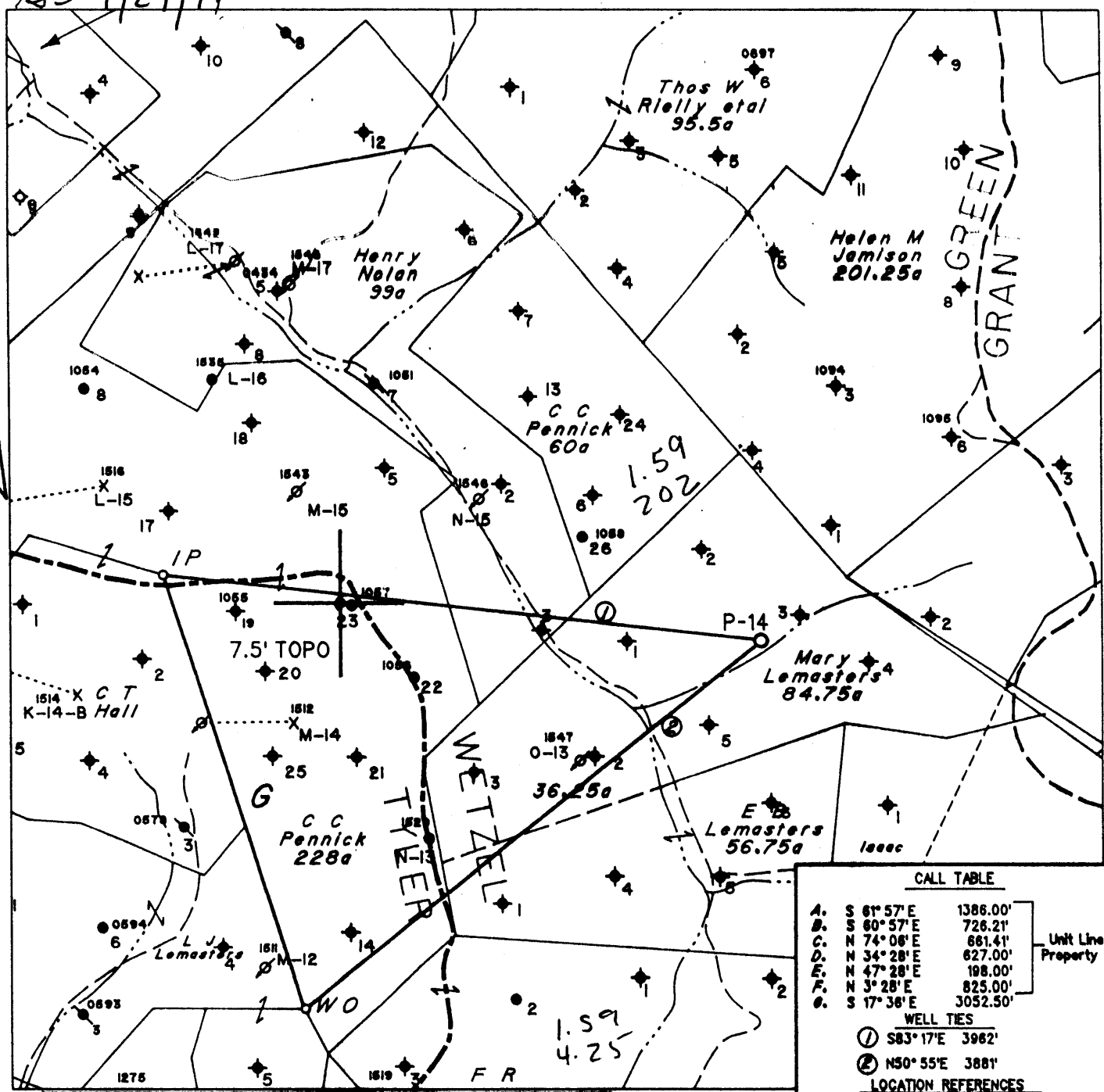


4/29/94

LATITUDE 39° 30' 00"

LONGITUDE 80° 37' 30"

8,550'



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

CALL TABLE

A.	S 81° 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 S83° 17' E 3962'
- ② N50° 55' E 3881'

LOCATION REFERENCES

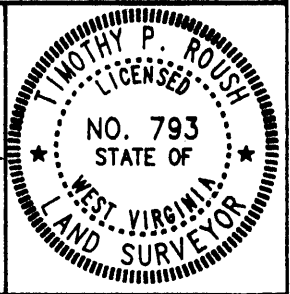
- N29° 47' W 100' 6" Beech
- N23° 04' E 101' 5" Hickory
- N79° 26' E 118' 8" Elm

