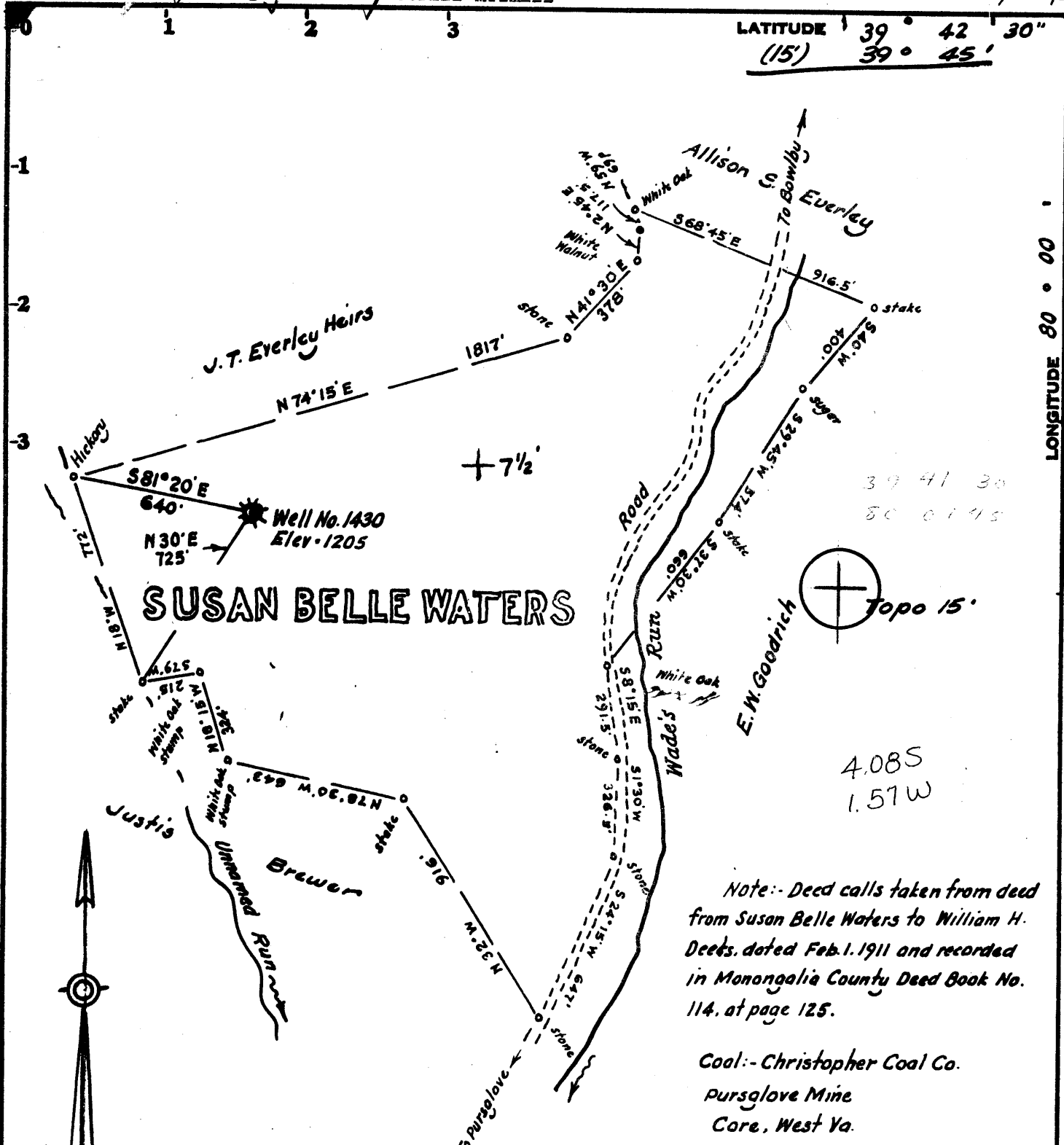


LATITUDE 39° 42' 30"  
(15) 39° 45'

LONGITUDE 80° 00'



39 41 30  
80 01 45



4.085  
1.57W

Note:- Deed calls taken from deed from Susan Belle Waters to William H. Deets, dated Feb. 1, 1911 and recorded in Monongalia County Deed Book No. 114, at page 125.

Coal:- Christopher Coal Co.  
Purslove Mine  
Core, West Va.

Minimum Error of Closure 1 in 200

Source of Elevation U.S.G.S. elev. at forks of road 1/2 mi SE = 992

- Fracture.....
- New Location.....
- 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.

Signed: *[Signature]*  
Squares: N S E W

Map No.

Company **CARNEGIE NATURAL GAS CO.**  
 Address **Munhall, Penna.**  
 Farm **Susan Belle Waters, FRANK ANDREW**  
 Tract \_\_\_\_\_ Acres **78.434** Lease No. **12016**  
 Well (Farm) No. **One** Serial No. **1430**  
 Elevation (Spirit Level) **1205** *NE*  
 Quadrangle **Osage 7 1/2 Blacksville 15'**  
 County **Monongalia** District **Cass**  
 Engineer *[Signature]*  
 Surveyor  
 Surveyor's Registration No. **1227**  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date **May 20, 1976** Scale **1" = 500'**

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

**WELL LOCATION MAP**  
FILE NO. **MON - 350 - DD**

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

-- Denotes one inch spaces on border line of original tracing.

