



LATITUDE 39 ° 25 '

LONGITUDE 80 ° 35 '

Minimum Error of Closure 1 in 200'

Source of Elevation Elev at bridge (shown) = 973'

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

Map No.

Company RAMCO OIL & GAS CORP.
 Address P.O. Box 99, Salpva, Ohio
 Farm A. H. Pope
 Tract _____ Acres 59 Lease No. _____
 Well (Farm) No. One Serial No. _____
 Elevation (Spirit Level) 1231
 Quadrangle Centerpoint
 County Doddridge District McClellan
 Engineer [Signature]
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date Nov. 5, 1972 Scale 1" = 30P = 495'

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

WELL LOCATION MAP
 FILE NO. DOD-1707

+ 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.



RECEIVED

JAN 3 1974

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Rotary Oil
Cable Gas No. 1
Recycling Comb.
Water Flood Storage
Disposal (Kind)

Quadrangle Centerpoint

Permit No. DOD-1707

Company RAMCO Oil & Gas Corp.
Address P.O. Box 99, Belpre, Ohio 45714
Farm A. H. Pope Acres 59
Location (waters) Little Battle Run
Well No. 1 Elev. 1231'
District McClellan County Doddridge
The surface of tract is owned in fee by A. H. Pope Heirs
Address Centerpoint, W. Va.
Mineral rights are owned by same
Address _____
Drilling Commenced 12/30/72
Drilling Completed 1/12/73
Initial open flow _____ cu. ft. _____ bbls.
Final production 1100MCF cu. ft. per day _____ bbls.
Well open 24 hrs. before test 585# 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			
7	913	913	200 sks.
5 1/2			
4 1/2		2332	75 sks.
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record. Lawson Cementing Co.

Fractured: DOWELL - 718 bbls. water; 30,000# 20/40 sand; 1,000# 10/20 sand; 1,000 gals. 15% HCL

Perforated: 2243' to 2260' - 12 holes

Coal was encountered at 824' Feet 60" Inches
Fresh water _____ Feet Salt Water _____ Feet
Producing Sand Big Injun Depth 2245' to 2268'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Rock		Soft	0	25		
Gray Sandstone		Soft	25	65		
Yellow Sandstone		Soft	65	80		
Gray Sandw/Red Rock		Soft	80	200		
Sand & Gray Shale w/ Red Rock		Soft	200	550		
Silica Sand w/ Shale Stringers		Soft	550	620		
Sand & Lime Shells		Soft	620	720		
Sand & Shale		Soft	720	824		
Coal & Soft Shale		Soft	824	834		
Sandy Shale		Soft	834	871		
Soft Shale		Soft	871	885		
Sandy Shale		Soft	885	910		
Sand w/ Shale Stringers		Soft	910	945		
Cherty Shale & Lime Shells		Soft	945	1050		
Sandy Shale w/ Red Rock		Soft	1050	1295		
Sand		Hard	1295	1330		
Sand & Soft Shale		Soft	1330	1400		*Pencil Cave 2126
Salt Sands w/ Shale		Soft	1400	2150		*Big Lime 2848

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Big Lime		Hard	2150	2233		*Keener 2218
Big Injun Sand		Hard	2233	2263		*Big Injun 2234
Sand & Shale		Soft	2263	2305		
Squaw Sand		Hard	2305	2317		
Sand & Shale		Soft	2317	2327		

Date December 27, 19 73

APPROVED RAMCO OIL & GAS CORP., Owner

By Neal Kuller, President
(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
NOV 16 1972
OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner A. H. Pope Heirs
Address Centerpoint, W. Va.
Mineral Owner A. H. Pope Heirs
Address Centerpoint, W. Va.
Coal Owner A. H. Pope Heirs
Address Centerpoint, W. Va.
Coal Operator None - no coal is being mined
Address in this area.

DATE November 9, 1972
Company RAMCO Oil & Gas Corp.
Address P. O. Box 99, Belpre, Ohio 45714
Farm A. H. Pope Acres 59
Location (waters) Little Bottle Run
Well No. 1 Elevation 1231'
District McClellan County Dodderidge
Quadrangle Centerpoint

INSPECTOR TO BE NOTIFIED Wm. Blosser
Colfax, W. Va. PH: 363-9105

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 3-16-73.

Robert K. Fodda
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 November 9, 1972 by M. S. M. Oil & Gas Co. made to RAMCO Oil & Gas Corp. and recorded on the _____ day of _____ 19____, in _____ County, Book _____ Page _____
 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.

Very truly yours,
(Sign Name) by: *Randall V. Rorer*
Well Operator
P. O. Box 99

Address of Well Operator _____
Street Belpre
City or Town Ohio 45714
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.

**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 Garden Drilling Co. NAME Brod Crouse

ADDRESS Salem, Illinois ADDRESS Rt. 1, Box 174, Grantsville, W. Va.

TELEPHONE TELEPHONE (604) 354-7457

ESTIMATED DEPTH OF COMPLETED WELL: 2325' ROTARY * CABLE TOOLS

PROPOSED GEOLOGICAL FORMATION: Big Injun

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	900'	900'	900'
7			
5 1/2			
4 1/2		2325'	350'
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 50' FEET SALT WATER FEET

APPROXIMATE COAL DEPTHS 360' ,

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