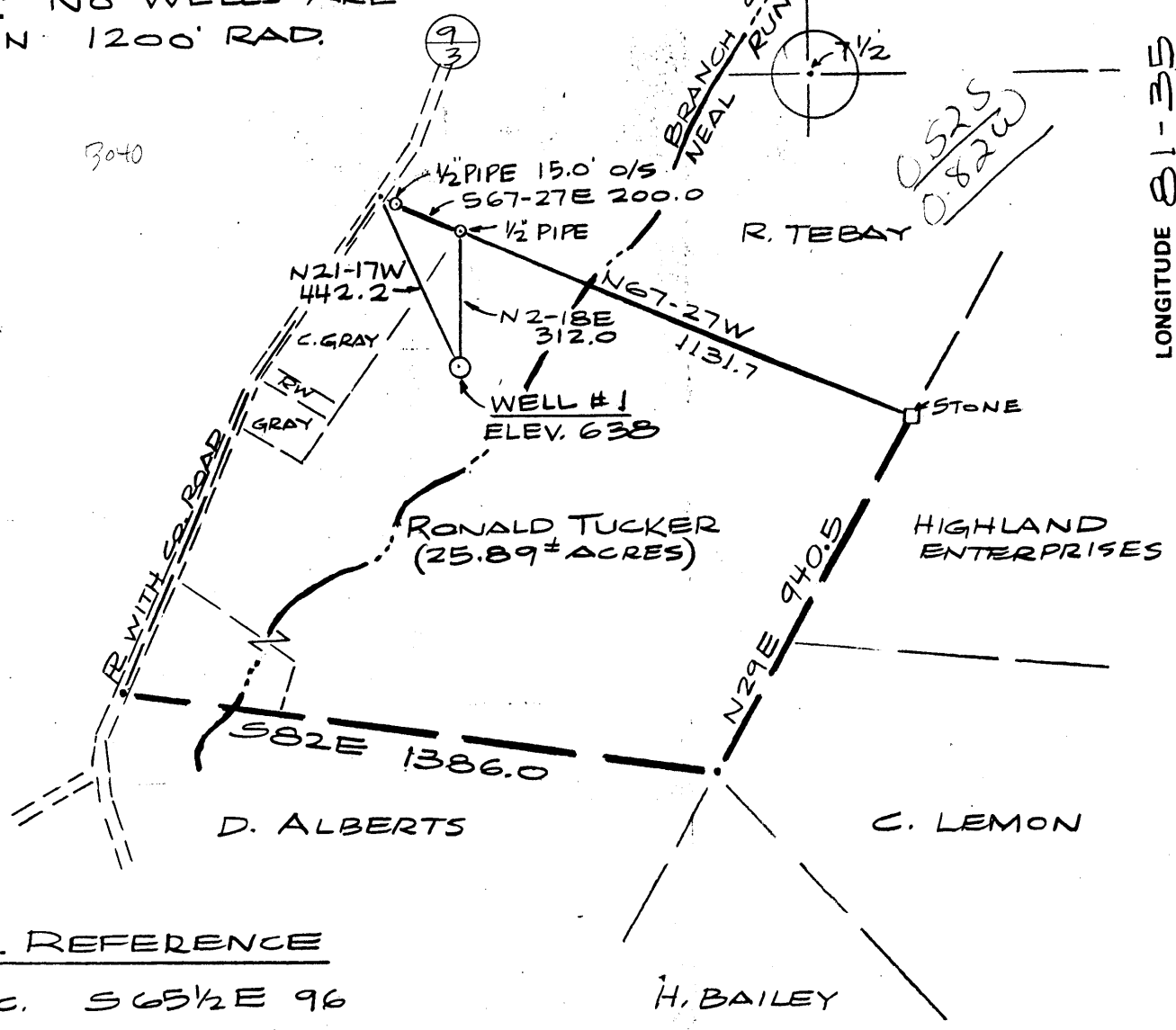


Jamie 6/16/88

4290
 LATITUDE 39-15
 2780
 LONGITUDE 81-35

NOTE - NO WELLS ARE WITHIN 1200' RAD.



