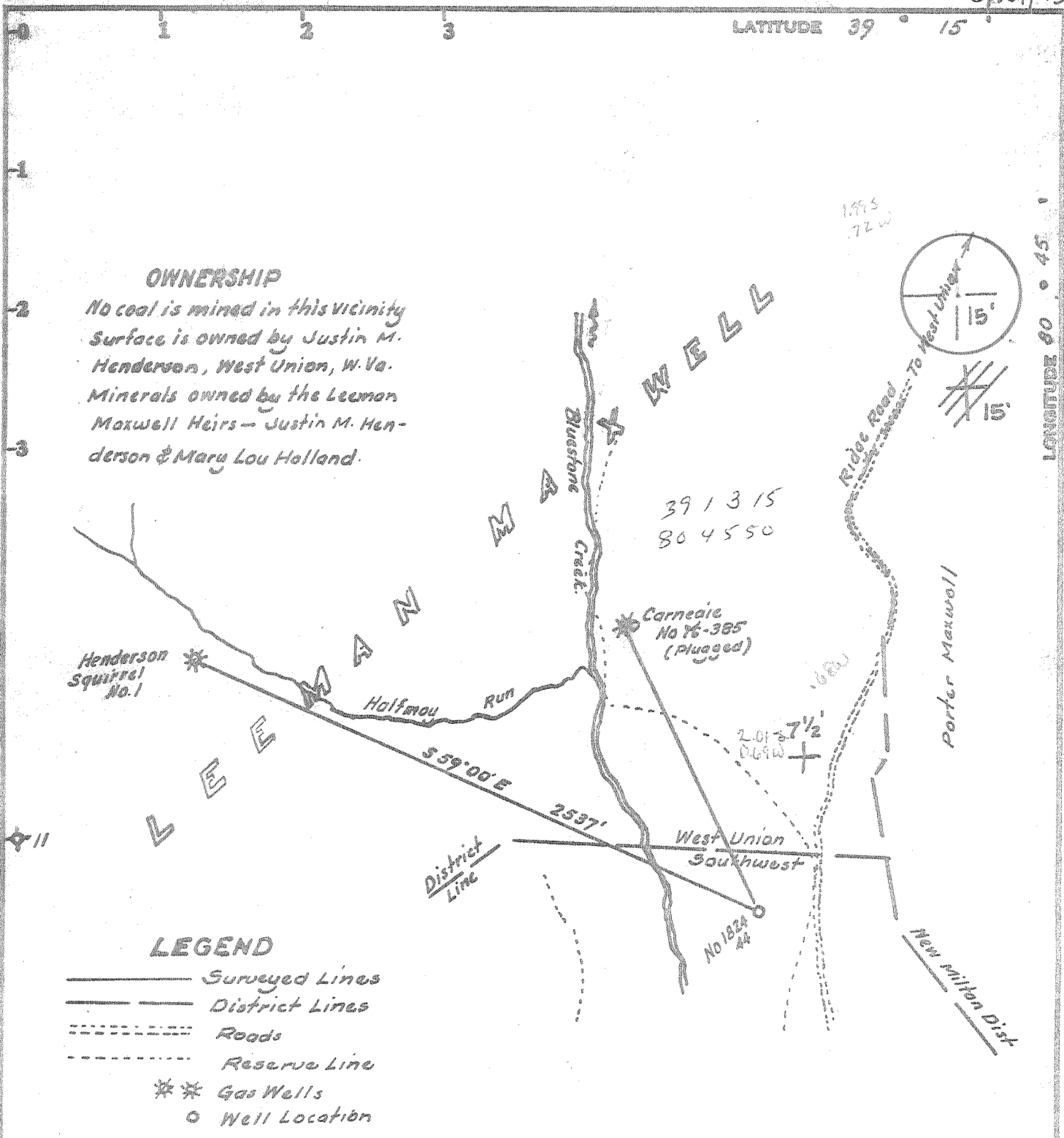


6/21/1919



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: W. H. [Signature]
 Squares: N S E W

Company Leeman Maxwell
 Address HENDERSON & HOLLAND
 Farm Maxwell
 Tract _____ Acres 2.56 Lease No. 6764
 Well (Farm) No. _____ Serial No. 1824
 Elevation (Spirit Level) NE
 Quadrangle Old 74' HOLBROOK 15'
 County Dodridge District Southwest
 Engineer W. H. [Signature]
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date May 16, 1919 Scale 1" = 40'

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

WELL LOCATION MAP
 FILE NO. 47-017-2446

+ Denotes location of well on United States Topographic Maps, scale 1 to $\frac{1}{62,500}$, latitude and longitude lines being represented by border lines as shown.
 - - Denotes one inch spaces on border line of original tracing.

ALEXANDER 665300' STRAIGHT FA-BLUESTONE CK JUL 17 1979 153

FORM IV-35 (Obverse)

Operator's Well No. 44-1824

[08-78]

WELL OPERATOR'S REPORT 44 OF

API Well No. 47 - 017 - 2446 State County Perm.

DRILLING, FRACURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal / (If "Gas", Production X / Underground storage / Deep / Shallow X /)

LOCATION: Elevation: 978' Watershed: Bluestone Creek District: Southwest County: Doddridge Quadrangle: Holbrook N.E.

WELL OPERATOR Carnegie Natural Gas Company DESIGNATED AGENT W.L. Yoho Address 3904 Main Street, Munhall, PA 15120 Address % Carnegie Natural Gas Company, Toll Gate, W.VA.

