

Figure 1.—Map showing the approximate distribution of natural gas and oil in the Lower Silurian regional oil and gas accumulation of the central Appalachian basin. Also shown is the location of the Lower Silurian Tuscarora Sandstone.

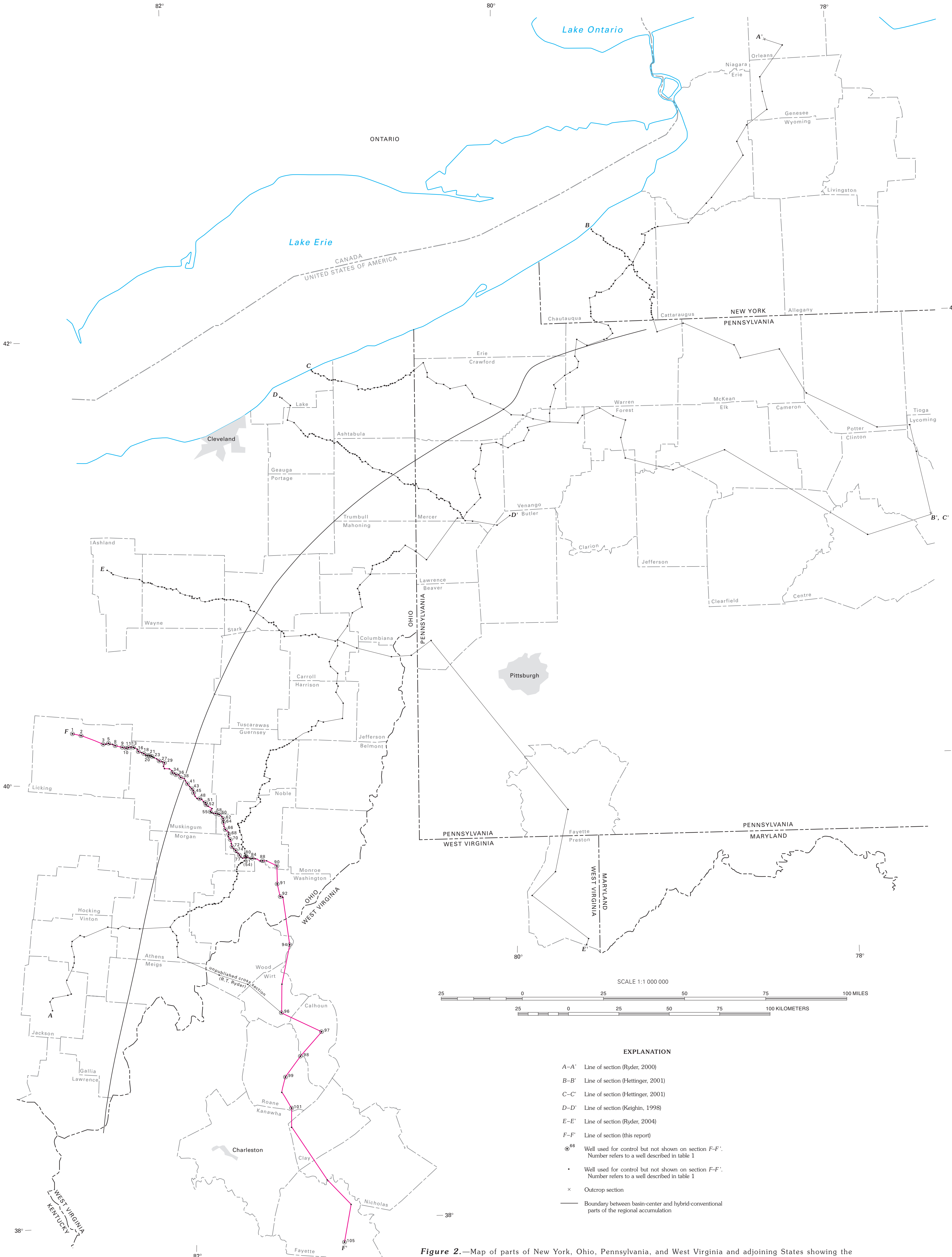


Figure 2.—Map of parts of New York, Ohio, Pennsylvania, and West Virginia and adjoining States showing the location of section F-F' and constituent wells.

Table 1.—Wells used to construct cross section F-F'. Refer to figure 2 for well locations. Also shown are perforated intervals, initial production flow per day, and reservoir names.