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

FILE NO. 1077  
 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 April 19, 19 94  
 FARM Mary Lemasters NO. P-14  
 API WELL NO. 47-103-1626-41

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1038' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint NC  
 SURFACE OWNER State of West Virginia ACREAGE 84.8 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 84.75 Ac.  
 LEASE NO. 57097-00  
 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 3018'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W.Va. 26105 Vienna, W.Va. 26105

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.: M.LEMASTERS-P14

LOCATION: Elevation: 1,038.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL  
Latitude: 8550 Feet South of 39 Deg. 30Min. Sec.  
Longitude 10600 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: 05/12/94  
Well work Commenced: 08/16/94  
Well work Completed: 09/16/94Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 3089  
Fresh water depths (ft) N/ASalt water depths (ft) N/AIs 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	308	308	To surface 150 sks.
4-1/2	3023	3023	300 sks.

## OPEN FLOW DATA

\* Water Injection Well

Producing formation Gordon Pay zone depth (ft) 2941-2982  
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 \_\_\_\_\_ HoursSecond 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 2956'-2966'. Treated with 300 gallons 15% HCL acid, 273 barrels gelled water & 7000# 20/40 sand.

## WELL LOG

Sand & Shale	0' - 968'
Sand	968' - 988'
Sand & Shale	988' - 1762'
Sand	1762' - 1796'
Sand & Shale	1796' - 2092'
Little Lime	2092' - 2104'
Shale	2104' - 2120'
Big Lime	2120' - 2182'
Shale	2182' - 2216'
Big Injun	2216' - 2356'
Shale	2356' - 2922'
Stray	2922' - 2924'
Gordon	2941' - 2982'
T.D.	3089'

10/91

19100

6 94



- 1) Date: April 21, 19 94
- 2) Operator's Well No. Mary Lemasters #P-14
- 3) SIC Code \_\_\_\_\_
- 4) API Well NO. 47 - 103 - 1626-LI  
State County Permit
- 5) UIC Permit No. \_\_\_\_\_

*103-1626  
Issued 05/12/94  
Expires 05/12/96*

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

- 6) WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_
- 7) LOCATION: Elevation: 1038' / District: Green / Watershed: Piney Fork / County: Wetzel / Quadrangle: Centerpoint *JPC*
- 8) WELL OPERATOR Pennzoil Products Company 4670 / Address: P. O. Box 5519  
Vienna, WV 26105
- 9) DESIGNATED AGENT James A. Crews / Address: P. O. Box 5519  
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   
Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_ / Convert \_\_\_\_\_  
Other physical change in well (specify) \_\_\_\_\_
- 13) GEOLOGICAL TARGET FORMATION, Gordon *419* / Depth 2918 feet(top) to 2933 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3018 ft.
- 15) Approximate water strata depths: Fresh, 218 feet; salt, 1245 feet.
- 16) Approximate coal seam depths: 850'
- 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 &/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 FILLUP 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		288'	288'	Cement to surface	Sizes
Coal									
Intermediate									
Production	4-1/2	J-55	10.5	X		3018'	3018'	Cement over salt sand	Depths set
Tubing									
Liners									Perforations: Top Bottom

- 25) APPLICANT'S OPERATING RIGHTS were acquired from Ella Mae Stansberry et al  
by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated August 24, 19 83, of record in the  
Wetzel County Clerk's office in Lease Book 65A at page 416

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

48 2 6 94

1) Date April 21, 1994  
Operator's  
2) Well No. Mary Lemasters #P-14  
3) SIC Code \_\_\_\_\_  
4) API Well No. 47 - 095 - 1626  
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

- |   |   |
|---|---|
| 6) SURFACE OWNER(S) OF RECORD TO BE SERVED  | 7 (i) COAL OPERATOR <u>N/A</u><br>Address _____                                 |
| (i) Name <u>WV Public Land Corporation</u><br>Address <u>Bldg. #3, Room 643</u><br><u>1900 Kanawha Blvd. E.</u> | 7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:<br>Name _____<br>Address _____ |
| (ii) Name <u>Charleston, WV 25305</u><br>Address _____<br><u>Dep't. of Natural Resources</u>                    | 7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:<br>Name _____<br>Address _____  |
| (iii) Name <u>1304 Goose Run Road</u><br>Address <u>Fairmont, WV 26554</u><br>Attn: <u>Gary Foster</u>          |   |

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