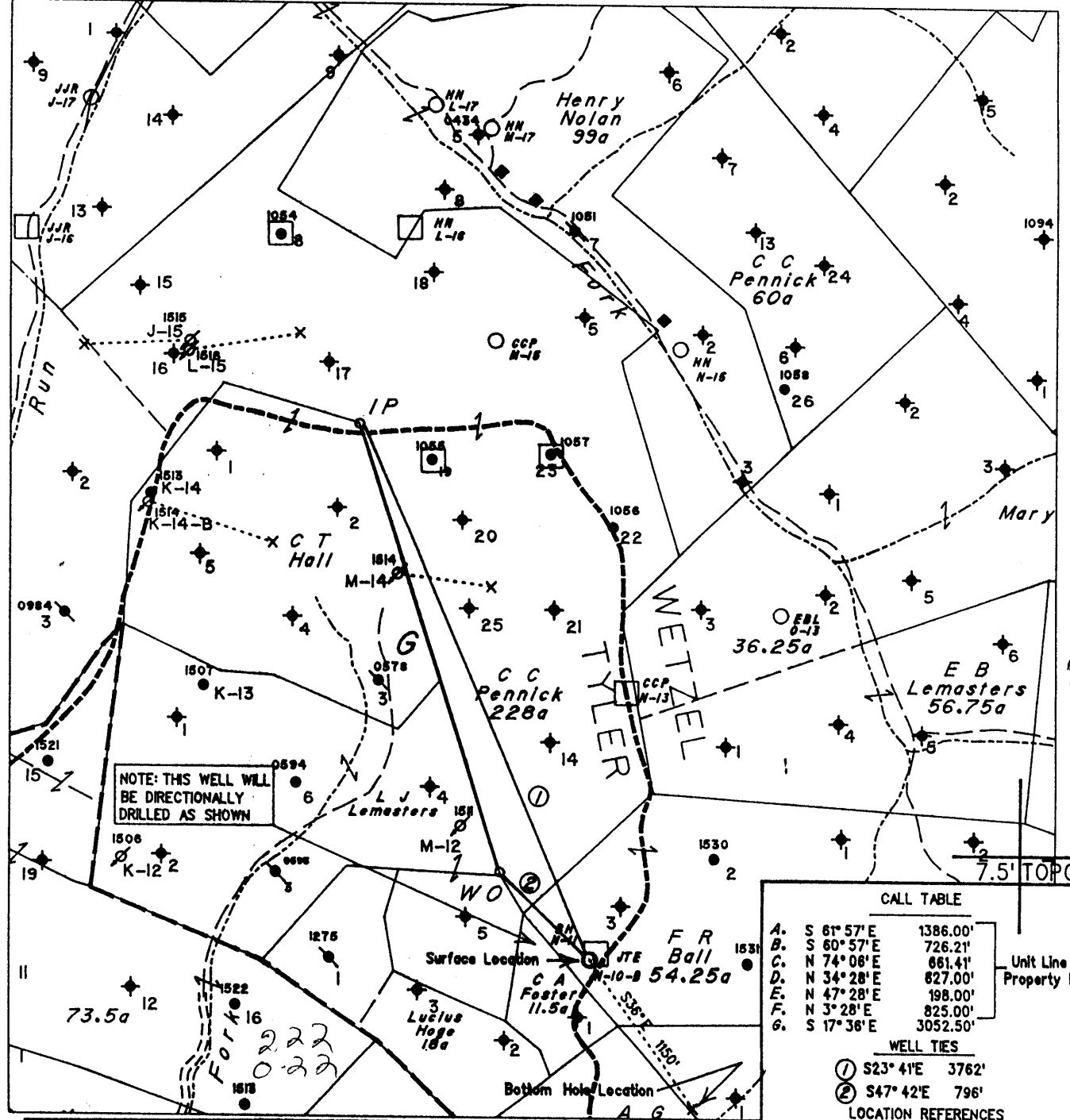


HS 5-6-93

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"



NOTE: THIS WELL WILL BE DIRECTIONALLY DRILLED AS SHOWN

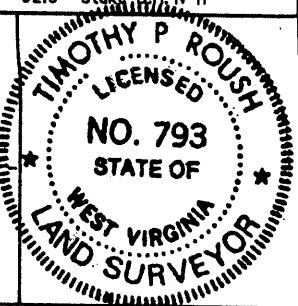
Note: No Known Water Supply Sources Are Located Within 1000' Of Proposed Well