Well No.	American Petroleum Institute No.	Company	Lease	County/State	Township (7.5-min grid/angle)	Date of log run	Perforated or open hole interval (depth in ft)	Initial production flow of natural gas, oil, and water (barrels per day)	Reservoirs
1	34-089-22051	Southern Triangle Oil Co.	No. 1 Sweetnam Comm.	Licking/Ohio	Burlington	11-27-03	—	—	—
2	34-089-22300	Lake Shore Pipeline Co.	No. 1 Shipley	Licking	Burlington	12-13-05	—	—	—
3	34-089-23503	American Well Management Co.	No. 1 Mayfield	Licking	Mary Ann	8-9-78	2,722-2,758	500 MCFG, AF; PAA, 4-8-82	C
4	34-089-21826	Lake Shore Pipeline Co.	No. 1 Crowley	Licking	Mary Ann	8-15-61	—	—	C
5	34-089-24722	Fortune Petroleum Corp.	No. 1 Hilton	Licking	Mary Ann	6-11-83	2,705-2,726	10 MCFG, 5 BO, AF	C
7	34-089-22553	J.F. Ritter Sr.	No. 1 Jones	Licking	Mary Ann	10-2-67	2,712-2,808	1,800 MCFG, AF	C
8	34-089-22509	C.J. Seibert (Oxford Oil)	No. 1 Flowers	Licking	Mary Ann	6-1-47	2,882-2,815, 2,890-2,946	500 MCFG, 30 BO, AF	C
9	34-089-22457	Cowan & McMillan Drilling	No. 2 McArtor	Licking	Perry	1-27-67	2,914-2,820, 2,930-2,943	150 MCFG, 100 BO, AF	C
10	34-089-24792	P.F. Moran	No. 1 Moran (SSW No. 2)	Licking	Perry	3-8-84	2,912-2,815, 2,818-2,820, 2,925-2,944	100 MCFG, 10 BO, AF	C
11	34-089-24782	Outcrop Oil Co.	No. 1 Seward	Licking	Perry	6-19-63	2,865-2,917	4 BO, N, 300 MCFG, 8 BO, AF	C
12	34-089-21769	Jobb, Inc.	No. 3-A Phillips	Licking	Perry	11-12-59	2,865-2,917	200 MCFG, 200 BO, AF	C
13	34-119-21580	Jobb, Inc.	No. 1 Phillips	Muskingum/Ohio	Jackson	10-11-58	3,018-3,026, 3,029-3,032, 3,040-3,044, 3,059-3,058, 3,073-3,074, 3,082-3,084	15 MCFG, 10 BO, AF	C
14	34-119-25274	Jerry Oil Co.	No. 1 Hemberger	Muskingum	Jackson	11-29-80	Oh, 3,150-3,164	100 MCFG, 15 BO, AF	C
15	34-119-23255	Clew Ludwig Oil Properties	No. 1 Batous	Muskingum	Jackson	8-26-76	3,017-3,020, 3,040-3,048	18 BO, AF	C
16	34-119-25923	Hilto Development Corp.	No. 2 Smith	Muskingum	Jackson	11-17-81	3,108-3,110, 3,137-3,143	20 MCFG, 10 BO, AF	C
17	34-119-25944	Hilto Development Corp.	No. 1 Minnich	Muskingum	Jackson	12-18-81	3,199-3,242	20 MCFG, 10 BO, 2 BW, AF	C
18	34-119-26228	Hilto Development Corp.	No. 2 McCann	Muskingum	Jackson	9-9-82	3,421-3,434	100 MCFG, 10 BO, 1 BW, AF	C
19	34-119-25114	Hopewell Oil & Gas Devel. Co.	No. 1 Shaw	Muskingum	Cass	3-9-80	3,482-3,484, 3,498-3,512	250 MCFG, AF	C
20	34-119-23271	Johnston Petroleum Corp.	No. 2 Wright	Muskingum	Cass	3-8-74	3,501-3,538	150 MCFG, N, 1 BO	C
21	34-119-23199	Johnston Petroleum Corp.	No. 1 Wright	Muskingum	Cass	1-29-74	—	PAA, 1-30-74	C
22	34-119-23113	Johnston Petroleum Corp.	No. 1 Sumner	Muskingum	Cass	10-14-79	3,377-3,384	600 MCFG, AF	C
23	34-119-27760	Cameron Production Co., Inc.	No. R-1 Todd	Muskingum	Cass	9-21-82	—	—	C
