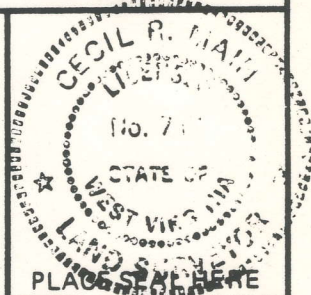


MAP SHEET 80 S21 W28

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION ALLEGHENY LAND and MINERAL CO. WELL # A-297
 ELEV. 903'

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) Cecil R. Main
 R.P.E. _____ L.L.S. 711



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE JANUARY 12th, 19 83
 OPERATOR'S WELL NO. A-1296
 API WELL NO. 47 - 085 - 6227
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 909' WATER SHED LITTLE INDIAN RUN
 DISTRICT MURPHY COUNTY RITCHIE
 QUADRANGLE SMITHVILLE 7.5' Harrisville 15' C
 SURFACE OWNER ROBERT E. LYREN, ET. UX. ACREAGE 28.8 Ac.
 OIL & GAS ROYALTY OWNER C.S. PEARCY LEASE ACREAGE 236 Ac.
 LEASE NO. 727

FEB 07 1983

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) DEEP

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION BROWN SHALE ESTIMATED DEPTH 5990
 WELL OPERATOR ALLEGHENY LAND and MINERAL CO. DESIGNATED AGENT DANIEL L. WHEELER
 ADDRESS P.O. BOX 1740 ADDRESS P.O. BOX 1740
CLARKSBURG, WEST VIRGINIA 26302-1740 CLARKSBURG, WEST VIRGINIA 26302-1740

66 Mahone (Smithville) (124)



Date December 18, 1984
 Operator's (REVERSE)
 Well No. A-1296
 Farm Pearcy
 API No. 47 - 085 - 6227

RECEIVED STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 DEC 21 1984 OIL and GAS DIVISION

OIL & GAS DIVISION WELL OPERATOR'S REPORT
 OF
DEPT. OF MINES
 DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: OIL / GAS X / LIQUID INJECTION / WASTE DISPOSAL
 (If "Gas", Production / Underground Storage / Deep / Shallow XX /)

LOCATION: Elevation: 909' Watershed Little Indian Run
 District: Murphy County: Ritchie Quadrangle: Smithville 7.5'

COMPANY ALAMCO, INC
200 West Main Street
 ADDRESS Clarksburg, West Virginia 26301

DESIGNATED AGENT ALAMCO, INC
200 West Main Street
 ADDRESS Clarksburg, West Virginia 26301

SURFACE OWNER Robert E. Lyren
 ADDRESS 486 N. Portage Path, Akron, OH 44303

MINERAL RIGHTS OWNER Maxwell Heirs
c/o Union National Bank
 ADDRESS Clarksburg, WV 26301

OIL AND GAS INSPECTOR FOR THIS WORK Samuel
Hersman ADDRESS P.O. Box 66, Smithville, WV

PERMIT ISSUED October 17, 1983

DRILLING COMMENCED October 30, 1984

DRILLING COMPLETED November 4, 1984

IF APPLICABLE: PLUGGING OF DRY HOLE ON
 CONTINUOUS PROGRESSION FROM DRILLING OR
 REWORKING. VERBAL PERMISSION OBTAINED
 ON _____

| Casing & Tubing Size Cond. | Used in Drilling | Left in Well | Cement fill up Cu. Ft. |
|----------------------------|------------------|--------------|------------------------|
| 20-16 | | | |
| 11-3/4" | | | |
| 9 5/8" | | | |
| 8 5/8" | 995' | 995' | to surface |
| 7" | | | |
| 5 1/2" | | | |
| 4 1/2" | 5884' | 5884' | w/500 sks 3000' |
| 3 | | | |
| 2 | | | |
| Liners used | | | |

GEOLOGICAL TARGET FORMATION Brown Shale DEPTH 5990 FEET

Depth of completed well 5915 feet Rotary x / Cable Tools _____
 Water Strata depth: Fresh 79 & 140 feet Salt _____ feet
 Coal seam depth: 385 - 388 Is coal being mined in this area? No

OPEN FLOW DATA

Producing formation Speechley, Brown Shale Pay zone depth See Back feet
 Gas: Initial open flow 169 Mcf/d Oil: Initial open flow _____ Bbl/d
 Final open flow 539 Mcf/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 4 hours

Static rock pressure 1150 psig (surface measurement after 72 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 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
 (continue on reverse side)