PERMITTED WORK: Drill X / Convert / Drill deeper / Redrill / Fracture to stimulate / Plug off old formation / Perforate new formation / Other physical change in well (specify)

PERMIT ISSUED ON June 21, 1979 OIL & GAS INSPECTOR FOR THIS WORK: Name Mr. Paul Garrett Address Clarksburg, W.VA. 26301

LOGICAL TARGET FORMATION: Alexander Depth 5300' feet Depth of completed well, 5121' feet Rotary X / Cable Tools Water strata depth: Fresh, 1025' feet; salt, - feet. Coal seam depths: None Is coal being mined in the area? No Work was commenced August 2, 1979, and completed August 22, 1979

LOGGING AND TUBING PROGRAM

Table with columns: LOGGING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), and OTHERS. Includes handwritten notes and a date stamp: FEB - 8 1980.

OIL & GAS DIVISION DEPT. OF MINES

PRODUCTION DATA

Producing formation: Alexander, Benson and Riley Pay zone depth 4554-4963 Gas: Initial open flow, 731 Mcf/d Oil: Initial open flow, Bbl/d Final open flow, 1,639 Mcf/d Final open flow, Bbl/d Time of open flow between initial and final tests, hours

Second producing formation: Bradford, Balltown and Warren Pay zone depth 3017-4197 Gas: Initial open flow, Mcf/d Oil: Initial open flow, Bbl/d Final open flow, Mcf/d Final open flow, Bbl/d Time of open flow between initial and final tests, hours

FEB 28 1980

[08-78]

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. Fractured 11-1-79
by Dowell:

- 1st Stage-Treated Perfs. 4921-4963 with 600 sacks of sand and 590 bbls. of water.
- 2nd State-Treated Perfs. 4636-39 & 4554-57 with 800 sacks of sand and 553 bbls of water.
- 3rd Stage-Treated Perfs. 4195-97; 4065-66; 3981-83; 3738-40; 3720-22 with 450 sacks of sand and 440 bbls. of water.
- 4th Stage-Treated Perfs. 3116-21; 3077-79; 3055-57; 3025; 3021; 3017-19 with 500 sacks of sand and 515 bbls. of water.

WELL LOG

FORMATION	Color	Hard or Soft	44 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Surface			0	25	
Sand			25	40	
Red Rock			65	80	
Sand			80	100	
Red Rock			100	133	
Sand			133	177	
Shale			177	184	
Sand			184	258	
Shale			258	296	
Sand			296	312	
Shale			312	415	
Red Rock			415	492	
Sand			492	505	
Red Rock			505	522	
Sand			522	530	
Red Rock			530	565	
Sand			565	591	
Shale			591	775	
Sand			775	990	
Shale			990	1025	
Sand			1025	1203	Water at 1025'
Shale			1203	1620	
Lime			1620	1625	
Shale			1625	1635	
Lime			1635	1720	
Sand			1720	1795	
Shale			1795	1976	
Sand			1976	2085	
Shale			2085	2265	
Sand			2265	2400	
Shale			2400	2785	
Sand			2785	2890	
Shale			2890	3260	
Sand			3260	3300	
Shale			3300	3900	
Sand and Shale			3900	5140	
T.D.				5140	

ALEX.

(Attach separate sheets to complete as necessary.)

Carnegie Natural Gas Company

Well Operator

By

Roger S. Ludwig

Is

Geologist

REG: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

JUN 12 1979
DEPT. OF MINES
PK

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

DATE June 12, 1979
Company Carnegie Natural Gas Company
Address 3904 Main Street, Monhall, Pa. 15120
Farm Leeman Maxwell Acres 2164
Location (waters) Bluestone Creek
Well No. 44-1821 Elevation 973'
District Southwest County Putnam
Quadrangle Holbrook N.E.

Surface Owner Justin Henderson
Address 108, Wood St. West Union, W.Va. 26156
Mineral Owner Leeman Maxwell Heirs.
Address _____
Coal Owner _____
Address _____
Coal Operator _____
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 2-21-80.

INSPECTOR TO BE NOTIFIED
Mr. Paul Garrett
321 Beech St.
Clarksburg, WV 26301
Ph: 622-3871

[Signature]
Deputy Director - Oil & Gas Division
GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land ¹⁹⁹⁹ oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated March 4, 1978 by Leeman and Mary C. Maxwell made to J. A. Connolly and recorded on the 12th day of June 1899, 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

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

Address of Well Operator

3904 Main Street
Street
Monhall,
City or Town
Penna. 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.

47-017-0446 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements"

Signed by _____

BLANKET BOOK

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 Spencer Enterprises NAME H. L. Yoho, Div. Supt.
 ADDRESS West Union, West Va. 26156 ADDRESS Toll Gate, West Va. 26112
 TELEPHONE 304-373-1602 TELEPHONE 304-659-2921
 ESTIMATED DEPTH OF COMPLETED WELL: 5300' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Alexander
 TYPE OF WELL: OIL _____ GAS X 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			
DELETED 11-3/4"	30'		
9 - 5/8			
8 - 5/8	800'	800'	to surface
7			
5 1/4			
4 1/2	5300'	5300'	600'
3			Perf. Top -
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS _____ FEET
 IS COAL BEING MINED IN THE AREA? no 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 _____