



IRA BENNETT

Minimum Error of Closure 1 in 200

Source of Elevation U.S.G.S.B.M. at Jarvisville = 1050

- 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: [Signature]  
Squares: N S E W

Map No.

Company RAMCO OIL & GAS CORP.  
 Address P.O. Box 99, Belpre, Ohio  
 Farm Harley Bennett  
 Tract \_\_\_\_\_ Acres 121.9 Lease No. \_\_\_\_\_  
 Well (Farm) No. One Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1307  
 Quadrangle Weston NW  
 County Harrison District Union  
 Engineer [Signature]  
 Engineer's Registration No. 1227  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Oct. 27, 1972 Scale 1" = 400' = 660'

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

WELL LOCATION MAP

FILE NO. Har-6446

+ 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.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
**Oil and Gas Division**  
**WELL RECORD 4**

39-15-1  
10-1-31

Quadrangle Weston  
Permit No. HAR-646

Rotary \_\_\_\_\_ Oil \_\_\_\_\_  
Cable  Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb.  not  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Company RAMCO Oil & Gas Corp.  
Address P. O. Box 99, Belpre, Ohio 45714  
Farm Harley Bennett Acres 121.9  
Location (waters) Buffalo Creek  
Well No. 1 Elev. 1307'  
District Union County Harrison  
The surface of tract is owned in fee by Harley Bennett et al  
Address Salem, W. Va.  
Mineral rights are owned by Harley Bennett et al  
Address Salem, W. Va.  
Drilling Commenced 11/20/72  
Drilling Completed 1/17/73  
Initial open flow show cu. ft. show bbls.  
Final production 1,200,000 cu. ft. per day 20 bbls.  
Well open 24 hrs. before test 1520' RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 8-10" 3/4	382'	382'	70 sks.
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2		3694'	100 sks.
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record.  
Fractured - Halliburton - 2-stage water frac - 1st stage - 910 bbls. water; 56,000# 20/40 sand -  
2nd stage - Speechley Sand - 750 bbls. water; 26,000# 20/40 sand.

Perforations: 3330' - 3340' 15 holes; 3567' - 3575' 8 holes; 3583' - 3587' 3 holes;  
3591' - 3595' 4 holes.

Coal was encountered at 295' Feet 60" Inches  
Fresh water \_\_\_\_\_ Feet  
Producing Sand Speechley & Balltown Salt Water Depth 3330' - 3340' & 3563' - 3595'  
Speechley Balltown

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay		Soft	0	15		
Slate		Soft	15	35		
Red Rock		Soft	35	65		
Slate		Soft	65	95		
Lime		Hard	95	135		
Slate & Shells		Soft	135	210		
Red Rock		Soft	210	220		
Slate & Shells		Soft	220	295		
Coal		Soft	295	300		
Slate & Shells		Soft	300	320		
Sand		Hard	320	345		
Slate & Lime		Soft	345	495		
Red Rock		Soft	495	515		
Slate & Shells		Soft	515	560		
Sand		Hard	560	580		
Slate & Shells		Soft	580	645		
Red Rock		Soft	645	655		
Slate		Soft	655	665		
Sand		Hard	665	692		
Red Rock		Soft	692	710		

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet <i>4</i>	Bottom Feet	Oil, Gas or Water	* Remarks
Slate & Shells		Soft	710	785		
Sand		Hard	785	935		
Slate & Shells		Soft	935	1020		
Sand		Hard	1020	1100		
Slate & Lime		Soft	1100	1215		
Sand		Hard	1215	1265		
Slate & Shells		Soft	1265	1300		
Sand		Hard	1300	1465		
Slate & Shells		Soft	1465	1565		
Lime		Hard	1565	1595		
Red Rock		Soft	1595	1615		
Slate & Lime		Soft	1615	1660		
Sand		Hard	1660	1690		
Lime		Hard	1690	1715		
Pencil Cave		Soft	1715	1724		
Big Lime		Hard	1724	1798		* Big Lime 1727'
Sand		Hard	1798	1823		* Big Injun 1816'
Red Rock		Soft	1823	1825		
Sand		Hard	1825	1890		
Squaw Sand		Hard	1890	2000		
Slate & Shells		Soft	2000	2140		
Lime		Hard	2140	2225		
Slate & Shells		Soft	2225	2235		
Sand		Hard	2235	2250		
Slate & Shells		Soft	2250	2320		
Sand		Hard	2320	2390		
Black & Red Shale		Soft	2390	2418		
Sand		Hard	2418	2505		
Slate & Shells		Soft	2505	2690		
Sand		Hard	2690	2710		
Shale & Shells		Soft	2710	3075		
Lime		Hard	3075	3120		
Slate & Shells		Soft	3120	3185		
Lime		Hard	3185	3255		
Slate & Shells		Soft	3255	3689		* Speechley 3326'
TD						* Balltown 3563'

Date August 28, 19 73

APPROVED RAMCO OIL & GAS CORP., Owner

By Neal Kudder, President  
(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

NOV 3 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.

DATE November 3, 1972

Surface Owner Harley Bennett et al

Company RAMCO Oil & Gas Corp.

Address Salem, W. Va.

Address P.O. Box 99, Belpre, Ohio 45714

Mineral Owner Harley Bennett et al

Farm Harley Bennett Acres 121.9

Address Salem, W. Va.

Location (waters) Buffalo Cr.

Coal Owner Fee

Well No. 1 Elevation 1307'

Address \_\_\_\_\_

District Union County Harrison

Coal Operator None - no coal is being mined

Quadrangle Weston

Address in this area.

Inspector to be notified Mr. Wm. Blosser

Box 1857 PH: Fairmont

Calfax 3639105

W.Va. 26546

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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 3-3-73.

Deputy Director  
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 February 10, 19 72 by James F. Scott 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. Kator, Asst. Sect.  
Well Operator

Address  
of  
Well Operator

RAMCO Oil & Gas Corp.  
P. O. Box 99  
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.

BOND DRILL

Har-646 PERMIT NUMBER  
Survey

**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 Harry Elder NAME Brad Crouse  
 ADDRESS Marietta, Ohio 45750 ADDRESS Rt. 1, Box 174, Grantsville, W. Va.  
 TELEPHONE \_\_\_\_\_ TELEPHONE (304) 354-7657  
 ESTIMATED DEPTH OF COMPLETED WELL: 3650' ROTARY \_\_\_\_\_ CABLE TOOLS   
 PROPOSED GEOLOGICAL FORMATION: Balltown  
 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			
<del>13</del> - 10	330'	330'	to surface
9 - 5/8			
8 - 5/8	1050'		
7	1760'		
5 1/2			
4 1/2		3650'	300' fillup
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 50 FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS 297'  
 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