(H) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 1779
 MAP NO. N48 N 2 S E W 3
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION F.R. Ball No. 9
(47-095-0548) = 1152'

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) Timothy P. Roush
 TIMOTHY P. ROUSH PS 793



STATE OF WEST VIRGINIA
 DIVISION OF ENERGY
 OIL AND GAS SECTION



DATE March 31, 19 93
 FARM AG 2 N. Eddy NO. N-10-B
 API WELL NO. 47-095-1533-41

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1427' WATERSHED Piney Fork
 DISTRICT McElroy 5 COUNTY Tyler
 QUADRANGLE Centerpoint Q 15 NW

SURFACE OWNER State of West Virginia ACREAGE 54.5 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 91.67 Ac.
 LEASE NO. 47220-00

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 Gordon ESTIMATED DEPTH 3520'

WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519
Vienna, W.Va. 26105 673 4670 ADDRESS Vienna, W.Va. 26105

MAY 1 1993

8-076

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: WVA. PUBLIC LAND CORP. Operator Well No.: J.T.EDDY N-10-B

LOCATION: Elevation: 1427 Quadrangle: Centerpoint

District: MCELROY County: TYLER
Latitude: 1,250 Feet South of 39 Deg.30 Min. Sec.
Longitude 11,650 Feet West of 80 Deg.40 Min. Sec.

Company: PENNZOIL PRODUCTS COMPANY
P. O. BOX 5519
VIENNA, WV 26105-5519

Agent: JAMES A. CREWS

Inspector: MIKE UNDERWOOD
Permit Issued: 05/12/93
Well work Commenced: 07/13/94
Well work Completed: 09/12/94
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 3788
Fresh water depths (ft) N/A
Salt water depths (ft) N/A
Is coal being mined in area (Y/N)? N
Coal Depths (ft): N/A

| Casing & Tubing | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|-----------------|------------------|--------------|------------------------|
| Size | | | To surface |
| 8-5/8 | 1410 | 1410 | 550 sks |
| 4-1/2 | 3768 | 3768 | 300 sks. |

OPEN FLOW DATA * Water Injection Well

Producing formation Gordon Pay zone depth (ft) 3668-3675
 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 pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
 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 pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PENNZOIL PRODUCTS COMPANY

By: [Signature]
Date: 1/4/95

TREATMENT

Perforated with 12 holes 3668'-3674'. Treated with 300 gallons 15% HCL acid, 299 barrels gelled water and 7500# 20/40 sand.

WELL LOG

(Measured depths, directionally drilled)

| | |
|--------------|---------------|
| Sand & Shale | 0' - 860' |
| Sand | 860' - 894' |
| Shale | 984' - 1082' |
| Sand | 1082' - 1122' |
| Shale | 1122' - 1241' |
| Pencil Cave | 1241' - 1250' |
| Shale | 1250' - 1312' |
| Sand | 1312' - 1338' |
| Sand & Shale | 1338' - 2050' |
| Sand | 2050' - 2110' |
| Sand & Shale | 2110' - 2472' |
| Big Lime | 2472' - 2476' |
| Shale | 2476' - 2511' |
| Big Injun | 2511' - 2821' |
| Shale | 2821' - 3622' |
| Stray | 3622' - 3624' |
| Shale | 3624' - 3645' |
| Gordon | 3645' - 3696' |
| T.D. | 3788' |

(Reverse)

191 & Gas
Oil Section

APR 15 93

WV Division of
Environmental Protection



- 1) Date: April 13, 19 93
- 2) Operator's Well No. J. T. EDDY #N-10-B
- 3) SIC Code _____
- 4) API Well NO. 47 - 095 - 1533 - LI
State County Permit
- 5) UIC Permit No. _____

Issued 05/12/93

Expires 05/12/95

STATE OF WEST VIRGINIA
NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

* NOTE: THIS WELL WILL BE DRILLED DIRECTIONALLY: S36°E 1150'

