

Minimum Error of Closure 1 in 200'

Source of Elevation Elev. at mouth of run - 886'

Fracture.....   
 New Location.....   
 Drill Deeper.....  PARTIAL PLUG 4/9/73  
 Abandonment.....  ISSUED 6/26/75 map No.

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. [Signature]  
 Squares: N S E W

Company Ramco Oil & Gas Corp.  
 Address P.O. Box 99, Belare, Ohio  
 Farm Merl G. Howard, et ux  
 Tract \_\_\_\_\_ Acres 238.5 Lease No. \_\_\_\_\_  
 Well (Farm) No. One Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1292  
 Quadrangle Wheeling SC  
 County Marshall District Sand Hill  
 Engineer W. H. [Signature]  
 Engineer's Registration No. 1227  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Nov. 17, 1972 Scale 1" = 400' = 660'

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

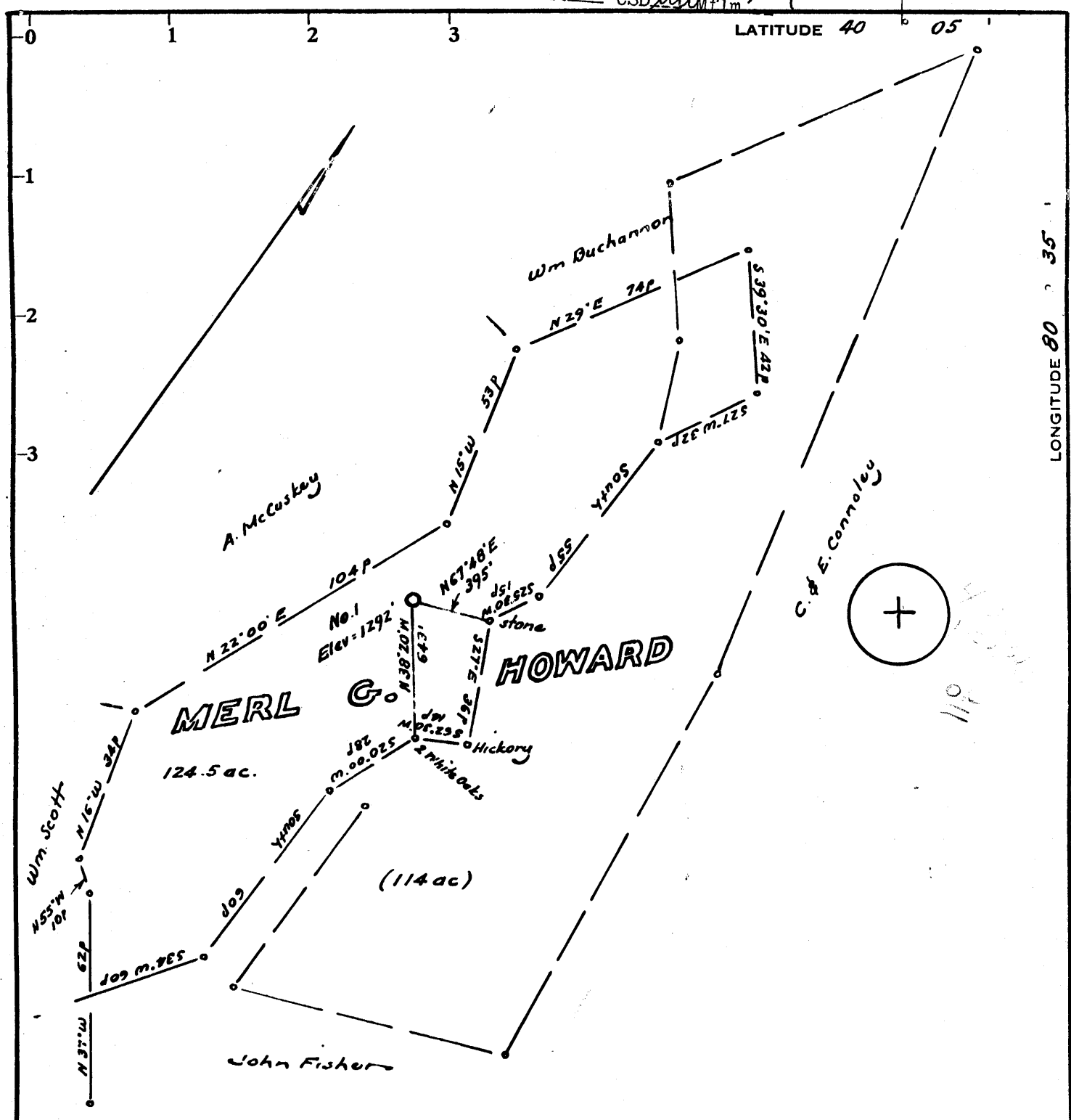
WELL LOCATION MAP

FILE NO. MARS-552-PP-P

