



New Location   
 Drill Deeper   
 Abandonment

Minimum Error of Closure 1 in 200  
 Source of Elevation SPOT ELEV. @ INTERSECTION OLD PIKE WITH STATE ROUTE 57, ELEV. = 1181

"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." *Rexford L. Ostrander*

Company NRM PETROLEUM CORP.  
 Address PO BOX 190 GLENVILLE, WEST VIRGINIA 26361  
 Farm BURTON A. ROY, et al  
 Tract 1 Acres 80 Lease No. \_\_\_\_\_  
 Well (Farm) No. Roy #2 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1207  
 Quadrangle PHILIPPI, T.S. MIN., 15'  
 County BARBOUR District ELK  
 Engineer REXFORD L. OSTRANDER, LL.S.  
 Engineer's Registration No. LL.S. NR 555  
 File No. 186-D3 Drawing No. NRM-12  
 Date NOVEMBER 4, 1977 Scale 1" = 500'

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

WELL LOCATION MAP  
 FILE NO. BAR-922

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.

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

47-001 DEC 15 1977

4500' Benson 6-6 Elk Creek (155)



RECEIVED

FEB 27 1978

OIL & GAS DIVISION  
DEPT. OF MINES

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Philippi  
Permit No. BAR-922

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

Company NRM Petroleum Corporation  
Address Box 190, Glenville, W. Va. 26351  
Farm Burton A. Boy Acres 80  
Location (waters) Elk Creek  
Well No. 2 Elev. 1219 EKB  
District Elk County Barbour  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_  
Drilling Commenced 12-13-77  
Drilling Completed 12-20-77  
Initial open flow Unk. HFW cu. ft. \_\_\_\_\_ bbls.  
Final production 828M cu. ft. per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test \_\_\_\_\_ 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	740	740	180 sks. 12-15
7			
5 1/2			
4 1/2	--	4045	150 sks. 12-21
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record.  
Benson frac wi 10,000# 80/100, 37,000# 20/40 in 760 bbl. wat.  
Low. Riley frac wi 8,000# 80/100, 42,000# 20/40 in 722 bbl. wat.

Coal was encountered at 306-315 Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water 1422 Feet \_\_\_\_\_  
Producing Sand Benson - Low. Riley Depth 3985-93, 4006-11, 3761-3773  
9 holes 6 holes 13 holes

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale & Sand			0	210		
Sand & Shale			210	301		
Coal			301	310		
Sand & Shale			310	515		
Shale			515	645		
Sand & Shale			645	740		
Sandy shale			740	982		
Shale			982	1056		
Lime			1056	1074		
Shale			1074	1104		
Big Lime			1104	1180		
Injun			1180	1304		
Shale			1304	1412		
Sand Gtz.-50'			1412	1476		
Sand & Shale			1476	1898		Water 1422 H.F.
Fourth Sand			1898	1918		
Sand & Shale			1918	1992		
Fifth Sand			1992	2034		
Shale & Siltstone			2034	2740		Air P. Inc. 2004'
Shale			2740	3626		
Riley			3626	3766		
Shale & Siltstone			3766	3904		
Shale			3904	3968		

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet (	Bottom Feet	Oil, Gas or Water	* Remarks
Benson			3968	4001		
Shale & Siltstone			4001	--		
Total Depth			--	4077		
No Final Open Flow - Hole full water.						

Date January 6, 19 78

APPROVED NRM Petroleum Corp. Owner

By Gene Haney, Cons. Geol.  
(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

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OIL & GAS DIVISION  
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner Burton A. Roy, et al  
Address Rt. 1 Philippi, W.V.  
Mineral Owner Martha Rose Roy  
Address Rt. 1 Philippi  
Coal Owner James M. O'Neal  
Address \_\_\_\_\_  
Coal Operator None  
Address \_\_\_\_\_

DATE 11-7-77  
Company MM Petroleum Corporation  
Address P.O. Box 190, Glenville, W.V. 26151  
Farm Burton A. Roy Acres 80  
Location (waters) Elk Creek  
Well No. #2 Elevation 1207  
District Elk County Barbour  
Quadrangle Philippi 7.3 min.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 27,  
of the W. Va. Code, the location is hereby approved  
for drilling. This permit shall expire if  
operations have not commenced by 4-1-78

INSPECTOR \_\_\_\_\_ To be  
TO BE NOTIFIED MM Petroleum appointed  
ADDRESS P.O. Box 190, Glenville, W.V. 26151  
PHONE 478-1111

[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 Oct. 17 1961 by Burton A. Roy, et al made to Hope Natural Gas Co. and recorded on the 10 day of Nov. 1961, in Barbour County, Book 45 Page 18

X 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,  
(Sign Name) R. L. Hopkins  
Well Operator  
P.O. Box 190  
Street  
Glenville  
City or Town  
West Virginia 26151  
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

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12.6 and will carry out the specified requirements."

Signed by R. L. Hopkins

BAR-922 PERMIT NUMBER  
47-001

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 Unknown \_\_\_\_\_ NAME Richard L. Hopkins \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ ADDRESS Rt. 1 Box 107-D Buckhannon, W.V. \_\_\_\_\_  
 TELEPHONE \_\_\_\_\_ TELEPHONE 304-472-2620 \_\_\_\_\_  
 ESTIMATED DEPTH OF COMPLETED WELL: 4300 \_\_\_\_\_ ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Monson \_\_\_\_\_  
 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			
8 - 5/8	<b>700</b>	<b>700</b>	<b>Cement to surface</b>
7			
5 1/2			
4 1/2		<b>4500</b>	<b>180 sbs.</b>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 30 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 \_\_\_\_\_ 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