WELL REFERENCE

18" SYC. S65 1/2 E 96
 ELEC. POLE S67 1/2 W 64
 #X-935

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 400
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION ROAD INTERSEC.
 ELEV. 670
 ~1500 SW OF LOCATION

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) *Karell R. Boice*
 R.P.E. _____ L.L.S. 667

PLACE SEAL HERE

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

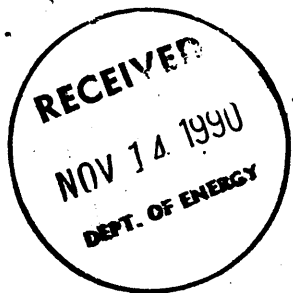


DATE JUNE 1, 1988
 OPERATOR'S WELL NO. 1
 API WELL NO. _____
47 - 107 - 1434
 STATE COUNTY PERMIT

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 638 WATER SHED BRANCH OF NEAL RUN
 DISTRICT LUBECK 3 COUNTY WOOD
 QUADRANGLE SOUTH PARKERSBURG 532 009 2 *Belleville nc 15'*
 SURFACE OWNER RONALD TUCKER ETAL ACREAGE 25.89±
 OIL & GAS ROYALTY OWNER RONALD TUCKER ETAL LEASE ACREAGE 30±
 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) _____
 JUN 21 1988

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 3800
 WELL OPERATOR LARRY M. MORRIS DESIGNATED AGENT LARRY M. MORRIS
 ADDRESS ROUTE 1 588 ADDRESS ROUTE 1
WASHINGTON, WV 26181 WASHINGTON, WV 26181



State of West Virginia

DEPARTMENT OF ENERGY
Oil and Gas Division

Date 8/14/89

Operator's 1

Well No. _____

Farm Tucker

API No. 47 - 107 - 1434

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 638 Watershed Neal Run

District: Lubeck County Wood Quadrangle South Parkersburg

COMPANY Larry Morris

ADDRESS Rt. 1, Washington, WV

SIGNATED AGENT Same

ADDRESS _____

SURFACE OWNER Ron Tucker

ADDRESS Rt. 3, Parkersburg, WV

MINERAL RIGHTS OWNER SAME

ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK _____

Robinson ADDRESS Mineral Wells

PERMIT ISSUED June 16, 1988

DRILLING COMMENCED November 10, 1988

DRILLING COMPLETED January 10, 1989

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

| Casing & Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. |
|-------------------------|---------------------|-----------------|------------------------------|
| Size 20-16, Cond. | | | |
| <u>13-10"</u> | <u>350</u> | <u>350</u> | <u>to surface</u> |
| <u>9 5/8</u> | | | |
| <u>8 5/8</u> | <u>1950</u> | | |
| <u>7</u> | | | |
| <u>5 1/2</u> | | | |
| <u>4 1/2</u> | | <u>3712</u> | <u>350 sk.</u> |
| <u>3</u> | | | |
| <u>2</u> | | | |
| Liners used | | | |

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3750 feet

Depth of completed well 3,712 feet Rotary ___ / Cable Tools XX

Water strata depth: Fresh 150 feet; Salt 1,580 feet

Coal seam depths: None Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 2,700-3,660 feet

Gas: Initial open flow 5 Mcf/d Oil: Initial open flow none Bbl/d

Final open flow 250 Mcf/d Final open flow none Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 750 psig (surface measurement) after 4 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

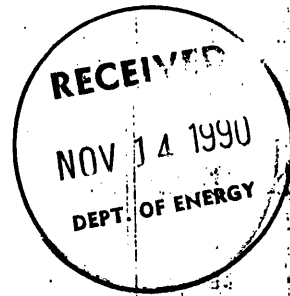
Time of open flow between initial and final tests _____ hours

Static rock pressure _____ psig (surface measurement) after _____ hours shut in

(Continue on reverse side)

NOV 16 1990

select fire holes between 2,700 and 3,750 fractured with 500,000 cu.ft. nitrogen.



