



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1' in 200
 PROVEN SOURCE OF ELEVATION U.S.G.S. B.M. 937

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) Paul K. Marshall
 R.P.E. _____ L.L.S. 580

PLACE SEAL HERE

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



DATE Nov. 27, 1981
 OPERATOR'S WELL NO. 1
 API WELL NO. 47 - Wood - 1195
 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 942 WATER SHED Stillwell Creek
 DISTRICT Union COUNTY Wood
 QUADRANGLE Valley Mills W.Va. 7.5' Marietta (S' SW)
 SURFACE OWNER F.J. Patterson ACREAGE 67.25
 OIL & GAS ROYALTY OWNER South Penn Oil & Gas et. al. LEASE ACREAGE 97.25
 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 Devonian ESTIMATED DEPTH 4800
 WELL OPERATOR Marietta Royalty Co. DESIGNATED AGENT J. Robert Mullenix
 ADDRESS 225 Putman Street ADDRESS 3902 1st. Avenue
Marietta Ohio Vienna W.Va. 26105

JAN 21 1982

IV-35
(Rev 8-81)

MAR 28 1983
OIL & GAS DIVISION
DEPT. OF MINES



State of West Virginia
Department of Mines
Oil and Gas Division

Date March 21, 1983
Operator's
Well No. One (1)
Farm F. J. Patterson
API No. 47 - 107 - 1195

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal /
(If "Gas," Production / Underground Storage / Deep / Shallow /)

LOCATION: Elevation: 942' Watershed Stillwell Creek
District: Union County Wood Quadrangle Valley Mills

COMPANY Marietta Royalty Company, Inc.
ADDRESS 225 Putnam St. Marietta, Ohio 45750
DESIGNATED AGENT J. Robert Mullenix
ADDRESS 3902 1st. Ave. Vienna, W. Va. 26105
SURFACE OWNER F. J. Patterson
ADDRESS Rt. 9 Parkersburg, W. Va. 26101
MINERAL RIGHTS OWNER _____
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Deo
Mace ADDRESS Rt. 1, Box 5, Sandridge
PERMIT ISSUED December, 1981 W. Va.
DRILLING COMMENCED February 17, 1982
DRILLING COMPLETED April 28, 1982

| Casing & Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. |
|------------------|------------------|--------------|------------------------|
| Size 20-16 Cond. | | | |
| 13-10" | 300' | 300' | 95 Sk. |
| 9 5/8 | | | |
| 8 5/8 | 1195' | | |
| 7 | 2012' | | |
| 5 1/2 | | | |
| 4 1/2 | 5120' | 5120' | 270 Sk. |
| 3 | | | |
| 2 | | | |
| Liners used | | | |

GEOLOGICAL TARGET FORMATION Devonian shale Depth 5070 feet
Depth of completed well 5070 feet Rotary / Cable Tools xx
Water strata depth: Fresh feet; Salt feet
Coal seam depths: NA Is coal being mined in the area? NA

OPEN FLOW DATA
Producing formation Devonian Shale Pay zone depth 3558-4234 feet
Gas: Initial open flow 300 Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 275 Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure 750 psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)
Second producing formation Pay zone depth feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow Mcf/d Oil: Final open flow Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure psig (surface measurement) after hours shut in

APR 4 1983

(Continue on reverse side)

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

980,000 SCF Nitrogen

3558 - 4234 15 Shots

Muron

WELL LOG

| FORMATION | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS Including indication of all fresh and salt water, coal, oil and gas |
|-------------------|-------|--------------|----------|-------------|--|
| Red Rock & Slate | | | 0 | 1050 | |
| Slate | | | 1050 | 1090 | |
| Black Slate | | | 1090 | 1195 | |
| Lime | | | 1195 | 1215 | |
| Sand | | | 1215 | 1230 | |
| Slate | | | 1230 | 1235 | |
| Sand | | | 1235 | 1270 | |
| Slate | | | 1270 | 1360 | |
| Lime | | | 1360 | 1375 | |
| Sand | | | 1375 | 1450 | 1390-1400 Oil Show |
| Slate | | | 1450 | 1475 | |
| Sand | | | 1475 | 1525 | |
| Slate | | | 1525 | 1595 | |
| Lime | | | 1595 | 1615 | |
| Sand | | | 1615 | 1638 | |
| Slate | | | 1638 | 1737 | |
| Sand | | | 1737 | 1750 | |
| Slate | | | 1750 | 1765 | |
| Sand | | | 1765 | 1865 | 1845 Water/Sand |
| Black Slate | | | 1865 | 1875 | |
| Sand | | | 1875 | 1970 | |
| Slate & Shells | | | 1970 | 2270 | |
| Black Slate | | | 2270 | 2308 | |
| Brown Shale | | | 2308 | 2320 | |
| Sand | | | 2320 | 2335 | |
| Lime <i>Berea</i> | | | 2335 | 2370 | |
| Slate & Shells | | | 2370 | 2890 | |
| White Slate | | | 2890 | 3595 | |
| Brown Slate | | | 3595 | 3645 | |
| Slate & Shells | | | 3645 | 3960 | |
| Brown Shale | | | 3960 | 4035 | |
| Slate & Shells | | | 4035 | 4055 | |
| Brown Shale | | | 4055 | 4290 | |
| Slate & Shells | | | 4290 | 4615 | |
| Lime | | | 4615 | 4630 | |
| Slate | | | 4630 | 4675 | |
| Brown Shale | | | 4675 | 5068 | |
| Lime | | | 5068 | 5070 | |

5070
2370
2700

T. D.

(Attach separate sheets as necessary)

Marietta Royalty Company, Inc.

