



New Location
 Drill Deeper
 Abandonment

Company Owens, Libbey-Owens Gas Dept.
 Address _____
 Farm Little Coal Land Co.
 Tract _____ Acres 6173 Lease No. _____
 Well (Farm) No. 13 Serial No. 410
 Elevation (Spirit Level) 889'
 Quadrangle Madison
 County Boone District Washington
 Engineer _____
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date _____ Scale _____

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. Boone 160

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.

(Cont. Line)

Deep Well

3-0 236

Boo-160

5.34 x E 1/2 82-00
3193-11 1/2 38-00

THE OWENS, LIBBEY-OWENS GAS DEPARTMENT

507 - Jordan
Berea

Well Record Serial No. 410

Little Coal Land Co., Well No. 13, Washington District, Boone County, W. Va.
Drilling commenced 7-11-35. Completed Plugged and abandoned 10-19-35.
Elevation top of 13" casing 897.5 ft.
Casing: 10" 505 ft.
8 1/4" 1407 " all pulled out

Formations

Name	Color	Top	Bottom	Thickness	Remarks
Sand	gray	0	15	15	
Coal	black	15	18	3	
Slate	gray	18	20	2	
Sand	gray	20	63	43	Fresh water at 30'
Slate	black	63	110	47	
Coal	black	110	112	2	
Sand	gray	112	135	23	
Slate	black	135	185	50	
Sand	dark	185	197	12	
Coal	black	197	203	6	
Slate	dark	203	276	73	
Sand	white	276	311	35	
Slate	dark	311	447	136	
Sand	gray	447	452	5	
Slate	dark	452	560	108	
Sand	white	560	728	168	Fresh water at 685' filled up to 200'
Slate	black	728	733	5	
Sand	white	733	812	79	
Slate	dark	812	858	46	
Sand	white	858	876	18	
Slate	dark	876	988	112	
Sand	white	988	1089	101	
Slate	black	1089	1094	5	
Sand	white	1094	1150	56	
Slate & Shell	gray	1150	1162	12	
Sand	white	1162	1167	5	
Red Rock	red	1167	1202	35	
Slate	gray	1202	1218	16	
Sand	white	1218	1225	7	
Lime	dark	1225	1262	37	
Slate	dark	1262	1272	10	
Lime	dark	1272	1306	34	
Maxton Sand	white	1306	1328	22	
Little Lime	dark	1328	1358	30	
Slate	white	1358	1380	22	
Lime	black	1380	1396	16	
Slate	white	1396	1398	2	
Big Lime	white	1398	1592	194	
Injun Sand	red	1592	1630	38	
Slate	black	1630	1672	42	
Slate & Shells	gray	1672	1711	39	
Slate	dark	1711	1721	10	
Lime	gray	1721	1787	66	
Slate	white	1787	1807	20	
Slate	dark	1807	2049	242	
Slate	white	2049	2061	12	
Brown Shale	brown	2061	2079	18	Gas - 19,000
Berea Sand	white	2079	2100	21	Gas 2081-2085' - 27,000
Lime Shell	black	2100	2102	2	Test at 2100' - 19,000

deep

THE OWENS LIBBEY-OWENS GAS DEPARTMENT

Well Record Serial No. 110

Little Coal Land Co., Well No. 15.

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Formations

Name	Color	Top	Bottom	Thickness	Remarks
Lime	white	2102	2117	15	
Slate	dark	2117	2122	5	
Slate & Shells	gray	2122	2171	49	
Slate	gray	2171	2208	37	
Slate & Shells	gray	2208	2268	60	Gas test - 9,500 cu. ft.
Slate	gray	2268	2310	42	
Slate & Lime Shells	gray	2310	2371	61	
Slate	gray	2371	3093	722	
Shale	brown	3093	3115	22	
Slate	gray	3115	3291	176	
Slate gray with streaks of brown shale		3291	3311	20	
Slate	gray	3311	3394	83	
Slate gray with streaks of brown shale		3394	3436	42	
Slate	gray	3436	3459	23	
Gray Slate & Brown Shale		3459	3487	28	
Shale	brown	3487	3512	25	
Gray Slate & Brown Shale		3512	3636	124	
Slate	gray	3636	4037	401	
Shale	brown	4037	4119	82	
Lime Coniferous	gray	4119	4187	68	
Total depth			4187		Reduced hole at 4150' Gas test - 9,500

Shot with 863 pounds gelatin from 4030 ft. to 4150 ft.
 " " 1350 " " 3450 " " 3610 "
 " " 120 gals. glycerine " 2058 " " 2097 "

m

Washington District, Boone County, W. Va.
 The Owens, Libbey-Owens Gas Dept., Charleston, W. Va. (Box 1375).
 On 6173 acres, surface and mineral rights owned by Little Coal
 Land Co., Madison, W. Va.