WELL LOG

| FORMATION | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS Including indication of all and salt water, coal, oil an |
|-------------|-------|--------------|----------|-------------|---|
| Topsoil | | | 0 | 5 | |
| Sand | | | 5 | 25 | |
| Red Rock | | | 25 | 30 | |
| Sand | | | 30 | 75 | |
| Lime | | | 75 | 85 | |
| Slate | | | 85 | 105 | |
| Sand | | | 105 | 130 | |
| Red Rock | | | 130 | 185 | |
| Sand | | | 185 | 200 | |
| Slate | | | 200 | 330 | |
| Sand | | | 330 | 390 | |
| Slate | | | 390 | 620 | |
| Red Rock | | | 620 | 765 | |
| Sand | | | 765 | 798 | |
| Slate | | | 798 | 870 | |
| Sand | | | 870 | 900 | |
| Lime | | | 900 | 920 | |
| Slate | | | 920 | 1,150 | |
| Sand | | | 1,150 | 1,170 | |
| Slate | | | 1,170 | 1,505 | |
| Sand | | | 1,505 | 1,715 | |
| Slate | | | 1,715 | 1,920 | |
| Brown Shale | | | 1,920 | 1,944 | |
| Sand Slate | | | 1,944 | 2,024 | |
| Lime | | | 2,024 | 2,085 | |
| Slate | | | 2,085 | 2,765 | |
| Shale | | | 2,765 | 3,115 | |
| Brown Shale | | | 3,115 | 3,548 | |
| Grey Shale | | | 3,548 | 3,750 | |

DFD 2028
LH 3178
J 3678

(Attach separate sheets as necessary)

LARRY MORRIS
Well Operator

By: [Signature]

Date: 11/14/89

7237

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: ⁵⁸⁸ Larry M. Morris 33675, 3, 614
- 2) Operator's Well Number: Tucker Wolfe #1 3) Elevation: 638
- 4) Well type: (a) Oil / or Gas
(b) If Gas: Production / Underground Storage
Deep / Shallow
- 5) Proposed Target Formation(s): ⁴⁴¹ Devonian Shale
- 6) Proposed Total Depth: 3200' feet
- 7) Approximate fresh water strata depths: 175'
- 8) Approximate salt water depths: 1650'
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No
- 11) Proposed Well Work: Drill & Frac New Well
- 12)

CASING AND TUBING PROGRAM

| TYPE | SPECIFICATIONS | | FOOTAGE INTERVALS | | CEMENT | |
|--------------|----------------|-------|-------------------|--------------|----------|--------------------|
| | Size | Grade | Weight per ft. | For drilling | | Left in well |
| Conductor | | | | | | |
| Fresh Water | 10" | | | | 350' | 500' 38CSR18-11.3 |
| Coal | None | | | | | |
| Intermediate | 7 | | 23# | 1700 | None | |
| Production | 4 1/2" | J-55 | 10 1/2# | | OK 3800' | 3200' 38CSR18-11.1 |
| Tubing | | | | | | |
| Liners | | | | | | |

RECEIVED
JUN 16 1988

PACKERS : Kind None
Sizes None
Depths set NA

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

102
119
1237

For Division of Oil and Gas Use Only Casing OK 3800'

Fee(s) paid: Plat Well Work Permit Plat Reclamation Fund Plat WPCP

Plat WW-9 Plat WW-2B Plat Bond 10 Single Well Agent

(Type)

RECEIVED
JUN 16 1988

- 1) Date: June 15, 1988
- 2) Operator's well number
Tucker and Wolfe #1
- 3) API Well No: 47 - 107 - 1434
State - County - Permit

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
 - (a) Name Ronald & Judy Tucker
Address Rt 3
Parkersburg
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____

- 5) (a) Coal Operator:
 - Name _____
Address _____
- (b) Coal Owner(s) with Declaration
 - Name _____
Address _____
- Name _____
Address _____

- 6) Inspector Glen P. Robinson
Address Rt #6 Mt. Pleasant Estate
MINERAL Wells, W.V. 26150
Telephone (304) - 489-9162

- (c) Coal Lessee with Declaration
 - Name _____
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

___ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
___ Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties, by:
___ Personal Service (Affidavit attached)
___ Certified Mail (Postmarked postal receipt attached)
___ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator _____
By: Larry Morris
Its: Designated Agent
Address Rt 1
Washington, WV 26181
Telephone 863-6012

Subscribed and sworn before me this 15th day of June, 1988
Pamela Jo Conner Notary Public
My commission expires 9-8-93