

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 S. W. Jack Drilling Company NAME W. L. Yoho - Supt.  
 ADDRESS Buckhannon, W. Va. 26201 ADDRESS Poll Ono, W. Va.  
 TELEPHONE \_\_\_\_\_ TELEPHONE 659-2921  
 ESTIMATED DEPTH OF COMPLETED WELL: 5000' ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Alexandria  
 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			
9 - 5/8	<u>11-3/4"</u>	<u>30'</u>	
8 - 5/8		<u>1200'</u>	<u>Cemented to surface</u>
7			
5 1/2			
4 1/2		<u>5000'</u>	<u>600'</u>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS \_\_\_\_\_  
 IS COAL BEING MINED IN THE AREA? None 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.

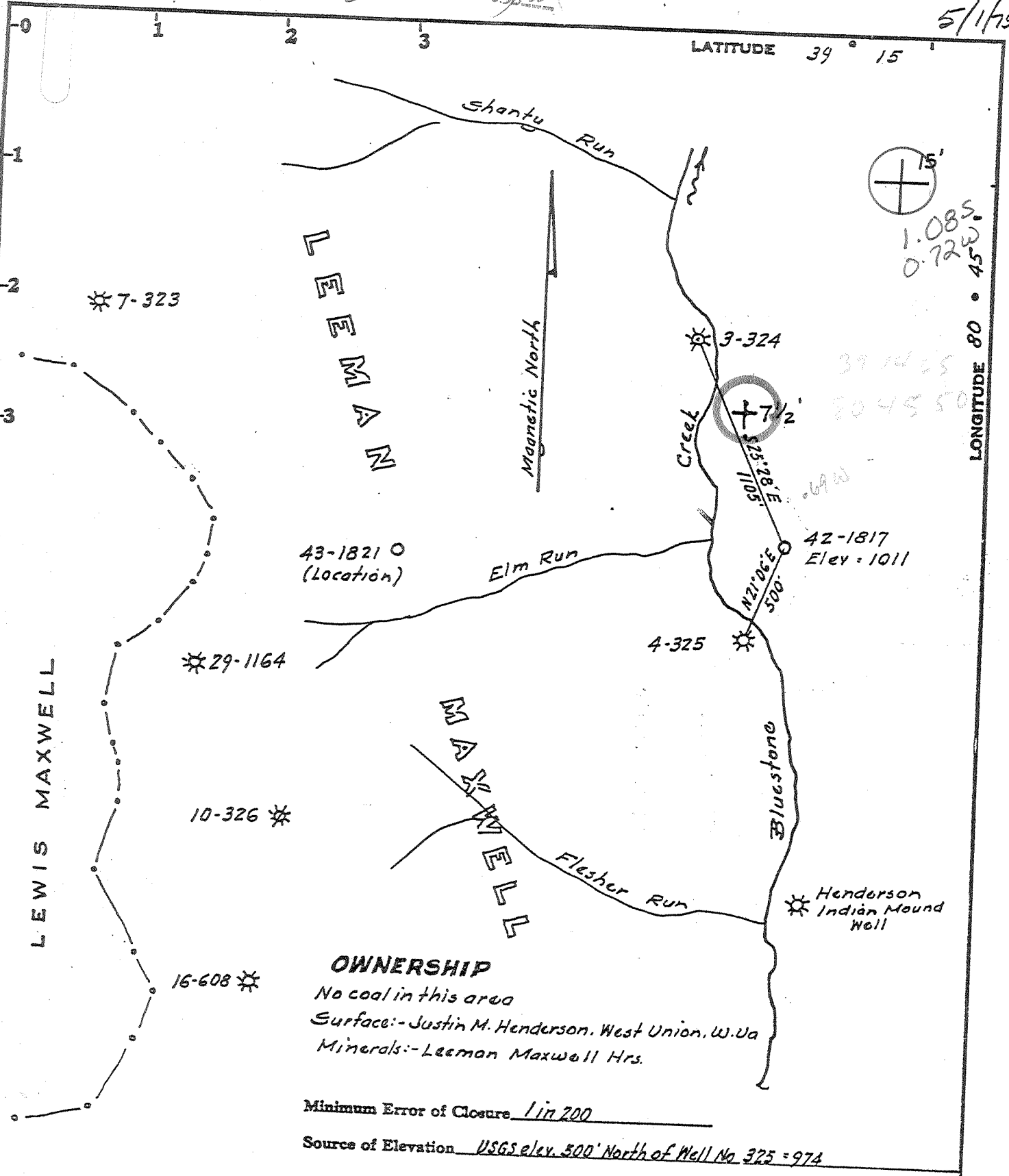
WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.  
 We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company  
\_\_\_\_\_  
Official Title

5/1/79

LATITUDE 39° 15'

LONGITUDE 80° 45'



1.085  
0.72W

39 14 25  
80 45 50

43-1821 O  
(Location)

42-1817  
Elev - 1011

4-325

29-1164

10-326

16-608

**OWNERSHIP**

No coal in this area  
Surface: - Justin M. Henderson, West Union, W. Va  
Minerals: - Leeman Maxwell Hrs.

