





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

*Littleton*

WELL RECORD

Permit No. WET 231-R

Oil or Gas Well Stop  
(KIND)

Company THE MANUFACTURERS LIGHT AND HEAT COMPANY  
Address 800 Union Trust Bldg., Pgh., Penna.  
Farm Valentine Blatt Acres 136  
Location (waters) \_\_\_\_\_  
Well No. 4270 Elev. 1026'  
District Proctor County Wetzel  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_  
Drilling commenced March 27, 1953  
Drilling completed April 14, 1954  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_  
Open Flow 2.0/10ths Water in 3" Inch  
\_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume 315.478 Cu. Ft.  
Rock Pressure 300 lbs. 48 hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water \_\_\_\_\_ feet \_\_\_\_\_ feet  
Salt water \_\_\_\_\_ feet \_\_\_\_\_ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10		917'0"	Size of
8 1/4			
7		1701'9"	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Cleaned out				1853	Shlumberger	Measurement	
Filled with cement			1853	1841			
Set 6-5/8" Lead Plug			1841	1838	Show of gas	1789	
Total Depth				1838	Gas 1825 to	1830	



WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Permit No. Wet-231  
Littleton Quad.

Gas & Oil Well

Company	Hope Natural Gas Co.		CASING & TUBING	
Address	Clarksburg, W. Va.	13	148	58
Farm	Valentine Blatt	10	963	963
Location	ACRES 1.36	8-1/4	1603	1603
Well No.	Lynn Camp	6-5/8	1893	1893
Well No.	7913	ELEV. 1026	5-3/16	2608
District	Proctor - Wetzol County			
Surface	Valentine Blatt, Rl, Proctor, W. Va.		8-1/4" casing cemented by Halliburton	
Mineral	-			
Commenced	Oct. 3, 1939			
Completed	Dec. 23, 1939			
Shot	Not shot yet	Coal at:		
Open Flow	8/10ths Merc. in 3 inch	488'	24"	
Volume	1,119,000 c.f.	692	60	
Rock Pressure	178 lbs. 10 hrs.	798	84	
Oil	5 bbls. 1st 24 hrs.			
Water	-			

Formation	Top	Base	Formation	Top	Base	
Clay	0	6	Lime	955	980	
Lime	6	15	Red Rock	980	1000	
Red Rock	15	24	Slate	1000	1080	
Slate	24	37	Red Rock	1080	1090	
Lime	37	50	Slate	1090	1155	
Slate	50	60	Lime	1155	1175	
Red Rock	60	72	Slate	1175	1185	
Lime	72	120	<del>L. Dunkard Sand</del> (1185)	1185	1203	
Red Rock	120	130	Slate	1203	1230	
Slate	130	155	<del>Sand</del> 7 BD	1250	1260	Oil 1255-
Lime	155	160	Lime	1272	1275	1260
Slate	160	168	Red Rock	1275	1280	
Red Rock	168	175	<del>L. Dunkard Sand</del>	1280	1302	
Slate	175	204	A Slate	1302	1325	
Lime	204	220	Lime	1325	1331	
Slate	220	250	Slate	1331	1355	
Red Rock	250	260	<del>Gas Sand</del> 1357	1355	1397	1344
Lime	260	275	Slate	1397	1405	
Slate	275	285	Lime	1405	1417	
Lime	285	290	Slate	1417	1425	
Sand	290	307	<del>1st Salt Sand</del> 1420	1425	1452	
Red Rock	307	315	Slate	1452	1460	
Lime	315	335	<del>2nd Salt Sand</del> 1460	1460	1481	
Red Rock	335	345	Slate	1481	1512	
Slate	345	372	<del>Sand</del> 1st Salt 1512	1512	1565	
Lime	372	400	Slate	1565	1599	
Slate	400	437	Lime	1599	1606	
Lime	437	455	Slate	1606	1675	
Sand	455	475	Lime	1675	1690	
Slate	475	488	Sand	1690	1730	
Coal	488	490	Slate	1730	1777	
Slate	490	500	<del>Sand</del> (Nixon) 1777	1777	1820	Gas 1790-
Lime	500	523	Slate	1830	1855	1817-1822
Sand	523	555	<del>Little Lime</del> 1855	1855	1872	
Slate	555	568	<del>Pencil Cave</del> 1872	1872	1876	
Lime	500	523	<del>Big Lime</del> 1876	1876	1944	
Sand	523	555	<del>Big Injun Sand</del> 1944	1944	2180	
Slate	555	568	Slate	2180	2195	
Lime	568	692	Sand	2195	2215	
Coal	692	697	Slate	2215	2350	
Lime	697	798	Sand	2350	2370	
Pgh. Coal	798	805	Slate & Shells	2370	2558	
Lime	805	820	Sand	2558	2570	
Slate	820	860	Slate	2570	2605	
Murphy Sand	860	904	<del>Sand</del> Sh. Gas	2605	2610	Gas 2824-
Red Rock	904	910	Slate	2610	2663	2827
Slate	910	920	Red Rock	2663	2680	
Lime	920	932	Slate	2680	2770	
Red Rock	932	955	<del>Gordon Stray S</del> 2770	2770	2784	Oil 2831
			Slate & Shells	2784	2820	
			<del>Gordon Sand</del> 2820	2820	2837	2837
			Slate	2837	2853	T.D.