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

Well was fractured November 13, 1984

| | | | |
|---------------|------------------------------|--------------------------------|---------------------------------------|
| Perforations: | 3404 - 3406 | 5460 - 5464 | 5711 - 5716 |
| | 3416 - 3418 | 5538 - 5538 | 5797 - 5800 |
| | 3428 - 3428 | 5550 - 5552 | 5820 - 5820 |
| | 3490 - 3492 | 5569 - 5569 | 5823 - 5823 |
| | 3495 - 3498 <u>Speechley</u> | 5573 - 5573 | <u>Brown Shale</u> <i>Rhinestreet</i> |
| | | 5603 - 5603 <u>Brown Shale</u> | <i>Rhinestreet</i> |

WELL LOG

| FORMATION COLOR HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS Including indication of all fresh and salt water, coal, oil and gas |
|------------------------------|----------|--------------------|--|
| Shale & Red Rock | 0 | 55 | Damp @ 79' |
| Sand & Shale | 55 | 138 | 1/4" water @ 140' |
| Red Rock & Shale | 138 | 157 | Gas check @ 1509' No show |
| Sand & Shale | 157 | 195 | Gas check @ 1698' 45 MCF/D |
| Red Rock | 195 | 230 | Gas check @ 1886' 189 MCF/D |
| Sand & Shale | 230 | 344 | Gas check @ 1978' 189 MCF/D |
| Red Rock | 344 | 363 | Gas check @ 2695' 119 MCF/D |
| Sand & Shale | 363 | 385 | Gas check @ 2942' 119 MCF/D |
| Coal | 385 | 388 | Gas check @ 3318' 103 MCF/D |
| Sand & Shale | 388 | 438 | Gas check @ 3380' 103 MCF/D |
| Red Rock | 438 | 453 | Gas check @ 3505' 103 MCF/D |
| Sand & Shale | 453 | 470 | Gas check @ 4381' 84 MCF/D |
| Red Rock | 470 | 521 | Gas check @ 4791' 84 MCF/D |
| Sand & Shale | 521 | 576 | Gas check @ 5572' 179 MCF/D |
| Red Rock | 576 | 667 | Gas check @ 5915' 169 MCF/D |
| Sand & Shale | 667 | 695 | |
| Red Rock | 695 | 820 | <u>GAMMA RAY LOG TOPS</u> |
| Sand & Shale | 820 | 1738 | |
| Little Lime | 1738 | 1752 | Pocono 1911' |
| Sand & Shale | 1752 | 1779 | Weir 2050' |
| Big Lime | 1779 | 1830 | Berea 2305' |
| Big Injun | 1830 | 1911 | Gordon 2684' |
| Sand & Shale | 1911 | 5915 T.D. | Speechley 3382' |
| | | <i>Rhinestreet</i> | Balltown 3692' |
| | | <i>@ T.D.</i> | Riley 4329' |
| | | | Benson 4621' |
| | | | Alexander 4801' |
| | | | Elk 5294' |
| | | | Brown Shale 5410' |

Onondoga ≈ 5882

*5915
2305
3610*

*5915
909
5006
3720
1286*

(Attach separate sheets as necessary)

ALAMCO, INC.

Well Operator

By: *Bruce G. Prather*



Date: December 18, 1984

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 coal, encountered in the drilling of a well."



1) Date: Sept. 27, 1983
 2) Operator's Well No. A-1296 - Percy
 3) API Well No. 47 085-6227-REN
 State County Permit

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas XX /
 B (If "Gas", Production / Underground storage / Deep / Shallow XX /)
- 5) LOCATION: Elevation: 909' Watershed: Little Indian Run
 District: Murphy County: Ritchie Quadrangle: Smithville 7.5'
- 6) WELL OPERATOR Alamco, Inc. 7) DESIGNATED AGENT Daniel L. Wheeler
 Address P.O. Box 1740 Address P. O. Box 1740
Clarksburg, WV 2630+ Clarksburg, WV 26301
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Samuel N. Hersman Name Development Drilling Corpn.
 Address P. O. Box 66 Address P. O. Box 1740
Smithville, WV 26178 Clarksburg, WV 26301
- 10) PROPOSED WELL WORK: Drill XX / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Brown Shale
- 12) Estimated depth of completed well, 5990' feet
- 13) Approximate trata depths: Fresh, 551 - 553 feet; salt, feet.
- 14) Approximate coal seam depths: None Is coal being mined in the area? Yes / No XX
- 15) CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS | | | | FOOTAGE INTERVALS | | CEMENT FILL-UP OR SACKS (Cubic feet) | PACKERS |
|-----------------------|----------------|-------|----------------|-----|-------------------|--------------|--------------------------------------|-----------------------------|
| | Size | Grade | Weight per ft. | New | Used | For drilling | | |
| Conductor | 16" | | | | X | 20' | 20' | Cement to surface |
| Fresh water | 8-5/8" | | | | | | | |
| Coal | 8-5/8" | | 20# | X | | 700' | 700' | Cement to surface |
| Intermediate | | | J.55 | | | | | |
| Production | 4-1/2" | | 10.50# | X | | 5990' | 5990' | Required by Rule 15.01 |
| Tubing | | | | | | | | |
| Liners | | | | | | | | Perforations: Top Bottom |