+ 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.

47-051



Minimum Error of Closure 1 in 200'  
 Source of Elevation Elev. at mouth of run = 886'

Fracture   
 New Location   
 Drill Deeper  Partial plugging  
 Abandonment  4-9-23

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: *Musberry*  
 Squares: N S E W

Company Ramco Oil & Gas Corp.  
 Address P.O. Box 99, Belpre, Ohio  
 Farm Merl G. Howard, et ux  
 Tract \_\_\_\_\_ Acres 238.5 Lease No. \_\_\_\_\_  
 Well (Farm) No. One Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1292  
 Quadrangle Wheeling SC  
 County Marshall District Sand Hill  
 Engineer Musberry  
 Engineer's Registration No. 1237  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Nov. 13, 1972 Scale 1" = 400' = 660'

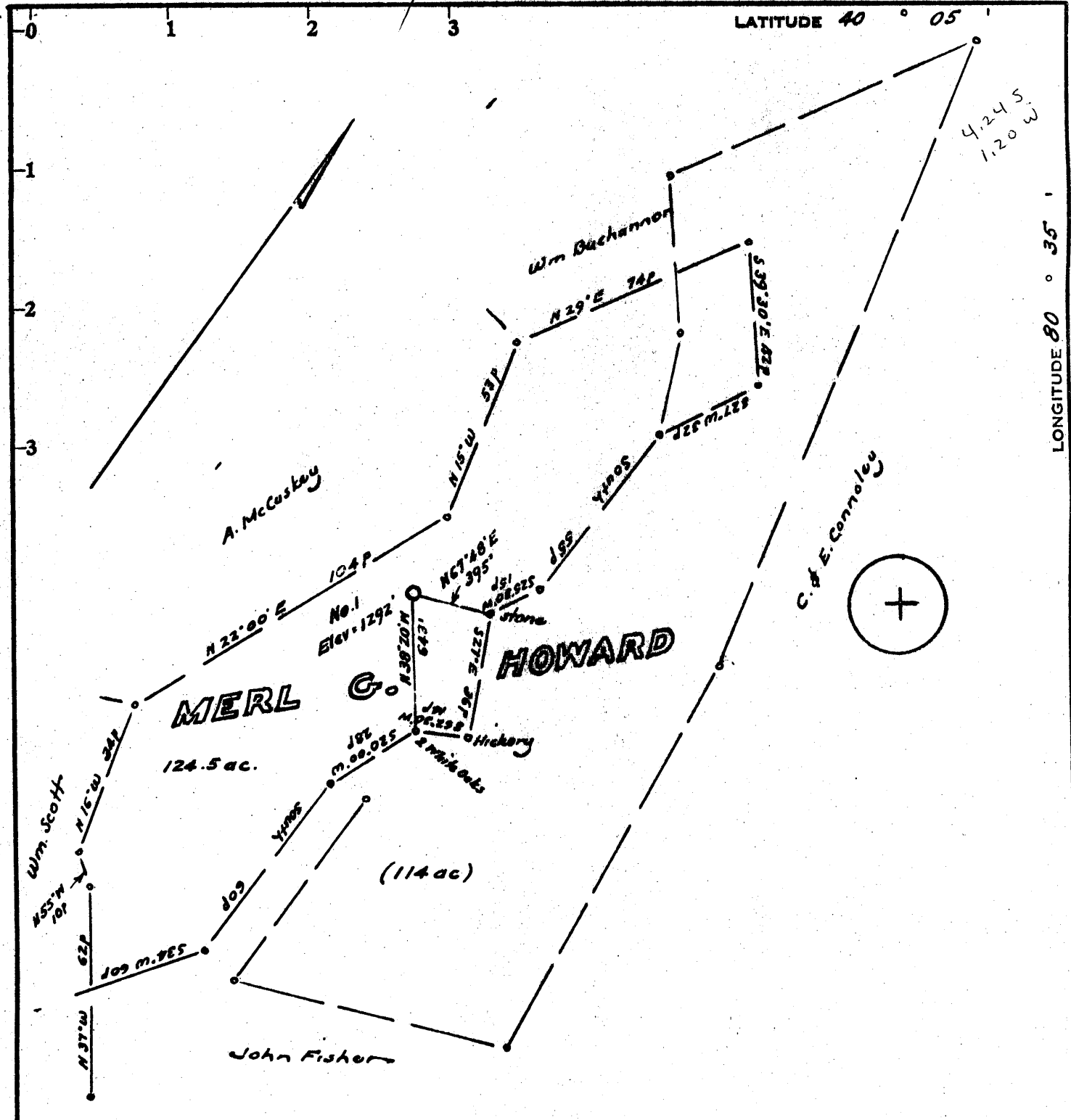
STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

