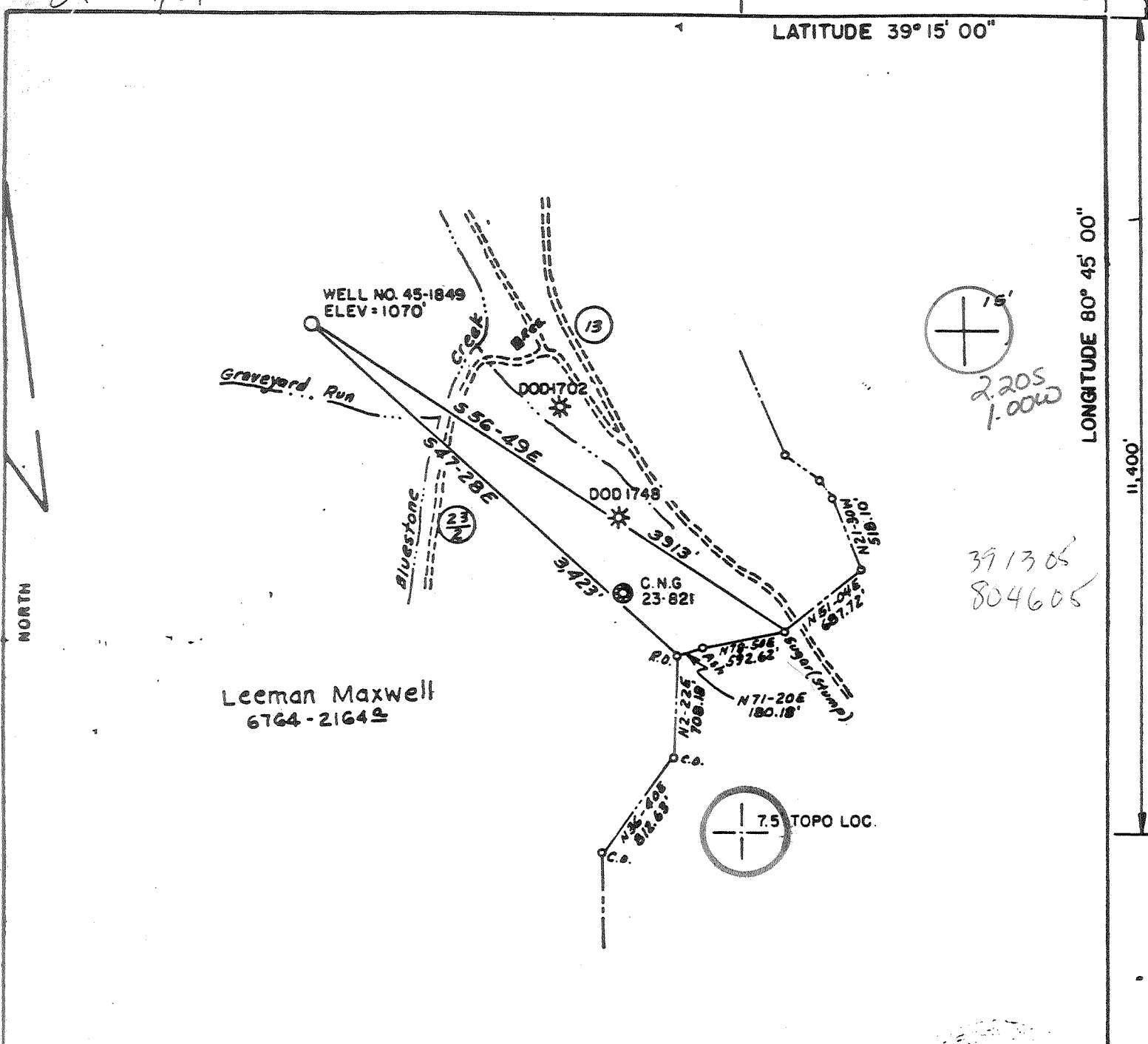


Plot Card CSD

5,100'

LATITUDE 39° 15' 00"

LONGITUDE 80° 45' 00"

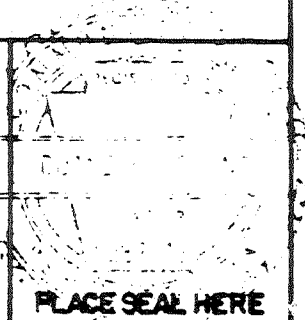


NORTH

Leeman Maxwell
6764-2164

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1' IN 200'
PROVEN SOURCE OF ELEVATION B.M. ON RIDGE 2600' N.E. OF LOC. ELEV. = 1172'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
(SIGNED) Quinn R. Doherty
R.P.E. _____ L.L.S. 026254E (PA)



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
FORM IV-6
(8-78)

DATE APRIL 20, 19 81
OPERATOR'S WELL NO. 45-1849
API WELL NO. 47 017 3035
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 1070' WATER SHED BLUESTONE CREEK
DISTRICT SOUTHWEST COUNTY DODDRIDGE
QUADRANGLE OXFORD 7.5' Dobbrook 151 NE
SURFACE OWNER JUSTIN M. HENDERSON ACREAGE 1500
OIL & GAS ROYALTY OWNER M.V. GRAY, AGT. B.M.L. HOLLAND, ATTY. IN FACT LEASE ACREAGE 2164
LEASE NO. 6764
PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5300'
WELL OPERATOR CARNEGIE NATURAL GAS CO. DESIGNATED AGENT W. L. YOHO, SUPERINTENDENT
ADDRESS 3904 MAIN STREET ADDRESS TOLL GATE, W. VA. 26442
MUNHALL, PA. 15120