Minimum Error of Closure 1 in 200

Source of Elevation USGS elev. 500' North of Well No 325 = 974

- 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.

Map No.

Signed: Justin Henderson  
Squares: N E W

Company CARNEGIE NATURAL GAS CO  
 Address Munhall, Penna.  
 Farm Leeman Maxwell  
 Tract \_\_\_\_\_ Acres 2164 Lease No. 6764  
 Well (Farm) No. 42 Serial No. 1817  
 Elevation (Spirit Level) 1011  
 Quadrangle Oxford Twp, HOLBROOK 15  
 County Doddridge District West Union  
 Engineer Justin Henderson  
 Engineer's Registration No. 1227  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date April 16, 1979 Scale 1" = 400' x 660'

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

**WELL LOCATION MAP**

FILE NO. 47-017-2430-REN

+ 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.

5000' Alexander  
6-4 STRAIGHT RR - BLUESTONE CR

MAY 12 1980



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division  
WELL RECORD

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

Quadrangle Holbrook N. E.

Permit No. 17-017-2130

Company Carnegie Natural Gas Company  
Address 390 Main St. Monhall, Pa. 15120  
Farm Leeman Maxwell Acres 216 1/2  
Location (waters) Blustone Creek  
Well No. 12-1817 Elev. 1011'  
District West Union County Doddridge  
The surface of tract is owned in fee by Justin M. Henderson  
Address West Union, W.Va. 26156  
Mineral rights are owned by Leeman Maxwell  
Hrs. Address Various  
Drilling Commenced July 29, 1981  
Drilling Completed August 3, 1981  
Initial open flow 92,900 cu. ft. \_\_\_\_\_ bbls.  
Final production 169,000 cu. ft. per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test 815 RP.

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	1193'	1193'	280 SKS
7			
5 1/2			
4 1/2	5006'	5006'	380 SKS
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Fractured by Dowell on, 9/11/1981, with 1520 bbls. of treated water, 1700 SKS of sand and 1380 gal. of acid.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water 55 Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet  
Producing Sand Alexander, Riley, Bradfoed, Warren Depth 1911-2933

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Clay			0	18		
Shale			18	55		
Sand			55	112		
Shale			112	116		
Limy Sand			116	200		
R. R. & Shale			200	235		
Lime			235	280		
Shale			280	330		
Sand			330	315		
Shale & R.R.			315	400		
Shale			400	431		
Shale & R.R.			431	470		
Shale			470	600		
Red Rock			600	625		
Shale			625	673		
Coal			673	676		
Shale			676	810°		
Sand			810	815		
R. R.			815	860		
Shale			860	935		
R. R.			935	960		
Sand			960	990		
Shale			990	1070		
Shale			1070	1090		
Sand			1090	1110		

**RECEIVED**

FEB 8 - 1982

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

MAR 01 1982

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale			1110	1230		
Shale			1230	1535		
L. Lime			1535	1565		
Shale			1565	1570		
B. Lime			1570	1670		
Sand			1670	1715		
Shale			1715	2910		
Sand			2910	2960		
Shale			2960	3260		
Sand			3260	3290		
Shale			3290	3700		
Sand			3700	3930		
Shale			3930	4580		
Sand			4580	4595		
Sand & Shale		<i>ALFX.</i>	4595	5050		
T.D.				5050		

Date November 21, 19 81

APPROVED Kenneth G. Dunay Owner  
*Geologist*



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

APR - 6 1981

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 March 24, 1981

Surface Owner Justin M. Henderson

Company Carnegie Natural Gas Company

Address West Union, W.Va. 26156

Address 390 1/2 Main Street, Marshall, Pa. 15120

Mineral Owner Lozman Maxwell Heirs.

Farm Lozman Maxwell Acres 216 1/2

Address West Union, W.Va. 26156

Location (waters) Bluestone Creek

Coal Owner No Commercial Coal

Well No. 12-1817 Elevation 1011'

Address \_\_\_\_\_

District West Union County Doddridge

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

Quadrangle Holbrook N.E.

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 drilling. This permit shall expire if operations have not commenced by 12-9-81

INSPECTOR TO BE NOTIFIED Steve Casey

ADDRESS \_\_\_\_\_

PHONE 884-7470

*[Signature]*  
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 March 4, 191899 by Lozman and Marc C. Maxwell made to J. A. Connolly and recorded on the 12 th. day of June 191899 in Doddridge County, Book 14 Page 327

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.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address of Well Operator

Very truly yours, Carnegie Natural Gas Company  
(Sign Name) W. S. Yako  
Well Operator

390 1/2 Main Street,  
Street  
Marshall  
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