24	34-119-23065	Liberty Petroleum Corp.	No. 1 Fulton	Muskingum	Cass	6-23-73	3,481-3,495	3,500 MCFG, AF	C
25	34-119-22550	Jack M. Johnson	No. 1 Schrader	Muskingum	Muskingum	11-1-77	3,373-3,610	4,000 MCFG, TO, AF	C
27	34-119-22784	Jack M. Johnson	No. 1 Miller	Muskingum	Muskingum	6-9-72	3,470-3,493	1,500 MCFG, 10 BO, AF	C
28	34-119-27783	Oxford Oil Company	No. J-5 G.P.S.	Muskingum	Muskingum	5-21-83	3,703-3,734	150 MCFG, 2 BO, AF	C
29	34-119-27797	Oxford Oil Company	No. J-12 G.P.S.	Muskingum	Muskingum	4-22-83	3,696-3,720, 3,731-3,735	50 MCFG, 1 BO, AF	C
30	34-119-27027	Reliance Energy	No. 2 Vandenberg	Muskingum	Muskingum	12-27-84	3,692-3,639	25 MCFG	C
31	34-119-23089	Reliance Energy	No. 1 Steverom	Muskingum	Muskingum	6-4-73	—	150 MCFG, AF; PAA, 8-24-73	C
32	34-119-25376	Clinton Oil Company	No. 1-648 Norris/White	Muskingum	Washington	4-1-81	3,678-3,686	200 MCFG, 1 BO, AF	C
33	34-119-26562	Republic Steel Corp.	No. 21 CR Consolidation Coal Co.	Muskingum	Washington	10-23-81	3,855-3,880	55 MCFG, N, 75 MCFG, 1 BO, AF	C
34	34-119-25869	Republic Steel Corp.	No. 15 CR Consolidation Coal Co.	Muskingum	Washington	9-4-81	3,824-3,832	30 MCFG, 4 BO, 3 BW, AF	C
35	34-119-25822	Republic Steel Corp.	No. 8 CR Consolidation Coal Co.	Muskingum	Washington	8-4-81	—	—	C
36	34-119-26359	PSG Energy Corp.	No. 48 CR Consolidation Coal Co.	Muskingum	Washington	8-22-83	3,914-3,943	42 MCFG, 2 BO, 1 BW, AF	C
37	34-119-25348	Jaddai, Inc.	No. 1 Madden	Washington	Washington	8-16-85	4,012-4,053	50 MCFG, 1 BO, TV, AF	C
38	34-119-23951	D.W. Lurker	No. 1 Tignor	Muskingum	Perry	5-13-75	—	1,500 MCFG, AF	C
39	34-119-23237	American Exploration Co.	No. 1 Brunwell	Muskingum	Perry	6-22-76	Oh, 4,130-4,180	100 MCFG, 50 MCFG, 5 BO, AF	C
40	34-119-24875	Outcrop Oil Company	No. 1 Reed	Muskingum	Perry	6-2-80	4,162-4,198	150 MCFG, 10 BO, AF	C
41	34-119-22412	Western Exploration, Inc.	No. 1 Dix	Muskingum	Perry	2-9-71	4,146-4,172, 4,237-4,245	400 MCFG, TO, AF; PAA, 10-2-82	C, M
42	34-119-21648	Kewanee Oil Company	No. 1 Mikolajek	Muskingum	Perry	3-29-90	—	PAA, 4-6-80	C
43	34-119-22913	Johnston Petroleum Corp.	No. 1 Moore	Muskingum	Perry	8-26-73	4,385-4,410	950 MCFG, TO, AF	C
44	34-119-27574	Cameron Brothers	No. 3-A Merry	Muskingum	Perry	7-25-89	4,361-4,396, 4,464-4,568	220 MCFG, 4 BO, AF	C, M
45	34-119-23571	Johnston Petroleum Corp.	No. 1 Taylor	Muskingum	Perry	4-30-75	4,281-4,302	50 MCFG, AF; PAA, 9-30-92	C
46	34-119-26705	Clinton Oil Company	No. 1-695 Pletcher	Muskingum	San Creek	7-17-83	4,418-4,450	75 MCFG, 2 BO, AF	C
47	34-119-26759	Berea Oil and Gas Corp.	No. 3 Hermon	Muskingum	San Creek	6-9-81	4,388-4,410, 4,420-4,426	100 MCFG, AF	C