**WELL LOCATION MAP**

FILE NO. MARS-552-PP

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



Minimum Error of Closure 1 in 200'

Source of Elevation Elev. at mouth of run - 886'

- 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 Merl G. Howard, et ux  
 Tract \_\_\_\_\_ Acres 230.5 Lease No. \_\_\_\_\_  
 Well (Farm) No. One Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1292  
 Quadrangle Wheeling SE  
 County Marshall District Sand Hill  
 Engineer [Signature]  
 Engineer's Registration No. 1227  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Nov. 13, 1972 Scale 1" = 400' = 660'

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

**WELL LOCATION MAP**

FILE NO. MARS-552

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



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

**RECEIVED**

APR 9 1973

**Oil and Gas Division**

OIL & GAS DIVISION  
DEPT. OF MINES

**WELL RECORD #**

40-15  
108-44

Quadrangle Wheeling

Permit No. MARS-552 - P.P.  
(CORRECTED WELL RECORD)

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

Company RAMCO Oil & Gas Corp.  
Address P.O. Box 99, Belpre, Ohio 45714  
Farm Merle G. Howard Acres 238.5  
Location (waters) Middle Wheeling Creek  
Well No. 1 Elev. 1292'  
District Sand Hill County Marshall  
The surface of tract is owned in fee by \_\_\_\_\_  
Merle G. Howard et ux  
Address Stone Church Rd., Elm Grove, W.Va.  
Mineral rights are owned by Merle G. Howard et ux  
Address Stone Church Rd., Elm Grove, WV  
Drilling Commenced December 8, 1972  
Drilling Completed April 6, 1973  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production \_\_\_\_\_ 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			
<del>20</del> -16			
Cond.	22		
13- <del>1/2</del> "	90		
<del>20</del> 10"	665	665	
8 5/8	1130		
7	1715	1715	
5 1/2			
4 1/2			
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Well to be treated and completed after plugging back.

Perforated - 1430' to 1432' 8 holes.

Haliburton pumped 250 gals. 15% acid with 1 gal. More-Flo

Final Test - 187,000<sup>M</sup> cubic feet - 360 psi

Coal was encountered at 628' - 633' Feet \_\_\_\_\_ Inches

Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_

Producing Sand \_\_\_\_\_ Depth \_\_\_\_\_

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Rock		Soft	0	25		
Sand		Hard	25	35		
Slate		Soft	35	90		
Red Rock		Soft	90	100		
Lime & Slate		Soft	100	290		
Slate		Soft	290	370		
Sand		Hard	370	380		
Lime & Slate		Soft	380	395		
Sand		Hard	395	420		
Lime & Slate		Soft	420	555		
Black Slate		Soft	555	568		
Black Lime		Hard	568	615		
Slate		Soft	615	628		
Coal		Soft	628	633		
Slate & Lime		Soft	633	665		
Lime		Hard	665	700		
Black Slate		Soft	700	720		
Lime		Hard	720	780		
Red Rock		Soft	780	790		
Slate		Soft	790	800		

