilson  
Date Completed: 8-16-51, Total Depth: 2,048  
Sample Range: 516 - 2,048  
Samples Missing: 725 - 731; 1,951 - 1,957  
Geologic Sample Range: Medina - St. Peter  
Division of Mines No.: 47

Taylor Creek Twp., Lot 10,000, Sample No. 403

Sun Oil Co., #1 Sponsler et al.  
Date Completed: 9-20-50, Total Depth: 1,995½  
Sample Range: 130 - 1,995  
Samples Missing: 154 - 170; 365 - 390; 422 - 444;  
581 - 652  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No.: None

## Harrison County

Freeport Twp., Section 10, Sample No. 478

East Ohio Gas Co. #1 J. K. McCullough  
Date Completed: 6-2-24, Total Depth: 5,908  
Sample Range: 3,971 - 5,904  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Clinton  
Economic Museum No.: 16444  
Division of Mines No.: None

German Twp., Section 23, Sample No. 33

Columbian Carbon Co. #1 G. Miller  
Date Completed: 2-13-39, Total Depth: 5,250  
Sample Range: 430 - 5,250  
Samples Missing: None  
Geologic Sample Range: Pottsville - Oriskany  
Division of Mines No.: 15

Stock Twp., Section 20, Sample No. 74

Brendel Prod. Co. #1 M. W. C. D. (D. K. West)  
Date Completed: 6-18-41, Total Depth: 5,974  
Sample Range: 360 - 5,974  
Samples Missing: 4,700 - 5,300  
Geologic Sample Range: Pottsville - Clinton  
Division of Mines No.: 27

Stock Twp., Section 22, Sample No. 77

East Ohio Gas Co. #1 J. L. Cramblett  
Date Completed: 6-29-41, Total Depth: 6,004  
Sample Range: 168 - 5,975  
Samples Missing: 285-295; 729-740; 2,169-2,179;  
4,090-4,236; 4,282-4,684; 4,728-4,739; 4,872-  
4,892; 5,009-5,024; 5,033-5,146; 5,355-5,407;  
5,416-5,436  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 28

Stock Twp., Section 32, Sample No. 152

The Texas Co. #1 E. A. Miser  
Date Completed: 7-13-44, Total Depth: 6,301  
Sample Range: 29-6,301  
Samples Missing: 271-304; 881-903; 962-1,005;  
1,104-1,188; 2,310-2,322; 3,193-3,371;  
4,264-4,299; 5,791-5,801; 5,842-5,898  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 39

Washington Twp., Section 2, Sample No. 2

Ohio Oil Co. #1 W. H. Blackwell  
Date Completed: 7-26-41, Total Depth: 6,255  
Sample Range: 0 - 6,255  
Samples Missing: 778-783; 845-854; 885-915;  
2,326-2,340; long samples from 3,917 to 5,920;  
5,975-5,981; 5,986-5,998; 5,638-5,641,  
5,641-5,643  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 29

Washington Twp., Section 28, Sample No. 198

Ohio Oil Co. #1 F. Cavin  
Date Completed: 1-3-42, Total Depth: 1,214  
Sample Range: 20 - 1,214  
Samples Missing: None  
Geologic Sample Range: Surface - Berea  
Division of Mines No.: 35

Washington Twp., Section 33, Sample No. 78

East Ohio Gas Co. #1 W. Phillips  
Date Completed: 6-3-41, Total Depth: 5,899  
Sample Range: 102 - 5,899  
Samples Missing: 109-138; 166-176; 186-196; 309-  
320; 370-385; 390-424; 452-490; 510-520; 580-  
622; 627-640; 691-701; 718-739; 806-820; 905-  
915; 925-940; 1,040-1,050; 1,085-1,107; 1,160-  
1,190; 1,270-1,300; 1,400-1,417; 1,480-1,490;  
1,655-1,665; 1,700-1,720; 1,862-1,872; 1,915-  
1,927; 1,995-2,003; 2,025-2,047; 2,094-2,105;  
2,130-2,140; 2,578-2,588; 2,815-2,830; 3,100-  
3,110; 3,132-3,150; 3,170-3,196; 3,205-3,226;  
3,333-3,350; 3,358-3,379; 4,575-4,590  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 26

Washington Twp., Section 33, Sample No. 10

Ohio Oil Co., #1 J. and E. Phillips  
Date Completed: 11-12-41, Total Depth: 5,975  
Sample Range: 55-5,975  
Samples Missing: 1,163-1,172; 5,105-5,110;  
5,670-5,677  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 32

## Henry County

Harrison Twp., Section 24, Sample No. 189

McAfee et al. #1 L. Damon  
Date Completed: 6-30-37, Total Depth: 2,513  
Sample Range: 1,950 - 2,513  
Samples Missing: None  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No.: None

## Marion Twp. , Section 5, Sample No. 137

Strohl Bros. #1 T. Sonnenberg  
Date Completed: 10-10-43, Total Depth: 1,630  
Sample Range: 1,589 - 1,627  
Samples Missing: None  
Geologic Sample Range: Trenton  
Division of Mines No. : None

## Marion Twp. , Section 5, Sample No. 137

Strohl Bros. #1 L. Hoff  
Date Completed: 7-5-93, Total Depth: 1,620  
Sample Range: 900 - 1,621  
Samples Missing: None  
Geologic Sample Range: Trenton  
Division of Mines No. : None

## Highland County

## Dodson Twp. , At Lynchburg, Sample No. 366

Freiburg and Workum #1 Freiburg and Workum  
Date Completed: Prior to 1912, Total Depth: 1,534  
Sample Range: 115 - 1,534  
Samples Missing: Random samples  
Geologic Sample Range: Richmond - Trenton  
Division of Mines No. : None

## Liberty Twp. , Hillsboro, Sample No. 479

Village of Hillsboro  
Date Completed: 1887, Total Depth: 1,750  
Sample Range: 47 - 1,718  
Samples Missing: None - Random  
Geologic Sample Range: Surface - St. Peter  
Economic Museum No. : 18924  
Division of Mines No. : None

## Madison Twp. , Lot 1830, Sample No. 303

Hunderlock and West #2 G. I. Cope  
Date Completed: 9-21-42, Total Depth: 1,700  
Sample Range: 75 - 1,692  
Samples Missing: Random samples  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None

## Hocking County

## Good Hope Twp. , Section 33, Sample No. 284

Springfield Gas Co. #7 Charles Wharton  
Date Completed: 5-17-05, Total Depth: 2,324  
Sample Range: 10 - 2,324  
Samples Missing: 125-145; 230-240; 440-450;  
470-490; 640-660; 985-1,005  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : None

## Green Twp. , Section 24, Sample No. 393

Griffin Producing Co. #11 L. and C. Linton  
Date Completed: 9-28-48, Total Depth: 2,866  
Sample Range: 36 - 2,866 (long samples)  
Samples Missing: 50-55; 77-85; 90-118; 130-200;  
212-276; 287-415; 422-515; 525-675; 683-740;  
793-809; 812-1,278; 1,345-1,480; 1,725-1,895;  
1,925-2,805; 2,851-2,859  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 540-A

## Holmes County

## Monroe Twp. , Lot 31, 3rd Qtr. , Sample No. 358

Ohio Fuel Gas Co. #1-6283 T. W. Strouse  
Date Completed: 12-1-36, Total Depth: 3,426  
Sample Range: 3,332 - 3,389  
Samples Missing: 3,352 - 3,370  
Geologic Sample Range: Clinton  
Division of Mines No. : 19

## Monroe Twp. , Lot 30, Sample No. 329

Ohio Fuel Gas Co. #1-6174 T. W. Strouse  
Date Completed: 8-14-36, Total Depth: 3,382  
Sample Range: 3,289 - 3,372  
Samples Missing: 3,356 - 3,371  
Geologic Sample Range: Clinton  
Division of Mines No. : 8

## Monroe Twp. , Section 3, Lot 20, Sample No. 351

Ohio Fuel Gas Co. #1 B. C. Bird  
Date Completed: 10-2-36, Total Depth: 3,213  
Sample Range: 3,149 - 3,211  
Samples Missing: 3,154 - 3,186  
Geologic Sample Range: Clinton  
Division of Mines No. : 12

## Monroe Twp. , Lot 18, 3rd Qtr. , Sample No. 351

Ohio Fuel Gas Co. #1 J. A. Mittin  
Date Completed: 11-11-36, Total Depth: 3,359  
Sample Range: 3,297 - 3,350  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 17

## Monroe Twp. , Lot 19, 3rd Qtr. Sample No. 358

Ohio Fuel Gas Co. #2 H. M. Tidball  
Date Completed: 1-6-37, Total Depth: 3,206  
Sample Range: 3,136 - 3,180  
Samples Missing: 3,143 - 3,163; 3,168 - 3,173  
Geologic Sample Range: Clinton  
Division of Mines No. : 24

## Paint Twp. , Section 29, Sample No. 329

Ohio Fuel Gas Co. #1 M. S. Miller  
Date Completed: 7-18-36, Total Depth: 4,176  
Sample Range: 300 - 4,208  
Samples Missing: 310-316; 330-337; 345-3,980;  
4,155-4,165; 4,176-4,185; 4,192-4,200  
Geologic Sample Range: Logan - Clinton  
Division of Mines No. : 4

## Paint Twp. , Section 33, Sample No. 329

Ohio Fuel Gas Co. #1 M. Harrold  
Date Completed: 9-24-36, Total Depth: 4,264  
Sample Range: 1,022 - 4,192  
Samples Missing: 1,055 - 4,132  
Geologic Sample Range: Berea - Clinton  
Division of Mines No. : 9

## Paint Twp. , Lot 33, 4th Qtr. , Sample No. 351

Ohio Fuel Gas Co. #1 S. S. Miller  
Date Completed: 11-25-36, Total Depth: 4,170  
Sample Range: 4,068 - 4,120  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 11

- Prairie Twp., Section 25, Sample No. 9  
Ohio Oil Co. #1 F. H. Oats  
Date Completed: 10-23-41, Total Depth: 3, 689  
Sample Range: 0 - 3, 689  
Samples Missing: 320-330; 775-790; 2, 480-2, 487  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 100
- Richland Twp., Section 6, Sample No. 351  
Ohio Fuel Gas Co. #2 A. Burkey  
Date Completed: 11-14-36, Total Depth: 3, 291  
Sample Range: 3, 226 - 3, 236  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 15
- Ripley Twp., Section 3, Sample No. 351  
Ohio Fuel Gas Co. #1 George Ley  
Date Completed: 5-12-37, Total Depth: 3, 407  
Sample Range: 3, 332 - 3, 379  
Samples Missing: 3, 351-3, 374  
Geologic Sample Range: Clinton  
Division of Mines No.: 231
- Ripley Twp., Section 3, Sample No. 351  
Ohio Fuel Gas Co. #1 L. F. Mullhall  
Date Completed: 12-8-36, Total Depth: 3, 377  
Sample Range: 3, 321 - 3, 359  
Samples Missing: 3, 329 - 3, 358  
Geologic Sample Range: Clinton  
Division of Mines No.: 225
- Ripley Twp., Section 31, Sample No. 351  
Ohio Fuel Gas Co. #1 E. E. Lozier  
Date Completed: 11-18-36, Total Depth: 3, 229  
Sample Range: 3, 141 - 3, 153  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 226
- Ripley Twp., Section 33, Sample No. 329  
Ohio Fuel Gas Co. #1 J. E. Gashe  
Date Completed: 9-22-36, Total Depth: 3, 407  
Sample Range: 3, 332 - 3, 372  
Samples Missing: 3, 356 - 3, 372  
Geologic Sample Range: Clinton  
Division of Mines No.: 220
- Ripley Twp., Section 34, Sample No. 329  
Ohio Fuel Gas Co. #1 B. McCluggage  
Date Completed: 9-9-36, Total Depth: 3, 345  
Sample Range: 3, 249 - 3, 301  
Samples Missing: 3, 268 - 3, 278  
Geologic Sample Range: Clinton  
Division of Mines No.: 219
- Washington Twp., Section 3, Sample No. 351  
Mehowa Oil and Gas Co. #1 H. E. Miller  
Date Completed: 4-14-37, Total Depth: 2, 884  
Sample Range: 2, 783 - 2, 859  
Samples Missing: 2, 800 - 2, 813  
Geologic Sample Range: Clinton  
Division of Mines No.: 230
- Washington Twp., Section 5, Sample No. 351  
Ohio Fuel Gas Co. #1 H. Berry  
Date Completed: 9-21-36, Total Depth: 2, 826  
Sample Range: 2, 769 - 2, 775  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 217
- Washington Twp., Section 16, Sample No. 351  
Ohio Fuel Gas Co. #1 W. L. Young  
Date Completed: 9-23-36, Total Depth: 3, 084  
Sample Range: 3, 009 - 3, 021  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 218
- Washington Twp., Section 17, Sample No. 329  
Ohio Fuel Gas Co. #4 F. Heffelfinger  
Date Completed: 8-7-36, Total Depth: 2, 876  
Sample Range: 2, 735 - 2, 833  
Samples Missing: 2, 765 - 2, 829  
Geologic Sample Range: Clinton  
Division of Mines No.: 215
- Washington Twp., Section 17, Sample No. 329  
Ohio Fuel Gas Co., #1 B. Young  
Date Completed: 10-14-36, Total Depth: 2, 896  
Sample Range: 2, 790 - 2, 831  
Samples Missing: 2, 807 - 2, 816; 2, 816 - 2, 821  
Geologic Sample Range: Clinton  
Division of Mines No.: 222
- Washington Twp., Section 17, Sample No. 358  
Ohio Fuel Gas Co. #1 G. H. Young  
Date Completed: 12-11-36, Total Depth: 2, 808  
Sample Range: 2, 710 - 2, 756  
Samples Missing: 2, 719 - 2, 746  
Geologic Sample Range: Clinton  
Division of Mines No.: 224
- Washington Twp., Section 28, Sample No. 351  
Ohio Fuel Gas Co. #1 W. F. Fulmer  
Date Completed: 10-21-36, Total Depth: 2, 847  
Sample Range: 2, 731 - 2, 791  
Samples Missing: 2, 738 - 2, 759  
Geologic Sample Range: Clinton  
Division of Mines No.: 223
- Washington Twp., Section 28, Sample No. 351  
Ohio Fuel Gas Co. #1 G. F. Houser  
Date Completed: 10-2-40, Total Depth: 2, 879  
Sample Range: 2, 721 - 2, 879  
Samples Missing: 2, 751-2, 757  
Geologic Sample Range: Clinton  
Division of Mines No.: 245
- Washington Twp., Section 28, Sample No. 351  
Ohio Fuel Gas Co. #1 M. Lifer  
Date Completed: 4-25-41, Total Depth: 2, 898  
Sample Range: 2, 753 - 2, 839  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 246

## Huron County

Greenwich Twp., At Greenwich, Sample No. 373  
St. Mary's Drilling Co. #1 C. Tilton  
Date Completed: 1906, Total Depth: 1,965  
Sample Range: 1,020 - 1,965  
Samples Missing: Random samples  
Geologic Sample Range: Columbus - Clinton  
Division of Mines No.: None

Norwalk Twp., Norwalk, Sample No. 480  
C. H. Gallup et al. #1 Village of Norwalk  
Date Completed: 1887, Total Depth: 2,725  
Sample Range: 10 - 2,725  
Samples Missing: None - Random  
Geologic Sample Range: Surface - Trenton  
Economic Museum No.: 18,926  
Division of Mines No.: None

Norwalk Twp., ———, Sample No. 373  
R. Lambie # — W. and L. E. Railroad  
Date Completed: ———, Total Depth: ———  
Sample Range: 0 - 298  
Samples Missing: 85 - 178; 200 - 250  
No log available  
Division of Water No.: None

Peru Twp., Section 2, Sample No. 163  
C. W. White #1 P. Arting  
Date Completed: 11-22-37, Total Depth: 4,270  
Sample Range: 3,435 - 4,150  
Samples Missing: 3,440-3,530; 3,535-3,600;  
3,650-3,800; 3,929-3,977; 3,980-4,001;  
4,003-4,093; 4,100-4,130  
Geologic Sample Range: Cambrian-Pre-Cambrian  
Division of Mines No.: 11

## Jackson County

Jefferson Twp., Section 27, Sample No. 312  
Ohio Fuel Gas Co. #1 L. Myers  
Date Completed: 3-21-47, Total Depth: 2,750  
Sample Range: 7 - 2,750  
Samples Missing: None  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 32

Lick Twp., ———, Sample No. 365  
Water Well at Keystone Station (Glasom)  
Date Completed: 1905, Total Depth: 130  
Sample Range: 0 - 130  
Samples Missing: None  
No log available  
Division of Water No.: None

Lick Twp., Section 15, Sample No. 365  
Water Well at Keystone Station (Floyd)  
Date Completed: 1905, Total Depth: 113  
Sample Range: 12 - 113  
Samples Missing: None  
No log available  
Division of Water No.: None

## Jefferson County

Salem Twp., Section 13, Sample No. 442  
B. Turner #1 Henry Iddings  
Date Completed: 12-16-50, Total Depth: 678  
Sample Range: 56 - 648  
Samples Missing: None  
Geologic Sample Range: Surface - Berea  
Division of Mines No.: 237

Island Creek Twp., Section 26, Sample No. 360  
Eastern Ohio Dev. Co. #1 Wayne Coal Co.  
Date Completed: 1931, Total Depth: 5,315  
Sample Range: 1,463 - 5,275  
Samples Missing: Random samples  
Geologic Sample Range: Berea - Oriskany  
Division of Mines No.: 830-A

## Knox County

Butler Twp., Section 6, Sample No. 355  
Ohio Fuel Gas Co. #1 A. Barker  
Date Completed: 8-11-36, Total Depth: 2,922  
Sample Range: 2,742 - 2,911  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 98

Butler Twp., Section 8, Sample No. 355  
Ohio Fuel Gas Co. #1 H. and E. Carpenter  
Date Completed: 9-4-36, Total Depth: 2,894  
Sample Range: 2,740 - 2,882  
Samples Missing: 2,790 - 2,800; 2,831 - 2,845;  
2,860 - 2,880  
Geologic Sample Range: Clinton  
Division of Mines No.: 105

Butler Twp., Section 13, Sample No. 356  
Ohio Fuel Gas Co., #1 R. D. Giffin  
Date Completed: 6-23-36, Total Depth: 2,922  
Sample Range: 2,818 - 2,917  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 92

Butler Twp., Section 14, Sample No. 356  
Ohio Fuel Gas Co. #1 R. D. Giffin  
Date Completed: 9-11-36, Total Depth: 3,022  
Sample Range: 2,923 - 3,020  
Samples Missing: 3,005 - 3,015  
Geologic Sample Range: Clinton  
Division of Mines No.: 103

Butler Twp., Section 16, Sample No. 339  
Ohio Fuel Gas Co. #1 E. R. Nethers  
Date Completed: 8-14-36, Total Depth: 2,950  
Sample Range: 2,848 - 2,950  
Samples Missing: 2,917 - 2,924  
Geologic Sample Range: Clinton  
Division of Mines No.: 97

Butler Twp., Section 17, Sample No. 355  
Ohio Fuel Gas Co. #1 D. Clark  
Date Completed: 6-18-36, Total Depth: 2,976  
Sample Range: 2,879 - 2,964  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 91

Butler Twp., Section 18, Sample No. 356  
Ohio Fuel Gas Co. #1 L. and C. Melick  
Date Completed: 9-5-36, Total Depth: 3,085  
Sample Range: 2,538 - 3,085  
Samples Missing: 2,543 - 2,900; 3,040 - 3,050  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No. 101

Butler Twp., Section 24, Sample No. 355  
Ohio Fuel Gas Co. #1 J. C. Wilson  
Date Completed: 8-25-36, Total Depth: 2,986  
Sample Range: 2,912 - 2,970  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 99

Butler Twp., Section 24, Sample No. 359  
Ohio Fuel Gas Co. #3 A. L. Wolfe  
Date Completed: 12-27-45, Total Depth: 3,007  
Sample Range: 2,951 - 3,004  
Samples Missing: 2,973 - 2,982  
Geologic Sample Range: Clinton  
Division of Mines No.: 418

Howard Twp., 3rd Qtr., Lots 8 and 13, Sample No. 356  
H. E. Perkins #1 H. E. Perkins  
Date Completed: 1-41, Total Depth: 4,945  
Sample Range: 3,542 - 4,945  
Samples Missing: 3,586-3,620; 3,680-3,700;  
3,710-3,717; 3,724- 3,732; 3,739-3,800; 3,809-  
3,820; 3,838-3,835; 3,844-3,855; 3,865-3,880;  
3,887- 3,898; 3,908-3,915; 3,923-3,930; 3,937-  
3,945; 3,962-3,970; 3,982-3,995; 4,233-4,769;  
4,854-4,862; 4,917-4,920  
Geologic Sample Range: Richmond - St. Peter  
Division of Mines No.: None