Proctor District, Wetzel County, W. Va.  
 By Hope Natural Gas Co., Clarkburg, W. Va.  
 Located 1.43 mi. N. of 80° 40' and 2.91 mi. S. of 39° 45' - NW - Littleton Quadrangle.  
 Elevation, 1026' L.

Permit Wet-231.  
 Drilling commenced Oct. 3, 1939; completed Dec. 3, 1939.

Gas and oil well.  
 Volume, 1,129,000 cu. ft.; rock pressure, 178 lbs. in 10 hrs.  
 Oil, 5 bbls., 1st 24 hours.

13" casing, 148'; 10", 963'; 8", 1603'; 6", 1893'; 5", 2608'.  
 Sample description from 10 to 1825' by G. H. Apocuri and from 1825 to 2653' by  
 J. H. C. Martens. The placing of the boundary between the Dunkard and  
 Monongahela is based on the assumption that the coal at 488 to 490' depth is  
 the Waynesburg seam. It then appears that the Waynesburg Sandstone is missing  
 here or is reduced to a very small thickness.

Record from Martens Dec. 3, 1943.

Top.	Bottom.	Thickness.	
DUNKARD GROUP, 488+ FEET			
0 -	10	10	No samples
10 -	15	5	Shale, grayish-green, with limy concretions
15 -	35	20	Shale, red, 50%; green sandy siltstone, 50%
35 -	70	35	Shale, red, with limy concretions
70 -	75	5	Siltstone, nearly white
75 -	86	11	Shale, red, with limy concretions, 60%; green siltstone, 40%
86 -	91	5	Shale and siltstone, green
91 -	97	6	Shale, red, with limy concretions, 50%; green shale, 50%
97 -	105	8	Shale, green
105 -	110	5	Shale, red, with limy concretions, 75%; green sandy siltstone, 25%
110 -	117	7	Shale, green, very silty
117 -	132	15	Siltstone, green
132 -	140	8	Shale, gray, 50%; red shale, 50%
140 -	146	6	Shale, gray
146 -	150	4	Shale, red, with limy concretions, 65%; grayish-green shale, 35%
150 -	168	18	Shale, green, calcareous
168 -	175	7	Shale, red, with limy concretions
175 -	184	9	Shale, red, 60%; green shale, 40%
184 -	190	6	Shale, green, with calcareous streaks
190 -	220	30	Siltstone, light-gray, sandy, micaceous
220 -	233	13	Shale, green, 60%; very light gray micaceous siltstone, 10%; light-brown limestone, 30%
233 -	245	12	Siltstone, light-gray, sandy
245 -	251	6	Shale, light-gray, soft, with limy concretions
251 -	262	11	Shale, red, with limy concretions
262 -	273	11	Shale, green, with limy concretions
273 -	280	7	Siltstone, green, sandy
280 -	286	6	Shale, green, with some siderite
286 -	307	21	Sandstone, white
307 -	313	6	Shale, green, with limy concretions
313 -	320	7	Shale, gray
320 -	326	6	Shale, gray, 70%; light-brown limestone, 30%
326 -	338	12	Shale, red, with limy concretions
338 -	345	7	Siltstone, green, 60%; green shale, 20%; red shale, 20%
345 -	351	6	Shale, green, 70%; green siltstone, 30%
351 -	356	5	Shale, green and gray
356 -	368	12	Shale, gray to dark-gray

(over)

