



Minimum Error of Closure 1 in 200'

Source of Elevation Elev. at forks of road = 1454

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.

- Fracture
- New Location
- Drill Deeper
- Abandonment

Signed: [Signature]  
Squares: N S E W

Map No.

Company **CARNEGIE NATURAL GAS CO.**  
 Address Munhall, Penna.  
 Farm Lem D. Harbert  
 Tract Acres 72.5 Lease No. 3326  
 Well (Farm) No. Two Serial No. 1775  
 Elevation (Spirit Level) 1407  
 Quadrangle Centerpoint N.E.  
 County Wetzel District Grant  
 Engineer [Signature]  
 Engineer's Registration No. 1227  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Oct. 26, 1972 Scale 1" = 30p = 495'

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

**WELL LOCATION MAP**

FILE NO. Wet-593

+ 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.

6-6 Smithton-Flint-Sedalia (99)

NOV 8 1972



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD <sup>1/2</sup>

Quadrangle Centerpoint NE

Permit No. WET-593

Rotary  Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas   
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Company Carnegie Natural Gas Company  
Address 3904 Main St., Munhall, Pa. 15120  
Farm Lem D. Harbert Acres 72.5  
Location (waters) Trailer Fork  
Well No. 2-1775 Elev. 1407'  
District Grant County Wetzel  
The surface of tract is owned in fee by Emory  
Talkington  
Address Smithfield, W. Va.  
Mineral rights are owned by Pat Dallison/Lory L. Harbert, Atty-in-fact, 1418 Hoffman Ave. Address Clarksburg, W. Va. 26301  
Drilling Commenced Nov. 6, 1973  
Drilling Completed Nov. 13, 1973  
Initial open flow 33,000 cu. ft. \_\_\_\_\_ bbls.  
Final production 169,000 cu. ft. per day \_\_\_\_\_ bbls.  
Well open 6 hrs. before test. 135 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 16"	10'	10'	
13-10" 10-3/4"	1135'	1135'	600 sacks
9 5/8			
8 5/8			
7	2354'	2354'	35 sacks
5 1/2			
4 1/2	3235'	3235'	110 sacks
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record.  
Fractured 8/21/73: three stages - 3112'-3188', 2956'-2962', and 2402'-2431', using 2098 bbl. water and 65,000# 20-40 sand.

Coal was encountered at 1100-1105' Feet 60 Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Big Injun Sand (30') Depth Injun 2402'-3112' (2956'-62)  
Gordon Sand 3112'-3188' - Gordon

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	15		
Red Rock			15	40		
Sand			40	80		
Slate			80	112		
Sand			112	150		
Red Rock			150	173		
Sand			173	226		
Red Rock			226	247		
Sand			247	261		
Slate			261	273		
Red rock			273	291		
Slate			291	307		
Sand			307	320		
Red Rock			320	341		
Slate			341	354		
Red Rock			354	365		
Slate			365	368		
Red Rock			368	373		
Lime Shells			373	436		
Red Rock			436	495		
Slate			495	561		
Red Rock			561	595		
Slate			595	734		
Sand			734	790		