Union Twp., Section 21, Sample No. 359  
Pure Oil Co. #1 W. D. Heaton  
Date Completed: 6-25-25, Total Depth: 2,838  
Sample Range: 3 Clinton samples  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

#### Lake County

Concord Twp., NW $\frac{1}{4}$ , Sample No. 412  
Fox, McClenathan, Fordyce #1 A. Reichert  
Date Completed: 7-14-48, Total Depth: 3,277  
Sample Range: 1,401 - 3,277  
Samples Missing: 1,880 - 1,886  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No.: 8

Concord Twp., Lot 3, Sample No. 413  
J. T. Gailey #1 R. Woodruff  
Date Completed: 6-5-50, Total Depth: 3,232  
Sample Range: 105 - 3,232  
Samples Missing: 240 - 249; 1,972 - 1,978; 2,450-  
2,458; 2,962-2,966  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: None

Kirtland Twp., Lot 90, Sample No. 66  
East Ohio Gas Co. #1 F. and S. Andrews  
Date Completed: 9-26-40, Total Depth: 3,756  
Sample Range: 103 - 3,734  
Samples Missing: 2,016-2,155; 2,612-2,622; 2,642-  
2,657; 3,000-3,037; 3,094-3,113  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 1

Madison Twp., Section 5, Sample No. 378  
Commercial Oil and Gas Co. #1 C. C. Rand  
Date Completed: 4-17-20, Total Depth: 2,896  
Sample Range: 1 Newburg sample  
Samples Missing: None  
Geologic Sample Range: Newburg  
Division of Mines No.: None

Painesville Twp., Lot 1, Sample No. 298  
Diamond Alkali Co. #39 Diamond Alkali Co.  
Date Completed: 1943, Total Depth: 3,025  
Sample Range: 204 - 1,793  
Samples Missing: None (long samples)  
Geologic Sample Range: Surface - Oriskany  
Division of Mines No.: None

#### Lawrence County

Decatur Twp., Section 1, Sample No. 311  
Ohio Fuel Gas Co. #1 A. C. Culbertson  
Date Completed: 12-10-47, Total Depth: 3,177  
Sample Range: 0 - 3,177  
Samples Missing: 360 - 366, 800 - 806,  
3,030 - 3,035  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 116

Washington Twp., Section 13, Sample No. 163  
W. F. Pfeiffer #20 S. L. David and Cambria  
Clay Prod. Co.  
Date Completed: 9-26-46, Total Depth: 3,205  
Sample Range: 2,899 - 3,200  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 106

#### Licking County

Bowling Green Twp., Section 10, Sample #361  
Ohio Fuel Gas Co. #1 P. R. Shartle  
Date Completed: 7-8-38, Total Depth: 2,807  
Sample Range: Two Newburg sand samples  
Samples Missing: None  
Geologic Sample Range: Newburg  
Division of Mines No.: 263

## Hanover Twp., Lot 6, Sample #324

Industrial Gas Co. #1 Kreig and Schiffeler  
Date Completed: 8-19-43, Total Depth: 2,743  
Sample Range: 2,680 - 2,743  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

## Jersey Twp., Section 21, Sample #324

S. D. and W. B. McCloy #1 N. A. and Bertha  
Rowe  
Date Completed: 5-1-41, Total Depth: 4,370  
Sample Range: 3,445 - 4,350  
Samples Missing: 3,461 - 3,499, 3,515 - 3,556  
3,572 - 3,650, 3,670 - 3,685, 3,710 - 3,737,  
3,740 - 3,750, 3,777 - 3,708, 3,826 - 3,859,  
3,990 - 3,999, 4,056 - 4,066, 4,115 - 4,125,  
4,142 - 4,150, 4,157 - 4,181, 4,223 - 4,242,  
4,302 - 4,310, 4,320 - 4,340  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No.: 477

## Madison Twp., Lot 7, 2nd Qtr., Sample #324

Ohio Fuel Gas Co. #2 D. Jones  
Date Completed: 4-20-40, Total Depth: 2,248  
Sample Range: 2,221 - 2,243  
Samples Missing: None  
Geologic Sample Range: "Big Lime"  
Division of Mines No.: 394

## McKean Twp., 3rd Quarter, Sample #324

National Drilling Co. #1 L. Layman  
Date Completed: 11-27-44, Total Depth: 4,365  
Sample Range: 4,285 - 4,365  
Samples Missing: None  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No.: None

## Newark Twp., Lot 1, Sample #324

Wehrle Co. and Pure Oil Co. #1 G. McDonald  
Date Completed: 10-15-25, Total Depth: 4,532  
Sample Range: 4,359 - 4,384  
Samples Missing: None  
Geologic Sample Range: St. Peter  
Division of Mines No.: None

## Newark Twp., Lot 1, Sample #361

Wehrle Gas Co. #8-87 W. W. and A. T. Wehrle  
Date Completed: 4-26-24, Total Depth: 4,375  
Sample Range: 4,360 - 4,375  
Samples Missing: None  
Geologic Sample Range: St. Peter  
Division of Mines No.: None

## Newark Twp., Lot 1, Sample #394

Wehrle Gas Co. #9-126 W. W. and A. T. Wehrle  
Date Completed: 1-1-25, Total Depth: 4,374  
Sample Range: 0 - 4372½ (long samples)  
Samples Missing: 597 - 612  
Economic Museum No.: 16,441  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No.: None

## Newark Twp., Lot 6, Sample No. 395

W. W. and A. T. Wehrle #5-123 Aaron Zartman  
Date Completed: 10-29-24, Total Depth: 4,605  
Sample Range: 600 - 4,605  
Samples Missing: 1,955-2,315; 2,328-2,347;  
2,375-2,470; 2,732-3,200; 3,460-3,480;  
4,300-4,374  
Geologic Sample Range: Ohio shale - St. Peter  
Economic Museum No.: 16442  
Division of Mines No.: None

## Newark Twp., Lot 1, Sample No. 324

Wehrle Co. and Pure Oil Co. #1-105 Harriet  
Smith  
Date Completed: 10-1-24, Total Depth: 4,424  
Sample Range: 4,230 - 4,424  
Samples Missing: Random samples  
Geologic Sample Range: St. Peter  
Division of Mines No.: None

## Newark Twp., Section 3, Sample No. 324

Ohio Fuel Gas Co. #1 T. Richards  
Date Completed: 8-27-36, Total Depth: 2,347  
Sample Range: 2,175 - 2,322  
Samples Missing: 2,283 - 2,294  
Geologic Sample Range: Clinton  
Division of Mines No.: 160

## Union Twp., Section 10, Sample No. 372

Ohio Fuel Gas Co. #1 L. T. Reese  
Date Completed: 8-9-24, Total Depth: 4,350  
Sample Range: 3,799 - 4,350  
Samples Missing: Random samples  
Geologic Sample Range: Trenton - L. Magnesian  
Division of Mines No.: None

## Washington Twp., Lot 4, Sample No. 279

Logan Gas Co. #1 J. L. Lyons et al.  
Date Completed: 7-24-10, Total Depth: 2,523  
Sample Range: 0 - 2,520  
Samples Missing: 1,560 - 1,580  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: None

## Logan County

## Bloomfield Twp., Section 19, Sample No. 377

\_\_\_\_\_ #1 Scrimshaw  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 428 - 1,356  
Samples Missing: Random samples  
Geologic Sample Range: Surface - Trenton  
No log available  
Division of Mines No.: None

## Bokes Creek Twp., Lot 6155, Sample No. 372

Wesner Bros. #2 F. N. Barnsdale  
Date Completed: 1-06, Total Depth: 2,052  
Sample Range: 1,820 - 2,052  
Samples Missing: 1,860 - 1,880; 1,920 - 1,960;  
2,020 - 2,052  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No.: None

- McArthur Twp. , Lot 9930, Sample No. 192  
Ohio Oil Co. #1 V. Johns  
Date Completed: 7-9-47, Total Depth: 3,361  
Sample Range: 15 - 3,361  
Samples Missing: None  
Geologic Sample Range: Surface - Pre-Cambrian  
Division of Mines No. : 18
- Miami Twp. , Section 34, Sample No. 399  
Middletown Oil and Gas Co. #1 J. Hall  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 290 - 1,508  
Samples Missing: Random samples from 290 to 695; missing from 835 - 870; 875 - 895; 960 - 1,040; 1,240 - 1,290; 1,370 - 1,392  
Geologic Sample Range: Surface - Trenton  
Economic Museum No. : 16697  
Division of Mines No. : None
- Monroe Twp. , \_\_\_\_\_, Sample No. 389  
Monroe Oil Co. #1 L. Nagle  
Date Completed: 1950, Total Depth: 1,603  
Sample Range: 105 - 1,603  
Samples Missing: 132 - 137; 220 - 226; 368 - 378; 514 - 521; 1,560 - 1,578  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None
- Monroe Twp. , Lot 3224, Sample No. 199  
Taite et al. #1 J. W. McKeever  
Date Completed: 1-31-48, Total Depth: 2,360  
Sample Range: 88 - 2,320  
Samples Missing: 160-880; 1,060-1,213; 1,214-2,460  
Geologic Sample Range: Surface - L. Magnesian  
Division of Mines No. : 20
- Perry Twp. , Lot 842, Sample No. 125  
Logan Oil, Gas and M. Co. #1 E. S. Moore  
Date Completed: 1906, Total Depth: 1,590  
Sample Range: 280 - 1,590  
Samples Missing: 470 - 610 (long samples)  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None
- Rush Creek Twp. , Lot 9974, Sample No. 260  
Simms Oil Co. #1 Ward Sweetland  
Date Completed: 4-14-33, Total Depth: 1,471  
Sample Range: 215 - 1,461  
Samples Missing: Random Samples  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None
- Lorain County
- Eaton Twp. , Lot 31, Sample No. 337  
Ohio Fuel Gas Co. #1 Susana Cavar  
Date Completed: 6-22-36, Total Depth: 2,641  
Sample Range: 2,562 - 2,627  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 61
- Henrietta Twp. , Lot 24, Sample No. 244  
Birmingham-Henrietta Syndicate #1 G. Bachman  
Date Completed: 12-23-49, Total Depth: 2,201  
Sample Range: 935 - 2,200 (Random)  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No. : None
- Huntington Twp. , Lot 12, Sample No. 337  
Ohio Fuel Gas Co. #1 A. E. Archer  
Date Completed: 10-28-42, Total Depth: 2,659  
Sample Range: 2,495 - 2,659  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 219
- Penfield Twp. , Lot 50, Sample No. 337  
Hanley and Bird #1 E. S. Jones  
Date Completed: 10-6-47, Total Depth: 2,962  
Sample Range: 2,403 - 2,562  
Samples Missing: 2,450 - 2,457; 2,475 - 2,483  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No. : 505
- Pittsfield Twp. , Lot 73, Sample No. 176  
Hanley and Bird #1 L. Jordan  
Date Completed: 12-18-46, Total Depth: 4,285  
Sample Range: 2,301 - 4,250  
Samples Missing: 2,476 - 2,486; 2,953 - 2,983; 3,186 - 3,196; 3,919 - 3,928  
Geologic Sample Range: Medina - St. Peter  
Division of Mines No. : 455
- Pittsfield Twp. , Lot 87, Sample No. 251  
Hanley and Bird #1 A. E. Nash  
Date Completed: 7-17-46, Total Depth: 4,299  
Sample Range: 2,162 - 4,259  
Samples Missing: 2,631-2,642; 2,796-2,801; 2,937½-2,961; 3,109-3,121; 3,490-3,509; 4,051-4,074; 4,141-4,152; 4,225-4,238  
Geologic Sample Range: Clinton - St. Peter  
Division of Mines No. : 434
- Pittsfield Twp. , Lot 93, Sample No. 224  
Hanley and Bird #1 G. W. Pitts  
Date Completed: 1-16-46, Total Depth: 4,230  
Sample Range: 3,550 - 4,230  
Samples Missing: None  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No. : 399
- Pittsfield Twp. , Lot 136, Sample No. 163  
Ohio Fuel Gas Co. #1 A. P. Lincoln  
Date Completed: 9-8-46, Total Depth: 4,356  
Sample Range: 3,910 - 4,288  
Samples Missing: None  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No. : 440
- Russia Twp. , \_\_\_\_\_, Sample No. 407  
\_\_\_\_\_ # \_\_\_\_\_ K. M. Hall  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 100 - 1,500  
Samples Missing: Random samples  
Geologic Sample Range: Surface - "Big Lime"  
No log available

Economic Museum No. : 18915  
Division of Mines No. : None

Russia Twp., Lot 36, Sample No. 178  
Hanley and Bird #1 W. Seabold  
Date Completed: 3-23-47, Total Depth: 4,157  
Sample Range: 2,321 - 4,157  
Samples Missing: 2,338-2,356; 2,515-2,531;  
3,443-3,452; 3,600-3,606; 4,145-4,150  
Geologic Sample Range: Medina - St. Peter  
Division of Mines No. : 475

#### Lucas County

Adams Twp., Section 25, Sample No. 44  
Stroble Bros. #1 Regan  
Date Completed: \_\_\_\_\_, Total Depth: 1,462  
Sample Range: 1,352 - 1,462  
Samples Missing: None  
Geologic Sample Range: Trenton  
No log available  
Division of Mines No. : None

Adams Twp., Section 20, Sample No. 295  
Water Well #2 Plaskan Corp.  
Date Completed: 1947, Total Depth: 525  
Sample Range: 80 - 525  
Samples Missing: None  
Division of Water No. : 58

Monclova Twp., Section 28, Sample No. 400  
#1 Butz  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 35 - 1,385  
Samples Missing: None  
Geologic Sample Range: Surface - Trenton  
No log available  
Economic Museum No. : 16696  
Division of Mines No. : None

Waterville Twp., Section 1, Sample No. 374  
H. L. Metzger #1 Homer L. Metzger  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 1,600 - 1,690  
Samples Missing: None  
Geologic Sample Range: Trenton  
No log available  
Division of Mines No. : None

#### Mahoning County

Austintown Twp., Lot 55, Tract 7, Sample No. 160  
East Ohio Gas Co. #1 A. Lloyd  
Date Completed: 9-17-46, Total Depth: 3,555  
Sample Range: 0 - 3,546  
Samples Missing: 561-579; 1,840-1,845; 2,380-  
2,386  
Geologic Sample Range: Surface - "Big Lime"  
Division of Mines No. : 66

Berlin Twp., Lot 19, Tract 2, Sample No. 63  
Magnolia Petroleum Co. #1 F. Fields  
Date Completed: 8-29-40, Total Depth: 5,206  
Sample Range: 105 - 5,206  
Samples Missing: 1,858 - 1,870  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 20

Goshen Twp., Section 11, Sample No. 250  
Ohio Oil Co. and J. Galey #1 D. B. McCune  
Date Completed: 7-24-45, Total Depth: 3,632  
Sample Range: 0 - 3,632  
Samples Missing: None  
Geologic Sample Range: Surface - Oriskany  
Division of Mines No. : None

Goshen Twp., Section 13, Sample No. 249  
Ohio Oil Co. #1 M. Schnell, Unit  
Date Completed: 2-2-46, Total Depth: 3,557  
Sample Range: 47 - 1,006  
Samples Missing: 57 - 110  
Geologic Sample Range: Surface - Oriskany  
Division of Mines No. : None

Goshen Twp., Section 14, Sample No. 436  
D. B. McCune #1 L. B. Smith  
Date Completed: 11-15-49, Total Depth: 5,406  
Sample Range: 3,548 - 5,406  
Samples Missing: 4,175-4,392; 5,209-5,230;  
5,330-5,334; 5,345-5,350  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No. : 83

Smith Twp., Section 4, Sample No. 70  
Magnolia Petroleum Co. #1 Schrum  
Date Completed: 4-21-41, Total Depth: 5,021  
Sample Range: 115 - 5,020  
Samples Missing: 3,110 - 3,126; 3,820-3,835  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 22

Smith Twp., Section 13, Sample No. 188  
Ohio Oil Co. #1 Warren-Warren, Unit  
Date Completed: 9-22-45, Total Depth: 5,298  
Sample Range: 0-5,232  
Samples Missing: 306 - 3,050  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 44

#### Marion County

Claridon Twp., Section 10, Sample No. 368  
Dibble Drilling Co. #1 H. Key  
Date Completed: 7-49, Total Depth: 662  
Sample Range: 340 - 662  
Samples Missing: 356 - 358; 448 - 454  
Geologic Sample Range: "Big Lime"  
No log available  
Division of Mines No. : None

Marion Twp., Section 19, Sample No. 462  
 Water Well at Marion Water Co.  
 Date Completed: 6-15-50, Total Depth: 183  
 Sample Range: 44 - 183  
 Samples Missing: None  
 Division of Water No. 317

Marion Twp., \_\_\_\_\_, Sample No. 368  
 Marion and Wyandotte Oil Co. #1 Strickler and  
 Hanson  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 1,401 - 1,551  
 Samples Missing: Random samples  
 No log available  
 Division of Mines No.: None

#### Medina County

Brunswick Twp., Section 11, Lot 11, Sample No. 337  
 Hanley and Bird #1 T. Schweder  
 Date Completed: 10-11-47, Total Depth: 3,369  
 Sample Range: 3,163 - 3,356  
 Samples Missing: 3,307 - 3,318; 3,330 - 3,335  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 650

Brunswick Twp., Lot 10, Sample No. 332  
 Ohio Fuel Gas Co. #1 C. F. Reutter  
 Date Completed: 6-22-36, Total Depth: 3,115  
 Sample Range: 2,977 - 3,115  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 159

Brunswick Twp., Lot 33, Sample No. 332  
 Ohio Fuel Gas Co. #1 C. Benjamin  
 Date Completed: 12-2-36, Total Depth: 3,420  
 Sample Range: 3,277 - 3,397  
 Samples Missing: Long samples  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 163

Chatham Twp., Lot 11, Tract 16, Sample No. 332  
 Ohio Fuel Gas Co. #1 B. E. Zeigler  
 Date Completed: 10-27-36, Total Depth: 2,678  
 Sample Range: 2,475 - 2,625  
 Samples Missing: Long samples  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 154

Guilford Twp., Section 10, Sample No. 332  
 Ohio Fuel Gas Co. #1 W. J. Bauer  
 Date Completed: 9-29-36, Total Depth: 3,464  
 Sample Range: 3,271 - 3,464  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 148

Guilford Twp., Section 14, Sample No. 332  
 Ohio Fuel Gas Co. #1 L. Eastman  
 Date Completed: 8-6-36, Total Depth: 3,388  
 Sample Range: 3,249 - 3,388  
 Samples Missing: 3,334 - 3,362; (long samples)  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 142

Guilford Twp., Section 25, Sample No. 332  
 Ohio Fuel Gas Co. #1 J. Newcomer  
 Date Completed: 9-12-36, Total Depth: 3,406  
 Sample Range: 3,260 - 3,406  
 Samples Missing: None (long samples)  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 146

Litchfield Twp., Section 8, Sample No. 235  
 Wisner Oil Co. #1 A. W. Chandler  
 Date Completed: 3-4-40, Total Depth: 2,651  
 Sample Range: 1,745 - 2,651  
 Samples Missing: 2,560 - 2,562  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 250

Montville Twp., Lot 54, Sample No. 332  
 Ohio Fuel Gas Co. #1 M. Fleck  
 Date Completed: 10-31-36, Total Depth: 3,558  
 Sample Range: 3,401 - 3,556  
 Samples Missing: None (long samples)  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 153

Montville Twp., Lot 59, Sample No. 332  
 Ohio Fuel Gas Co. #1 C. H. Rodgers  
 Date Completed: 8-13-36, Total Depth: 3,549  
 Sample Range: 3,398 - 3,549  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 137

Spencer Twp., Section 4, Sample No. 332  
 Ohio Fuel Gas Co. #1 F. I. Miller  
 Date Completed: 1-1-36, Total Depth: 2,242  
 Sample Range: 2,237 - 2,239  
 Samples Missing: None  
 Geologic Sample Range: Newburg  
 Division of Mines No.: 134

#### Meigs County

Bedford Twp., Section 1, Sample No. 88  
 Nollem Oil and Gas Corp. #1 S. A. and I. Eastman  
 Date Completed: 9-30-47, Total Depth: 1,759  
 Sample Range: 1,655 - 1,751  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 745