Top.	Bottom.	Thickness.	
368	- 431	63	Shale, light-gray to greenish-gray, with small limy concretions
431	- 443	12	Shale, grayish-green, with siderite spherulites
443	- 449	6	Siltstone, light-gray, very sandy
449	- 455	6	Shale, greenish-gray, 60%; light-gray siltstone, 40%
455	- 462	7	Sandstone, white
462	- 470	8	Limestone, brown, 70%; green and gray shale, 30%
470	- 476	6	Shale, gray, clayey, 70%; white sandstone, 30%
476	- 488	12	Limestone, brown, 50%; gray shale, 50%
HONOLUAHOLA FORMATION, 317 FEET			
488	- 490	2	Coal (Waynesburg Coal)
490	- 507	17	Shale, gray
507	- 514	7	Siltstone, greenish-gray, 50%; gray shale, 50%
514	- 520	6	Shale, gray, clayey, calcareous
520	- 526	6	Shale, red, with limy concretions
526	- 554	28	Sandstone, white
554	- 560	6	Shale, gray
560	- 567	7	Siltstone, green, sandy
567	- 579	12	Shale, gray, clayey, 60%; brown limestone, 40%
579	- 585	6	Siltstone, green, sandy, 70%; brown limestone, 30%
585	- 591	6	Limestone, brown
591	- 616	25	Shale, light-green, soft, 70%; brown limestone, 30%
616	- 622	6	Shale, green, calcareous
622	- 629	7	Siltstone, green, sandy, 75%; light-brown limestone, 25%
629	- 635	6	Shale, green
635	- 641	6	Limestone, brown
641	- 657	16	Limestone, light-brown
657	- 663	6	Limestone, light-brown, 70%; green and gray shale, 30%
663	- 670	7	Limestone, light-brown, silty
670	- 683	13	Shale, light-gray
683	- 692	9	Limestone, light-brown, shaly
692	- 697	5	Coal (Sewickley Coal)
697	- 701	4	Shale, gray to dark-gray, clayey, 95%; coal, 5%
701	- 707	6	Shale, gray, 70%; limestone, light-brown, 30%
707	- 736	29	Limestone, light-brown, 60 to 90%; gray shale, 40 to 10%
736	- 742	6	Shale, green
742	- 747	5	Shale, gray, silty, calcareous
747	- 753	6	Limestone, light-brown
753	- 760	7	Limestone, grayish-green
760	- 766	6	Shale, very light gray
766	- 778	12	Siltstone, nearly white, sandy, 70%; light-gray shale, 30%
778	- 798	20	Siltstone, light-gray, with siderite spherulites, 75%; gray shale, 25%
798	- 805	7	Coal (Pittsburgh Coal)
CONEMAUGH, ALLEGHENY, AND POTTSVILLE FORMATIONS, 1067 FEET			
805	- 812	7	Shale, light-gray, with siderite spherulites
812	- 832	20	Shale, very light-gray, with siderite spherulites
832	- 837	5	Shale, gray
837	- 844	7	Shale, grayish-green
844	- 861	17	Shale, grayish-green, with siderite spherulites
861	- 867	6	Siltstone, grayish-green, sandy, 70%; red and gray shale, 30%
867	- 900	33	Sandstone, white <i>Murphy</i>
900	- 912	12	Shale, grayish-green
912	- 930	18	Shale, gray, soft, clayey
930	- 947	17	Shale, red, with many limy concretions
947	- 955	8	Shale, grayish-green
955	- 963	8	Shale, light-gray, clayey, 85%; black shale and coal, 15%

(CONTINUED ON PAGE 3)

Top.	Bottom.	Thickness.	
963	- 970	7	Shale, grayish-green
970	- 976	6	Shale, red, 50%; light-gray shale, 50%
976	- 995	19	Shale, red, with limy concretions
995	- 1005	10	Shale, greenish-gray, silty
1005	- 1011	6	Shale, red, 60%; green shale, 40%
1011	- 1028	17	Shale, red, with limy concretions
1028	- 1043	15	Shale, reddish-gray, clayey
1043	- 1058	15	Shale, grayish-green
1058	- 1073	15	Shale, gray, soft
1073	- 1088	15	Shale, red, with limy concretions, 70%; white shale, 30%
1088	- 1093	5	Shale, light-gray
1093	- 1098	5	Shale, red
1098	- 1105	7	Shale, green, calcareous
1105	- 1120	15	Shale, light-gray, soft, thinly laminated
1120	- 1128	8	Shale, gray
1128	- 1135	7	Shale, very dark-gray
1135	- 1142	7	Shale, light-gray to gray
1142	- 1152	10	Shale, dark-gray
1152	- 1158	6	Shale, dark-gray, 75%; sandstone, white, 25%
1158	- 1187	29	Siltstone, dark-gray, shaly
LD- 1187	- 1203	16	Siltstone, white, sandy, with siderite spherulites
1203	- 1210	7	Shale, light-gray
1210	- 1228	18	Shale, very dark gray
1228	- 1234	6	Shale, light-gray
1234	- 1239	5	Shale, light-gray and red
1239	- 1250	11	Shale, gray, 60%; light-gray siltstone, 40%
1250	- 1258	8	Sandstone, white (oil, 1255-1260')
1258	- 1270	12	Shale, light-gray, calcareous
1270	- 1275	5	Shale, light-gray and red
- 1275	- 1307	32	Sandstone, white
1307	- 1314	7	Shale, white, gray, and red
1314	- 1322	8	Siltstone, light-gray, shaly, 60%; dark-gray shale, 40%
1322	- 1330	8	Shale and siltstone, light-gray, with limy concretions
1330	- 1339	9	Shale, very light gray
1339	- 1345	6	Shale, red, with limy concretions
1345	- 1350	5	Shale, dark-gray
1350	- 1357	7	Siltstone, white, sandy
- 1357	- 1394	37	Sandstone, white
1394	- 1404	10	Shale, gray, clayey
1404	- 1420	16	Shale, very light gray
- 1420	- 1452	32	Sandstone, white, medium-grained
1452	- 1458	6	Shale, gray, with siderite spherulites
- 1458	- 1465	7	Sandstone, white, fine
1465	- 1484	19	Shale, various colors (avings?)
1484	- 1493	9	Shale, gray
1493	- 1500	7	Shale, dark-gray, 50%; white sandstone, 50%
1500	- 1507	7	Shale, white and gray, 60%; white sandstone, 40%
- 1507	- 1520	13	Sandstone, white, fine
1520	- 1535	15	Sandstone, white, very coarse
1535	- 1562	27	Sandstone, white, fine
1562	- 1593	31	Shale, gray to dark-gray
1593	- 1607	14	Shale, white to light-gray
1607	- 1671	64	Shale, gray to dark-gray
1671	- 1692	21	Siltstone, gray, sandy
1692	- 1717	25	Sandstone, white
1717	- 1730	13	Siltstone, light-gray, sandy
1730	- 1740	10	Shale, dark-gray

