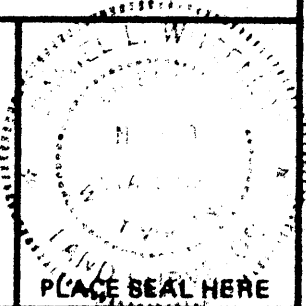


LATITUDE 39° 20' 00"  
 39 19 05  
 81 23 55

(15') 81° 20'  
 LONGITUDE 81° 22' 30"

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION BM JCT 31 & 312  
ELEV. 673'

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) Daniel L. Wheeler  
 R.P.E. \_\_\_\_\_ L.L.S. 530



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



DATE APRIL 30, 1980  
 OPERATOR'S WELL NO. MOORE #2  
 API WELL NO. 47-107-1012  
 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 785 WATER SHED HARRY HOLLOW  
 DISTRICT UNION COUNTY WOOD  
 QUADRANGLE VALLEY MILLS 7.5' MARIETTA 15' 30'  
 SURFACE OWNER WILLIAM MOORE ACREAGE 50  
 OIL & GAS ROYALTY OWNER WILLIAM MOORE LEASE ACREAGE 50  
 LEASE NO. \_\_\_\_\_  
 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 GORDON ESTIMATED DEPTH 2800  
 WELL OPERATOR DEPER OIL & GAS CORP. DESIGNATED AGENT MARK SCHUMACHER  
 ADDRESS POLYCHEMICAL BANK BLDG - 69 DELAWARE AVE ADDRESS ROOM 652 EMPIRE BANK BLDG  
BUFFALO, N.Y. 14202 CLARKSBURG, W. VA. 26301

6-0 W ~~WHEELER~~

(072) JUN 17 1980



DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

2/18/81 - BEREA: 2134-36 (2), 2141-43 (2), 2148-52 (8)  
598.5 sks 20/40 sand in 875 BBLs. fluid.

GORDON: 2504-19 (18)  
598.5 sks 20/40 sand in 800 BBLs. fluid.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Fill & Shale			0	15	
Shale			15	25	
Sand			25	80	
Sand & Red Rock			80	160	
Red Rock			160	175	
Sand & Shale			175	255	
Red Rock & Shale			255	265	
Sand			265	285	
Red Rock & Shale			285	300	
Sand, Shale & Red Rock			300	475	
Red Rock			475	520	
Sand & Shale			520	585	
Red Rock & Shale			585	870	
Sand			870	915	
Shale			915	945	
Red Rock & Shale			945	1010	
Sand & Shale			1010	1100	
Shale			1100	1175	
Sand & Shale			1175	1400	
Shale			1400	1490	
Sand & Shale			1490	1528	
Injun			1528	1768	
Sand & Shale			1768	2155	
Berea			2134	2164	
Sand & Shale			2164	2502	
Gordon			2502	2529	
Sand & Shale			2529	2675	T.D.

(Attach separate sheets as necessary)

BEREA OIL AND GAS CORPORATION

Well Operator

By: Thomas E. Riley Thomas E. Riley, P.E.

Date: April 19, 1982

Note: 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 interval of a well."



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

**RECEIVED**  
JUL 17 1981

**Oil and Gas Division  
WELL RECORD**

OIL & GAS DIVISION  
DEPT. OF MINES  
Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_ x  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Quadrangle Valley Mills  
47-107-1012  
Permit No. \_\_\_\_\_

Company Berea Oil and Gas Corp.  
Address PO Box 299 Bridgeport WV 26330  
Farm Wm. Moore Acres 50  
Location (waters) Slate Run  
Well No. 2 Elev. 760'  
District Union County Wood  
The surface of tract is owned in fee by William Moore  
Address 920 32nd St., Parkersburg W. Va.  
Mineral rights are owned by Same  
Address \_\_\_\_\_  
Drilling Commenced 8/10/80  
Drilling Completed 8/12/80  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production 24 M cu. ft. per day \_\_\_\_\_ bbls.  
Well open 4 hrs. before test 100# 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	256'	256'	90 sx.
7			
5 1/2			
4 1/2	2063'	2063'	240 sx.
3			
x 1 1/2"		2016'	
Lines Used			

Well treatment details: Attach copy of cementing record.  
2/18/81 1st-Berea: 2134-36 (2 shots), 2141-43 (2 shots), 2148-52 (8 shots).  
598.5 sks. 20/40 sand. 875 bbls. water.  
2nd-Gordon: 2504-19 (18 shots). 598.5 sks 20/40 sand.  
800 bbls. water.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
 Fresh water 40 Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
 Producing Sand Berea and Gordon Depth 2134 and 2504'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand and Shale			0	1528		From KB = 830'
Injun			1528	1768		
Sand and Shale			1768	2155		
Berea			<del>2134</del> 2154	2164		
Sand and Shale			2164	2502		
Gorden			2502	2529		
Sand and Shale			2529	2675		
TOTAL DEPTH				2675		

(over)  
Indicates Electric Log logs in the remarks section

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks

Date July 15, 1981 19  

APPROVED Berea Oil and Gas Corp. Owner

By Thomas E. Riley

Thomas E. Riley, P.E.  
 Manager of Engineering



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

APR 30 1980

Oil and Gas Division

OIL & GAS DIVISION  
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE April 30, 1980  
Company Berea Oil Gas Corp.  
Address See well operator below  
Farm Moore Acres 50  
Location (waters) Slate Run  
Well No. # 2 Elevation 760  
District Union County Wood  
Quadrangle Valley Mills

Surface Owner William Moore  
Address 920 32nd St., Parkersburg, W. Va.  
Mineral Owner same  
Address \_\_\_\_\_  
Coal Owner same  
Address \_\_\_\_\_  
Coal Operator none  
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 1-13-81.

Robert H. [Signature]  
Deputy Director - Oil & Gas Division

INSPECTOR  
TO BE NOTIFIED Paul Goodnight  
ADDRESS Smithville, W. Va.  
PHONE 477-3660

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 April 28 19 80 by William Moore made to Energy Unlimited, Inc. and recorded on the 28th day of April 19 80 in Wood County, Book 737 Page 45

XX 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, Mark Schumacher  
(Sign Name) [Signature]  
Well Operator  
652 Empire Bank Building  
Fourth & Main Streets  
Street  
Clarksburg,  
City or Town  
W. Va.  
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 of found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

47-107-1012 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 \_\_\_\_\_

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

PROPOSED WORK ORDER TO XX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT:  
 NAME \_\_\_\_\_ NAME Mark Schumacher  
 ADDRESS \_\_\_\_\_ ADDRESS Clarksburg, W. Va.  
 TELEPHONE \_\_\_\_\_ TELEPHONE 304-624-6429  
 ESTIMATED DEPTH OF COMPLETED WELL: 2800' ROTARY XX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Gordon  
 TYPE OF WELL: OIL X GAS X COMB. X 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			
8 - 5/8 <u>XX</u>	250	250	Surface
7			
5 1/2			
4 1/2 <u>XX</u>	T. D.	T. D.	400'
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 150 FEET \_\_\_\_\_ SALT WATER 1500 FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS N. A.  
 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