Bedford Twp., Section 1, Sample No. 326  
 Nollem Oil and Gas Corp. #4 S. A. and I. Eastman  
 Date Completed: 6-48, Total Depth: 1,705½  
 Sample Range: 1,600 - 1,698½  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 795

Chester Twp., Section 6W, Sample No. 363  
 D. T. Orndoff, #2 E. Will  
 Date Completed: 5-20-48, Total Depth: 1,740  
 Sample Range: 1,695 - 1,732  
 Samples Missing: 1,721 - 1,728  
 Geologic Sample Range: Berea  
 Division of Mines No.: 793

Chester Twp., Section 6, Sample No. 326  
 H. B. Walker #1 O. Eastman  
 Date Completed: 3-16-48, Total Depth: 1,710  
 Sample Range: 1,592 - 1,708  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 781

Olive Twp., Section 3, Lot 1161, Sample No. 265  
 B. H. Putnam and Co. #1 P. Kibble  
 Date Completed: 2-15-49, Total Depth: 1,907  
 Sample Range: 537 - 1,907  
 Samples Missing: 1,188 - 1,195  
 Geologic Sample Range: Conemaugh - Berea  
 Division of Mines No.: 856

Olive Twp., Section 9, Sample No. 243  
 B. H. Putnam and Co. #1 J. W. Wiley  
 Date Completed: 4-8-49, Total Depth: 2,154  
 Sample Range: 0 - 2,154  
 Samples Missing: 1,356 - 1,364; 1,680 - 1,685  
 Geologic Sample Range: Surface - Berea  
 Division of Mines No.: 864

Olive Twp., Section 9, Sample No. 266  
 B. H. Putnam and Co. #1 J. B. Torrence  
 Date Completed: 6-2-49, Total Depth: 2,149  
 Sample Range: 90 - 2,005  
 Samples Missing: 265 - 270; 1,340 - 1,345;  
 1,791 - 1,796  
 Geologic Sample Range: Surface - Cuyahoga  
 Division of Mines No.: 866

Olive Twp., Section 9, Sample No. 276  
 B. H. Putnam and Co. #1 C. Emrick  
 Date Completed: 12-30-48, Total Depth: 2,140  
 Sample Range: 1,410 - 2,140  
 Samples Missing: 1,570 - 1,590  
 Geologic Sample Range: Pottsville - Berea  
 Division of Mines No.: 850

Olive Twp., Section 10, Sample No. 264  
 B. H. Putnam and Co. #1 M. A. Hall  
 Date Completed: 11-14-48, Total Depth: 2,029  
 Sample Range: 830 - 2,029  
 Samples Missing: 1,146 - 1,155; 1,262 - 1,272;  
 1,832 - 1,839  
 Geologic Sample Range: Pottsville - Berea  
 Division of Mines No.: 834

Olive Twp., Section 11, Sample No. 241  
 B. H. Putnam and Co. #1 W. Reed  
 Date Completed: 12-31-48, Total Depth: 2,068  
 Sample Range: 745 - 2,068  
 Samples Missing: 1,045 - 1,052; 1,645 - 1,654  
 Geologic Sample Range: Pottsville - Berea  
 Division of Mines No.: 851

Olive Twp., Section 23, Sample No. 253  
 Sinclair - Prairie Oil Co. #1 W. T. Longworth  
 Date Completed: 4-22-43, Total Depth: 7,466  
 Sample Range: 905 - 7,466  
 Samples Missing: 3,337 - 3,470  
 Geologic Sample Range: Pottsville - Trenton  
 Division of Mines No.: 442

Orange Twp., Section 5, Sample No. 326  
 B. H. Putnam and Co. #1 C. Headley  
 Date Completed: 8-28-48, Total Depth: 3,375  
 Sample Range: 1,785 - 1,812  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 810

Orange Twp., Section 5, Sample No. 275  
 B. H. Putnam and Co. #2 C. Headley  
 Date Completed: 11-24-48, Total Depth: 1,804  
 Sample Range: 215 - 1,804  
 Samples Missing: 815 - 849; 859 - 896  
 Geologic Sample Range: Conemaugh - Berea  
 Division of Mines No.: 836

Sutton Twp., Section 16, Sample No. 326  
 Tyree et al. #1 M. Mallory  
 Date Completed: 5-31-38, Total Depth: 3,872  
 Sample Range: 3,680 - 3,844  
 Samples Missing: 3,763 - 3,788  
 Geologic Sample Range: Oriskany  
 Division of Mines No.: None

#### Mercer County

Butler Twp., Section 33, Sample No. 427  
 Water Well #4 at Village of Coldwater  
 Date Completed: 9-50, Total Depth: 250  
 Sample Range: 40 - 250  
 Samples Missing: 100 - 105  
 Division of Water No.: 178

Gibson Twp., Section 21, Sample No. 91  
 Fisher-McCall Co. #1 J. Benner  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 1,069 - 1,120  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 No log available  
 Division of Mines No.: None

Recovery Twp., Section 19, Sample No. 120  
 E. G. Henderson #1 T. S. Heckathorn  
 Date Completed: 4-43, Total Depth: 2,015  
 Sample Range: 1,165 - 2,015  
 Samples Missing: None  
 Geologic Sample Range: Trenton - L. Magnesian  
 Division of Mines No.: None

Recovery Twp., Section 19, Sample No. 182  
 J. C. Reynolds #1 J. Breymire  
 Date Completed: 1945, Total Depth: 1,120  
 Sample Range: 970 - 1,120  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

#### Monroe County

Center Twp., Section 6, Sample No. 307  
 South Penn. Nat. Gas Co. #1 G. and L. Kerr  
 Date Completed: 5-15-44, Total Depth: 5,620½  
 Sample Range: 0 - 5,620½

Samples Missing: 3,500 - 5,270  
 Geologic Sample Range: Surface - Newburg  
 Division of Mines No. : 290

Center Twp. , Section 17, Sample No. 327  
 Nalley Oil and Gas Co. #2 T. Griffith  
 Date Completed: 2-14-48, Total Depth: 2,190  
 Sample Range: 1,697 - 1,713  
 Samples Missing: None  
 Geologic Sample Range: "Big Injun"  
 Division of Mines No. : 735

Malaga Twp. , Section 33, Sample No. 224  
 Seagram Valley Gas Co. #1 E. Bintz  
 Date Completed: 3-12-48, Total Depth: 1,722  
 Sample Range: 1,600 - 1,721½  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No. : 779

Perry Twp. , Section 17, Sample No. 426  
 Sheridan and Hogue #1 R. A. Smith  
 Date Completed: 6-2-48, Total Depth: 2,178  
 Sample Range: 1,770 - 2,157  
 Samples Missing: 1,925 - 1,927; 2,014 - 2,018  
 Geologic Sample Range: Cuyahoga - Berea  
 Division of Mines No. : 796

Perry Twp. , Section 28, Sample No. 285  
 J. W. Alderton #1 Gray  
 Date Completed: 1905, Total Depth: 1,769  
 Sample Range: 0 - 1,768  
 Samples Missing: 175 - 206; 1,100 - 1,170;  
 1,398 - 1,425  
 Geologic Sample Range: Surface - Berea  
 Division of Mines No. : None

Summit Twp. , Section 18, Sample No. 89  
 J. H. Weber #1 M. M. Fisher  
 Date Completed: Prior 1918, Total Depth: 2,455  
 Sample Range: 1,586 - 1,955  
 Samples Missing: None  
 Geologic Sample Range: Cuyahoga - Berea  
 No log available  
 Division of Mines No. : None

Washington Twp. , Section 4, Sample No. 363  
 Park Oil and Gas Co. #1 O. P. Foraker  
 Date Completed: 10-30-47, Total Depth: 2,141  
 Sample Range: 2,065 - 2,118  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No. : 717

#### Montgomery County

Clay Twp. , Section 2, Sample No. 443  
 Water Wells # 1 and 2 at Phillipsburg  
 Date Completed: \_\_\_\_\_, Total Depth: 137  
 Sample Range: 90-137 and 0-105 (composite)  
 Samples Missing: None  
 Division of Water No. 1217

#### Morgan County

Bloom Twp. , Section 4, Sample No. 327  
 Stephens Gas Co. #1 Van Horn, Rex and Barr  
 Date Completed: 1-5-46, Total Depth: 4,443  
 Sample Range: 4,189 - 4,406  
 Samples Missing: 4,202-4,209; 4,240-4,248;  
 4,278-4,286; 4,352-4,357  
 Geologic Sample Range: "Big Lime" - Clinton  
 Division of Mines No. : 478

Bloom Twp. , Section 8, Sample No. 336  
 Stephens Gas Co. , #1 M. and E. Pool  
 Date Completed: 5-22-46, Total Depth: 4,232  
 Sample Range: 3,917 - 4,232  
 Samples Missing: None  
 Geologic Sample Range: Clinton - Medina  
 Division of Mines No. : 506

Bristol Twp. , Section 13S, Sample No. 271  
 Wittmer Oil and Gas Co. #1 I. Morris  
 Date Completed: 10-16-48, Total Depth: 4,969  
 Sample Range: 500 - 4,162  
 Samples Missing: 500 - 530; 3,855 - 4,128  
 Geologic Sample Range: Conemaugh - "Big Lime"  
 Division of Mines No. : 633

Bristol Twp. , Section 24, Sample No. 212  
 Wittmer Oil and Gas Co. #1 W. O. Wortman  
 Date Completed: 7-16-48, Total Depth: 4,901  
 Sample Range: 164 - 4,893  
 Samples Missing: 608-652; 1,526-1,560; 2,535-  
 2,598; 2,648-2,681; 3,846-3,925; 3,938-3,996  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No. : 619

Deerfield Twp. , Section 11, Sample No. 327  
 Industrial Gas Co. #1 G. Edgell  
 Date Completed: 9-12-45, Total Depth: 4,284  
 Sample Range: 4,084 - 4,284  
 Samples Missing: 4,090 - 4,190  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 454

Deerfield Twp. , Section 12, Sample No. 204  
 National Gas and Oil Corp. #1 M. Barnes  
 Date Completed: 6-26-47, Total Depth: 6,644  
 Sample Range: 4,242 - 6,644  
 Samples Missing: None  
 Geologic Sample Range: Clinton - St. Peter  
 Division of Mines No. : 536

Deerfield Twp. , Section 20, Sample No. 327  
 Industrial Gas Co. #1 H. Bankes  
 Date Completed: 11-27-46, Total Depth: 4,033  
 Sample Range: 3,953 - 4,025  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 528

Homer Twp. , Section 2, Sample No. 336  
 D. T. Orndoff #1 S. V. and K. R. Dale  
 Date Completed: 8-12-38, Total Depth: 1,423  
 Sample Range: Three 2nd Berea sand samples  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No. : 91

Homer Twp., Section 3, Sample No. 336  
 Pure Oil Co. #1 J. L. Glass  
 Date Completed: 1926, Total Depth: 1,288  
 Sample Range: 1,195 - 1,288  
 Samples Missing: 1,224½ - 1,229½  
 Geologic Sample Range: Berea  
 Division of Mines No.: 390-A

Malta Twp., Section 15, Sample No. 336  
 Mid-East #1 C. E. Perkins (L. Tippie)  
 Date Completed: 5-18-48, Total Depth: 4,766  
 Sample Range: 4,594 - 4,765  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 605

Manchester Twp., Section 30, Sample No. 386  
 Wittmer-Morrow #1 F. F. Dye  
 Date Completed: 3-3-49, Total Depth: 5,205  
 Sample Range: 20 - 1,203  
 Samples Missing: 51 - 75; 80 - 200; 570 - 670;  
 935 - 1,020  
 Geologic Sample Range: Surface - Big Injun  
 Division of Mines No.: 653

Meigsville Twp., Section 1, Sample No. 316  
 Foraker et al. #1 C. Murray  
 Date Completed: 7-20-42, Total Depth: 3,564  
 Sample Range: 3,440 - 3,564  
 Samples Missing: None  
 Geologic Sample Range: Oriskany  
 Division of Mines No.: 238

Meigsville Twp., Section 12, Sample No. 210  
 J. Morrow Co. #1 L. F. Murrey  
 Date Completed: 8-26-48, Total Depth: 5,231  
 Sample Range: 73 - 5,215  
 Samples Missing: 4,885 - 4,905  
 Geologic Sample Range: Surface-Medina  
 Division of Mines No.: 602

Penn Twp., Section 36, Sample No. 429  
 National Gas and Oil #1 J. C. O. Tompkins  
 Date Completed: 5-4-48, Total Depth: 4,944  
 Sample Range: 4,750 - 4,939  
 Samples Missing: None  
 Geologic Sample Range: Clinton-Medina  
 Division of Mines No.: 600

Union Twp., Section 26, Sample No. 363  
 Ohio Fuel Gas Co. #1 F. Hambel  
 Date Completed: 5-31-27, Total Depth: 635½  
 Sample Range: 605 - 630 (1 sample)  
 Samples Missing: None  
 Geologic Sample Range: Macksburg Stray Sand  
 Division of Mines No.: 420-A

Union Twp., Section 26, Sample No. 363  
 Ohio Fuel Gas Co. #2 F. Hambel  
 Date Completed: 5 - 1927 Total Depth: 654  
 Sample Range: 1 sample at 635  
 Samples Missing: None  
 Geologic Sample Range: Macksburg Sand  
 Division of Mines No.: 420-A

York Twp., Section 26, Sample No. 221  
 Zanesville Tool and Supply Co. #1 D. Rambo  
 Date Completed: 7-8-47, Total Depth: 3,981  
 Sample Range: 0 - 3,981  
 Samples Missing: 790 - 800, 2,640 - 2,650  
 Geologic Sample Range: Surface-Medina  
 Division of Mines No.: 554

York Twp., Section 29, Sample No. 336  
 Pure Oil Co. #1 George Fye  
 Date Completed: 8-29-24, Total Depth: 1,387  
 Sample Range: 1,276 - 1,293 (1 sample)  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 485-A

York Twp., Section 29, Sample No. 336  
 Pure Oil Co. #8 George Fye  
 Date Completed: 5-5-26, Total Depth: 1,253  
 Sample Range: 1,232 - 1,253  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 485-A

York Twp., Section 34 W, Sample No. 327  
 Foraker et al. #2 New York Coal Co.  
 Date Completed: 7-25-45, Total Depth: 3,699  
 Sample Range: 3,568 - 3,620  
 Samples Missing: 3,604 - 3,611  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 446

York Twp., Section 35, Sample No. 387  
 Oxford Oil Co. #5 W. C. Weaver  
 Date Completed: 4-9-49, Total Depth: 3,951  
 Sample Range: 3,822 - 3,951  
 Samples Missing: 3,859 - 3,929  
 Geologic Sample Range: Clinton-Medina  
 Division of Mines No.: 660

#### Muskingum County

Adams Twp., Section 19, Sample No. 333  
 South Penn Oil Co. #1 H. M. Vernon  
 Date Completed: 7-20-45, Total Depth: 4,344  
 Sample Range: 4,140 - 4,323  
 Samples Missing: 4,249 - 4,310  
 Geologic Sample Range: Clinton-Medina  
 Division of Mines No.: 492

Blue Rock Twp., Section 5, Sample No. 333  
 Industrial Gas Corp. #2 H. J. Zinsmeister  
 Date Completed: 8-3-46, Total Depth: 4,300  
 Sample Range: 4,108 - 4,300  
 Samples Missing: None  
 Geologic Sample Range: Clinton - Medina  
 Division of Mines No.: 682

Blue Rock Twp., Section 9, Sample No. 333  
 Industrial Gas Corp. #5 U. S. A.  
 Date Completed: 9-24-43, Total Depth: 4,400  
 Sample Range: 4,292 - 4,400  
 Samples Missing: 4,322 - 4,329  
 Geologic Sample Range: Clinton-Medina  
 Division of Mines No.: 318

Blue Rock Twp., Section 10, Sample No. 333  
 Industrial Gas Corp. #6 U. S. A.  
 Date Completed: 7-11-43, Total Depth: 4,333  
 Sample Range: 4,188 - 4,282  
 Samples Missing: 4,234 - 4,271  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 328

Blue Rock Twp., Section 11, Sample No. 223  
 National Oil and Gas Co. #1 E. Crawford  
 Date Completed: 2-18-48, Total Depth: 6,797  
 Sample Range: 4,650 - 6,797  
 Samples Missing: 4,688 - 4,698; 5,200 - 5,210  
 Geologic Sample Range: Medina-St. Peter  
 Division of Mines No.: 778

Blue Rock Twp., Section 3, Sample No. 333  
 Industrial Gas Corp. #14 U. S. A.  
 Date Completed: 6-7-45, Total Depth: 4,516  
 Sample Range: 4,388 - 4,516  
 Samples Missing: 4,439 - 4,496  
 Geologic Sample Range: Clinton-Medina  
 Division of Mines No.: 523

Blue Rock Twp., Section 24, Sample No. 365  
 Pure Oil Co. #1 L. M. Parker  
 Date Completed: 11-15-26, Total Depth: 1,389  
 Sample Range: 1,321 - 1,385  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 397-A

Brush Creek Twp., Section 14, Sample No. 335  
 Salem Gas Co. #1 A. S. Leland  
 Date Completed: 2-5-47, Total Depth: 3,777  
 Sample Range: 3,543 - 3,775  
 Samples Missing: 3,550 - 3,557; 3,577 - 3,592  
 Geologic Sample Range: "Big Lime"-Clinton  
 Division of Mines No.: 784

Cass Twp., Lot 18 - 3rd Quarter, Sample No. 335  
 Ohio Fuel Gas Co. #1 L. M. Shaw  
 Date Completed: 9-17-36, Total Depth: 3,495  
 Sample Range: 3,338 - 3,498  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 17

Falls Twp., 2nd Quarter, Sample No. 335  
 Ohio Fuel Gas Co. #1 V. Vanderbark  
 Date Completed: 10-3-36, Total Depth: 3,481  
 Sample Range: 3,440 - 3,491  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 15

Falls Twp., 3rd Quarter, Sample No. 85  
 H. K. Porter Co. #1 F. A. Dearth  
 Date Completed: 10-7-43, Total Depth: 3,553  
 Sample Range: 3,213 - 3,553  
 Samples Missing: None  
 Geologic Sample Range: "Big Lime" - Clinton  
 Division of Mines No.: 351

Falls Twp., 4th Quarter, Sample No. 381  
 Wittmer Oil and Gas Co. #4 Muskingum Co.  
 Infirmary  
 Date Completed: 5-27-44, Total Depth: 3,558  
 Sample Range: 3,314 - 3,533  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 424

Harrison Twp., Section 6, Sample No. 65  
 E. M. Shields #1 L. E. Updyke  
 Date Completed: 9-11-40, Total Depth: 4,324  
 Sample Range: 534 - 4,324  
 Samples Missing: 4,081 - 4,093  
 Geologic Sample Range: Pottsville - Medina  
 Division of Mines No.: 146

Hopewell Twp., Section 7, Sample No. 335  
 Everett Gas Co. #1 L. Shuey  
 Date Completed: 7-30-46, Total Depth: 3,181  
 Sample Range: 3,125 - 3,172  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 702

Madison Twp., 3rd Quarter, Sample No. 381  
 Ohio Fuel Gas Co. #1 - 7755 J. L. and M. Stump  
 Date Completed: 6-23-44, Total Depth: 3,752  
 Sample Range: 3,600 - 3,670  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 414

Meigs Twp., Section 19, Sample No. 35  
 Columbus Clay and Mineral Co. #1 A. L. Harmon  
 Date Completed: 7-28-41, Total Depth: 4,686  
 Sample Range: 3,185 - 4,659  
 Samples Missing: 3,480 - 3,490, 4,262 - 4,269  
 Geologic Sample Range: "Big Lime" - Clinton  
 Division of Mines No.: 218

Newton Twp., Section 7, Sample No. 333  
 Industrial Gas Corp. #1 N. Smith  
 Date Completed: 8-28-43, Total Depth: 3,490  
 Sample Range: 3,425 - 3,488  
 Samples Missing: 3,438 - 3,451; 3,468 - 3,472  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 330

Newton Twp., Section 25, Sample No. 333  
 J. Morrow #1 L. Stoneburner  
 Date Completed: 9-6-46, Total Depth: 3,515  
 Sample Range: 3,360 - 3,440  
 Samples Missing: 3,392 - 3,398  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 727

Richhill Twp., Section 25, Sample No. 335  
 Pure Oil Co. #1 C. S. Spratt  
 Date Completed: 8-1-23, Total Depth: 1,532  
 Sample Range: 148 - 172 (1 Cow Run sample)  
 Samples Missing: None  
 Geologic Sample Range: Cow Run Sand  
 Division of Mines No.: 276-A