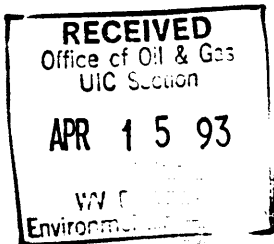
- 6) WELL TYPE: Liquid injection / Gas injection (not storage) _____ / Waste disposal _____
- 7) LOCATION: Elevation: 1427' / Watershed: Piney Fork
District: McElroy / County: Tyler / Quadrangle: Centerpoint *286*
- 8) WELL OPERATOR Pennzoil Products Co. 37450 9) DESIGNATED AGENT J.A. Crews
Address P.O. Box 5519 / Address P.O. Box 5519
Vienna, WV 26105 / Vienna, WV 26105
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Randall Mick / Mike Underwood
Address 111 Blackshere Dr. Rt. #2, Box 135
Mannington, WV / Salem, WV 26426
26582
- 11) DRILLING CONTRACTOR:
Name _____
Address _____
- 12) PROPOSED WELL WORK: *Drill / Drill deeper _____ / Redrill _____ / Stimulate
Plug off old formation _____ / Perforate new formation _____ / Convert _____
Other physical change in well (specify) _____
- 13) GEOLOGICAL TARGET FORMATION, Gordon / Depth 3417 feet(top) to 3433 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3520 ft.
- 15) Approximate water strata depths; Fresh, 607 feet; salt, ~~2000~~ feet.
- 16) Approximate coal seam depths: 1270
- 17) Is coal being mined in the area? Yes _____ / No
- 18) Virgin reservoir pressure in target formation 1400 psig. Source ESTIMATED
- 19) Estimated reservoir fracture pressure 3500 psig (BHFP)
- 20) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour: 25 Bottom hole pressure 2380
- 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh water, produced water, bactericides, and other chemicals as necessary to maintain water quality and improve oil recovery.
- 22) FILTERS (IF ANY): Cartridge Filters and/or Coal Bed Filters
- 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: _____

24) 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 | | | | | | | | | Kinds |
| Fresh water | 8 5/8 | L.S. | 20 | X | | 679 | 679 | Cement to Surface | Sizes |
| Coal | | | | | | | | | |
| Intermediate | | | | | | | | | |
| Production | 4 1/2 | J-55 | 10.5 | X | | 3520 | 3520 | Cement over Salt Sand | Depths set |
| Tubing | | | | | | | | | |
| Liners | | | | | | | | | Perforations: Top Bottom |

- 25) APPLICANT'S OPERATING RIGHTS were acquired from Hazel L. Kinney, etal
by deed _____ / lease / other contract _____ / dated August 16, 19 78, of record in the
Wetzel County Clerk's office in Lease Book 216 at page 725

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



1) Date April 13, 1993
Operator's _____
2) Well No. J.T. EDDY #N-10-B
3) SIC Code _____
4) API Well No. 47 - 095 - /533
State County Permi _____

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the

DIVISION OF OIL AND GAS, DEPARTMENT OF ENERGY

- | | |
|---|---|
| <p>6) SURFACE OWNER(S) OF RECORD TO BE SERVED</p> <p>(i) Name <u>WV Public Land Corp.</u> Address <u>Bldg. #3, Room 643</u> <u>1900 Kanawha Blvd., E.</u></p> <p>(ii) Name <u>Charleston, WV 25305</u> Address _____</p> <p>(iii) Name <u>Dept. Natural Resources</u> <u>1304 Goose Run Road</u> Address <u>Fairmont, WV 26554</u> <u>ATTN: Gary Foster</u></p> | <p>7 (i) COAL OPERATOR <u>N/A</u> Address _____</p> <p>7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD Name _____ Address _____</p> <p>7 (iii) COAL LESSEE WITH DECLARATION ON RECORD: Name _____ Address _____</p> |
|---|---|

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which sets out the parties involved in the drilling or other work, and
- (2) The plat (surveyor's map) showing the well location on Form WW-6; and
- (3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

The date proposed for the first injection or waste disposal is _____, 19____.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM WW-3(B)) DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Director of the Division of Oil and Gas, West Virginia Department of Energy, with respect to a well at the location described on the attached Application and depicted on attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Director.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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.

PENNZOIL PRODUCTS COMPANY

Well operator

By Timothy H. Roush
Timothy H. Roush

Its Supervisor - Surveying/Mapping

Telephone (304) 422-6565