Drilled under permit Boo-160, issued Nov. 730, 1935. (?)

Elevation, 889' L.

13" casing, 29'; 10", 505'; 8", 1407'.

Coal was encountered at 15-18, 110-112, and 197-203'.

Completion reported to Dept. of Mines Sept. 30, 1935.

Well was shot at 2058-2097', 3450-3640', and 4020-4140'.

Fresh water at 30 and 685'.

Dry hole.

	Top.	Bottom.
Sand, gray, soft	0	15
✓Coal, black, soft	15	18
Slate, gray, soft	18	20
Sand, gray, hard (hole full water at 30')	20	63
Slate, black, soft	63	110
✓Coal, black, soft	110	112
Sand, gray, hard	112	135
Slate, black, soft	135	185
Sand, black, soft	185	197
✓Coal, black, soft	197	203
Slate, dark, soft	203	276
Sand, white, hard	276	311
Slate, dark, soft	311	447
Sand, gray, soft	447	452
Slate, dark, soft	452	560
Sand, white, hard (hole full water, 685')	560	728
Slate, black, soft	728	733
Sand, white, hard	733	812
Slate, dark, soft	812	858
Sand, white, hard	858	876
Slate, dark, soft	876	988
Sand, white, hard	988	1089
Slate, black, soft	1089	1094
Sand, white, hard	1094	1150
Slate and shell, gray, soft	1150	1162
Sand, white, hard	1162	1167
Red rock, soft	1167	1202
Slate, gray, soft	1202	1218
Sand, white, hard	1218	1225
Lime, dark, hard	1225	1262
Slate, dark, soft	1262	1272
Lime, dark, hard	1272	1306
✓Maxton Sand, white, hard	1306	1328
✓Little Lime, dark, hard	1328	1358
Slate, white, soft	1358	1380
Lime, black, hard	1380	1396
Slate, white, soft	1396	1398
✓Big Lime, white, hard	1398	1592
✓Big Injun Sand, red, hard	1592	1630
Slate, black, soft	1630	1672
Slate and shells, gray, soft	1672	1711
Slate, dark, soft	1711	1721
Lime, gray, hard	1721	1787
Slate, white, soft	1787	1807
Slate, dark, soft	1807	2049

(OVER)

deep

LITTLE COAL LAND CO. NO. 410 WELL (Continued).

	Top.	Bottom.
Slate, white, soft	2049	- 2061
✓Brown shale, soft (19 ft. gas at 2079')	2061	- 2079
✓Berea Sand, white, hard	2079	- 2100
Lime shell, black, hard	2100	- 2102
Lime, white, hard	2102	- 2117
Slate, dark, soft	2117	- 2122
Slate and shells, gray, medium	2122	- 2171
Slate, gray, soft	2171	- 2203
Slate and shells, gray, soft and hard	2203	- 2268
Slate, gray, soft	2268	- 2310
Slate and lime shells, gray, hard	2310	- 2371
Slate, gray, soft	2371	- 3093
Shale, brown, soft	3093	- 3115
Slate, gray, soft	3115	- 3291
Slate, gray, with streaks of brown shale	3291	- 3341
Slate, gray, soft	3341	- 3394
Slate, gray, with streaks of brown shale	3394	- 3436
Slate, gray, soft	3436	- 3459
Slate and shale, gray and brown, soft	3459	- 3487
Shale, brown, soft	3487	- 3542
Slate and shale, gray and brown, soft	3542	- 3636
Slate, gray, soft	3636	- 4037
Shale, brown, soft	4037	- 4149
✓Lime, Corniferous, gray, hard, to bottom	4149	- 4187

461

4149
 889
 ———
 3260