Top.	Bottom.	Thickness.	
1740	- 1751	11	Siltstone, gray to white, sandy, with siderite spherulites
✓ 1751	- 1825	37	Sandstone, white, fine
1825	- 1825	7	Sandstone, white, coarse, nearly all quartz; crystal faces on many grains
1825	- 1842	17	Shale, dark-gray, silty; a little black shale and traces of coal, 1832-1832'
1842	- 1855	13	Siltstone, light-gray
HAUGH GROUP, 37 FEET			
1855	- 1866	11	Shale, gray, soft, calcareous, and fossiliferous
- 1866	- 1872	6	Limestone, grayish-brown ("Little Line")
- 1872	- 1876	4	Shale, gray, soft, thinly laminated ("Pencil Cave")
- 1876	- 1892	12	Sandstone, white, very fine
GREENHILL LIMESTONE, 93 FEET			
- 1892	- 1943	51	Limestone, light-brown <i>Big Line</i>
✓ 1943	- 1978	35	Sandstone, nearly white, fine- to medium-grained, highly calcareous; larger grains are rounded and frosted
1978	- 1985	7	Sandstone, white, coarse, moderately calcareous
LOWER MISSISSIPPIAN AND UPPER DEVONIAN, 868+ FEET			
1985	- 2014	29	Sandstone, white, with green specks, fine, slightly calcareous
2014	- 2182	168	Sandstone, very light gray to white, fine- to medium-grained
2182	- 2199	17	Shale, gray, silty
2199	- 2215	16	Sandstone, nearly white, fine
2215	- 2238	23	Shale, gray
2238	- 2285	47	Siltstone and shale, gray
2285	- 2306	21	Shale, gray, with small amount of siltstone
2306	- 2350	44	Siltstone and shale, gray
2350	- 2400	50	Sandstone, nearly white, very fine; small amounts of gray shale and siltstone
2400	- 2475	75	Siltstone, gray, shaly; some parts nearly coarse enough to be classed as sandstone
2475	- 2529	54	Shale, dark-gray, silty
2529	- 2550	21	Shale and siltstone, dark-gray
2550	- 2570	20	Sandstone, very light yellow, very fine
2570	- 2604	34	Shale and siltstone, gray
2604	- 2608	4	Siltstone, very light gray, sandy
2608	- 2630	22	Siltstone, gray, fine, shaly
2630	- 2639	9	Shale, gray, 60%; red shale, 40%
2639	- 2657	18	Shale, gray, silty
2657	- 2735	68	Shale, red, silty, micaceous
2735	- 2764	39	Shale, gray, with some sandy streaks
2764	- 2775	11	Sandstone, nearly white, very fine
2775	- 2800	25	Sandstone, white to greenish, very fine, 60%; gray shale, 40%
2800	- 2820	20	Shale, gray; also white to green siltstone and very fine sandstone
- 2820	- 2825	5	Sandstone, white, coarse; sample consists mostly of angular fragments formed by breaking of large grains or pebbles (gas, 2824-2827')
2825	- 2833	8	Shale, gray (oil, 2831'; Gordon Sand is reported for interval 2820-2837', so this shale may beavings
2833	- 2838	5	Sandstone, nearly white, fine, 70%; gray shale, 30%
2838	- 2853	15	Shale and siltstone, gray
	2853		Total depth