



COAL OWNED BY _____

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."
 Minimum degree of accuracy is one part in 200

Signed Robert M. Heill
 J.S.

COMPANY THE MANUFACTURERS LIGHT & HEAT
 ADDRESS 800 UNION TRUST BLDG., PGH., PA.
 FARM J. MURPHY
 MAP 0-25/24 ACRES 104 LEASE NO. 2864
 WELL (FARM) NO. 1 SERIAL NO. 1628
 ELEVATION (SPIRIT LEVEL) 1089'
 QUADRANGLE CAMERON SE
 COUNTY MARSHALL DISTRICT Cameron
 POINT OF PROVEN ELEVATION CAMERON B.M. U.S.G.S.
 FILE NO. _____ DRAWING NO. Y-25-964
 DATE 5 JAN. 1964 SCALE 1" = 400'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
 WELL LOCATION MAP
 FILE NO. MARS-481-A

+ 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.

New Big Run a gas storage

J. A. MURPHY NO. 1628 WELL.

Cameron District, Marshall County, W. Va.
 By Manufacturers Light & Heat Co.
 Completed Sept. 20, 1913.
 Record from Mr. Schillingham Sept. 30, 1930.

	Top.	Bottom.
Pittsburgh Coal	69	705
Little Burkard Sand	1062	1067
Big Burkard Sand	1167	1217
Big Lane (show oil & gas, 1760')///	1795	1835
Big Injun Sand (break, 1925-1940-1970 and 1980')	1835	2090
50-Foot Sand (little gas, 2660')	2656	2668
Gordon Sand	2721	2744
Total depth		2744



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Quadrangle Cameron

Permit No. MARS-481

WELL RECORD

Oil or Gas Well Storage
(KIND)

Company The Manufacturers Light & Heat Company
Address 800 Union Trust Building, Pittsburgh, Pa.
Farm J. A. Murphy Acres 10 1/4
Location (waters) Grave Creek
Well No. 1628 Elev. 1089.00'
District CAMERON County Marshall
The surface of tract is owned in fee by Mrs. NICHOLS
Harold Hammar Address Cameron, W. Va.
Mineral rights are owned by J. C. Reid Hrs.
Cameron, Address West Virginia
Drilling commenced June 18, 1965
Drilling completed July 6, 1965
Date Shot N/A From N/A To N/A
With Well not shot
Open Flow /10ths Water in N/A Inch
Not Tested /10ths Merc. in N/A Inch
Volume N/A Cu. Ft.
Rock Pressure N/A lbs. N/A hrs.
Oil No Oil bbls., 1st 24 hrs.
WELL ACIDIZED No
WELL FRACTURED No

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size <u>OO</u>			<u>Left in Well</u>
16			Kind of Packer
13			<u>Disc. Well</u>
10 <u>10-3/4"</u>	<u>OO</u>	<u>152'</u>	Size of <u>6-5/8" X 1"</u>
8 1/2 <u>8-5/8"</u>	<u>OO</u>	<u>98 1/2'</u>	Depth set <u>20 1/2'</u>
6 3/4 <u>7"</u>	<u>OO</u>	<u>95 3/4'</u>	
5 3/16			
3 <u>4-1/2"</u>	<u>OO</u>	<u>30'</u>	Perf. top <u>N/A</u>
2			Perf. bottom <u>N/A</u>
Liners Used			Perf. top <u>N/A</u>
			Perf. bottom <u>N/A</u>

CASING CEMENTED --- SIZE --- No. Ft. --- Date ---
No Casing Cemented
COAL WAS ENCOUNTERED AT 710 FEET 00 INCHES
710 FEET 00 INCHES 717 FEET 00 INCHES
--- FEET --- INCHES --- FEET --- INCHES

RESULT AFTER TREATMENT N/A
ROCK PRESSURE AFTER TREATMENT N/A
Fresh Water N/A Feet N/A Salt Water N/A Feet N/A

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
<u>Pgh. Coal</u>			<u>710</u>	<u>717</u>			
<u>Murphy Sand</u>			<u>812</u>	<u>820</u>			
<u>Big Dunkard</u>			<u>118 1/4</u>	<u>1225</u>			
<u>1st Salt Sand</u>			<u>1392</u>	<u>1405</u>			
<u>3 rd Salt Sand</u>			<u>1527</u>	<u>1553</u>			
<u>Maxton Sand</u>			<u>1712</u>	<u>1768</u>			
<u>Big Lime</u>			<u>1818</u>	<u>1852</u>			
<u>Big Injun</u>			<u>1856</u>	<u>(Assumed) 2110</u>			<u>1928' to 1950' Shale. 1968' to 197 1/2' - 11% Porosity and 20% Water Saturation.</u>

Note: Well located in School Yard, plugged to surface as follows: 2827' to 2520' Aquagel, 2520' to 2460' Cement, 2460' to 2120' Aquagel, 2120' to 2060' Cement, 2060' to 1910' Aquagel, 1910' to 1850' Cement, 1850' to 1810' Aquagel, 1810' to 1050' Cement, 1050' to Surface, Aquagel. All plugging material was run through 2-3/8" Upset Tubing by Well Service Inc.. Well logged by Schlumberger Well Survey Corp.. The original 8-5/8" Casing will serve as Vent to surface, was ripped through Pittsburgh Coal.

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NO. 4
APPROVED BY
A. T. Cable
A. T. CABLE
MAY 1965