Salem Twp., Section 20, Sample No. 335  
 Pure Oil Co. #1 C. O. Bowden  
 Date Completed: 8-9-22, Total Depth: 1,235  
 Sample Range: 1 Cow Run sample  
 Samples Missing: None  
 Geologic Sample Range: Cow Run Sand  
 Division of Mines No.: 265-A

Salt Creek Twp., Section 10, Sample No. 203  
 National Gas and Oil Co. #1 Nathan Wickham  
 Date Completed: 5-14-47, Total Depth: 6,910  
 Sample Range: 4,276 - 6,910  
 Samples Missing: 4,376 - 4,412; 4,421 - 4,818;  
 5,181 - 5,191; 5,544 - 5,561  
 Geologic Sample Range: Clinton - L. Magnesian  
 Division of Mines No.: 787

Salt Creek Twp., Section 10, Sample No. 318  
 Pittsburg Oil and Gas Co. #1 H. Corbin  
 Date Completed: 8-6-46, Total Depth: 4,279  
 Sample Range: 4,008 - 4,273  
 Samples Missing: 4,016 - 4,116  
 Geologic Sample Range: Clinton - Medina  
 Division of Mines No.: 686

Salt Creek Twp., Section 26, Sample No. 157  
 Industrial Gas Corp. #1 S. Whitmire  
 Date Completed: 9-14-46, Total Depth: 6,740  
 Sample Range: 4,256 - 6,740  
 Samples Missing: 4,663 - 4,673; 5,557 - 5,571;  
 6,558 - 6,571  
 Geologic Sample Range: Clinton - St. Peter  
 Division of Mines No.: 689

Salt Creek Twp., Section 27, Sample No. 318  
 Bartley et al. #2 Josie Olden  
 Date Completed: 7-25-46, Total Depth: 4,322  
 Sample Range: 4,209 - 4,322  
 Samples Missing: None  
 Geologic Sample Range: Clinton - Medina  
 Division of Mines No.: 650

Salt Creek Twp., Section 34, Sample No. 318  
 Salt Creek Dev. Co. #2 U. S. A.  
 Date Completed: 7-22-46, Total Depth: 4,410  
 Sample Range: 4,267 - 4,410  
 Samples Missing: None  
 Geologic Sample Range: Clinton - Medina  
 Division of Mines No.: 666

Salt Creek Twp., Section 35, Sample No. 318  
 B. G. Bartley et al. #2 H. White  
 Date Completed: 8-7-45, Total Depth: 4,508  
 Sample Range: 4,202 - 4,428  
 Samples Missing: 4,218 - 4,389, 4,407 - 4,418  
 Geologic Sample Range: "Big Lime" - Clinton  
 Division of Mines No.: 547

Wayne Twp., Section 3, Sample No. 334  
 Industrial Gas Corp. and L. D. Rees #1 C. Durant  
 Date Completed: 7-3-45, Total Depth: 4,097  
 Sample Range: 3,922 - 4,035  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 531

Wayne Twp., Section 2, Sample No. 334  
 Wasson and Co., Inc. #1 F. Wilson  
 Date Completed: 8-19-46, Total Depth: 4,064  
 Sample Range: 3,900 - 3,968  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 683

Wayne Twp., Section 29, Sample No. 334  
 E. K. Kane #1 L. E. Schlaegel  
 Date Completed: 11-12-46, Total Depth: 4,108  
 Sample Range: 3,823 - 4,080  
 Samples Missing: 4,028 - 4,032; 4,070 - 4,080;  
 4,012 - 4,016; 4,018 - 4,070  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 743

Wayne Twp., Section 29, Sample No. 335  
 E. K. Kane #1 S. Bowman  
 Date Completed: 11-14-46, Total Depth: 4,385  
 Sample Range: 4,118 - 4,385  
 Samples Missing: 4,128 - 4,176; 4,216 - 4,231;  
 4,318 - 4,328; 4,351 - 4,356  
 Geologic Sample Range: Clinton - Medina  
 Division of Mines No.: 744

#### Noble County

Brookfield Twp., Section 20, Sample No. 225  
 J. E. Morrow #1 L. F. Larrick  
 Date Completed: 11-29-47, Total Depth: 5,189  
 Sample Range: 900 - 5,141  
 Samples Missing: 936 - 1,031; 1,040 - 1,080;  
 1,187-1,185; 1,203-1,675; 1,778-3,035; 3,287-  
 3,605; 3,715-3,726; 3,771-3,800; 3,965-5,124  
 Geologic Sample Range: Allegheny - Clinton  
 Division of Mines No.: 590

Buffalo Twp., Section 31, Sample No. 385  
 H. R. Helvenston #1 Ava Brick Co.  
 Date Completed: 2-10-49, Total Depth: 3,780  
 Sample Range: 3,530 - 3,780  
 Samples Missing: 3,731 - 3,769  
 Geologic Sample Range: Ohio shale - Oriskany  
 Division of Mines No.: 658

Center Twp., Section 23, Sample No. 59  
 Robert Lewis #1 O. E. Heisler  
 Date Completed: 9-20-37, Total Depth: 5,800  
 Sample Range: 4,853 - 5,789  
 Samples Missing: 5,375 - 5,400; 5,423 - 5,439;  
 5,449 - 5,490  
 Geologic Sample Range: "Big Lime" - Medina  
 Division of Mines No.: 7

Jefferson Twp., Section 26, Sample No. 336  
 Clark Drilling Co. #1 G. W. Hesson  
 Date Completed: 5-5-48, Total Depth: 1,536  
 Sample Range: 1,510 - 1,526  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No.: 628

## Ottawa County

Clay Twp. , Section 21, Sample No. 374  
 E. L. Rugh #1  
 Date Completed: 10-05, Total Depth: 1,351  
 Sample Range: 125 - 1,347  
 Samples Missing: 600-660; 900-1,000; 1,325-1,330  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No. : None

Clay Twp. , Section 33, Sample No. 463  
 Water Well #3 at Genoa  
 Date Completed: 7-51, Total Depth: 350  
 Sample Range: 0 - 350  
 Samples Missing: 170 - 175  
 Division of Water No. : 184

Clay Twp. , Section 33, Sample No. 468  
 Water Well #4 at Genoa  
 Date Completed: 1951, Total Depth: 436  
 Sample Range: 0 - 350  
 Samples Missing: 170 - 175  
 Division of Water No. : 185

## Paulding County

Paulding Twp. , Section 24, Sample No. 425  
 Water Well at Paulding Water Works  
 Date Completed: 10-50, Total Depth: 625  
 Sample Range: 0-625  
 Samples Missing: 35 - 39; 545 - 550  
 Division of Water No. : 83

## Perry County

Bearfield Twp. , Section 23, Sample No. 288  
 Metzger Co. #3 Floyd Sims  
 Date Completed: 10-12-48, Total Depth: 6,100  
 Sample Range: 3,780 - 6,090  
 Samples Missing: 5,070 - 5,080; 5,474 - 5,479  
 Geologic Sample Range: Clinton - St. Peter  
 Division of Mines No. : 1132

Clayton Twp. , Section 3, Sample No. 259  
 Quaker State Oil Co. #1 S. C. Moore  
 Date Completed: 10-12-48, Total Depth: 3,486  
 Sample Range: 0 - 3,484  
 Samples Missing: 952 - 1,260  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No. : 1220

Clayton Twp. , Section 3, Sample No. 318  
 Industrial Gas Corp. #1 W. E. Moore  
 Date Completed: 6-28-45, Total Depth: 3,326  
 Sample Range: 3,238 - 3,307  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 656

Clayton Twp. , Section 7, Sample No. 179  
 Pure Oil Co. #4 B. J. Williams  
 Date Completed: 5-9-42, Total Depth: 3,248  
 Sample Range: 3,183 - 3,248  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 344

Clayton Twp. , Section 7, Sample No. 182  
 Pure Oil Co. #2 J. A. Cannon  
 Date Completed: 9-5-41, Total Depth: 3,168  
 Sample Range: 3,113 - 3,168  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 296

Clayton Twp. , Section 20, Sample No. 138  
 Ohio Oil Co. #1 J. L. Wilson  
 Date Completed: 9-9-43, Total Depth: 3,431  
 Sample Range: 20 - 3,430  
 Samples Missing: 320 - 330; 380 - 765; 970 - 980;  
 1,140 - 1,150  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No. : 506

Clayton Twp. , Section 22, Sample No. 88  
 Lupher and Snyder #1 L. J. Snyder  
 Date Completed: 10-24-41, Total Depth: 3,448  
 Sample Range: 3,363 - 3,417  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 306

Clayton Twp. , Section 27, Sample No. 127  
 Palm Oil Corp. #1 A. Hamilton  
 Date Completed: 5-19-43, Total Depth: 3,430  
 Sample Range: 100 - 3,428  
 Samples Missing: 2,939 - 2,949  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No. : 484

Clayton Twp. , Section 32, Sample No. 100  
 Ohio Oil Co. #1 Callie M. Dugan  
 Date Completed: 8-15-42, Total Depth: 3,346  
 Sample Range: 60 - 3,346  
 Samples Missing: 2,040 - 2,080; 3,241 - 3,253  
 Geologic Sample Range: Surface - Medina  
 Division of Mines No. : 352

Clayton Twp. , Section 33, Sample No. 135  
 Ohio Oil Co. #1 Coulter Sisters  
 Date Completed: 9-17-43, Total Depth: 3,508  
 Sample Range: 0 - 3,507  
 Samples Missing: 1,591 - 1,729  
 Geologic Sample Range: Surface - Medina  
 Division of Mines No. : 526

Hopewell Twp. , Section 24, Sample No. 318  
 Industrial Gas Corp. #6 R. B. Skinner  
 Date Completed: 1-25-46, Total Depth: 3,102  
 Sample Range: 3,050 - 3,102  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 723

Hopewell Twp. , Section 32, Sample No. 318  
 Bradford Prod. Co. #1 Pappas and Massuros  
 Date Completed: 7-8-46, Total Depth: 3,058  
 Sample Range: 2,988 - 3,051  
 Samples Missing: 3,013 - 3,018  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 815

Hopewell Twp., Section 34, Sample No. 316  
 Preston Oil Co. #3 H. C. Albert  
 Date Completed: 12-6-49, Total Depth: 2,934  
 Sample Range: 2,870 - 2,930  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 1,343

Hopewell Twp., Section 35, Sample No. 318  
 Belmont Quad. Drilling Corp. #1 G. Vlerebome  
 Date Completed: 8-7-45, Total Depth: 3,071  
 Sample Range: 3,017 - 3,056  
 Samples Missing: 3,028 - 3,032  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 680

Pleasant Twp., Section 6, Sample No. 126  
 Ohio Oil Co. #1 W. Rugg  
 Date Completed: 4-8-43, Total Depth: 3,675  
 Sample Range: 10 - 3,440  
 Samples Missing: 535 - 560; 610 - 630; 786 -  
 814; 1,004 - 1050; 1,150 - 1,165  
 Geologic Sample Range: Surface - "Big Lime"  
 Division of Mines No.: 439

Pleasant Twp., Section 6, Sample No. 139  
 Ohio Oil Co. #1 D. W. Bolyard  
 Date Completed: 10-10-43, Total Depth: 3,777  
 Sample Range: 0 - 3,777  
 Samples Missing: 165 - 180, 1,320 - 1,330  
 Geologic Sample Range: Surface - Medina  
 Division of Mines No.: 513

Pleasant Twp., Section 31, Sample No. 146  
 Ohio Oil Co. #1 V. C. Henry  
 Date Completed: 11-16-43, Total Depth: 3,690  
 Sample Range: 225 - 3,690  
 Samples Missing: 780 - 840; 960 - 990; 1,210 -  
 2,500; 2,520 - 2,530; 3,600 - 3,635  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No.: 514

Reading Twp., Section 1-E, Sample No. 147  
 Zanesville Tool and Supply Co., #1 S. I. Forsythe  
 Date Completed: 1-16-45, Total Depth: 3,180  
 Sample Range: 880 - 3,159  
 Samples Missing: 975 - 2,555  
 Geologic Sample Range: Cuyahoga - Clinton  
 Division of Mines No.: 627

Reading Twp., Section 3, Sample No. 316  
 Industrial Gas Corp. #1 M. Mathews  
 Date Completed: 10-11-46, Total Depth: 3,045  
 Sample Range: 2,914 - 3,014  
 Samples Missing: 2,926 - 2,941  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 883

Reading Twp., Section 10, Sample No. 317  
 Industrial Gas Corp. #1 Loveberry and Mohler  
 Date Completed: 4-19-45, Total Depth: 3,098  
 Sample Range: 3,020 - 3,079  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 659

Reading Twp., Section 17, Sample No. 317  
 Wisner Oil Co. #4 D. T. Ream  
 Date Completed: 6-18-46, Total Depth: 2,985  
 Sample Range: 2,939 - 2,974  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 841

Reading Twp., Section 18, Sample No. 316  
 J. E. Morrow et al #1 W. E. James  
 Date Completed: 6-18-46, Total Depth: 2,883  
 Sample Range: 2,744 - 2,883  
 Samples Missing: 2,761 - 2,790  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 835

Reading Twp., Section 20, Sample No. 317  
 Waverly-Sturm #10 S. B. Dittol  
 Date Completed: 8-30-29, Total Depth: 3,040  
 Sample Range: 2,936 - 2,968  
 Samples Missing: 2,942 - 2,948  
 Geologic Sample Range: Clinton  
 Division of Mines No.: None

Thorn Twp., Section 11, Sample No. 317  
 Industrial Gas Corp. #1 Frank Cooperrider  
 Date Completed: 8-28-43, Total Depth: 2,917  
 Sample Range: 2,669 - 2,697  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 760

Thorn Twp., Section 11, Sample No. 317  
 Sloan and Zook #2 W. R. Cooperrider  
 Date Completed: 6-21-46, Total Depth: 2,715  
 Sample Range: 2,420 - 2,715  
 Samples Missing: 2,442 - 2,447; 2,454 - 2,463  
 Geologic Sample Range: "Big Lime" - Medina  
 Division of Mines No.: 733

Thorn Twp., Section 13, Sample No. 109  
 Ohio Oil and Ind. Gas Co. #1 Foucht-Long  
 Date Completed: 11-16-42, Total Depth: 2,905  
 Sample Range: 190 - 2,905  
 Samples Missing: 2,354 - 2,400  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No.: 791

Thorn Twp., Section 135, Sample No. 124  
 Ohio Oil Co. #1 E. R. Foucht  
 Date Completed: 6-7-43, Total Depth: 2,925  
 Sample Range: 0 - 2,926  
 Samples Missing: None  
 Geologic Sample Range: Medina  
 Division of Mines No.: 756

Thorn Twp., Section 24, Sample No. 102  
 Ohio Oil Co. #1 I. Brown  
 Date Completed: 6-19-42, Total Depth: 2,897  
 Sample Range: 360 - 2,897  
 Samples Missing: None  
 Geologic Sample Range: Pottsville - Clinton  
 Division of Mines No.: 784

Thorn Twp., Section 24, Sample No. 106  
Ohio Oil Co. #2 I. W. Brown  
Date Completed: 10-10-42, Total Depth: 3,055  
Sample Range: 375 - 3,055  
Samples Missing: 445 - 455; 790 - 800; 2,337 -  
2,355  
Geologic Sample Range: Pottsville - Medina  
Division of Mines No.: 789

#### Pickaway County

Scioto Twp., Lot 931, Sample No. 367  
Water Well #1 at Inst. Feeble Minded  
Date Completed: 11-42, Total Depth: 292  
Sample Range: 28 - 292  
Samples Missing: 85 - 125  
Division of Water No.: 18

Scioto Twp., Lot 931, Sample No. 367  
Water Well #2 at Inst. Feeble Minded  
Date Completed: 7-43, Total Depth: 215  
Sample Range: 180 - 215  
Samples Missing: None  
Division of Water No.: None

Scioto Twp., Lot 931, Sample No. 367  
Water Well #3 at Inst. Feeble Minded  
Date Completed: 1943, Total Depth: 430  
Sample Range: 212 - 430  
Samples Missing: 217 - 246; 255 - 262; 270 -  
275; 295 - 300; 312 - 317; 360 - 365  
Division of Water No.: None

#### Pike County

Beaver Twp., Section 35, Sample No. 263  
E. O. White #1 R. Babst  
Date Completed: 6-14-50, Total Depth: 4,227  
Sample Range: 0 - 4,227  
Samples Missing: Random samples from 0 - 2,700,  
Missing: 2,800 - 2,833; 3,569 - 3,577; 3,581-  
3,589; 3,830 - 3,862; 4,186 - 4,198  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No.: 1

Mifflin Twp., SW $\frac{1}{4}$ , Sample No. 134  
Sinking Spring Oil Co. #1 R. B. Kessler  
Date Completed: 1921, Total Depth 1,792  
Sample Range: 1,018 - 1,792  
Samples Missing: None  
Geologic Sample Range: Utica - St. Peter  
Division of Mines No.: None

Pee Pee Twp., Lot 490, Sample No. 310  
Waverly Oil and Gas Co. #1 Peru Hutt (I.  
Donaldson)  
Date Completed: 7-14-09, Total Depth: 3,360  
Sample Range: 0 - 3,320  
Samples Missing: Long Samples  
Geologic Sample Range: Surface - L. Magnesian  
Division of Mines No.: None

Scioto Twp., Section 16, Sample No. 287  
Pico Oil Co. #1 Armintrout  
Date Completed: 1949, Total Depth: 3,429  
Sample Range: 105 - 3,429  
Samples Missing: 158 - 250; 255 - 480; 490 -  
695; 698 - 770; 790 - 960; 980 - 1,010;  
1,020 - 1,070; 1,218 - 1,244; 1,340 - 1,380;  
1,475 - 1,500; 1,670 - 1,715; 1,780 - 1,860;  
1,910 - 1,976; 2,150 - 2,190; 2,230 - 2,270;  
2,440 - 2,475  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No.: None

#### Portage County

Aurora Twp., Section 18, Sample No. 319  
R. B. Weed et al #1 H. Bissel et al  
Date Completed: 7-23-46, Total Depth: 4,013  
Sample Range: 3,383 - 4013  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 14

Aurora Twp. Section 19, Sample No. 319  
R. B. Weed et al #1 J. Twiss  
Date Completed: 3-1-48, Total Depth: 4,052  
Sample Range: 3,945 - 4,052  
Samples Missing: 3,996 - 4,002  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Charlestown Twp., SW $\frac{1}{4}$ , Sample No. 414  
C. S. Coen, J. A. Fox, J. Galey #1 E. W.  
Hatfield  
Date Completed: 7-13-49, Total Depth: 4,441  
Sample Range: 150 - 4,441  
Samples Missing: 322 - 340; 453 - 2,432; 2,700 -  
2,775; 2,836 - 2,844; 3,145 - 3,205; 3,265 -  
3,275; 3,297 - 3313; 3381 - 3,400; 3,420 -  
3,446; 3,709 - 3,732; 3,919 - 3,945; 4,051 -  
4,058; 4,219 - 4,233  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 21

Deerfield Twp., Section 1-N, Lot 55, Sample No. 73  
Magnolia Petroleum Co. #1 H. A. Forney  
Date Completed: 10-15-41, Total Depth: 4,930  
Sample Range: 85 - 4,914  
Samples Missing: 4,020 - 4,035  
Geologic Sample Range: Surface - Medina  
Division of Mines No.: 5

Edinburgh Twp., Lot 9, Sample No. 80  
East Ohio Gas Co. #1 S. W. Anderson  
Date Completed: 11-28-41, Total Depth: 4,627  
Sample Range: 0 - 4,612  
Samples Missing: 20 - 77  
Geologic Sample Range: Surface - Medina  
Division of Mines No.: 4

Palmyra Twp., Section 13, Sample No. 242  
 J. W. Cashdollar #1 E. C. and J. T. Henderson  
 Date Completed: 3-6-37, Total Depth: 4,792  
 Sample Range: 1,250 - 3,550  
 Samples Missing: 1,510-1,530; 1,610-1,630; 1,770-  
 1,790; 1,850-1,890; 2,290-2,300; 2,340-2,350;  
 2,520-2,530; 3,030-3,040  
 Geologic Sample Range: Ohio shale - "Big Lime"  
 Division of Mines No.: 2

Ravenna Twp., ———, Sample No. 357  
 Water Well on F. Rosinow farm  
 Date Completed: 1905, Total Depth: 109  
 Sample Range: 0 - 108½  
 Samples Missing: None  
 No log available  
 Division of Water No.: None