RECEIVED

DEC 17 1973

OIL & GAS DIVISION  
DEPT. OF MINES

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet / 2	Bottom Feet	Oil, Gas or Water	* Remarks
Slate			790	801		
Slate and Shells			801	814		
Slate			814	821		
Sand			821	825		
Slate			825	870		
Sand			870	888		
Slate			888	896		
Sand			896	905		
Slate			905	915		
Sand			915	946		
Slate and Sand			946	989		
Sand			989	1016		
Slate and Shells			1016	1072		
Sand			1072	1078		
Slate and Shells			1078	1100		
Coal			1100	1105		
Slate and Shells			1105	1184		
Slate			1184	1207		
Red Rock			1207	1220		
Slate			1220	1225		
Slate and Shells			1225	1292		
Red Rock			1292	1325		
Slate and Shells			1325	1427		
Sand			1427	1470		
Slate			1470	1486		
Sand			1486	1517		
Slate			1517	1570		
Sand			1570	1610		
Slate and Shells			1610	1766		
Slate			1766	1820		
Sand			1820	1829		
Slate and Shells			1829	1956		
Slate			1956	2058		
Slate and Sand			2058	2181		
Red Rock			2181	2207		
Slate			2207	2214		
Red Rock			2214	2223		
Slate			2223	2251		
Sand and Lime			2251	2269		
Slate			2269	2287		
Lime			2287	2292		
Slate			2292	2295		
Lime			2295	2361		
Sand			2361	2472		
Sand and Shells			2472	2735		
Sand			2735	2749		
Slate and Shells			2749	2853		
Sand			2853	2864		
Slate and Shells ?			2864	2965		
Sand			2965	2983		
Slate and Shells			2983	3049		
Sand - Gordon			3049	3164		
Slate			3164	3176		
Sand			3176	3190		
Slate and Shells			3190	3416		
Total Depth				3416		

2295  
 1407  
 ---  
 888

Date December 12, 19 73

APPROVED CARNEGIE NATURAL GAS COMPANY, Owner

By Roy S. Ludwig  
 (Title)

ENCLOSURE



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

**RECEIVED**  
OCT 30 1972  
OIL & GAS DIVISION  
DEPT. OF MINES

**Oil and Gas Division**  
**OIL AND GAS WELL PERMIT APPLICATION**

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

DATE October 27, 1972  
Company Carnegie Natural Gas Co.  
Address 3904 Main St., Monhall, Pa.  
Farm Lan D. Harbert Acres 72.5  
Location (waters) Branch of South Fork Fish Creek  
Well No. 2-1775 Elevation 1407  
District Grant County Wetzel  
Quadrangle Centerville N.E.

Surface Owner Emory Talkington  
Address Smithfield, W. Va.  
Mineral Owner Walt Dallison / Lory L. Harbert  
Address Polson, W. Va. 1418 Hoffman Ave  
Coal Owner Mountaineer Coal Co.  
Address Monongah, W. Va. Clarksburg, W. Va.  
Coal Operator \_\_\_\_\_  
Address \_\_\_\_\_

Mr Arthur  
INSPECTOR TO BE NOTIFIED Null  
Box 296 PH: 775-5611  
Shyndel  
W. Va. 26575

**THIS PERMIT MUST BE POSTED AT THE WELL SITE**

All provisions being in accordance with Chapter 22, of the W. Va. code, the location is hereby certified for drilling. This permit shall expire if operations have not commenced by 2-29-73

T. E. Todd  
Deputy Director - Oil & Gas Division

**GENTLEMEN:**

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated November 6, 1935 by L. D. Harbert made to Z. F. Francis and recorded on the 25th day of March 191936, in Wetzel County, Book 48 Page 69

NEW WELL \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  
\_\_\_\_\_ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address 2701 day Oct., 1972 before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours, Carnegie Natural Gas Co.  
(Sign Name) J. L. Sweney Well Operator Div. Supt.  
3904 Main Street Street  
Monhall City or Town  
Pennsylvania 15120 State

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

**BLANKET BOND**

Wet-593 PERMIT NUMBER  
Sweney

**THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION**

PROPOSED WORK ORDER TO  DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME Glenn I. Haught & Sons NAME J. W. Sweeney Div. Supt.  
 ADDRESS Saltville, W. Va. ADDRESS Box 387, Mannington, W. Va. 26582  
 TELEPHONE 477-2222 TELEPHONE 986-2060  
 ESTIMATED DEPTH OF COMPLETED WELL: 3150 ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Flint Sand  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS  COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10 <u>10"</u>	<u>1170</u>	<u>1170</u>	<u>Cemented to surface</u>
9 - 5/8			
8 - 5/8			
7	<u>2365</u>		
5 1/2			
4 1/2	<u>3150</u>	<u>3150</u>	<u>1200'</u>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS ? FEET SALT WATER 0 FEET  
 APPROXIMATE COAL DEPTHS 1129' to 1131'  
 IS COAL BEING MINED IN THE AREA?  BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company

\_\_\_\_\_  
Official Title