1292  
628  
568

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet <i>f</i>	Bottom Feet	Oil, Gas or Water	* Remarks
Red Rock		Soft	800	810		
Slate		Soft	810	840		
Red Rock		Soft	840	860		
Slate & Shells		Soft	860	885		
Red Rock		Soft	885	906		
Slate		Soft	906	960		
Sand		Hard	960	975		
Slate		Soft	975	1015		
Red Rock		Soft	1015	1030		
Slate & Shells		Soft	1030	1040		
Sand		Hard	1040	1058		
Red Rock		Soft	1058	1095		
Slate, gritty		Soft	1095	1150		
Dark Slate		Soft	1150	1190		
Sand		Hard	1190	1220		
Slate & Shells		Soft	1220	1330		
Sand		Hard	1330	1385		
Slate & Shells		Soft	1385	1425		
Sand <i>1st Salt</i>		Hard	1425	1440	gas	1430' - 1440'
Slate		Soft	1440	1530		
Sand		Hard	1530	1570	water	1530' hole full
Slate		Soft	1570	1610		
Sand		Hard	1610	1705		
Slate		Soft	1705	1710		
Sand		Hard	1710	1735	water	1715'-1730'
Slate		Soft	1735	1746	oil show	- 1715'-1730'
Lime		Hard	1746	1755		
Sand		Hard	1755	1882		
Slate		Soft	1882	1898		
Sand		Hard	1898	1955	gas show	1898'-1900'
Slate & Sand		Soft	1955	2005		
Slate & Shells		Soft	2005	2095		
Sand		Hard	2095	2105		
Slate & Shells		Soft	2105	2200		
Slate		Soft	2200	2250		
Shells		Soft	2250	2290		
Slate		Soft	2290	2315		
Sand <i>Injan?</i>		Hard	2315	2324		
Slate & Shells		Soft	2324	2400		
Slate & Red Rock		Soft	2400	2458		
TD			2458			

*Perced*  
 1755  
 2315  
 425  
 Per. - 17023  
 2315  
 1294

Date April 9, 19 73

APPROVED RAMCO Oil & Gas Corp., Owner

By Carl E. Moore, Vice President  
(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division

RECEIVED

APR 9 1973

OIL & GAS DIVISION  
DEPT. OF MINES

40-15  
108-44

WELL RECORD 3

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

Quadrangle Wheeling

Permit No. MARS-552 - P.P.

Company RAMCO Oil & Gas Corp.  
Address P.O. Box 99, Belpre, Ohio 45714  
Farm Merle G. Howard Acres 238.5  
Location (waters) Middle Wheeling Creek  
Well No. 1 Elev. 1292'  
District Sand Hill County Marshall  
The surface of tract is owned in fee by \_\_\_\_\_  
Merle G. Howard et ux  
Address Stone Church Rd., Elm Grove, W.Va.  
Mineral rights are owned by Merle G. Howard et ux  
Address Stone Church Rd., Elm Grove, WV  
Drilling Commenced December 8, 1972  
Drilling Completed April 6, 1973  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production \_\_\_\_\_ 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			
<del>20-16</del>			
Cond.	22		
<del>13-1/2</del>	90		
<del>10"</del>	665	665	
8 5/8	1130		
7	1715	1715	
5 1/2			
4 1/2			
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Well to be treated and completed after plugging back.

5-0 (this completion)

Coal was encountered at 628' - 633' Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand \_\_\_\_\_ Depth \_\_\_\_\_

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Rock		Soft	0	25		
Sand		Hard	25	35		
Slate		Soft	35	90		
Red Rock		Soft	90	100		
Lime & Slate		Soft	100	290		
Slate		Soft	290	370		
Sand		Hard	370	380		
Lime & Slate		Soft	380	395		
Sand		Hard	395	420		
Lime & Slate		Soft	420	555		
Black Slate		Soft	555	568		
Black Lime		Hard	568	615		
Slate		Soft	615	628		
Coal		Soft	628	633		
Slate & Lime		Soft	633	665		
Lime		Hard	665	700		
Black Slate		Soft	700	720		
Lime		Hard	720	780		
Red Rock		Soft	780	790		
Slate		Soft	790	800		

(over)

\* Indicates Electric Log tops in the remarks section.

