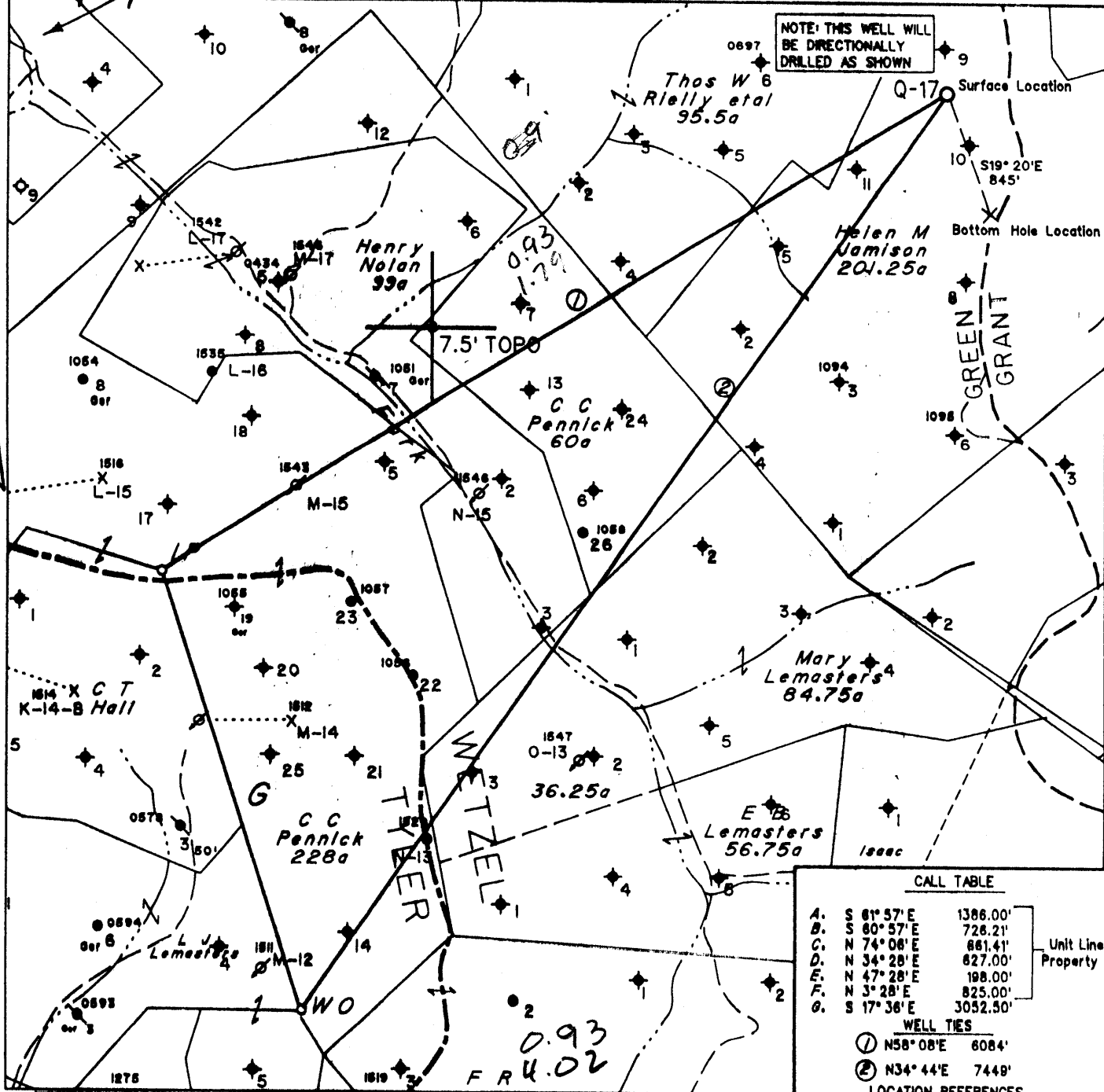


GS 5/24/94

LATITUDE 39° 30' 00"

LONGITUDE 80° 37' 30"



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

CALL TABLE		
A.	S 61° 57' E	1386.00'
B.	S 80° 57' E	726.21'
C.	N 74° 08' E	661.41'
D.	N 34° 28' E	627.00'
E.	N 47° 28' E	198.00'
F.	N 3° 28' E	825.00'
G.	S 17° 38' E	3052.50'

Unit Line & Property Line

WELL TIES		
①	N58° 08' E	8084'
②	N34° 44' E	7448'

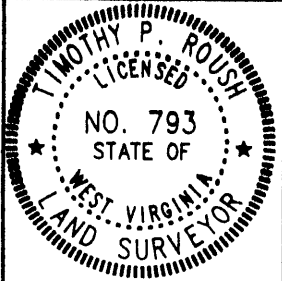
LOCATION REFERENCES		
N59° 18' W	203'	10" Maple
N80° 50' W	158'	5" Maple
S66° 08' E	190'	6" Maple

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

FILE NO. 1269  
 MAP NO. N58 N 3 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 May 13, 19 94  
 FARM H.M. Jamison NO. Q-17  
 API WELL NO. 47-103-1635-L1

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1477' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint NL  
 SURFACE OWNER State of West Virginia ACREAGE 201 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 201 Ac.  
 LEASE NO. 47256-00  
 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 3530'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W. Va. 26105 434670 ADDRESS Vienna, W. Va. 26105  
 JUN 3 1994  
 8-0 95

FORM IV-6

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

Well Operator's Report of Well Work

Farm name: WVA. PUBLIC LANDS Operator Well No.: H.M.JAMISON Q17

LOCATION: Elevation: 1,477.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL  
Latitude: 4950 Feet South of 39 Deg. 30Min. Sec.  
Longitude 9400 Feet West of 80 Deg. 37 Min. 30 Sec.

