

Latitude

Longitude

2.65s
.41w

Topo Location

7.5' Loc. _____ 15' Loc. _____
(calc.) _____

Company Manufact H&H

Farm Wm Howard Hrs #1003

15' Quad _____
(sec.)

7.5' Quad Cameron

District Cameron

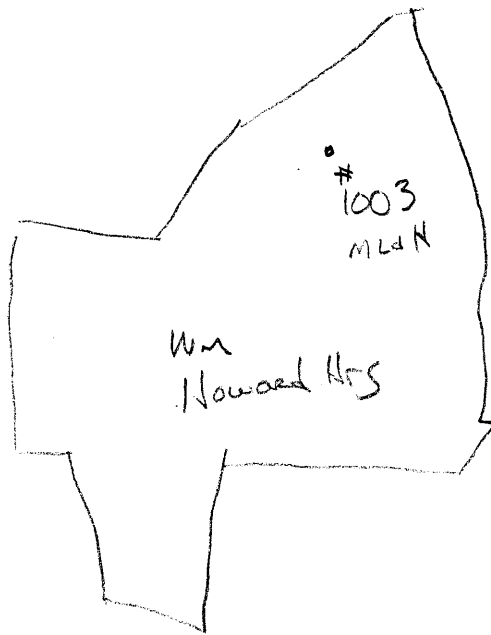
WELL LOCATION PLAT

County 051 Permit 30354

Cameron

39 55

80 30



30354/

W. H. HOWARD NO. 1003 WELL.

Liberty District, Marshall County, W. Va.
By Manufacturers Light & Heat Co.
Completed Jan. 25, 1910.
Record from Mr. Schillhahn Sept. 30, 1939.

	Top.	Bottom.
Pittsburgh Coal	920	- 925
Little Dunkard Sand	1170	- 1190
Big Dunkard Sand	1265	- 1294
Gas Sand	1470	- 1510
Salt Sand	1630	- 1670
2nd Salt Sand	1685	- 1740
Maxton Sand	1860	- 1890
Big Lime	1960	- 2000
Big Injun Sand	2000	- 2245
50-Foot Sand	2480	- 2500
Gordon Stray Sand	2855	- 2870
Gordon Sand (gas, 2938')	2914	- 2943
Total depth		2945



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

405

WELL RECORD

Permit No. MA28-354-A Oil or Gas Well Gas (KIND)

Company THE MANUFACTURERS LIGHT AND HEAT COMPANY
Address 800 Union Trust Bldg., Pgh., Penna.
Farm W. H. Howard, et al Acres 115
Location (waters) _____
Well No. 1093 Elev. _____
District Cameron County Marshall
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by The Manufacturers Light and Heat Company Address Pgh., Pa.
Drilling commenced December 13, 1909
Drilling completed January 25, 1910
Date Shot _____ From _____ To _____
With _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of <u>6 5/8</u>
10			Depth set <u>2959-10/12</u>
8 1/4	<u>1280</u>	<u>890</u>	
6 3/4	<u>1975</u>	<u>1975</u>	
5 3/16			
4 3/8		<u>2976-9/12</u>	Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure 350 lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
COAL WAS ENCOUNTERED AT 920 FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Pittsburgh Coal			920	925			
Little Dunkard			1170	1190			
Big Dunkard			1265	1294			
Gas Sand			1470	1510			
Salt Sand			1620	1670			
Second Salt			1685	1740	Gas at 2938		
Maxium Sand			1860	1890	Steel Line Measurement		
Big Lime			1960	2000	Jab 26 well shot with 80 qts.		
Big Injun Sand			2000	2245	In Gordon Sand Increased flow		
Fifty Foot			2480	2500	from 13 bibs. to 20		
Stray Sand			2855	2870	Jay 31 well tubed with 4" S.H.		
Gordon Sand			2914	2943	Anchor 4 joints 85 2/12"		
TOTAL DEPTH				2945	Above packer 146 joints 2891 7/12"		
Cage placed on top of 2nd joint Packer placed on top of 4th joint							
THIS WELL WAS DRILLED DEEPER WHILE CLEANING OUT UNDER ORDER C-13296 September, 1941							
Pittsburgh Coal			920	925			
Gordon Sand			2914	2943			
Slate			2943	2990			
4th Sand			2990	2994	Gas at 2992'		
Slate			2994	3034			
5th Sand			3034	3037			
TOTAL DEPTH				3037			



FEB 11 1953