Well Operator

By:

Chlori Chize, Sec.

Date:

MAR 24 1963

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 sand, encountered in the drilling of a well."



Well No. one (1)
Farm F. J. Patterson
API # 47-107-1195
Date DEC 8 1981

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil XX / Gas XX /
(If "Gas", Production XX / Underground storage ___ / Deep ___ / Shallow ___ /

LOCATION: Elevation: 942' Watershed: Stillwell Creek
District: Union County: Wood Quadrangle: Valley Mills

WELL OPERATOR Marietta Royalty Company, Inc.
Address 225 Putnam Street
Marietta, Ohio 45750

DESIGNATED AGENT J. Robert Mullenix
Address 3902 1st. Ave.
Vienna, W.Va. 26105

OIL AND GAS ROYALTY OWNER South Penn Oil & Gas, etal
Address P. O. Box 2967
Houston, Texas 77001
Acreage 97.25 Acres

COAL OPERATOR _____
Address _____

SURFACE OWNER F. J. Patterson
Address Rt. 9
Parkersburg, W.Va. 26101
Acreage 97.25 Acres

COAL OWNER(S) WITH DECLARATION ON RECORD:
NAME _____
Address _____
NAME _____
Address _____

FIELD SALE (IF MADE) TO:
NAME _____
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
NAME _____
Address _____

OIL AND GAS INSPECTOR TO BE NOTIFIED:
NAME Deo Mace
Address Rt. 1, Box 5
Sandridge, W.Va. 25274
Telephone 304-655-7398

RECEIVED

DEC 10 1981

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ___ / lease XX / other contract ___ / dated Nov. 9, 1981, to the undersigned well operator from Lucille K. Rasel and Harley E. Rasel, Sr.

(If said deed, lease, or other contract has been recorded:)

Recorded on Nov. 10, 1981, in the office of the Clerk of County Commission of Wood County, West Virginia, in Deed Book 763 at page 533. A permit is requested as follows:

PROPOSED WORK: Drill XX / Drill Deeper ___ / Redrill ___ / Fracture or stimulate XX / Plug off old formation ___ / Perforate new formation XX / Other physical change in well (specify) _____

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after receipt of this Application by the Dept. Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessees on or before the day of the mailing or delivery of this Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1013 WASHINGTON ST., E.
CHARLESTON, WV 25311
Telephone - 304/348-3092

BLANKET BOND MARIETTA ROYALTY COMPANY, INC.
Well Operator
By: J. Robert Mullenix 1981
Its: President
DEC 8 1981

(Revised 3-81)

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) _____
Address _____

GEOLOGICAL TARGET FORMATION Devonian Shale - Middle
Estimated depth of completed well 4,800' feet. Rotary ___ / Cable tools XX /
Approximate water strata depths: Fresh, 150' feet; salt, 1,800' feet.
Approximate coal seam depths: Unknown
Is coal being mined in this area: Yes ___ / No XX /

CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS | | | | FOOTAGE INTERVALS | | CEMENT FILL UP OR SACKS Cubic ft. | PACKERS |
|-----------------------|----------------|-------|---------------|-----|-------------------|----------------|-----------------------------------|-----------------------------|
| | Size | Grade | Weight per ft | New | Used | For Drill-ling | | |
| Conductor | | | | | | | | Kinds |
| Fresh water | 10" | | 32 | X | | | 200' | Cemented to surface |
| Coal | 8 5/8" | | 24 | X | | 1,100' | | Sizes |
| Intermed. | 7" | | 20 | X | | 1,600' | | |
| Production | 4 1/2" | | 10.5 | X | | | 4,800' | Cemented if Productive |
| Tubing | | | | | | | | |
| Liners | | | | | | | | Perforations: Top Bottom |

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan" applicable to the reclamation required by Code §22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code §22-4-12a, and (v) if applicable, the consent required by Code §22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions of this permit are in accordance with Chapter 22, of the West Virginia Code, and this permit is hereby approved for _____ drilling. This permit shall expire if operations have not commenced by 8-28-82.

John B. Brudgett
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code §22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator ___ / owner ___ / lessee ___ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____, 19____.

By: _____

Its: _____

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

RECEIVED
JVA
APR 11 1982
OIL & GAS
DIVISION

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil XX / Gas XX /
(If "Gas", Production XX / Underground storage ___ / Deep ___ / Shallow ___ /
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Acreage 97.25 Acres

DESIGNATED AGENT J. Robert Mullenix
Address 3902 1st. Ave.
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NAME Deo Mace
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Telephone 304-655-7398

NAME _____
Address _____

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NAME _____
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WV DEPARTMENT OF MINES

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BLANKET BOND

MARIETTA ROYALTY COMPANY, INC.
Well Operator

By: Robert Mullenix 1981

Its: President

DEC 8 1981

(Revised 3-81)

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|-----------------------|----------------|-------|---------------|-----|-------------------|----------------|-----------------------------------|-----------------------------|
| | Size | Grade | Weight per ft | New | Used | For Drill-ling | | |
| Conductor | | | | | | | | Kinds |
| Fresh water | 10" | | 32 | X | | 200' | Cemented to surface | |
| Coal | 8 5/8" | | 24 | X | | 1,100' | <i>29 1/2" sizes</i> | Sizes |
| Intermed. | 7" | | 20 | X | | 1,500' | | |
| Production | 4 1/2" | | 10.5 | X | | 4,800' | Cemented if Productive | |
| Tubing | | | | | | 5,100' | | |
| Liners | | | | | | | | Perforations: Top Bottom |

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A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 8-28-82

[Signature]
Deputy Director - Oil & Gas Division

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W A I V E R

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Date: _____, 19 _____

By: _____