



COAL OWNED BY \_\_\_\_\_  
RECONDITION  
 NEW LOCATION...   
 DRILL DEEPER...   
 ABANDONMENT...

0-25-9

COMPANY THE MANUFACTURERS LIGHT & HEAT  
 ADDRESS 800 UNION TRUST BLDG., PGM, PA.  
 FARM ELMER & CECIL HARTLEY  
 TRACT \_\_\_\_\_ ACRES 100 LEASE No. 19438  
 WELL (FARM) No. 1 SERIAL No. 4620  
 ELEVATION (SPIRIT LEVEL) 186260'  
 QUADRANGLE CAMERON NE  
 COUNTY MARSHALL DISTRICT WEBSTER  
 ENGINEER A. C. Strout M.  
 ENGINEER'S REGISTRATION No. 1912  
 FILE No. \_\_\_\_\_ DRAWING No. Y-25-295  
 DATE 17 MAR 61 SCALE 1"=800'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON  
**WELL LOCATION MAP**  
 FILE No. MARS-408R

+ 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.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

WELL RECORD

Quadrangle Cameron  
Permit No. MARS-408-R

Oil or Gas Well GAS  
(KIND)

Company The Manufacturers Lt. and Ht. Co.  
Address 800 Union Trust Bldg., Pittsburgh 19, Pa.  
Farm Elmer & Cecil Hartley Acres 100  
Location (waters) \_\_\_\_\_  
Well No. L-4620 Elev. 1262.60G.L. 16  
District Webster County Marshall  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
13 3/8"	61'2"	61'2"	
10 3/4"	770'	770'	Size of
8 5/8"	1230'3"	1230'3"	Depth set
7"	1234'4"	1804'	
5 3/16"			
4 1/2"	1977'5"	1977'5"	Perf. top
2"			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Re Drilling commenced June 5, 1961  
Re Drilling completed December 14, 1961  
Date Shot 12/11/61 From 1888' To 1931'  
With Pitot Tube  
Open Flow /10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in 4 1/2 Inch  
Volume 6,090,000 Cu. Ft.  
Rock Pressure 780 lbs. 72 hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water \_\_\_\_\_ feet  
Salt water \_\_\_\_\_ feet

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
COAL WAS ENCOUNTERED AT 730 FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
		THICKNESS					
✓ Pittsburgh Coal		6	730	736			
✓ Big Dunkard Sand		39	1198	1237			
✓ Gas Sand		67	1364	1431			
✓ 1st Salt Sand		30	1504	1534			
✓ 3rd Salt Sand		17	1660	1677			
Break		41	1677	1718			
✓ 3rd Salt Sand		44	1718	1762			
✓ Big Injun			1815				
Drilled to a Total Depth of 1978'.					Pay Zones from Schlumberger Surveys		
TOTAL DEPTH					1888 - 1907'	wet gas	
					1907 - 1919'	wet gas	
					1924 - 1931'	little gas, mostly water.	
Drilling Completed 9/27/61 Well Completed 12/14/61							
7" Casing - 1234'4" Screwed on and Cemented to Surface							
9/18/61 Found Cement inside & outside tubing to Depth of 1924'. Open Flow from pay zone (1924-1931) was 32MCF/day with hole full of water to within 750' of surface.							
9/27/61 Perforated pay zone from 1907' to 1919' to determine the possibility of a water closure well. Found more gas production.							
12/11/61 Perforated rest of pay zone from 1888' to 1907' - Increased gas production but the well continues to produce a large amount of water.							