APR 18 1973

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Rock		Soft	800	810		
Slate		Soft	810	840		
Red Rock		Soft	840	860		
Slate & Shells		Soft	860	885		
Red Rock		Soft	885	906		
Slate		Soft	906	960		
Sand		Hard	960	975		
Slate		Soft	975	1015		
Red Rock		Soft	1015	1030		
Slate & Shells		Soft	1030	1040		
Sand		Hard	1040	1058		
Red Rock		Soft	1058	1095		
Slate, gritty		Soft	1095	1150		
Dark Slate		Soft	1150	1190		
Sand		Hard	1190	1220		
Slate & Shells		Soft	1220	1330		
Sand		Hard	1330	1385		
Slate & Shells		Soft	1385	1425		
Sand		Hard	1425	1440	gas 1430' - 1440'	
Slate		Soft	1440	1530		
Sand		Hard	1530	1570	water 1530' hole full	
Slate		Soft	1570	1610		
Sand		Hard	1610	1705		
Slate		Soft	1705	1710		
Sand		Hard	1710	1735	water 1715'-1730'	
Slate		Soft	1735	1746	oil show - 1715'-1730'	
Lime		Hard	1746	1755		
<del>Sand</del>		Hard	1755	1882		
Slate		Soft	1882	1898		
Sand		Hard	1898	1955	gas show 1898'-1900'	
Slate & Sand		Soft	1955	2005		
Slate & Shells		Soft	2005	2095		
Sand		Hard	2095	2105		
Slate & Shells		Soft	2105	2200		
Slate		Soft	2200	2250		
Shells		Soft	2250	2290		
Slate		Soft	2290	2315		
Sand <i>Injun?</i>		Hard	2315	2324		
Slate & Shells		Soft	2324	2400		
Slate & Red Rock		Soft	2400	2458		
TD			2458			

2315  
1292  
1023

Date April 9, 19 73

APPROVED RAMCO Oil & Gas Corp. Owner

By Carl E. Moore Vice 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.

DATE November 7, 1972

Surface Owner Merle G. Howard et ux  
Address Stone Church Rd., Elm Grove, W. Va.  
Mineral Owner Merle G. Howard et ux  
Address Stone Church Rd., Elm Grove, W. Va.  
Coal Owner Valley Camp Coal Co.  
Address Valley Grove, W. Va.  
Coal Operator Valley Camp Coal Co.  
Address Valley Grove, W. Va.

Company RAMCO Oil & Gas Corp.  
Address P.O. Box 99, Belpre, Ohio 45714  
Farm Merle G. Howard et ux Acres 124 238  
Location (waters) Wheeling Run CRK.  
Well No. 1 Elevation 1292'  
District Sand Hill County Marshall  
Quadrangle Wheeling

INSPECTOR TO BE NOTIFIED Arthur Null  
Hundred, W. Va. PH: 775-5611

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 3-21-73.

Robert H. Todd  
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 January 24, 72 by Columbia Gas Transmission Corp. RAMCO Oil & Gas Corp. made to \_\_\_\_\_ 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,  
by: Randall V. Kiser Asst. Sect.  
(Sign Name) \_\_\_\_\_  
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.

BOND DRILL



**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 John Mosser \_\_\_\_\_ NAME Brod Crouse \_\_\_\_\_  
 ADDRESS Harrisville, V. Va. \_\_\_\_\_ ADDRESS Rt. 1, Box 174, Grantsville, V. Va. \_\_\_\_\_  
 TELEPHONE (304) 643-2155 \_\_\_\_\_ TELEPHONE (304) 354-7657 \_\_\_\_\_  
 ESTIMATED DEPTH OF COMPLETED WELL: 2450' \_\_\_\_\_ 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	720'	720'	cemented to surface
9 - 5/8			
8 - 5/8	1350'		
7	1850'		
5 1/2			
4 1/2		2450'	70 sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS 690' \_\_\_\_\_  
 IS COAL BEING MINED IN THE AREA? Yes \_\_\_\_\_ BY WHOM? Valley Camp Coal Co. \_\_\_\_\_

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