48	34-119-24957	Berea Oil and Gas Corp.	No. 1 Cain	Muskingum	Rich Hill	11-11-80	4,480-4,530	860 MCFG, TO, AF	C
49	34-119-24955	Berea Oil and Gas Corp.	No. 3 Cain	Muskingum	Rich Hill	11-14-80	4,674-4,716	1,100 MCFG, TO, AF	C
50	34-119-24405	Berea Oil and Gas Corp.	No. 1 Ball	Muskingum	Rich Hill	12-13-78	4,645-4,691	200 MCFG, AF	C
51	34-119-24444	Berea Oil and Gas Corp.	No. 1 Ball	Muskingum	Rich Hill	12-2-78	4,654-4,614	400 MCFG, 3 BO, AF	C
52	34-119-27139	Cavendish/Enterprise/Enovigas	No. 31 Ohio Power Co. AEV	Muskingum	Rich Hill	1-2-85	4,596-4,604	47 MCFG, AF	C
53	34-119-26450	Cavendish Petroleum of Ohio	No. 10A Ohio Power Co.	Muskingum	Rich Hill	1-28-83	4,834-4,912	10 MCFG, 5 BO, AF	C
54	34-119-26448	Cavendish Petroleum of Ohio	No. 9-A Ohio Power Co.	Muskingum	Rich Hill	1-19-83	4,882-4,937	25 MCFG, 10 BO, AF; PAA, 3-20-90	C
55	34-119-26869	Enterprise Energy Company	No. 50-A Ohio Power Co.	Muskingum	Rich Hill	12-29-83	4,850-4,890	588 MCFG, AF	C
56	34-119-26967	Cavendish/Enterprise/Enterprise Energy	No. 48A Ohio Power Co.	Muskingum	Rich Hill	4-2-84	4,892-4,894, 4,971-4,973	PAA, 9-26-84	C
57	34-119-26913	Enterprise Energy Corp.	No. 42-A Ohio Power Co.	Muskingum	Rich Hill	2-20-83	4,794-4,800	470 MCFG, AF	C
58	34-119-26475	Cavendish Petroleum of Ohio	No. 13-A Ohio Power Co.	Muskingum	Rich Hill	2-5-83	4,982-5,037	PAA, 2-5-83	C
59	34-121-21537	Micro Mineral Development Co.	No. 1 Ohio Power Co.	Noble/Ohio	Brookfield	6-2-72	4,924-4,980	2,400 MCFG, 50 BO, AF	C
60	34-121-23980	Land Provest, Inc.	No. 1 Tooms	Noble	Brookfield	4-22-89	4,929-4,979	50 MCFG, 1 BO, AF	C
61	34-121-21489	Quarry Petroleum Corp.	No. 58 Ohio Power Co.	Noble	Brookfield	9-14-71	4,974-5,020	150 MCFG, TO, N, 370 MCFG, 5 BO, AF	C
62	34-121-23148	Cavendish Petroleum	No. 67A Ohio Power	Noble	Brookfield	5-7-84	5,211-5,220, 5,265-5,266, 5,332-5,337	60 MCFG, AF	C, M
63	34-121-23189	Cavendish Petroleum of Ohio, Inc.	No. 73A Ohio Power Co.	Noble	Brookfield	6-12-84	5,238-5,293, 5,392-5,394	110 MCFG, AF	C, M
64	34-121-23226	Cavendish/Enterprise	No. 31 AEP Ohio Power Co.	Noble	Brookfield	11-29-84	5,234-5,241	118 MCFG, AF	C
65	34-121-23757	Everflow Eastern	No. 44 Ohio Power	Noble	Brookfield	4-11-90	5,275-5,312	250 MCFG, AF	C
66	34-121-22137	Benarity Corporation	No. 28 Reed	Noble	Brookfield	12-10-79	5,176-5,254	250 MCFG, AF	C
67	34-121-23235	Yarkee Exploration, Inc.	No. 3 Secrest	Noble	Brookfield	12-27-84	5,401-5,432	1,500 MCFG, 5 BO, AF	C
68	34-121-23710	Green Gas Company	No. 2 Teters	Noble	Brookfield	9-28-91	5,398-5,412	50 MCFG, 4 BW, AF	C
69	34-121-23377	Hansa Petroleum Company	No. 424 Hill	Noble	Sharon	11-29-84	5,234-5,409, 5,494-5,496	100 MCFG, AF	C, M
70	34-121-22074	Green Gas Company	No. 1 Ohio Power Forker	Noble	Sharon	5-18-78	5,203-5,305, 5,371-5,388	100 MCFG, AF	C, M