AUG 17 1981

6764 Straight Fork Bluestone Creek (133)

133



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

Quadrangle Oxford
Permit No. 017-3035

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

Company Carnegie Natural Gas Company
Address 3904 Main Street, Munhall, Pa. 15120
Farm Leeman Maxwell Acres 2164
Location (waters) Blustone
Well No. 45-1849 Elev. 1070'
District Southwest County Doddridge
The surface of tract is owned in fee by Justin M. Henderson
Address West Union, W Va.
Mineral rights are owned by Maxwell Hrs.
Address Various
Drilling Commenced August 4, 1981
Drilling Completed August 9, 1981
Initial open flow 48,200 cu. ft. _____ bbls.
Final production 1,639,000 cu. ft. per day _____ bbls.
Well open 11 hrs. before test 1350 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	1222	1222	
7			
5 1/2			
4 1/2	5031	5031	
3			
2			
Liners Used			

Well treatment details:
Dowell: September 25, 1981 25 bbls. acid, 2083 bbls. water, 225,000 sand. Attach copy of cementing record.

Coal was encountered at _____ Feet _____ Inches
Fresh water 80 Feet _____ Salt Water _____ Feet _____
Producing Sand Warren, Bradford, Riley, Alexander Depth 2948-4931

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	15		
Shale			15	40		
Shale			40	65		
Sand			65	180		
Lime Sand			180	250		
Limy Sand			250	320		
Shale			320	355		
Red Rock			355	370		
Sand			370	380		
R. R.			380	395		
Shale			395	405		
R. R.			405	430		
Shale			430	440		
Sandy Shale			440	450		
R. R.			450	480		
Shale			480	510		
Sand			510	550		
Shale			550	740		
Coal			740	743		
Shale			743	850		
Sand			850	905		
Shale			905	930		
Shale			930	935		
Shale			935	1055		
Sand			1055	1150		

RECEIVED
OCT 15 1981
OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

OCT 29 1981

Geologist

APPROVED

Kenneth H. Murray

Owner

Date

October 7,

19 81

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water • Remarks
Shale			1150	1395	
Sand			1395	1425	
Shale			1425	1450	
Sand			1450	1550	
I. Lime			1550	1590	
Big Lime			1590	1650	
Big Injun			1650	1720	
Shale			1720	2080	
Sand			2080	2210	
Shale			2210	2390	
Sand			2390	2460	
Shale			2460	2700	
Sand			2700	2720	
Shale			2720	2850	
Sand			2850	2870	
Shale			2870	3035	
Sand			3035	3085	
Shale			3085	3310	
Sand			3310	3405	
Shale			3405	4580	
Sand <i>BNSN?</i>			4580	4615	
Shale			4615	4670	
Sand			4670	4800	
Shale			4800	4842	
Sand <i>Alex?</i>			4842	4936	
Shale			4936	5050	

T.D.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
JUL 27 1981

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

OIL & GAS DIVISION
DEPT. OF MINES

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

DATE July 23, 1981

Surface Owner Justice M. Henderson
Address West Union, West Va. 26456
Mineral Owner M.V. Gray, Atty. in Fact. & M.L. Holland
Address West Union, W.Va. 26456
Coal Owner No Commercial Coal
Address _____
Coal Operator _____
Address _____

Company Carnegie Natural Gas Company
Address 3904 Main Street, Munhall, Pa. 15120
Farm Leeman Maxwell Acres 1500
Location (waters) Blustone Creek 1070
Well No. 45-1849 Elevation 4172*
District Southwest County Doddridge
Quadrangle Oxford 7.5

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 3-31-82.

INSPECTOR
TO BE NOTIFIED Stephen Casey
ADDRESS Jane Lew, W.Va.
PHONE 884-7470

J. E. Hargrett
Deputy Director - Oil and 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, 1899 by Leeman and Mary C. Maxwell made to J. A. Connolly and recorded on the 12 th. 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. L. Yanko
Well Operator
Address 3904 Main Street,
Street
of Munhall,
Well Operator 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

47-017-3035

PERMIT NUMBER

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

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME S. W. Jack Drilling Company NAME W. L. Y ho - Supt.
 ADDRESS Buckhannon, W.Va. 26201 ADDRESS Toll Gate, W.Va. 26442
 TELEPHONE _____ TELEPHONE 659-2921
 ESTIMATED DEPTH OF COMPLETED WELL: 5300' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Devonian Shale
 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			
13 - 10 <u>11-3/4"</u>	<u>30'</u>	<u>30'</u>	
9 - 5/8			
8 - 5/8	<u>1300'</u>	<u>1300'</u>	<u>Cemented to surface</u>
7			
5 1/2			
4 1/2	<u>5275'</u>	<u>5275'</u>	<u>600'</u>
3			<u>Perf. Top</u>
2			<u>Perf. Bottom</u>
Liners			<u>Perf. Top</u>
			<u>Perf. Bottom</u>

APPROXIMATE FRESH WATER DEPTHS _____ FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS _____
 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 Owner of 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.

Justin M. Anderson
For Coal Company

Official Title