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-085-6227-REN Date October 17, 19 83

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires October 17, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

| | | | | |
|-----------------|------------------|--------------------------|----------------------------|-------------------|
| Bond: <u>66</u> | Agent: <u>OK</u> | Plat: <u>[Signature]</u> | Casing: <u>[Signature]</u> | Fee: <u>24695</u> |
|-----------------|------------------|--------------------------|----------------------------|-------------------|

[Signature]
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.



1) Date: January 26, 19 83
 2) Operator's Well No. A-1296 Percy
 3) API Well No. 47 085 6227
 State County Permit

DRILLING CONTRACTOR:
Development Drilling
P. O. Drawer 1740
Clarksburg, WV 26301

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

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil / Gas XX /
 B (If "Gas", Production / Underground storage / Deep / Shallow XX /)
- 5) LOCATION: Elevation: 909' Watershed: Little Indian Run
 District: Murphy County: Ritchie Quadrangle: Smithville 7.5'
- 6) WELL OPERATOR Allegheny Land & Mineral Co. 11) DESIGNATED AGENT Daniel L. Wheeler
 Address P. O. Box 1740 Address P. O. Box 1740
Clarksburg, WV 26301 Clarksburg, WV 26301
- 7) OIL & GAS ROYALTY OWNER Maxwell Heirs 12) COAL OPERATOR N/A
 Address X Union National Bank Address
Clarksburg, WV 26301
- Acreage 236
- 8) SURFACE OWNER Robert E. Lyren et ux 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address 486 N. Portage Path Name Maxwell Heirs
Akron, Ohio 44303 Address X Union National Bank
 Acreage 28.8 Clarksburg, WV 26301
- 9) FIELD SALE (IF MADE) TO: Name
 Address Consolidated Gas Supply Corp. Address
445 W. Main St., Clarksburg, WV 26301
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED Name
 Name Samuel N. Hersman 477-3597 Address
 Address P. O. Box 66 Address
Smithville, WV 26178
- 14) COAL LESSEE WITH DECLARATION ON RECORD:
 Name N/A
 Address
- 15) PROPOSED WORK: Drill XX / Drill deeper / Redrill / Fracture or stimulate /
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify)
- 16) GEOLOGICAL TARGET FORMATION, Brown Shale
- 17) Estimated depth of completed well, 5990' feet
- 18) Approximate water strata depths: Fresh, 551-553 feet; salt, feet.
- 19) Approximate coal seam depths: None Is coal being mined in the area? Yes / No XX

20) CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS | | | | | FOOTAGE INTERVALS | | CEMENT FILL-UP OR SACKS (Cubic feet) | PACKERS | |
|-----------------------|----------------|-------|----------------|-----|------|-------------------|--------------|--------------------------------------|---------|---------------|
| | Size | Grade | Weight per ft. | New | Used | For drilling | Left in well | | | |
| Conductor | 16" | | | | X | 20' | 20' | | | Kinds |
| Fresh water | 8 5/8 | | | | | | | | | |
| Coal | 8 5/8 | | 20# | X | | 900' | 900' | | | Sizes |
| Intermediate | | | | | | | | | | |
| Production | 4 1/2 | | 18.5# | X | | 5990' | 5990' | | | Depths set |
| Tubing | | | | | | | | | | |
| Liners | | | | | | | | | | Perforations: |
| | | | | | | | | | | Top Bottom |

21) EXTRACTION RIGHTS

Check and provide one of the following:

- Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)

22) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

23) Required Copies (See reverse side.)

24) 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 lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Notary:
 My Commission Expires February 14, 1989

Signed: Daniel L. Wheeler
 Its: Vice President

OFFICE USE ONLY

DRILLING PERMIT

Permit number 47-085-6227 Date January 31, 1983

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector. (Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

Permit expires October 1, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

| | | | | |
|-------|--------|-------|--------|-----|
| Bond: | Agent: | Plat: | Casing | Fee |
| | | | | |

Fred D. White
 Administrator, Office of Oil and Gas