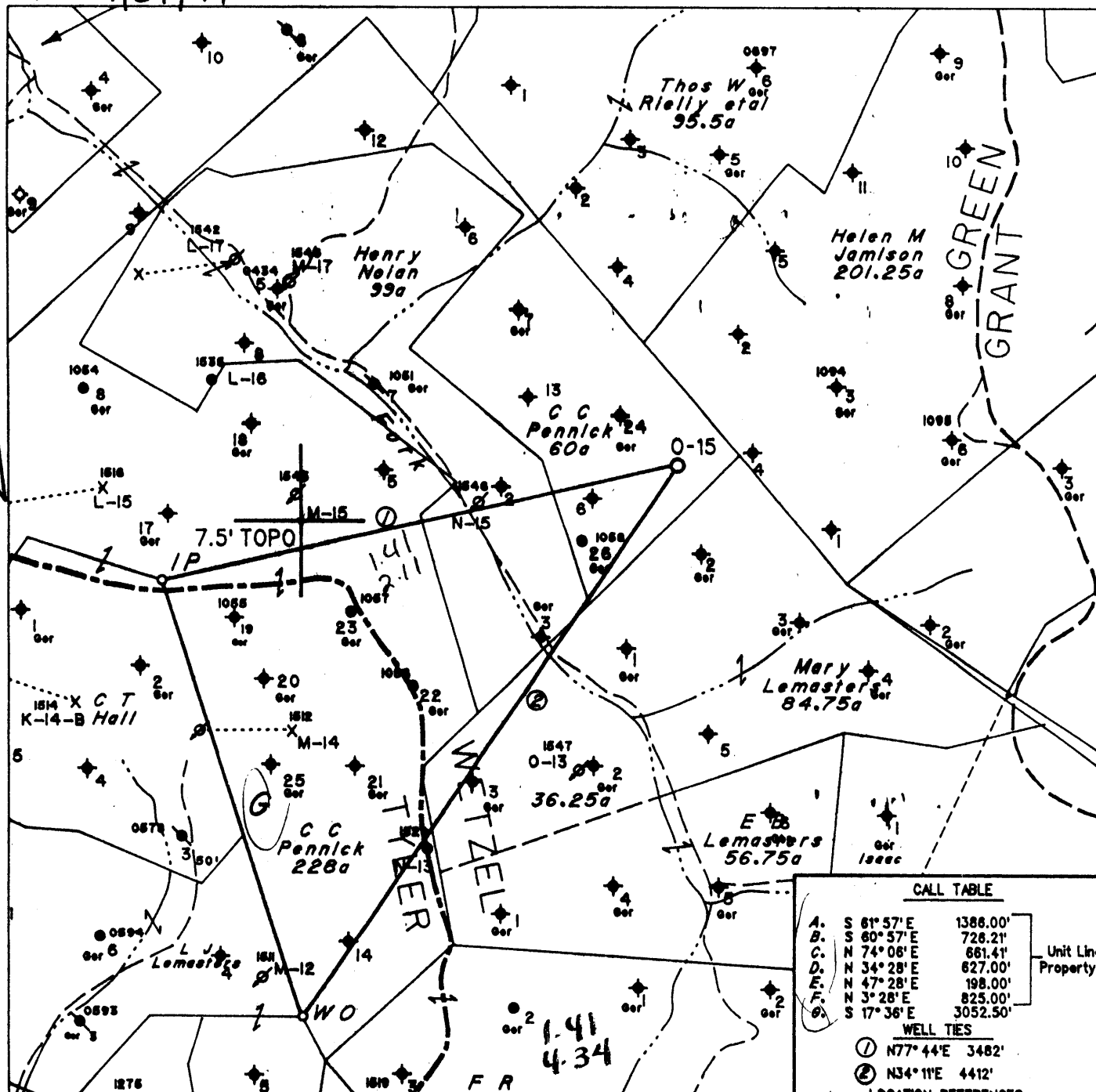


GS 4/29/94



CALL TABLE

A.	S 61° 57' E	1386.00'
B.	S 60° 57' E	728.21'
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° 36' E	3052.50'

Unit Line & Property Line

WELL TIES

- ① N77° 44' E 3482'
- ② N34° 11' E 4412'

LOCATION REFERENCES

- S8° 22' W 123' 3" Black Oak
- N0° 25' E 164' 3" Jack Oak
- N25° 08' E 153' 4" White Oak

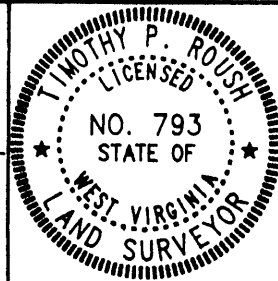
Note: No Known Water Supply Sources Are Located Within 1000' Of Proposed Well

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

FILE NO. 573  
 MAP NO. N58 N 3 S E W3  
 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, 1994  
 FARM C.C. Pennick NO. 0-15  
 API WELL NO. 47-103-1634-46

WELL TYPE: OIL      GAS      LIQUID INJECTION X WASTE DISPOSAL       
 (IF "GAS") PRODUCTION      STORAGE      DEEP      SHALLOW       
 LOCATION: ELEVATION 1458' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint

SURFACE OWNER State of West Virginia ACREAGE 60 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 60 Ac.  
 LEASE NO. 15773-60 Ac.