71	34-121-23273	Srara Corporation	No. 1 Caldwell	Noble	Sharon	11-12-84	5,384-5,534	100 MCFG, AF	C, M
72	34-121-23219	Loma Petroleum, Inc.	No. 2 Kill	Noble	Sharon	8-19-84	5,495-5,598	175 MCFG, 1 BO, AF	C, M
73	34-121-21487	Alco-Cat Oil Company	No. 1 Keith-Ohio Power Co.	Noble	Sharon	11-29-71	5,695-5,642	180 MCFG, AF	C, M
74	34-121-23088	New Frontier Exploration	No. 5 Pickenspang	Noble	Sharon	12-29-83	5,687-5,649	500 MCFG, AF	C
75	34-121-23396	Enterprise Energy Corporation	No. 3 Ogde	Noble	Sharon	2-26-85	5,674-5,789	20 MCFG, AF	C, M
76	34-121-21983	Allegheny Land & Mineral Co.	No. AG-10 Ohio Power Co.	Noble	Sharon	10-19-77	5,693-5,690	440 MCFG, AF	C, M
77	34-121-23418	Benarity Corporation	No. 43 Ohio Power	Noble	Sharon	10-30-66	5,695-5,694, 5,762-5,770	74, 12-4-65	C, M
78	34-121-23331	Benarity Corporation	No. 45 Ohio Power	Noble	Jackson	12-11-84	5,672-5,660, 5,782-5,796	150 MCFG, AF	C, M
79	34-121-23382	Loma/Enterprise/Enovigas	No. 1 Hale	Noble	Jackson	12-15-84	5,770-5,818	150 MCFG, 1 BO, AF	C, M
80	34-121-23263	Loma Petroleum (Enovigas)	No. 1 Hale	Noble	Jackson	12-6-84	5,723-5,842	180 MCFG, 3 BO, AF	C, M
81, A-A' (54)	34-121-21430	East Ohio Gas Company	No. 1596 Brown Comm.	Noble	Jackson	6-4-70	5,814-5,833	65 MCFG, AF	C
82	34-121-23319	Dirty Oil & Gas Corporation	No. 1-D Brown	Noble	Jackson	10-30-64	6,020-6,031, 6,130-6,141	200 MCFG, AF	C, M
83	34-121-23317	Dirty Oil & Gas Corporation	No. 10 Wickiana	Noble	Jackson	10-17-84	6,030-6,080, 6,171-6,184	25 MCFG, N, 150 MCFG, AF	C, M
84	34-121-23315	Dirty Oil & Gas Corporation	No. 20 Wickiana	Noble	Jackson	10-24-84	5,978-6,001, 6,084-6,094	125 MCFG, AF	C, M
85	34-121-23316	Dirty Oil & Gas Corporation	No. 13, P-3W-21	Noble	Jackson	10-24-84	5,837-6,082	100 MCFG, N, 200 MCFG, AF	C, M
86	34-121-23181	Dirty Oil & Gas Corporation	No. 13 Ford-C-N-G-RS	Noble	Jackson	9-3-84	5,888-6,110	125 MCFG, AF; PAA, 10-12-84	C, M
87	34-121-23252	Reserve Exploration, Inc.	No. 1 Black	Noble	Jefferson	11-4-83	6,163-6,201	75 MCFG, AF	C, M
88	34-121-22970	Reserve Exploration Company	No. 1 Black	Noble	Jefferson	1-13-83	6,174-6,180, 6,216-6,220, 6,314-6,320	100 MCFG, AF	C, M
89	34-121-22017	Cine Oil & Gas Company	No. 1 Greenless	Noble	Jefferson	8-10-78	6,130-6,148, 6,243-6,248	50 MCFG, AF	C, M
90	34-121-21278	Amerasia Petroleum Company	No. 1 Ullman	Noble	Ek	10-19-66	—	—	C
91	34-167-23306	Eastern Operating Company	No. 1 Galba	Washington/Ohio	Liberty	2-18-71	—	PAA, 2-20-71	—
92	34-167-23048	Ullman Operating/Rockoil	No. 2 Rockoil-Herman	Washington	Lawrence	6-5-85	6,813-6,888, 6,954-6,964	300 MCFG, AF	C, M
93	34-167-23253	Madison Ventures	No. 1 Huffman-Maddan	Washington	Lawrence	12-14-82	7,01		