47-054



RECEIVED

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division

WELL RECORD 8

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

Quadrangle Blacksville NE  
Permit No. MON-350-DD

Company Carnegie Natural Gas Company  
Address 3904 Main St., Munhall, Pa. 15120  
Farm S. Belle Waters Acres 78  
Location (waters) Wade Run  
Well No. 1-1430 Elev. 1205  
District Cass County Monongalia  
The surface of tract is owned in fee by Frank Andrew

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2	3805	3805'	120 sacks
3			
2			
Liners Used			

Address Rt. #1, Box 33, Maidsville, WV 26541  
Mineral rights are owned by Ruth W. Marsteller, etal  
Address 556 Mansfield Ave., Star City WV 26505  
Drilling Commenced June 24, 1976  
Drilling Completed June 26, 1976  
Initial open flow 49,430 cu. ft. \_\_\_\_\_ bbls.  
Final production 44,000 M cu. ft. per day 4 bbls.  
Well open \_\_\_\_\_ hrs. before test 730# RP.

Well treatment details:

Attach copy of cementing record.

1st Stage: Perforated: 3608-3738 - 12 holes.  
Fractured: 669 bbls. of water, 25,000# 20-40 sand, using 500 gals. of Dowell X15% Acid to breakdown.  
2nd Stage: Perforated: 2890-2915 - 14 holes.  
Fractured: 631 bbls. of water, 18,000# 20-40 sand, using 1000 gals. of Dowell X15% Acid to breakdown.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet Salt Water \_\_\_\_\_ Feet  
Producing Sand (Balltown (Bayard)) Depth 3608-3738 (2890-2915)

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Original Total Depth				1932		
Shale			1932	2065		
Sand			2065	2100		
Shale			2100	2130		
Sand			2130	2150		
Shale			2150	2165		
Sand			2165	2270		
Shale			2270	2280		
Sand			2280	2430		
Shale			2430	2500		
Red Rock			2500	2510		
Shale			2510	2532		
Sand			2532	2548		
Shale			2548	2580		
Red Rock			2580	2640		
Shale			2640	2658		
Red Rock			2658	2672		
Shale			2672	2680		
Red Rock			2680	2700		
Sand			2700	2725		
Shale			2725	2740		
Red Rock			2740	2760		
Sand			2760	2770		

3898  
1932  
1966 new ft., all explor.

\* Indicates Electric Log tops in the remarks section.

(over)

DEC 20 1976

DEC 20 1976

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale			2770	2855		
Sand Bayard			2855	2935		
Shale			2935	3110		
Sand			3110	3120		
Shale			3120	3320		
Sand			3320	3330		
Shale			3330	3522		
Sand			3522	3540		
Shale			3540	3710		
Sand Balltown			3710	3720		
Shale			3720	3745		
Sand			3745	3750		
Shale			3750	3785		
Sand			3785	3810		
Shale			3810			
<b>Total Depth</b>				<b>3898</b>		



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

JUN 16 1976

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 May 24, 1976

Surface Owner Frank Andrew

Company Carnegie Natural Gas Company

Address Rt. #1, Box 33, Maidsville, WV 26541

Address 3904 Main St., Munhall, Pa. 15120

Mineral Owner Ruth W. Marsteller, et al

Farm S. Belle Waters Acres 78

Address 556 Mansfield Ave., Star City, WV 26505

Location (waters) Wade Run

Coal Owner Christopher Coal Co.

Well No. 1-1430 Elevation 1205

Address Core, WV 26529

District Cass County Monongalia

Coal Operator \_\_\_\_\_

Quadrangle Blacksville, NE

Address \_\_\_\_\_

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 approved for deepening. This permit shall expire if operations have not commenced by 10-16-76.

[Signature]  
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED William Blosser  
PH: 363-9105 ADDRESS Colfax, W. Va.

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 July 9 19 25 by S. Belle Waters made to Carnegie Natural Gas Co. and recorded on the 27th day of August 19 25, in Monongalia County, Book 205 Page 134

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 \_\_\_\_\_ day \_\_\_\_\_ 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 COMPANY  
(Sign Name) \_\_\_\_\_  
Well Operator Div. Supt.

Address  
of  
Well Operator

3904 Main St.  
Street  
Munhall  
City or Town  
Pa. 15120  
State

West Virginia Geological and Economic Survey  
P. O. Box 879  
Morgantown, W. Va. 26505

\*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

MON-350-DD \_\_\_\_\_ PERMIT NUMBER

87-061

**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 \_\_\_\_\_ NAME J.C. Stephenson, Div. Supt.  
 ADDRESS \_\_\_\_\_ ADDRESS Mannington, W. Va. 26582  
 TELEPHONE \_\_\_\_\_ TELEPHONE 304 - 986 - 2060  
 ESTIMATED DEPTH OF COMPLETED WELL: 3950 ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Balltown  
 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 <b>10"</b>	<b>507</b>	<b>507</b>	<b>Used when originally drilled</b>
9 - 5/8			
8 - 5/8	<b>1324</b>	<b>1324</b>	<b>Used when originally drilled</b>
7	<b>1711</b>	<b>1711</b>	<b>Used when originally drilled</b>
5 1/2			
4 1/2	<b>3950</b>	<b>3950</b>	<b>1000'</b>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS 455-462, \_\_\_\_\_  
 IS COAL BEING MINED IN THE AREA? yes BY WHOM? Christopher Coal Co.

**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.