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

Agent: JAMES A. CREWS

Inspector: RANDAL MICK  
Permit Issued: 06/01/94  
Well work Commenced: 08/11/94  
Well work Completed: 09/23/94  
Verbal Plugging  
Permission granted on:  
Rotary  Cable \_\_\_\_\_ Rig  
Total Depth (feet) 3804'  
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 8-5/8	750	750	To surface 310 sks.
4-1/2	3753	3753	300 sks.

OPEN FLOW DATA \* Water Injection Well

Producing formation Gordon Pay zone depth (ft) 3648-3692  
 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 20 holes, 3666'-3676'. Treated with 300 gallons 15% HCL acid, 249 barrels gelled water and 8700 lbs. of 20/40 sand

## WELL LOG

Sand & Shale	0'-1118'
Sand	1118'-1168'
Sand & Shale	1168'-1391'
Sand	1391'-1462'
Shale	1462'-1800'
Sand	1800'-1846'
Sand & Shale	1846'-1984'
Sand	1984'-2050'
Sand & Shale	2050'-2382'
Sand	2382'-2432'
Sand & Shale	2432'-2752'
Sand	2752'-2772'
Shale	2772'-2780'
Big Injun	2780'-2995'
Shale	2995'-3628'
Stray	3628'-3632'
Gordon	3648'-3692'
T.D.	3804'

10/91

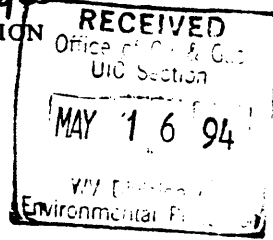
19238



- 1) Date: May 13, 1994
- 2) Operator's Well No. H. M. JAMISON #Q-17
- 3) SIC Code \_\_\_\_\_
- 4) API Well NO. 47 - 103 - 1635-LI  
State County Permit
- 5) UIC Permit No. \_\_\_\_\_

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

*Issued 06/01/94  
Expires 06/01/96*



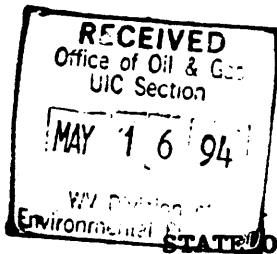
- 6) WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_
- 7) LOCATION: Elevation: 1477' / Watershed: Piney Fork  
District: Green / County: Wetzel / Quadrangle: Centerpoint
- 8) WELL OPERATOR Pennzoil Products Company 4690 9) DESIGNATED AGENT James A. Crews  
Address P. O. Box 5519 / Address P. O. Box 5519  
Vienna, WV 26105 / Vienna, WV 26105
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED Name Mike Underwood  
Address Route 2, Box 135  
Salem, WV 26426
- 11) DRILLING CONTRACTOR: Name \_\_\_\_\_  
Address \_\_\_\_\_
- 12) PROPOSED WELL WORK: Drill \_\_\_\_\_ / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate   
NOTE: This well to Plug off old formation / Perforate new formation / Convert /  
be drilled directionally S 19° 20' E 845' / Other physical change in well (specify) \_\_\_\_\_
- 13) GEOLOGICAL TARGET FORMATION, Gordon 419 Depth 3430 feet (top) to 3447 feet (bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3530 ft.
- 15) Approximate water strata depths: Fresh, 657' feet; salt, 1684 feet.
- 16) Approximate coal seam depths: 1289'
- 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 2332
- 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Freshwater, produced water, bactericides and other chemicals as needed to maintain water quality and improve oil recovery.
- 22) FILTERS (IF ANY): Cartridge and/or coalbed 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	LS	20	X		727'	727'	Cement to surface	Sizes
Coal									
Intermediate									
Production	4-1/2	J-55	10.5	X		3530'	3530'	Cement over salt sand	Depths set
Tubing									
Liners									Perforations: Top Bottom

- 25) APPLICANT'S OPERATING RIGHTS were acquired from Union National Bank of Clarksburg  
by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated October 23, 1978  
Wetzel County Clerk's office in Lease Book 58A at page 181 of record in the

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



1) Date May 13, 1994  
Operator's  
2) Well No. H. M. JAMISON #Q-17  
3) SIC Code \_\_\_\_\_  
4) API Well No. 47 - 103 - 1635  
State County Permit

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 Corporation</u><br/>Address <u>Bldg. #3, Room 643</u><br/><u>1900 Kanawha Blvd. E.</u></p> <p>(ii) Name <u>Charleston, WV 25305</u><br/>Address _____<br/><u>Dept. of Natural Resources</u></p> <p>(iii) Name <u>1304 Goose Run Road</u><br/>Address <u>Fairmont, WV 26554</u><br/>Attn: <u>Gary Foster</u></p> | <p>7 (i) COAL OPERATOR _____<br/>Address _____</p> <p>7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:<br/>Name _____<br/>Address _____</p> <p>7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:<br/>Name _____<br/>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.

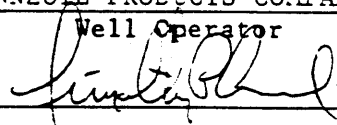
The date proposed for the first injection or waste disposal is \_\_\_\_\_, 19\_\_\_\_.

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 P. Roush  
Its Supervisor, Surveying/Mapping  
Telephone (304) 422-6565