Ravenna Twp., Lot 36, Sample No. 415  
 J. T. Galey, C. S. Coen, J. A. Fox #1 A. M.  
 Shipley  
 Date Completed: 9-11-50, Total Depth: 4,277  
 Sample Range: 111 - 4,270  
 Samples Missing: 122-130; 153-198; 459-469; 670-  
 680; 690-700; 748-755; 761-769; 785-796; 820-  
 829; 846-856; 1,096-1,117; 1,127-1,137; 1,171-  
 1,189; 1,240-1,250; 1,312-1,336; 1,873-1,878;  
 4,174-4,191; 4,252-4,257  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No.: 23

#### Putnam County

Blanchard Twp., Section 22, Sample No. 97  
 Norton - Stewart Pet. Corp. #5 W. D. Williams  
 Date Completed: 12-5-37, Total Depth: 2,020  
 Sample Range: 1,418 - 2,020  
 Samples Missing: None  
 Geologic Sample Range: Trenton - St. Peter  
 Division of Mines No.: 21

Blanchard Twp., Section 22, Sample No. 105  
 H. P. Hubbell et al. #4 Robert Baker  
 Date Completed: 9-46, Total Depth: 1,365  
 Sample Range: 40 - 1,370  
 Samples Missing: 530-795; 800-915; (5' to 50'  
 intervals)  
 Geologic Sample Range: Surface - Trenton  
 No log available  
 Division of Mines No.: None

Blanchard Twp., Section 22, Sample No. 376  
 Sun Oil Co. and Brown #1 L. U. McCullough  
 Date Completed: 9-1-37, Total Depth: 1,992  
 Sample Range: 1,933 - 1,977  
 Samples Missing: None  
 Geologic Sample Range: St. Peter  
 Division of Mines No.: None

Blanchard Twp., Section 23 Sample No. 316  
 G. Wallace #3 H. Baker  
 Date Completed: 10-30-42, Total Depth: 1,366  
 Sample Range: 1,325 - 1,366  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

Liberty Twp., Section 29, Sample No. 156  
 Ohio Oil Co. #1 L. Barlage  
 Date Completed: 3-21-44, Total Depth: 3,377  
 Sample Range: 0 - 3,377  
 Samples Missing: None  
 Geologic Sample Range: Surface - Cambrian  
 Division of Mines No.: 31

Ottawa Twp., Section 27, Sample No. 323  
 Water Well at Village of Ottawa  
 Date Completed: 2-17-49, Total Depth: 215  
 Sample Range: 60 - 200 (long samples)  
 Samples Missing: None  
 Division of Water No.: 63

Perry Twp., Section 17, Sample No. 167  
 Westates Petroleum Co. #1 R. J. Merriott  
 Date Completed: 5-15-50, Total Depth: 1,391  
 Sample Range: 43 - 1,391  
 Samples Missing: None  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No.: None

Pleasant Twp., Section 26, Sample No. 451  
 Water Well at Columbus Grove Power Plant  
 Date Completed: 1950, Total Depth: 451  
 Sample Range: 116 - 451  
 Samples Missing: 258 - 273  
 Division of Water No.: 64

Riley Twp., Section 23, Sample No. 87  
 G. Wallace #1 J. Bohr  
 Date Completed: 10-18-47, Total Depth: 1,362  
 Sample Range: 55 - 1,335½  
 Samples Missing: 60 - 85; 140 - 147; 210 - 219;  
 272-281; 306-347; 380-410; 461-490; 511-1,297  
 Geologic Sample Range: Surface - Trenton  
 No log available  
 Division of Mines No.: None

Van Buren Twp., Section 30, Sample No. 460  
 Water Well at Leipsic  
 Date Completed: 1950, Total Depth: 605  
 Sample Range: 375 - 605  
 Samples Missing: None  
 Division of Water No.: 161

#### Richland County

Madison Twp., Section 22, Sample No. 359  
 Water Well at Mansfield Ry. St. and P. Co.  
 Date Completed: 1905, Total Depth: 138  
 Sample Range: 0 - 138  
 Samples Missing: 90 - 100  
 No log available  
 Division of Water No.: None

Monroe Twp., Section 3, Sample No. 359  
 Ohio Fuel Gas Co. #2 D. R. Culler  
 Date Completed: 12-6-45, Total Depth: 2,711  
 Sample Range: 2,538 - 2,586  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: 50

Worthington Twp., Section 5, Sample No. 339  
Ohio Fuel Gas Co. #1 A. M. Carsey  
Date Completed: 8-8-36, Total Depth: 2,547  
Sample Range: 2,357 - 2,547  
Samples Missing: 2,443 - 2,452; 2,502 - 2,519;  
2,538 - 2,543  
Geologic Sample Range: Clinton  
Division of Mines No. : 14

Worthington Twp., Section 5, Sample No. 339  
Ohio Fuel Gas Co. #1 Mansfield Bldg. and Loan  
Company  
Date Completed: 6-4-36, Total Depth: 2,426  
Sample Range: 2,265 - 2,426  
Samples Missing: 2,399 - 2,408  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No. : 11

Worthington Twp., Section 20, Sample No. 339  
Ohio Fuel Gas Co. #1 A. Shaffer  
Date Completed: 8-31-36, Total Depth: 2,432  
Sample Range: 2,296 - 2,415  
Samples Missing: 2,404 - 2,410  
Geologic Sample Range: Clinton  
Division of Mines No. : 15

Worthington Twp., Section 25, Sample No. 339  
Ohio Fuel Gas Co. #2 F. E. Bowen  
Date Completed: 10-9-36, Total Depth: 2,757  
Sample Range: 2,605 - 2,740  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 16

Worthington Twp., Section 26, Sample No. 339  
Ohio Fuel Gas Co. #1 C. B. Stanley  
Date Completed: 7-18-36, Total Depth: 2,802  
Sample Range: 2,638 - 2,802  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 13

#### Ross County

Concord Twp., Lot 407, Sample No. 153  
Kissling Bros. #1 W. Perie  
Date Completed: 1945, Total Depth: 2,325  
Sample Range: 12 - 2,325  
Samples Missing: 100 - 125; 429 - 439; 485 -  
495; 725 - 735; 774 - 785; 1,323 - 1,333; 1,544 -  
1,558  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No. : None

Paxton Twp., Lot 1,914, Sample No. 390  
Jones and Davis #1 Wm. Richardson  
Date Completed: 1928, Total Depth: 1,830  
Sample Range: 120 - 1,085  
Samples Missing: 120 - 145; 180 - 205; 360 -  
365; 490 - 500; 580 - 585; 605 - 635  
Geologic Sample Range: Surface - Trenton  
Economic Museum No. 16449  
Division of Mines No. : None

Union Twp., Lot 247, Sample No. 291  
Glenwood Oil and Gas Co. #1 Glenwood Park  
Date Completed: 6-3-38, Total Depth: 2,674  
Sample Range: 1,952 - 2,674  
Samples Missing: None  
Geologic Sample Range: Utica - St. Peter  
Division of Mines No. : None

#### Sandusky County

Ballville Twp., Section 16, Sample No. 392  
C. L. Williams #1 Gladys Gilmore  
Date Completed: 9-9-49, Total Depth: 2,126  
Sample Range: 130 - 2,090  
Samples Missing: 140 - 160; 435 - 500; 510 - 525;  
565 - 585; 635 - 645; 650 - 670; 730 - 745;  
1,000 - 1,005; 1,075 - 1,085; 1,095 - 1,100;  
1,170 - 1,200; 1,265 - 1,419; 1,421 - 1,427;  
1,550 - 1,597; 1,633 - 1,715  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No. : None

Jackson Twp., Section 2, Sample No. 374  
Ohio Oil Co. (Rinebold Bros.) #1 F. Gephart  
Date Completed: 4-16-04, Total Depth: 1,418  
Sample Range: 1,150 - 1,268  
Samples Missing: None  
Geologic Sample Range: Trenton  
Division of Mines No. : None

Jackson Twp., Section 2, Sample No. 374  
Rinebold Bros. #2 M. Gephart  
Date Completed: 7-7-04, Total Depth: 1,421  
Sample Range: 0 - 1,286½  
Samples Missing: 525 - 625; 920 - 1,135  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None

Sandusky Twp., Section 31, Sample No. 374  
Water Well on F. B. Rollins Farm  
Date Completed: 1905, Total Depth: 470  
Sample Range: 60 - 470  
Samples Missing: 180 - 220  
No log available  
Division of Water No. : None

Scott Twp., ———, Sample No. 374  
E. W. Carothers #1 L. Gibbs and Co.  
Date Completed: 1905, Total Depth: 1,647  
Sample Range: 60 - 1,647  
Samples Missing: Random samples  
Geologic Sample Range: Surface - St. Peter  
No log available  
Division of Mines No. : None

Woodville Twp., Section 9, Sample No. 305  
Ohio Oil Co. #1 W. H. Bruns  
Date Completed: 9-22-02, Total Depth: 2,822  
Sample Range: 1,177 - 2,822  
Samples Missing: None  
Geologic Sample Range: Trenton - Pre-Cambrian  
Economic Museum No. 16445  
Division of Mines No. : None

## Scioto County

Bloom Twp., Section 30, Sample No. 441  
 Van Everman #1 Second Nat. Bank Ashland  
 Date Completed: 4-19-51, Total Depth: 2,634  
 Sample Range: 844 - 2,266  
 Samples Missing: 866 - 905; 960 - 1,238; 1,251 - 1,260; 1,290 - 1,455; 1,500 - 1,725; 1,806 - 1,821; 1,846 - 1,858; 1,916 - 1,933; 2,138 - 2,151  
 Geologic Sample Range: Cuyahoga - "Big Lime"  
 Division of Mines No.: 84

Clay Twp., Section 11, Sample No.: 396  
 #2 Adams Brickyard  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 0 - 1,138  
 Samples Missing: 651 - 1,133 (Random 0 - 651)  
 Geologic Sample Range: Surface - Ohio Shale  
 No log available  
 Economic Museum No.: 16439  
 Division of Mines No.: None

Green Twp., Lot 82, Sample No. 437  
 N. N. Smith and Dow Chemical Co. #1 Albert Rose  
 Date Completed: \_\_\_\_\_, Total Depth: 4,183  
 Sample Range: 1,875 - 4,178  
 Samples Missing: 2,381 - 2,391; 2,698 - 2,709; 2,860 - 2,881; 3,249 - 3,257  
 Geologic Sample Range: "Big Lime" - St. Peter  
 Division of Mines No.: 83

Porter Twp., Section 13, Sample No. 447  
 Rogers and Wright #1 Anthony Hock  
 Date Completed: 3-27-51, Total Depth: 2,174  
 Sample Range: 442 - 2,082  
 Samples Missing: 558 - 568; 626 - 634; 745 - 748; 955 - 966; 1,273 - 1,284; 1,350 - 1,358; 1,591 - 1,603; 1,828 - 2,000; 2,004 - 2,055; 2,060 - 2,082  
 Geologic Sample Range: Cuyahoga - Medina  
 Division of Mines No.: 85

## Seneca County

Big Spring Twp., Section 23, Sample No. 92  
 Jones et al. #1 A. Brandt  
 Date Completed: 4-27-41, Total Depth: 1,581  
 Sample Range: 1,481 - 1,573  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

Clinton Twp., Section 7, Sample No. 292  
 Sun Oil Co. #1 M. E. Crum  
 Date Completed: 6-28-38, Total Depth: 2,090  
 Sample Range: 10 - 2,088½  
 Samples Missing: 625 - 630; 950 - 955; 980 - 1,000; 1,709 - 1,714; 2,042 - 2,051;  
 Geologic Sample Range: Surface - St. Peter  
 Division of Mines No.: 17

Clinton Twp., Section 7, Sample No. 286  
 Sun Oil Co. #2 M. E. Crum  
 Date Completed: 1-23-39, Total Depth: 2,221  
 Sample Range: 1,462 - 2,221  
 Samples Missing: 1,564 - 1,851  
 Geologic Sample Range: Trenton - St. Peter  
 Division of Mines No.: 18

Clinton Twp., Section 7, Sample No. 376  
 A. M. Clouse #3 A. J. West  
 Date Completed: 7-5-38, Total Depth: 2,093  
 Sample Range: 1,741 - 2,093½  
 Samples Missing: 1,790 - 2,053½  
 Geologic Sample Range: Trenton - St. Peter  
 Division of Mines No.: None

Hopewell Twp., Section 3, Sample No. 98  
 W. H. Morrow et al. #1 D. S. Hostler  
 Date Completed: 6 - 1942, Total Depth: 1,560  
 Sample Range: 0 - 1,560  
 Samples Missing: 385 - 415  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No.: None

Jackson Twp., \_\_\_\_\_, Sample No. 365  
 Eagle Oil Co. \_\_\_\_\_ F. Harrison  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 0 - 1,305  
 Samples Missing: 230 - 250; 400 - 410; 630 - 690; 1,150 - 1,288  
 Geologic Sample Range: Surface - Trenton  
 No log available  
 Division of Mines No.: None

Liberty Twp., Section 30, Sample No. 316  
 Liberty Angus Oil Co. #1 Smith  
 Date Completed: 1942, Total Depth: 1,467  
 Sample Range: 1,360 - 1,467  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

Pleasant Twp., Section 33, Sample No. 54  
 Jones and Keiner #1-A S. D. Sours  
 Date Completed: 11-23-38, Total Depth: 2,073  
 Sample Range: 45 - 2,073  
 Samples Missing: 1,419 - 1,424  
 Geologic Sample Range: Surface - St. Peter  
 Division of Mines No.: None

Scipio Twp., Section 13, Sample No. 104  
 Ohio Oil Co. #1 H. Bishop  
 Date Completed: 9-5-42, Total Depth: 3,123  
 Sample Range: 35 - 3,123  
 Samples Missing: None  
 Geologic Sample Range: Surface - L. Magnesian  
 Division of Mines No.: 25

Seneca Twp., Section 26, Sample No. 411  
 E. R. Roach et al. #1 F. F. Heimrich (C. R. Temple)  
 Date Completed: 6-20-41, Total Depth: 1,730  
 Sample Range: 150 - 1,730  
 Samples Missing: 1,600 - 1,612  
 Geologic Sample Range: Surface - Trenton

No log available  
Economic Museum No. : 19250  
Division of Mines No. : None

Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 602

### Shelby County

#### Clinton Twp., City of Sidney, Sample No. 408

Date Completed: 1885, Total Depth: 1,915  
Sample Range: 120 - 1,830  
Samples Missing: 120 - 170; 200 - 230; 470 - 570; 740 - 830; 1,300 - 1,330; 1,710 - 1,800  
Geologic Sample Range: Surface - St. Peter  
Economic Museum No. : 19216  
Division of Mines No. : None

#### Loramie Twp., Section 2, Sample No. 57

G. Eilerman #1 Eshman  
Date Completed: 2 - 1942, Total Depth: 1,266  
Sample Range: 1,204½ - 1,266  
Samples Missing: None  
Geologic Sample Range: Trenton  
No log available  
Division of Mines No. : None

### Stark County

#### Canton Twp., Section 1, Sample No. 320

Hanley and Bird #1 Fontes et al.  
Date Completed: 11-22-47, Total Depth: 4,890  
Sample Range: 4,725 - 4,812  
Samples Missing: 4,728 - 4,732  
Geologic Sample Range: Clinton  
Division of Mines No. : 734

#### Canton Twp., Section 1, Sample No. 354

Brendel Prod. #1 R. A. Evans  
Date Completed: 10-15-46, Total Depth: 4,887  
Sample Range: 4,691 - 4,796  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 494

#### Canton Twp., Section 2, Sample No. 354

Republic Steel #2 Republic Steel  
Date Completed: 8-4-46, Total Depth: 4,707  
Sample Range: 4,592 - 4,675  
Samples Missing: 4,625 - 4,629; 4,650 - 4,653  
Geologic Sample Range: Clinton  
Division of Mines No. : 440

#### Canton Twp., Section 10, Sample No. 319

Hanley and Bird #1 Standard Oil Co.  
Date Completed: 5-27-47, Total Depth: 4,612  
Sample Range: 4,540 - 4,600  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 610

#### Canton Twp., Section 14, Sample No. 179

East Ohio Gas Co. #3 - 1,870 Cleveland Trust  
Date Completed: 4-10-47, Total Depth: 4,769  
Sample Range: 4,622 - 4,769

#### Canton Twp., Section 14, Sample No. 319

Hanley and Bird #1 National Exch. Trust  
Date Completed: 6-26-47, Total Depth: 4,691  
Sample Range: 4,625 - 4,672  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 648

#### Canton Twp., Section 15, Sample No. 320

Hanley and Bird #1 Frank Trace et al.  
Date Completed: 7-19-47, Total Depth: 4,618  
Sample Range: 4,536 - 4,611  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 604

#### Canton Twp., Section 15, Sample No. 320

Hanley and Bird #1 Welch Consol. Lease  
Date Completed: 7-9-47, Total Depth: 4,680  
Sample Range: 4,615 - 4,681  
Samples Missing: 4,653 - 4,665; 4,667 - 4,672;  
Geologic Sample Range: Clinton  
Division of Mines No. : 654

#### Canton Twp., Section 22, Sample No. 320

Hanley and Bird #2 A. D. Thomas et al.  
Date Completed: 1-21-48, Total Depth: 4,761  
Sample Range: 4,687 - 4,761  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 694

#### Jackson Twp., Section 2, Sample No. 354

Ohio Fuel Gas Co. #2 G. H. Deuble  
Date Completed: 3-22-38, Total Depth: 4,439  
Sample Range: 2,887 - 2,897  
Samples Missing: None  
Geologic Sample Range: Oriskany  
Division of Mines No. : 101

#### Jackson Twp., Section 3, Sample No. 354

Ohio Fuel Gas Co. #5 A. J. Stoner  
Date Completed: 9-8-36, Total Depth: 4,309  
Sample Range: 4,208 - 4,267  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 24

#### Jackson Twp., Section 4, Sample No. 358

Ohio Fuel Gas Co. #1 C. A. Buchtel  
Date Completed: 11-30-36, Total Depth: 4,280  
Sample Range: 4,195 - 4,270  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 38

#### Jackson Twp., Section 4, Sample No. 358

Ohio Fuel Gas Co. #1 Irene Lingle  
Date Completed: 11-4-36, Total Depth: 4,206  
Sample Range: 4,106 - 4,169  
Samples Missing: 4,121 - 4,161