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

MAR 27 1994

PLUG AND ABANDON      CLEAN OUT AND REPLUG       
 TARGET FORMATION Gordon ESTIMATED DEPTH 3438'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
4670 VIENNA, W.VA. 26105 VIENNA, W.VA. 26105

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.: C.PENNICK 0-15

LOCATION: Elevation: 1,458.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL  
Latitude: 7400 Feet South of 39 Deg. 30Min. Sec.  
Longitude 11100 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: 05/25/94  
Well work Commenced: 08/04/94  
Well work Completed: 09/23/94

Verbal Plugging  
Permission granted on: \_\_\_\_\_

Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 3479  
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	705.10	705.10	225 sks.
4-1/2	3452.2	3452.2	300 sks.

OPEN FLOW DATA \* Water Injection Well

Producing formation Gordon Pay zone depth (ft) 3352-3396  
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 3374'-3384'. Treated with 300 gallons 15% HCL acid, 282 barrels gelled water and 7000# 20/40 sand.

## WELL LOG

Sand & Shale	0'-1103'
Sand	1103'-1152'
Sand & Shale	1152'-1322'
Sand	1322'-1340'
Sand & Shale	1340'-2050'
Sand	2055'-2083'
Shale	2083'-2103'
Sand	2103'-2120'
Shale	2120'-2172'
Sand	2172'-2208'
Shale	2208'-2294'
Sand	2294'-2323'
Shale	2323'-2500'
Sand	2500'-2512'
Shale	2512'-2526'
Big Injun	2526'-2764'
Shale	2764'-3334'
Stray	3334'-3337'
Shale	3337'-3352'
Gordon	3352'-3396'
T.D.	3479'

10/91

19237

*Rec: 4/26/94*



- 1) Date: April 21, 19 94
- 2) Operator's Well No. C. C. PENNICK #0-15
- 3) SIC Code \_\_\_\_\_
- 4) API Well NO. 47 - 103 - 1634-LI  
State County Permit
- 5) UIC Permit No. \_\_\_\_\_

*Issued 05/25/94  
Expires 05/25/96*

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: 1458' / Watershed: Piney Fork  
District: Green / County: Wetzel / Quadrangle: Centerpoint *38c*
- 8) WELL OPERATOR Pennzoil Products Company 4670 / 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 / 11) DRILLING CONTRACTOR:  
Address Route 2, Box 135 / Name \_\_\_\_\_  
Salem, WV 26426 / 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 3338 feet(top) to 3353 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3438 ft.
- 15) Approximate water strata depths; Fresh, 638 feet; salt, 1665 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 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. / recovery.
- 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		708'	708'	Cement to surface	Sizes
Coal									
Intermediate									
Production	4-1/2	J-55	10.5	X		3438'	3438'	Cement over salt sand	Depths set
Tubing									
Liners									Perforations: Top Bottom

- 25) APPLICANT'S OPERATING RIGHTS were acquired from C. C. Pennick et al  
by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated September 24, ~~XX~~ 1895, of record in the  
Wetzel County Clerk's office in Lease Book 47 at page 250

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

APR 26 94

1) Date April 21, 1994  
Operator's  
2) Well No. C. C. PENNICK 0-15  
3) SIC Code \_\_\_\_\_  
4) API Well No. 47 - 103 - 1634-61  
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> Address _____
(i) Name <u>WV Public Land Corporation</u> Address <u>Bldg. #3, Room 643</u> <u>1900 Kanawha Blvd. E.</u>	7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD: Name _____ Address _____
(ii) Name <u>Charleston, WV 25305</u> Address _____ <u>Dep't. of Natural Resources</u>	7 (iii) COAL LESSEE WITH DECLARATION ON RECORD: Name _____ Address _____
(iii) Name <u>1304 Goose Run Road</u> Address <u>Fairmont, WV 26554</u> <u>Attn: 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.

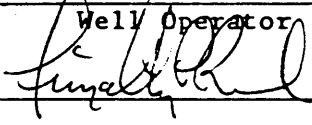
The date proposed for the first injection or waste disposal is \_\_\_\_\_, 19\_\_\_\_.

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