- Geologic Sample Range: Clinton  
Division of Mines No. : 39
- Jackson Twp., Section 5, Sample No. 353  
Ohio Fuel Gas Co. #1 P. Neidert  
Date Completed: 10-30-36, Total Depth: 4,162  
Sample Range: 4,083 - 4,140  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 40
- Jackson Twp., Section 8, Sample No. 354  
Ohio Fuel Gas Co. #1 A. B. Clay  
Date Completed: 9-26-36, Total Depth: 4,212  
Sample Range: 4,111 - 4,177  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 23
- Jackson Twp., Section 17, Sample No. 358  
Ohio Fuel Gas Co. #1 E. P. Rohr  
Date Completed: 2-2-37, Total Depth: 4,178  
Sample Range: 4,106 - 4,167  
Samples Missing: 4,110 - 4,158;  
Geologic Sample Range: Clinton  
Division of Mines No. : 50
- Jackson Twp., Section 17, Sample No. 358  
Ohio Fuel Gas Co. #2 J. L. Stockert  
Date Completed: 6-8-37, Total Depth: 4,279  
Sample Range: 4,179 - 4,258  
Samples Missing: 4,182 - 4,190; 4,193 - 4,199;  
4,211 - 4,215; 4,223 - 4,242  
Geologic Sample Range: Clinton  
Division of Mines No. : 58
- Jackson Twp., Section 27, Sample No. 354  
Ohio Fuel Gas Co. #5 E. Harmount  
Date Completed: 7-20-36, Total Depth: 4,335  
Sample Range: 4,189 - 4,340  
Samples Missing: 4,207 - 4,237  
Geologic Sample Range: Clinton  
Division of Mines No. : 9
- Jackson Twp., Section 28, Sample No. 353  
Ohio Fuel Gas Co. #6 E. Harmount  
Date Completed: 11-13-36, Total Depth: 4,323  
Sample Range: 4,248 - 4,318  
Samples Missing: 4,309 - 4,312  
Geologic Sample Range: Clinton  
Division of Mines No. : 31
- Lake Twp., Section 34, Sample No. 72  
C. W. White #1 J. Hyler  
Date Completed: 12-31-39, Total Depth: 4,584  
Sample Range: 0 - 4,568  
Samples Missing: 1,386 - 1,396  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 158
- Lawrence Twp., Section 13, Sample No. 69  
Ed. Obermiller #1 P. C. Smith  
Date Completed: 6-3-40, Total Depth: 4,081  
Sample Range: 2,495 - 4,081
- Samples Missing: 2,585 - 2,595; 3,540 - 3,550;  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No. : 167
- Lexington Twp., Section 20, Sample No. 358  
G. W. Boyce #1 I. and B. Snode  
Date Completed: 7-19-47, Total Depth: 3,203  
Sample Range: 645 - 3,203  
Samples Missing: 703 - 3,154  
Geologic Sample Range: Berea - "Big Lime"  
Division of Mines No. : 638
- Marlboro Twp., Section 35, Sample No. 353  
E. R. Loudon #1 L. M. McCrory  
Date Completed: 6-1-46, Total Depth: 788  
Sample Range: 434 - 641  
Samples Missing: None  
Geologic Sample Range: Cuyahoga  
Division of Mines No. : 386
- Nimishillen Twp., Section 12, Sample No. 354  
East Ohio Gas Co. #1 J. Martig  
Date Completed: 7-1-38, Total Depth: 5,183  
Sample Range: 4,998 - 5,093  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 106
- Pike Twp., Section 24, Sample No. 208  
M. B. Beldon #1 E. G. Close  
Date Completed: 6-18-48, Total Depth: 4,969  
Sample Range: 745 - 4,969  
Samples Missing: 3,368 - 4,156  
Geologic Sample Range: Cuyahoga - Clinton  
Division of Mines No. : 765
- Pike Twp., Section 29, Sample No. 313  
Status Devel. Co. #2 M. W. C. D. (DeHinden)  
Date Completed: 11-8-47, Total Depth: 4,591  
Sample Range: 100 - 4,591  
Samples Missing: 140 - 150; 380 - 385; 395 - 400;  
1,070 - 1,076; 1,180 - 1,190; 2,100 - 2,110;  
2,320 - 2,327; 2,584 - 2,594; 2,610 - 2,615;  
2,810 - 2,815; 4,500 - 4,507  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 714
- Plain Twp., Section 32, Sample No. 155  
M. B. Belden et al. #2 Canton Terrace  
Date Completed: 10-15-46, Total Depth: 4,593  
Sample Range: 0 - 4,611  
Samples Missing: 455 - 465; 1,870 - 1,880; 1,910 -  
1,920; 4,155 - 4,165; 4,571 - 4,597  
Geologic Sample Range: Surface - Clinton  
Division of Mines No. : 513
- Sugar Creek Twp., Section 21, Sample No. 354  
Ohio Fuel Gas Co. #1 J. Forney  
Date Completed: 7-17-36, Total Depth: 4,296  
Sample Range: 4,080 - 4,217  
Samples Missing: 4,108 - 4,128  
Geologic Sample Range: Clinton  
Division of Mines No. : 13

Sugar Creek Twp., Section 34, Sample No. 112  
Ohio Oil Co. #1 M. Kaylor  
Date Completed: 1-1-43, Total Depth: 4,368  
Sample Range: 125 - 4,368  
Samples Missing: 186 - 212; 2,992 - 3,010; 3,586 - 3,600; 3,945 - 3,977  
Geologic Sample Range: Surface - Clinton  
Division of Mines No.: 235

#### Summit County

Coventry Twp., Tract 2, Sample No. 435  
L. Kiplinger #1 Colonial Salt Co.  
Date Completed: 1912, Total Depth: 4,085  
Sample Range: 15 - 2,752  
Samples Missing: None  
Geologic Sample Range: Surface - Medina  
Economic Museum No.: 18917  
Division of Mines No.: None

Green Twp., Section 36, Sample No. 62  
E. Obermiller #1 G. Burgoon  
Date Completed: 2-2-40, Total Depth: 2,975  
Sample Range: 0 - 2,966  
Samples Missing: 275 - 289  
Geologic Sample Range: Surface - Oriskany  
Division of Mines No.: 42

Green Twp., Section 36, Sample No. 380  
C. R. Obermiller #1 H. Brown  
Date Completed: 4-13-40, Total Depth: 4,447  
Sample Range: 2,620 - 4,445  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No.: 43

Norton Twp., Lot 75, Sample No. 434  
Columbia Chemical Co. #1 S. A. McFrederick  
Date Completed: 1913, Total Depth: 3,870  
Sample Range: 78 - 3,425  
Samples Missing: 2,180 - 2,300  
Geologic Sample Range: Surface - Clinton  
Economic Museum No.: 19235  
Division of Mines No.: None

Springfield Twp., ———, Sample No. 362  
Interstate Oil Co. #1 J. Douglas  
Date Completed: 7-24-05, Total Depth: 3,789  
Sample Range: 300 - 3,600  
Samples Missing: Random Samples  
Geologic Sample Range: Berea - "Big Lime"  
Division of Mines No.: None

Talmadge Twp., Lot 2, Sample No. 179  
Pawnee Oil Corp. #1 Smith and Guise  
Date Completed: 9-3-46, Total Depth: 3,996  
Sample Range: 3,460 - 3,495  
Samples Missing: None  
Geologic Sample Range: Newburg  
Division of Mines No.: 72

#### Trumbull County

Gustavus Twp., Section 3, Sample No. 190  
S. M. and J. R. Vincent #1 J. E. McCamey  
Date Completed: 11-26-32, Total Depth: 4,449  
Sample Range: 2,663 - 4,437  
Samples Missing: 2,725 - 2,741; 3,017 - 3,029; 3,203 - 3,221; 3,221 - 3,233; 3,245 - 3,291; 3,291 - 3,327; 3,331 - 3,341; 3,365 - 3,379; 3,395 - 3,407; 3,443 - 3,455; 3,461 - 3,473; 3,479 - 3,497; 3,497 - 3,509; 3,521 - 3,537; 3,543 - 3,561; 3,561 - 3,579; 3,585 - 3,597; 3,675 - 3,687; 3,687 - 3,715; 3,715 - 3,726; 3,726 - 3,750; 3,939 - 3,954; 4,288 - 4,300; 4,339 - 4,351; 4,351 - 4,395  
Geologic Sample Range: "Big Lime" - Clinton  
Division of Mines No.: None

Lordstown Twp., Lot 20, Sample No. 75  
Magnolia Petroleum Co. #1 D. Giovannone  
Date Completed: 3-20-42, Total Depth: 4,828  
Sample Range: 175 - 4,824  
Samples Missing: 825 - 925; 3,940 - 3,948; 4,582 - 4,593; 4,614 - 4,619  
Geologic Sample Range: Surface - Medina  
Division of Mines No.: 1

#### Tuscarawas County

Clay Twp., Section 21, Sample No. 349  
G. E. Jewell #1 F. B. Kinsley  
Date Completed: 11-28-36, Total Depth: 3,762  
Sample Range: 3,712 - 3,762  
Samples Missing: None  
Geologic Sample Range: Oriskany  
Division of Mines No.: 8

Clay Twp., Section 22, Sample No. 41  
Ohio Fuel Gas Co. #1 B. R. Carothers  
Date Completed: 11-23-36, Total Depth: 5,289  
Sample Range: 3,410 - 5,289  
Samples Missing: None  
Geologic Sample Range: "Big Lime" - Medina  
Division of Mines No.: 4

Dover Twp., Lot 14, Sample No. 331  
Hanley and Bird #1 McDougall and Seikel  
Date Completed: 9-12-46, Total Depth: 4,831  
Sample Range: 4,700 - 4,820  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: 261

Dover Twp., Section 21, Sample No. 254  
Columbian Carbon Co. #1 - 512 A. Ervin  
Date Completed: 2-26-41, Total Depth: 4,790  
Sample Range: 0 - 4,790  
Samples Missing: 1,805 - 1,825, 1,935 - 1,945  
Geologic Sample Range: Surface - Medina  
Division of Mines No.: 94

## Dover Twp. , Section 30, Sample No. 209

Brendel Prod. Co. #3 Robinson Clay Prod. Co.  
 Date Completed: 3-5-40, Total Depth: 4, 623  
 Sample Range: 2, 170 - 4, 623  
 Samples Missing: 3, 208 - 3, 225; 4, 526 - 4, 543;  
 Geologic Sample Range: Ohio Shale - Medina  
 Division of Mines No. : 66

## Dover Twp. , Lot 2, Sample No. 240

Columbian Carbon Co. #1 F. and B. Krantz  
 Date Completed: 3-2-41, Total Depth: 4, 834  
 Sample Range: 0 - 4, 827  
 Samples Missing: 795 - 800; 951 - 956; 1, 127 -  
 1, 136; 1, 252 - 1, 258; 1, 419 - 1, 428; 2, 064 -  
 2, 073; 2, 202 - 2, 210; 3, 525 - 3, 531; 4, 222 -  
 4, 230  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No. : 95

## Dover Twp. , Lot 5, Sample No. 321

Hanley and Bird #1 W. G. Gerber  
 Date Completed: 3-23-48, Total Depth: 4, 935  
 Sample Range: 4, 754 - 4, 929  
 Samples Missing: 4, 800 - 4, 804  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 308

## Dover Twp. , Lot 9, Sample No. 331

Brendel Prod. Co. #1 Columbia Fire Brick Co.  
 Date Completed: 8-31-38, Total Depth: 4, 855  
 Sample Range: 4, 735 - 4, 855  
 Samples Missing: 4, 770 - 4, 783; 4, 795 - 4, 799;  
 4, 827 - 4, 831  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 46

## Dover Twp. , Lot 9, Sample No. 338

Brendel Prod. Co. #2 Columbia Fire Brick Co.  
 Date Completed: 5-12-39, Total Depth: 4, 855  
 Sample Range: 4, 717 - 4, 815  
 Samples Missing: 4, 723 - 4, 730; 4, 742 - 4, 748;  
 4, 753 - 4, 757; 4, 773 - 4, 795  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 54

## Dover Twp. , Lot 13, Sample No. 330

Hanley and Bird #1 E. G. Becker  
 Date Completed: 4-18-46, Total Depth: 4, 919  
 Sample Range: 4, 783 - 4, 919  
 Samples Missing: 4, 887 - 4, 891  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 253

## Dover Twp. , Lot 36 - 2nd Qtr. , Sample No. 331

Lyons et al. #1 Fred Haas  
 Date Completed: 4-28-39, Total Depth: 4, 675  
 Sample Range: 4, 544 - 4, 649  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 55

## Fairfield Twp. , Section 3, Sample No. 302

Producers Oil Co. #1 J. H. Weaver  
 Date Completed: 5-12-31, Total Depth: 5, 006  
 Sample Range: 110 - 5, 006  
 Samples Missing: Some long samples  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No. : 170 - A

## Fairfield Twp. , Section 14, Sample No. 58

Brendel Prod. Co. #1 R. E. Dessecker  
 Date Completed: 6-4-40, Total Depth: 5, 153  
 Sample Range: 15 - 5, 153  
 Samples Missing: 1, 910 - 1, 920; 1, 960 - 1, 970;  
 2, 680 - 2, 690; 2, 780 - 2, 800  
 Geologic Sample Range: Surface - Clinton  
 Division of Mines No. : 71

## Franklin Twp. , Section 3, Sample No. 338

East Ohio Gas Co. #1 Maconal Coal Co.  
 Date Completed: 1-18-38, Total Depth: 4, 664  
 Sample Range: 4, 473 - 4, 664  
 Samples Missing: None  
 Geologic Sample Range: Clinton - Medina  
 Division of Mines No. : 33

## Franklin Twp. , Section 9, Sample No. 248

Columbian Carbon Co. #1 G. Smith  
 Date Completed: 2-11-41, Total Depth: 4, 477  
 Sample Range: 0-4, 477  
 Samples Missing: 44 - 48; 767 - 769; 920 - 925;  
 1, 085 - 1, 095; 2, 540 - 2, 546, 2, 674 - 2, 676;  
 3, 015 - 3, 022; 3, 432 - 3, 442; 3, 675 - 3, 690;  
 4, 116 - 4, 120; 4, 335 - 4, 342; 4, 421 - 4, 427  
 Geologic Sample Range: Surface - Medina  
 Division of Mines No. : 93

## Franklin Twp. , Section 9, Sample No. 308

Columbian Carbon Co. #1 H. Benfer  
 Date Completed: 5-28-41, Total Depth: 4, 543  
 Sample Range: 85 - 4, 543  
 Samples Missing: 2, 346 - 2, 356; 4, 497 - 4, 499  
 Geologic Sample Range: Surface-Medina  
 Division of Mines No. : 101

## Franklin Twp. , Section 11, Sample No. 338

East Ohio Gas Co. #1 W. Aul  
 Date Completed: 11-22-37, Total Depth: 4, 504  
 Sample Range: 4, 383 - 4, 407  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 35

## Franklin Twp. , Section 12, Sample No. 338

East Ohio Gas Co. #2 H. B. Fuhrer  
 Date Completed: 12-11-37, Total Depth: 4, 418  
 Sample Range: 4, 307 - 4, 342  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 31

## Franklin Twp. , Section 17, Sample No. 338

Ohio Fuel Gas Co. #1 Sarah Weber  
 Date Completed: 2-15-37, Total Depth: 4, 638  
 Sample Range: 4, 446 - 4, 553  
 Samples Missing: None

- Geologic Sample Range: Clinton  
Division of Mines No. : 30
- Franklin Twp., Section 19, Sample No. 330  
East Ohio Gas Co. #1 Josephine Fernsell  
Date Completed: 4-9-38, Total Depth: 4, 431  
Sample Range: 4, 243 - 4, 432  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 39
- Franklin Twp., Section 20, Sample No. 331  
East Ohio Gas Co. #1 T. J. Krantz  
Date Completed: 6-22-38, Total Depth: 4, 726  
Sample Range: 4, 544 - 4, 649  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 43
- Franklin Twp., Lot 10, 1st Quarter, Sample No. 330  
East Ohio Gas Co. #1 O. C. Metzger  
Date Completed: 10-22-38, Total Depth: 4, 421  
Sample Range: 4, 248 - 4, 344  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 49
- Goshen Twp., Lot 30, Sample No. 88  
Acme Die Tool Co. #1 Gerald Graff  
Date Completed: 6-8-46, Total Depth: 5, 088  
Sample Range: 4, 915 - 5, 062  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 248
- Goshen Twp., Lot 34, Sample No. 67  
Penn - Ohio Gas Co. #1 C. E. Leggett  
Date Completed: 8-28-40, Total Depth: 5, 203  
Sample Range: 520 - 5, 203  
Samples Missing: 1, 830 - 1, 870; 2, 520 - 2, 540;  
5, 139 - 5, 151  
Geologic Sample Range: Cuyahoga - Medina  
Division of Mines No. : 73
- Jefferson Twp., Lot 32, Sample No. 349  
S. J. Brendel Oil and Gas. Co. #2 - B Stone  
Creek Brick Co.  
Date Completed: 10-21-48, Total Depth: 977  
Sample Range: 910 - 972  
Samples Missing: None  
Geologic Sample Range: Berea  
Division of Mines No. : 343
- Jefferson Twp., Section 14, Sample No. 349  
S. J. Brendel Oil and Gas Co. #1 J. and G. Heid  
Date Completed: 1-28-49, Total Depth: 1, 178  
Sample Range: 1, 122 - 1, 178  
Samples Missing: None  
Geologic Sample Range: Berea  
Division of Mines No. : 356
- Jefferson Twp., Section 2, Lot 13, Sample No. 247  
Brendel Oil and Gas Co. #1 E. Burk (Specht)  
Date Completed: 3-23-40, Total Depth: 4, 941  
Sample Range: 3, 720 - 4, 654
- Samples Missing: 4, 338 - 4, 386; 4, 597 - 4, 634;  
Geologic Sample Range: "Big Lime"  
Division of Mines No. : 65
- Jefferson Twp., Lot 37 - 3rd Quarter, Sample No. 349  
Big Four Oil and Gas Co. #1 P. H. Leonard  
Date Completed: 3-29-48, Total Depth: 1, 281  
Sample Range: 1, 205 - 1, 278  
Samples Missing: None  
Geologic Sample Range: Berea  
Division of Mines No. : 309
- Lawrence Twp., Section 14, Sample No. 330  
East Ohio Gas Co. #1 C. Swank  
Date Completed: 4-27-38, Total Depth: 4, 731  
Sample Range: 4, 537 - 4, 716  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 40
- Lawrence Twp., Section 14, Sample No. 338  
Nat. Gas Co. of W. Va. #5 Robinson Clay Prod.  
Company  
Date Completed: 10-21-38, Total Depth: 4, 732  
Sample Range: 4, 703 - 4, 729  
Samples Missing: 4, 718 - 4, 723  
Geologic Sample Range: Clinton  
Division of Mines No. 47
- Lawrence Twp., Section 17, Sample No. 330  
Ohio Fuel Gas Co. #1 J. S. Breitmeler  
Date Completed: 5-17-38, Total Depth: 4, 692  
Sample Range: 4, 626 - 4, 692  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No. : 41
- Lawrence Twp., Section 17, Sample No. 331  
Brendel Prod. Co. #2 Robinson Clay Prod. Co.  
Date Completed: 5-11-38, Total Depth: 4, 745  
Sample Range: 4, 661 - 4, 731  
Samples Missing: 4, 672 - 4, 678  
Geologic Sample Range: Clinton  
Division of Mines No. : 42
- Lawrence Twp., Section 25, Sample No. 338  
Brendel Prod. Co. #1 Stowe - Fuller  
Date Completed: 12-4-38, Total Depth: 4, 893  
Sample Range: 4, 769 - 4, 893  
Samples Missing: 4, 776 - 4, 784; 4, 790 - 4, 870;  
4, 828 - 4, 833; 4, 857 - 4, 862  
Geologic Sample Range: Clinton  
Division of Mines No. : 50
- Rush Twp., Section 24, Sample No. 161  
Ohio Oil Co. #1 (A. B. Cecil) O. and E. Hines  
Date Completed: 8-9-46, Total Depth: 1, 103  
Sample Range: 10 - 1, 103  
Samples Missing: None  
Geologic Sample Range: Surface - Berea  
Division of Mines No. : 264

Sandy Twp. , Section 5, Sample No. 224  
 Natural Gas Co. of W. Va. #1 G. G. Evans  
 Date Completed: 7-31-37, Total Depth: 4,806  
 Sample Range: 455 - 860  
 Samples Missing: None (long samples)  
 Geologic Sample Range: Cuyahoga - Berea  
 Division of Mines No. : 19

Warren Twp. , Section 1, Sample No. 177  
 J. A. Upham #1 W. Brug  
 Date Completed: 5-16-46, Total Depth: 5,396  
 Sample Range: 5,180 - 5,363  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No. : 252

Warren Twp. , Section 35, Sample No. 79  
 East Ohio Gas Co. #1 M. W. C. D.  
 Date Completed: 5-13-41, Total Depth: 5,130  
 Sample Range: 295 - 5,099  
 Samples Missing: None  
 Geologic Sample Range: Logan - Clinton  
 Division of Mines No. : 100

Washington Twp. , Lot 37, Sample No. 158  
 John Morrow #1 Robert Treat  
 Date Completed: 7-27-49, Total Depth: 951  
 Sample Range: 865 - 951  
 Samples Missing: None  
 Geologic Sample Range: Berea  
 Division of Mines No. : 372

#### Union County

Claiborne Twp. , ———, Sample No. 444  
 Water Well at Richwood  
 Date Completed: ———, Total Depth: 120  
 Sample Range: 35 - 120  
 Samples Missing: None  
 Division of Water No. : 182

#### Van Wert County

Pleasant Twp. , ———, Sample No. 456  
 Water Well at Eisenhauer Mfg.  
 Date Completed: 6-14-46, Total Depth: 232  
 Sample Range: 0 - 232  
 Samples Missing: None  
 Division of Water No. : 9

Pleasant Twp. , ———, Sample No. 457  
 Water Well at Van Wert Creamery  
 Date Completed: 11-7-46, Total Depth: 305  
 Sample Range: 116 - 305  
 Samples Missing: None  
 Division of Water No. : 13

Pleasant Twp. , ———, Sample No. 449  
 Water Well at 1st Ward School  
 Date Completed: 1947, Total Depth: 411  
 Sample Range: 30 - 411  
 Samples Missing: None  
 Division of Water No. : 14

Pleasant Twp. , Section 21, Sample No. 459  
 Water Well on Arthur Brook Farm  
 Date Completed: 1946, Total Depth: 233  
 Sample Range: 0 - 233  
 Samples Missing: None  
 Division of Water No. : 11

Ridge Twp. , Section 18, Sample No. 450  
 Water Well at Van Wert  
 Date Completed: 1946, Total Depth: 351  
 Sample Range: 0 - 351  
 Samples Missing: None  
 Division of Water No. : 8

Union Twp. , Section 28, Sample No. 200  
 Ohio Oil Co. #1 Balliet - Bauer  
 Date Completed: 12-29-47, Total Depth: 1,288  
 Sample Range: 3 - 1,285  
 Samples Missing: None  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No. : 2

York Twp. , Section 13, Sample No. 371  
 Pure Oil Co. #1 E. Thomas  
 Date Completed: 5-11-22, Total Depth: 1,290  
 Sample Range: 1,229 - 1,290  
 Samples Missing: 1,268 - 1,274  
 Geologic Sample Range: Trenton  
 Division of Mines No. : None

#### Vinton County

Clinton Twp. , Section 9, Sample No. 458  
 Water Well at Zaleski Nat. Guard Comp.  
 Date Completed: 10-19-46, Total Depth: 436  
 Sample Range: 95 - 436  
 Samples Missing: 110 - 115; 155 - 160; 245 - 250;  
 410 - 418  
 Division of Water No. : 13

#### Warren County

Clear Creek Twp. , Section 35, Sample No. 300  
 D. J. Roe #1 Fred Reininger  
 Date Completed: 2 - 1948, Total Depth: 982  
 Sample Range: 20 - 982  
 Samples Missing: 162 - 166  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No. : None

Deerfield Twp. , Section 31, Sample No. 366  
 Mason Oil Co. #1 E. Marshall (J. W. Scull)  
 Date Completed: 1906, Total Depth: 872  
 Sample Range: 40 - 772  
 Samples Missing: None  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No. : None

#### Washington County

Adams Twp. , Lot 49, Sample No. 108  
 Columbian Carbon Co. #1 C. H. Augenstein

- Date Completed: 2-15-42, Total Depth: 4,443  
 Sample Range: 0 - 4,443  
 Samples Missing: 2,065 - 2,075; 2,165 - 2,175;  
 2,490 - 2,500  
 Geologic Sample Range: Surface - Oriskany  
 Division of Mines No.: 210
- Fairfield Twp., Section 13, Sample No. 326  
 Witago Oil Co. #1 L. Root  
 Date Completed: 9 - 1938, Total Depth: 1,985  
 Sample Range: 805 - 1,494  
 Samples Missing: Random samples  
 Geologic Sample Range: Conemaugh - "Big Injun"  
 Division of Mines No.: None
- Grandview Twp., Section 18, Sample No. 326  
 Pure Oil Co. (Huntsman) #1 Edwards  
 Date Completed: \_\_\_\_\_, Total Depth: 1,360  
 Sample Range: 1,157 - 1,360  
 Samples Missing: 1,173 - 1,190; 1,315 - 1,325  
 Geologic Sample Range: Pottsville - "Big Injun"  
 Division of Mines No.: None
- Grandview Twp., Section 31, Sample No. 363  
 Morgan Pet. Co. #2 Adolph Miller (Chas. Reed)  
 Date Completed: 4-15-49, Total Depth: 1,830  
 Sample Range: 1,580 - 1,818  
 Samples Missing: 1,585 - 1,610; 1,620 - 1,630;  
 1,645 - 1,652; 1,803 - 1,813  
 Geologic Sample Range: Keener - "Big Injun"  
 Division of Mines No.: None
- Lawrence Twp., Section 25, Sample No. 168  
 Sinclair - Prairie Oil Co. #1 R. Hill  
 Date Completed: 9-15-44, Total Depth: 5,205  
 Sample Range: 51 - 5,205  
 Samples Missing: None  
 Geologic Sample Range: Surface - Oriskany  
 Division of Mines No.: 359
- Marietta Twp., Section 36, Sample No. 274  
 Int. Derrick Co. #1 Int. Derrick Co.  
 Date Completed: 1948, Total Depth: 693  
 Sample Range: 312 - 693  
 Samples Missing: None  
 Geologic Sample Range: Conemaugh - Allegheny  
 No log available  
 Division of Mines No.: 990
- Palmer Twp., Section 32, Sample No. 481  
 Columbian Carbon Co. #1 J. C. Stollar  
 Date Completed: 7-25-40, Total Depth: 3,991  
 Sample Range: 355 - 3,991  
 Samples Missing: None  
 Geologic Sample Range: Monongahela - Oriskany  
 Economic Museum No.: 19242  
 Division of Mines No.: 303
- Warren Twp., Section 24, Sample No. 5  
 Ohio Oil Co. #1 C. W. Edgar  
 Date Completed: 2-28-42, Total Depth: 2,125  
 Sample Range: 77 - 2,120  
 Samples Missing: 650 - 665; 738 - 745; 989 - 994;  
 1,315 - 1,333; 1,760 - 1,765  
 Geologic Sample Range: Surface Berea  
 Division of Mines No.: 853
- Warren Twp., Section 29, Sample No. 50  
 Ross and Jaeger #1 C. Ammon  
 Date Completed: 6-4-41, Total Depth: 4,651  
 Sample Range: 0 - 4,650  
 Samples Missing: 3,540 - 3,560  
 Geologic Sample Range: Surface - Oriskany  
 Division of Mines No.: None
- Wayne County
- Baughman Twp., Section 30, Sample No. 352  
 Water Well at Cyclone Drilling Machine Co.  
 Date Completed: 12-3-04, Total Depth: 604  
 Sample Range: 237 - 604  
 Samples Missing: None (long samples)  
 Division of Water No.: None
- Canaan Twp., Section 16, Sample No. 362  
 R. Lambie #1 Martin E. Cole  
 Date Completed: 6 - 1905, Total Depth: 512  
 Sample Range: 19 - 512  
 Samples Missing: None  
 Geologic Sample Range: Surface - Berea  
 Division of Mines No.: None
- Chester Twp., Section 30, Sample No. 362  
 Ohio Fuel Gas Co. #1 B. Norton  
 Date Completed: 12-30-40, Total Depth: 3,160  
 Sample Range: 3,000 - 3,109  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: None
- Chester Twp., Section 29, Sample No. 347  
 Ohio Fuel Gas Co. #2 Dennis and Roy Hiner  
 Date Completed: 7-25-42, Total Depth: 3,192  
 Sample Range: 3,047 - 3,192  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: None
- Chester Twp., Section 30, Sample No. 348  
 Ohio Fuel Gas Co. #1 M. McMaster  
 Date Completed: 9-8-36, Total Depth: 3,091  
 Sample Range: 3,017 - 3,038  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: None
- Chester Twp., Section 30, Sample No. 347  
 Ohio Fuel Gas Co. #2 M. McMasters  
 Date Completed: 9-13-40, Total Depth: 3,095  
 Sample Range: 2,999 - 3,090  
 Samples Missing: 3,030 - 3,040; 3,074 - 3,085  
 Geologic Sample Range: Clinton  
 Division of Mines No.: None
- Chester Twp., Section 30, Sample No. 348  
 Ohio Fuel Gas Co. #1 D. M. Priest  
 Date Completed: 7-15-36, Total Depth: 3,046  
 Sample Range: 3,027 - 3,046  
 Samples Missing: None  
 Geologic Sample Range: Clinton  
 Division of Mines No.: None

Chester Twp., Section 36, Sample No. 347  
Ohio Fuel Gas Co. #1 R. Knox  
Date Completed: 10-10-42, Total Depth: 2,943  
Sample Range: 2,770 - 2,889  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Clinton Twp., Section 2, Sample No. 348  
Ohio Fuel Gas Co. #1 G. Johnson  
Date Completed: 7-14-36, Total Depth: 3,289  
Sample Range: 3,200 - 3,285  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Clinton Twp., Section 5, Sample No. 347  
Ohio Fuel Gas Co. #1 College of Wooster  
Date Completed: 12-5-36, Total Depth: 3,124  
Sample Range: 3,047 - 3,101  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Clinton Twp., Section 11, Sample No. 348  
Ohio Fuel Gas Co. #1 E. Sidle  
Date Completed: 9-2-36, Total Depth: 3,208  
Sample Range: 3,045 - 3,148  
Samples Missing: 3,063 - 3,129  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Clinton Twp., Section 12, Sample No. 348  
Ohio Fuel Gas Co. #2 F. Maurer  
Date Completed: 10-15-36, Total Depth: 3,069  
Sample Range: 3,028 - 3,055  
Samples Missing: 3,036 - 3,043  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Clinton Twp., Section 22, Sample No. 348  
Ohio Fuel Gas Co. #1 A. A. Westfall  
Date Completed: 8-1-36, Total Depth: 3,141  
Sample Range: 3,007 - 3,117  
Samples Missing: 3,023 - 3,057; 3,070 - 3,085  
Geologic Sample Range: Clinton  
Division of Mines No.: 87

Congress Twp., Section 13, Sample No. 348  
Ohio Fuel Gas Co. #2 C. Yost  
Date Completed: 2-3-39, Total Depth: 3,176  
Sample Range: 2,754 - 3,152  
Samples Missing: None  
Geologic Sample Range: Newburg - Clinton  
Division of Mines No.: None

Congress Twp., Section 13, Sample No. 348  
A. McCrea #2 A. Wolgamuth  
Date Completed: 6-2-39, Total Depth: 3,145  
Sample Range: 2,805 - 2,855  
Samples Missing: 2,811 - 2,827  
Geologic Sample Range: "Big Lime"  
Division of Mines No.: None

Congress Twp., Section 26, Sample No. 347  
Ohio Fuel Gas Co. #1 E. J. Garver  
Date Completed: 10-23-36, Total Depth: 3,159  
Sample Range: 3,093 - 3,108  
Samples Missing: None  
Geologic Sample Range: Clinton  
Division of Mines No.: None

Franklin Twp., Section 24, Sample No. 237  
Ohio Oil Co. #1-A O. W. Foster  
Date Completed: 9-24-45, Total Depth: 3,846  
Sample Range: 0 - 3,846  
Samples Missing: 936 - 3,048; 3,215 - 3,251;  
3,530 - 3,534; 3,728 - 3,752  
Geologic Sample Range: Surface - Medina  
Division of Mines No.: 35

Paint Twp., Section 5, Sample No. 347  
Ohio Fuel Gas Co. #1 S. Nussbaum  
Date Completed: 11-10-36, Total Depth: 4,160  
Sample Range: 4,002 - 4,160  
Samples Missing: 4,034 - 4,044; 4,084 - 4,087  
Geologic Sample Range: Clinton  
Division of Mines No.: 2

Paint Twp., Section 10, Sample No. 347  
Ohio Fuel Gas Co. #1 W. D. Dodez  
Date Completed: 11-10-36, Total Depth: 4,095  
Sample Range: 3,901 - 4,015  
Samples Missing: 3,967 - 3,982  
Geologic Sample Range: Clinton - Medina  
Division of Mines No.: 3

Paint Twp., Section 23, Sample No. 348  
Ohio Fuel Gas Co. #1 J. J. Hershberger  
Date Completed: 8-25-36, Total Depth: 4,062  
Sample Range: 2,690 - 2,698  
Samples Missing: None  
Geologic Sample Range: Oriskany  
Division of Mines No.: 1

Wooster Twp., Section 3, Sample No. 352  
H. B. Odenkirk #1 J. W. Stager  
Date Completed: 1903, Total Depth: 3,280  
Sample Range: 1,940 - 3,250  
Samples Missing: 2,095 - 2,180; 2,261 - 2,290;  
2,305 - 2,390; 2,666 - 2,710; 2,761 - 2,780  
Geologic Sample Range: "Big Lime" - Clinton  
No log available  
Division of Mines No.: None

Wooster Twp., Section 14, Sample No. 1  
Ohio Oil Co. #8 J. H. Armstrong  
Date Completed: 6-25-41, Total Depth: 6,116  
Sample Range: 500 - 6,116  
Samples Missing: 570-620; 625-650; 655-755; 780-  
827; 1,124-1,130; 1,171-1,186; 2,040-2,050;  
2,070-2,184; 2,452-2,460; 2,566-2,580; 2,785-  
2,796; 2,805-2,814; 3,147-3,159; 3,340-3,351;  
3,361-3,392; 3,515-3,550; 4,703-4,708; 5,049-  
5,058; 5,101-5,107; 5,923-5,928  
Geologic Sample Range: Cuyahoga - L. Magnesian  
Division of Mines No.: None

## Williams County

Madison Twp., Section 26, Sample No. 121  
 Ro-Kin-Da Oil Co. #1 C. E. Hendricks  
 Date Completed: 12-20-42, Total Depth: 2,523  
 Sample Range: 235 - 2,523  
 Samples Missing: None  
 Geologic Sample Range: Surface - St. Peter  
 Division of Mines No.: None

## Wood County

Bloom Twp., Section 7, Sample No. 52  
 C. R. Schwyn #1 C. R. Schwyn  
 Date Completed: 4-42, Total Depth: 1,405  
 Sample Range: 300 - 1,405  
 Samples Missing: None  
 Geologic Sample Range: Clinton - Trenton  
 Division of Mines No.: None

Bloom Twp., Section 32, Sample No. 376  
 Test Oil Co. #1 A. J. Walker  
 Date Completed: 1905, Total Depth: 1,871  
 Sample Range: 1,145 - 1,871  
 Samples Missing: 1,239 - 1,262; 1,310 - 1,334;  
 1,543 - 1,555; 1,588 - 1,600; 1,610 - 1,636;  
 1,712 - 1,734; 1,748 - 1,765  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

Center Twp., Section 32, Sample No. 115  
 Portage River Oil Co. #1 I. Nelson  
 Date Completed: 1941, Total Depth: 1,875  
 Sample Range: 1,825 - 1,874  
 Samples Missing: None  
 Geologic Sample Range: St. Peter  
 Division of Mines No.: None

Henry Twp., Section 35, Sample No. 277  
 C. L. Williams Co. #2 Peters  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 1,162 - 1,779  
 Samples Missing: 1,496 - 1,777  
 Geologic Sample Range: Trenton - St. Peter  
 No Log Available  
 Division of Mines No.: None

Henry Twp., Section 35, Sample No. 277  
 C. L. Williams #3 Peters  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 40 - 949  
 Samples Missing: 260 - 355; 720 - 949;  
 Geologic Sample Range: Surface - Medina  
 No log available  
 Division of Mines No.: None

Henry Twp., Section 35, Sample No. 375  
 Water Well at N. Baltimore  
 Date Completed: 4-20-49, Total Depth: 260  
 Sample Range: 35 - 260  
 Samples Missing: None  
 O. W. R. B. No.: 340

Jackson Twp., Section 24, Sample No. 133  
 Pember et al. #1 Yeasting  
 Date Completed: 12-19-43, Total Depth: 1,478  
 Sample Range: 150 - 1,459  
 Samples Missing: 730 - 1,420  
 Geologic Sample Range: Surface - Trenton  
 No log available  
 Division of Mines No.: None

Liberty Twp., Section 1, Sample No. 43  
 Ward et al. #1 Shaw  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 440 - 1,345  
 Samples Missing: 1,180 - 1,312  
 Geologic Sample Range: Medina - Trenton  
 No log available  
 Division of Mines No.: None

Liberty Twp., Section 1, Sample No. 96  
 F. Fry et al. #1 F. Shaw  
 Date Completed: \_\_\_\_\_, Total Depth: 1,557  
 Sample Range: 1,316 - 1,519  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

Liberty Twp., Section 12, Sample No. 48  
 J. Brailey #1 S. E. Killian  
 Date Completed: 8-25-37, Total Depth: 2,927  
 Sample Range: 1,930 - 2,927  
 Samples Missing: None  
 Geologic Sample Range: Trenton - Pre-Cambrian  
 Economic Museum No. 18911  
 Division of Mines No.: None

Liberty Twp., Section 12, Sample No. 94  
 Hurd Oil Co. #1 J. Haylett  
 Date Completed: \_\_\_\_\_, Total Depth: 1,487  
 Sample Range: 1,271 - 1,478  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

Liberty Twp., Section 15, Sample No. 158  
 Ohio Oil Co. #1 D. J. Cory  
 Date Completed: 8-3-06, Total Depth: 2,262  
 Sample Range: 1,529 - 2,262  
 Samples Missing: None (long samples)  
 Geologic Sample Range: Trenton - St. Peter  
 Division of Mines No.: None

Liberty Twp., Section 19, Sample No. 376  
 F. A. Johnson et al. #1 La Pointe  
 Date Completed: 8-18-49, Total Depth: 1,522  
 Sample Range: 1,492 - 1,519  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No.: None

Liberty Twp., Section 26, Sample No. 269  
 \_\_\_\_\_ #1 B. Rickard  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 0 - 1,214  
 Samples Missing: 550 - 1,170  
 Geologic Sample Range: Surface - Trenton

- No log available  
Division of Mines No. : None
- Liberty Twp. , Section 30, Sample No. 256  
Wood County Oil Co. #1 Johnson - Drummon  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 50 - 1,541  
Samples Missing: 680 - 685; 920 - 925; 1,150 - 1,155; 1,175 - 1,180; 1,190 - 1,195; 1,265 - 1,285; 1,290 - 1,310; 1,493 - 1,540  
Geologic Sample Range: Surface - Trenton  
No log available  
Division of Mines No. : None
- Perry Twp. , Section 11, Sample No. 377  
Water Well at Eli Cline Farm  
Date Completed: 1904, Total Depth: 106  
Sample Range: 0 - 106  
Samples Missing: Long samples  
No log available  
Division of Water No. : None
- Perry Twp. , Section 32, Sample No. 375  
Test Oil Co. #1 A. J. Walker  
Date Completed: 1905, Total Depth: 1,173  
Sample Range: 160 - 1,173  
Samples Missing: None  
Geologic Sample Range: Surface - Trenton  
No log available  
Division of Mines No. : None
- Perrysburg Twp. , Section 22, Sample No. 119  
Adrian Oil and Gas Co. #1 W. Grelley  
Date Completed: 2-42, Total Depth: 2,058  
Sample Range: 1,253 - 2,058  
Samples Missing: 1,273 - 1,795  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No. : None
- Perrysburg Twp. , Section 23, Sample No. 377  
\_\_\_\_\_ #\_\_\_\_\_ Zazing  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 1,850 - 1,875  
Samples Missing: None  
Geologic Sample Range: St. Peter  
No log available  
Division of Mines No. : None
- Plain Twp. , Section 13, Sample No. 53  
Sun Oil Co. #1 H. E. Cross  
Date Completed: 7-19-39, Total Depth: 2,190  
Sample Range: 40 - 2,190  
Samples Missing: 330 - 340  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No. : None
- Plain Twp. , Section 35, Sample No. 95  
Pember et al. #1 A. Lein  
Date Completed: \_\_\_\_\_, Total Depth: 1,397  
Sample Range: 1,266 - 1,285  
Samples Missing: None  
Geologic Sample Range: Trenton  
No log available  
Division of Mines No. : None
- Plain Twp. , Section 36, Sample No. 39  
Pember et al. #1 R. Kramer  
Date Completed: 1-13-43, Total Depth: 1,617  
Sample Range: 1,200 - 1,592  
Samples Missing: 1,472 - 1,559  
Geologic Sample Range: Trenton  
Division of Mines No. : None
- Portage Twp. , Section 5, Sample No. 131  
Goodwell Oil and Gas Co. #1 L. Shinew  
Date Completed: 2-23-39, Total Depth: 2,460  
Sample Range: 1,648 - 1,907  
Samples Missing: 1,889 - 1,900  
Geologic Sample Range: Trenton - St. Peter  
Division of Mines No. : None
- Portage Twp. , Section 6, Sample No. 283  
G. F. Munn #2 L. Dienst  
Date Completed: 11-19-04, Total Depth: 1,262  
Sample Range: 20 - 1,242  
Samples Missing: None  
Geologic Sample Range: Surface - Trenton  
Division of Mines No. : None
- Ross Twp. , Tract 81?, Sample No. 375  
B. Wolfe #1 E. M. Warner  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 500 - 1,335  
Samples Missing: None (long samples)  
Geologic Sample Range: Medina - Trenton  
No log available  
Division of Mines No. : None
- Washington Twp. , Section 36, Sample No. 115  
J. S. Brailey #1 Beaverstock  
Date Completed: 5-10-42, Total Depth: 1,738  
Sample Range: 1,461 - 1,738  
Samples Missing: None  
Geologic Sample Range: Trenton  
Division of Mines No. : None
- Wyandot County
- Antrim Twp. , Section 28, Sample No. 4  
Ohio Oil Co. #1 B. Chatlain  
Date Completed: 6-10-42, Total Depth: 2,390  
Sample Range: 54 - 2,390  
Samples Missing: 90 - 95; 115 - 120; 290 - 295; 1,080 - 1,085; 1,375 - 1,385; 1,860 - 1,865; 2,315 - 2,320  
Geologic Sample Range: Surface - St. Peter  
Division of Mines No. : None
- Crane Twp. , Section 3, Sample No. 465  
H. J. Lininger #3 Seyfert - Newell  
Date Completed: 7-1951, Total Depth: 1,437  
Sample Range: 1,355 - 1,937  
Samples Missing: None  
Geologic Sample Range: Trenton  
Division of Mines No. : None
- Crawford Twp. , Section 18, Sample No. 99  
Ohio Oil Co. #1 Nora Heck  
Date Completed: 5-15-42, Total Depth: 2,801

Sample Range: 0 - 2,801  
 Samples Missing: 1,198 - 1,208  
 Geologic Sample Range: Surface - L. Magnesian  
 Division of Mines No. : 72

OUT OF STATE WELLS

## Indiana

**Crawford Twp., Section 36, Sample No. 377**

Stull and Bland #1 F. Davis  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 1,330 - 1,398  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 No log available  
 Division of Mines No. : None

**Jackson Twp., Section 36, Sample No. 120**

Miller Bros. #1 R. Parsell  
 Date Completed: 3-7-47, Total Depth: 5,632  
 Sample Range: 1,775 - 3,118  
 Samples Missing: 2,015 - 3,118  
 Geologic Sample Range: Trenton - Pre-Cambrian  
 Division of Mines No. : None

**Marseilles Twp., Section 13, Sample No. 297**

Temple and Perkins #1 W. W. Morrall  
 Date Completed: 1939, Total Depth: 1,920  
 Sample Range: 1,579 - 1,899  
 Samples Missing: None  
 Geologic Sample Range: Trenton - St. Peter  
 Division of Mines No. : None

**Pitt Twp., Section 24, Sample No. 38**

Coyle #1 A. Reber  
 Date Completed: 10-1-33, Total Depth: 1,913  
 Sample Range: 420 - 1,625  
 Samples Missing: 905 - 920; 1,180 - 1,430;  
 1,435 - 1,500  
 Geologic Sample Range: Medina - Trenton  
 Division of Mines No. : None

**Richland Twp., Section 2, Sample No. 48**

Pure Oil Co. #1 G. A. Kemmerly  
 Date Completed: 3-14-41, Total Depth: 1,370  
 Sample Range: 1,319 - 1,370  
 Samples Missing: None  
 Geologic Sample Range: Trenton  
 Division of Mines No. : 70

**Richland Twp., Section 13, Sample No. 49**

Pure Oil Co. #1 R. H. Kear  
 Date Completed: 5-19-41, Total Depth: 1,928  
 Sample Range: 1,356 - 1,928  
 Samples Missing: None  
 Geologic Sample Range: Trenton - St. Peter  
 Division of Mines No. : 71

**Tymochtee Twp., Section 7, Sample No. 114**

Bland - Perkins #1 C. S. Grubel  
 Date Completed: 7-2-37, Total Depth: 1,479  
 Sample Range: 61 - 1,422  
 Samples Missing: 65 - 100; 553 - 1,040; 1,050 -  
 1,070; 1,080 - 1,216; 1,218 - 1,345  
 Geologic Sample Range: Surface - Trenton  
 Division of Mines No. : None

**Adams County, Section 4, T-26N, R-14E, Sample No. 473**

Water Well #1 at City of Monroe  
 Date Completed: 10-50, Total Depth: 206  
 Sample Range: 65 - 200  
 Samples Missing: None

**Adams County, Section 34, T-28N, R-14E, Sample No. 474**

Water Well #8 at City of Decatur  
 Date Completed: 1-47, Total Depth: 400  
 Sample Range: 25 - 400  
 Samples Missing: None

**Adams County, Section 35, T-25N, R-13E, Sample No. 169**

R. O. McKee #1 R. Glendening  
 Date Completed: \_\_\_\_\_, Total Depth: 2,330  
 Sample Range: 793 - 2,329  
 Samples Missing: None

**Henry County, Section 12, T-16N, R-11E, Sample No. 173**

Ohio Oil Co. #1 May  
 Date Completed: \_\_\_\_\_, Total Depth: 3,670  
 Sample Range: 0 - 3,670  
 Samples Missing: None

**Jasper County, Section 14, T-30N, R-6W, Sample No. 164**

Kankakee Valley Development #1 Bank of  
 Rensselaer  
 Date Completed: \_\_\_\_\_, Total Depth: 3,373  
 Sample Range: 97 - 3,330  
 Samples Missing: None

**Jay County, Section 29, T-24, R-13E, Sample No. 42**

Petroleum Development Co. #1 J. Binegar  
 Date Completed: 3-1-40, Total Depth: 3,404  
 Sample Range: 1,001 - 3,404  
 Samples Missing: 1,550 - 1,758

**Jay County, Madison Twp., Section 1, Sample No. 128**

E. G. Henderson #2 Charles Barger  
 Date Completed: 3-3-44, Total Depth: 1,134  
 Sample Range: 1,083 - 1,134  
 Samples Missing: None

**Jay County, Madison Twp., Section 5, Sample No. 144**

M. and S. Co. #1 W. G. Hilflicker  
 Date Completed: 10-25-43, Total Depth: 1,567  
 Sample Range: 50 - 1,546  
 Samples Missing: None

**Randolph County, Section 2, T-19N, R-14E, Sample No. 128**

Seip #1 Butts  
 Date Completed: \_\_\_\_\_, Total Depth: 1,175  
 Sample Range: 1,087 - 1,160  
 Samples Missing: None

Randolph County, Section 15, T-21N, R-14E, Sample No. 128

Simmons #1 Potter

Date Completed: \_\_\_\_\_, Total Depth: 1,095

Sample Range: 1,010 - 1,095

Samples Missing: None

Randolph County, Section 23, T-20N, R-14E, Sample No. 128

Seip #1 Hunt

Date Completed: \_\_\_\_\_, Total Depth: 1,180

Sample Range: 1,101 - 1,176

Samples Missing: None

St. Joseph County, Liberty Twp., Section 28, Sample No. 90

Ohio Oil Co. #1 Pearse Hrs.

Date Completed: \_\_\_\_\_, Total Depth: 1,514

Sample Range: 0 - 1,514

Samples Missing: None

Wayne County, Boston Twp., Section 22, Sample No. 175

Wayne County Producers #1 Fred Taylor

Date Completed: 1-15-43, Total Depth: 3,330

Sample Range: 1,904 - 2,423

Samples Missing: None

#### Kentucky

Estill County, \_\_\_\_\_, Sample No. 196

South Central Petroleum #1 Pruitt - Miller - Goff

Date Completed: \_\_\_\_\_, Total Depth: 3,801

Sample Range: 2,746 - 4,001

Samples Missing: 3,195 - 3,216

Grayson County, \_\_\_\_\_, Sample No. 81

Sun Oil Co. #1 George Woods

Date Completed: 2-41, Total Depth: 3,770

Sample Range: 0 - 3,770

Samples Missing: None

Kenton County, Latonia Twp., Sample No. 255

Standard Oil Co. #1 Fee

Date Completed: 11-10-47, Total Depth: 1,011

Sample Range: 52 - 1,011

Samples Missing: None

Knox County, \_\_\_\_\_, Sample No. 191

Schmidt #1 Hammond

Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_

Sample Range: 1,641 - 4,998

Samples Missing: 4,220 - 4,234

Lincoln County, \_\_\_\_\_, Sample No. 186

California Co. #1 A. R. Spears

Date Completed: 11-12-46, Total Depth: 6,117

Sample Range: 0 - 6,117

Samples Missing: None

McLean County, \_\_\_\_\_, Sample No. 83

Ohio Oil Co. #2 G. B. McManama

Date Completed: 10-25-30, Total Depth: 1,400

Sample Range: 1,411 - 1,723

Samples Missing: None

Ohio County, \_\_\_\_\_, Sample No. 82

Ohio Oil Co. #1 Alvey Oller

Date Completed: 8-19-40, Total Depth: 2,503

Sample Range: 90 - 2,503

Samples Missing: None

#### Maryland

Worcester County, Ocean City, Sample No. 165

Standard Oil New Jersey #1 State of Maryland

Date Completed: 12-14-46, Total Depth: 7,710

Sample Range: 1,170 - 7,710

Samples Missing: None

Worcester County, \_\_\_\_\_, Sample No. 86

Socony-Vacuum Oil Co. #1 J. D. Bethards

Date Completed: 8-26-45, Total Depth: 7,178

Sample Range: 40 - 7,150

Samples Missing: 10 - 804; 1,280 - 1,500

#### North Carolina

Dare County, \_\_\_\_\_, Sample No. 257

Standard Oil New Jersey #1 Pimlico Sound

Date Completed: 3-13-47, Total Depth: 6,410

Sample Range: 4,500 - 6,410

Samples Missing: 4,650 - 4,700; 5,160 - 70;  
5,470 - 80

#### Pennsylvania

Butler County, Mercer Twp., Sample No. 150

Mfgr's Light and Heat Co. #1 J. G. Hockenberry

Date Completed: 11-10-44, Total Depth: 10,096

Sample Range: 0 - 10,096

Samples Missing: 6,501 - 8,302

Erie County, Springfield Twp., Sample No. 12

Ohio Oil Co. #2 C. I. S. Corp. (J. Baker)

Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_

Sample Range: 0 - 500

Samples Missing: None

Erie County, Springfield Twp., Sample No. 17

Ohio Oil Co. #7 C. I. S. Corp. (J. Baker)

Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_

Sample Range: 0 - 560

Samples Missing: None

Erie County, Springfield Twp., Sample No. 32

Ohio Oil Co. #22 C. I. S. Corp. (N. Blickensdorfer)

Date Completed: 4-10-42, Total Depth: 4,457

Sample Range: 68 - 4,457

Samples Missing: 700 - 710; 4,360 - 4,364

Erie County, Springfield Twp., Sample No. 24

Ohio Oil Co. #14 C. I. S. Corp. (N. Blickensdorfer)

Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_

- Sample Range: 20 - 570  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 11  
Ohio Oil Co. #1 Jay Childs  
Date Completed: 3-30-41, Total Depth: 5,191  
Sample Range: 0 - 5,191  
Samples Missing: 302 - 310; 827 - 834; 1,782 - 1,787; 2,020 - 2,026; 4,630 - 4,635
- Erie County, Springfield Twp., Sample No. 16  
Ohio Oil Co. #6 C.I.S. Corp. (Jay Childs)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 543  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 13  
Ohio Oil Co. #3 C.I.S. Corp. (S.W. Childs)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 610  
Samples Missing: 46 - 52
- Erie County, Springfield Twp., Sample No. 29  
Ohio Oil Co. #19 C.I.S. Corp. (R. Haggerty)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 50 - 680  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 23  
Ohio Oil Co. #13 C.I.S. Corp. (C. L. Johnson)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 35 - 662  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 22  
Ohio Oil Co. #12 C.I.S. Corp. (H. Johnson)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 10 - 529  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 19  
Ohio Oil Co. #9 C.I.S. Corp. (J. R. Hall)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 572  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 21  
Ohio Oil Co. #11 C.I.S. Corp. (Press)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 1,175  
Samples Missing: 145 - 150; 745 - 750
- Erie County, Springfield Twp., Sample No. 18  
Ohio Oil Co. #8 C.I.S. Corp. (A. E. Sisson)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 546  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 14  
Ohio Oil Co. #4 C.I.S. Corp. (L. Statzer)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 494  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 15  
Ohio Oil Co. #5 C.I.S. Corp. (L. Statzer)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 543  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 30  
Ohio Oil Co. #30 C.I.S. Corp. (R. R. Thomas)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 50 - 687  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 31  
Ohio Oil Co. #21 C.I.S. Corp. (E. E. Ward)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 50 - 782  
Samples Missing: None
- Erie County, Springfield Twp., Sample No. 20  
Ohio Oil Co. #10 C.I.S. Corp. (L. Whitney)  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 551  
Samples Missing: 342 - 348
- Lawrence County, Slippery Rock Twp., Sample No. 187  
Ohio Oil Co. #1 M. Copper  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 65 - 999  
Samples Missing: 968 - 975; 984 - 990
- Washington County, Robinson Twp., Sample No. 170  
Texas Co. #1 A. Skraba  
Date Completed: 8-22-45, Total Depth: 6,204  
Sample Range: 20 - 6,244  
Samples Missing: None

## Tennessee

- Cannon County, Woodbury Twp., Sample No. 229  
Magnolia Petroleum Co. #1 M. B. Gaither  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 0 - 1,936  
Samples Missing: None

- Pickett County, \_\_\_\_\_, Sample No. 234  
Eleson #1 Ammonette  
Date Completed: 3-48, Total Depth: 1,800  
Sample Range: 1,580 - 1,795  
Samples Missing: 1,580 - 1,795; 1,620 - 1,635; 1,645 - 1,660

## Virginia

- Lee County, Blackwater, Sample No. 246  
McNabe Gas Co. #1 Anderson  
Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
Sample Range: 1,160 - 4,156  
Samples Missing: 2,212 - 2,220; 2,260 - 3,317; 3,767 - 3,781

- Lee County, Rose Hill, Sample No. 278  
\_\_\_\_\_ #1 A. A. Richardson

Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 55 - 899  
 Samples Missing: None

Rockingham County, \_\_\_\_\_, Sample No. 258  
 James Gas Co. #1 Dove  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 49 - 2,679  
 Samples Missing: None

Rockingham County, \_\_\_\_\_, Sample No. 261  
 James Gas Co. #1 T. S. Lanz  
 Date Completed: \_\_\_\_\_, Total Depth: 2,760  
 Sample Range: 45 - 2,754  
 Samples Missing: None

Wise County, \_\_\_\_\_, Sample No. 202  
 James Gas Co. #1 W. B. Osborne  
 Date Completed: 1-23-50, Total Depth: 4,860  
 Sample Range: 225 - 2,319  
 Samples Missing: 1,395 - 1,442; 1,464 - 1,485;  
 1,542 - 1,547; 1,650 - 1,660; 1,695 - 1,718;  
 1,740 - 1,750; 1,920 - 1,925; 1,974 - 1,985;  
 2,140 - 2,219; 2,225 - 2,242; 2,272 - 2,292

#### West Virginia

Clay County, Henry Dist., Sample No. 322  
 United Fuel Gas Co. #1 Brown, Goshorn and  
 Swan  
 Date Completed: \_\_\_\_\_, Total Depth: 5,345  
 Sample Range: 3,350 - 4,450  
 Samples Missing: 3,800 - 4,100; 4,200 - 4,350

Greenbrier County, Williamsburg Dist., Sample No.  
 154  
 Texas Co. #1 G. R. Dean  
 Date Completed: 7-26-47, Total Depth: 8,410  
 Sample Range: 0 - 8,410  
 Samples Missing: None

Hancock County, Clay Dist., Sample No. 423  
 John Galey #1 K. Sobel  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 50 - 4,768  
 Samples Missing: 976 - 4,510; 4,517 - 4,535

Jackson County, Ravenswood Dist., Sample No. 315  
 Joe Rubin #1 W. J. Brown  
 Date Completed: 10 - 5 - 38, Total Depth: 4,300  
 Sample Range: 4,254 - 4,294  
 Samples Missing: 4,258 - 4,265

Kanawha County, Jefferson Dist., Sample No. 262  
 Benedum - Trees Oil Co. #1 J. A. Hill  
 Date Completed: \_\_\_\_\_, Total Depth: 6,285  
 Sample Range: 20 - 6,285  
 Samples Missing: Numerous

Kanawha County, Loudon Dist., Sample No. 234  
 G. L. Cabot #1 G. C. Painter (Vorholt)  
 Date Completed: 11-30-35, Total Depth: 4,971  
 Sample Range: 4,922 - 4,971  
 Samples Missing: Numerous

Mingo County, \_\_\_\_\_, Sample No. 322  
 United Fuel Gas Co. #1 Cotiga Development Co.  
 Date Completed: 8-24-31, Total Depth: \_\_\_\_\_  
 Sample Range: 3,200 - 3,888  
 Samples Missing: 3,200 - 3,298; 3,309 - 3,330;  
 3,340 - 3,394; 3,415-3,788; 3,837-3,838; 3,837-  
 3,850; 3,851-3,860

Monongalia County, Morgan Dist., Sample No. 267  
 Hope Natural Gas Co. #1 H. C. Greer  
 Date Completed: 11-19-41, Total Depth: 7,684  
 Sample Range: 5,347 - 7,457  
 Samples Missing: 5,404 - 5,454

Pocahontas County, Huntersville Dist., Sample No. 162  
 Ohio Oil Co. #1 Seneca State Forest  
 Date Completed: 3-24-45, Total Depth: 960  
 Sample Range: 10 - 950  
 Samples Missing: None

Preston County, Kingwood Dist., Sample No. 230  
 Hope Natural Gas Co. #1 Frank Barlow  
 Date Completed: 4-16-49, Total Depth: 8,635  
 Sample Range: 6,720 - 8,128  
 Samples Missing: 6,730-6,944; 6,953-6,963; 6,973-  
 7,004; 7,013-7,081; 7,095-7,131; 7,140-7,212;  
 7,215-7,327; 7,335-7,523; 7,572-7,577

Preston County, Portland Dist., Sample No. 216  
 Snee and Eberly #1 Virginia Cuppett  
 Date Completed: 9-17-48, Total Depth: 8,940  
 Sample Range: 7,095 - 8,940  
 Samples Missing: 7,102-7,674; 7,685-8,082; 8,234-  
 8,320; 8,331-8,430; 8,542-8,611

Preston County, Portland Dist., Sample No. 228  
 Nolle, Snee and Eberly #1 H. R. Fitzpatrick  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 536 - 8,547  
 Samples Missing: 3,790-3,808; 4,069-4,088; 5,512-  
 5,519; 5,604-5,612; 5,625-5,631; 5,637-5,656;  
 6,222-7,484; 7,500-7,943; 7,949-8,146; 8,153-  
 8,535

Preston County, Portland Dist., Sample No. 233  
 Hope Natural Gas Co. #1 Pyles  
 Date Completed: 5-2-49, Total Depth: 6,086  
 Sample Range: 175 - 1,227  
 Samples Missing: 1,012 - 1,017

Roane County, Geary Dist., Sample No. 322  
 United Fuel Gas Co. #7, W. S. Lewis  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 4,370 - 4,852  
 Samples Missing: numerous

Summers County, Greenbrier Dist., Sample No. 195  
 G. L. Cabot #1 W. M. Elswick  
 Date Completed: 12-1-47, Total Depth: 6,972  
 Sample Range: 100 - 6,957  
 Samples Missing: None

- Taylor County, \_\_\_\_\_, Sample No. 236  
 Pittsburgh and W. Va. Gas Co. #1 A. M. Miller  
 Date Completed: 11-11-44, Total Depth: 4,306  
 Sample Range: 0 - 4,107  
 Samples Missing: None (long samples)
- Tucker County, Davis Dist., Sample No. 215  
 Cumberland and Allegheny Gas Co. #1 W. Va.  
 Power Co.  
 Date Completed: \_\_\_\_\_, Total Depth: 8,193  
 Sample Range: 160 - 8,193  
 Samples Missing: None
- Tucker County, Dry Fork Dist., Sample No. 151  
 Ohio Oil Co. #1 Kuykendall  
 Date Completed: 3-25-46, Total Depth: 8,401  
 Sample Range: 0-8,401  
 Samples Missing: 2,109-2,114
- Webster County, Hacker Valley Dist., Sample No. 245  
 Tri-State Oil and Gas Co. #1 Hoover - Davis  
 Date Completed: 12-12-45, Total Depth: 4,016  
 Sample Range: 0 - 3,995  
 Samples Missing: None
- Wetzel County, Proctor Dist., Sample No. 61  
 Mfgr's Light and Heat Co. #1 J. A. Parsons  
 Date Completed: 3-22-41, Total Depth: 3,114  
 Sample Range: 1,101 - 3,112  
 Samples Missing: None
- Wood County, Lubeck Dist., Sample No. 432  
 W. H. Bickel #1 Fee  
 Date Completed: 7-1938, Total Depth: 4,470  
 Sample Range: 4,417 - 4,451  
 Samples Missing: None
- Wood County, Tygart Dist., Sample No. 315  
 W. H. Bickel #1 Blizzard - Reese  
 Date Completed: 12-4-37, Total Depth: 4,705  
 Sample Range: 4,583 - 4,700  
 Samples Missing: None

#### Canada

- Lambton County, 6th Concession Warwick, Sample  
 No. 125  
 Wilson-Sullivant Devel. Co. #1 Wood  
 Date Completed: \_\_\_\_\_, Total Depth: \_\_\_\_\_  
 Sample Range: 320 - 532  
 Samples Missing: None