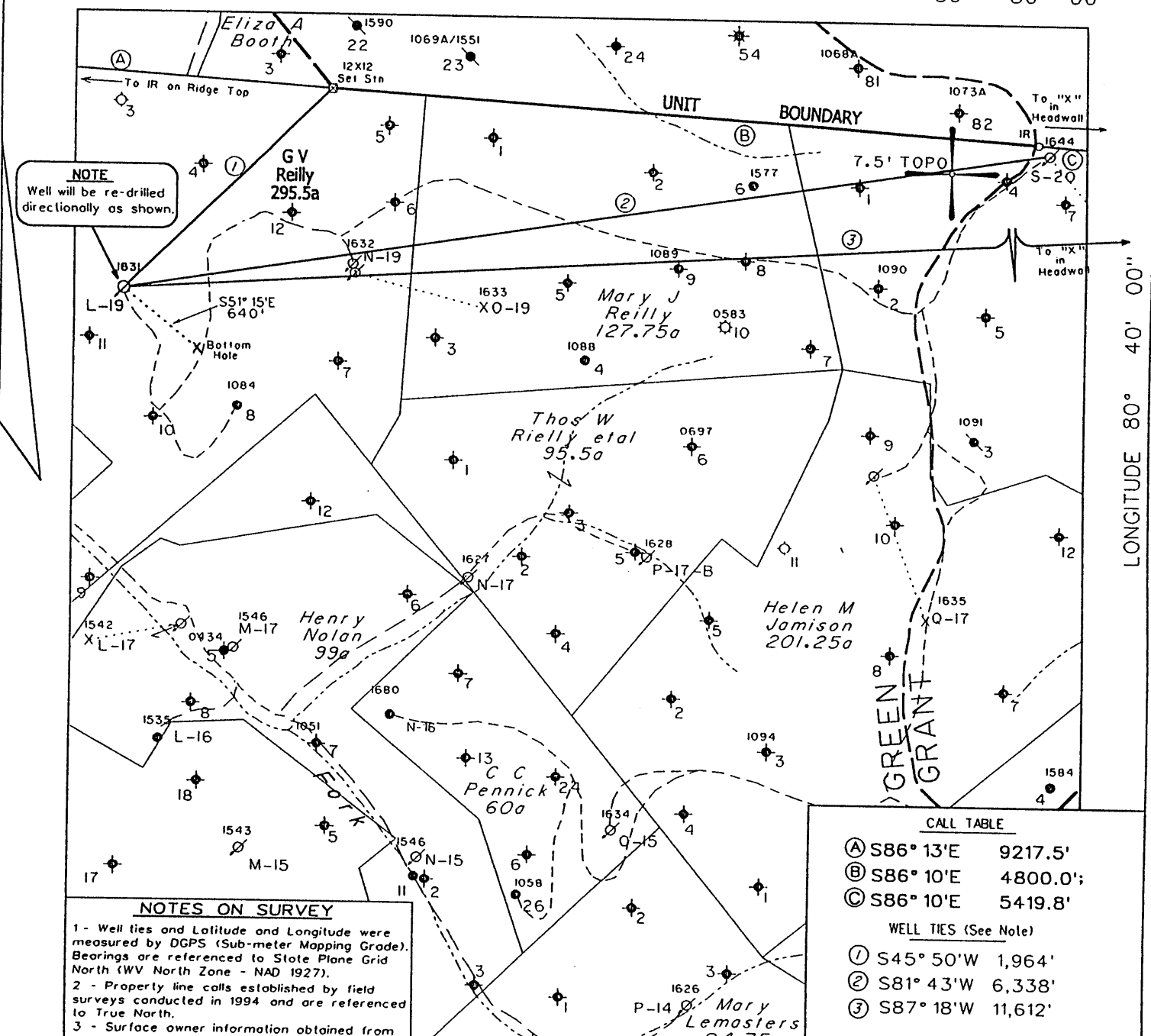


Longitude = 80° 40' 34.6" 2700'

LATITUDE 39° 30' 00"



**NOTE**  
Well will be re-drilled directionally as shown.

**NOTES ON SURVEY**  
 1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to State Plane Grid North (WV North Zone - NAD 1927).  
 2 - Property line calls established by field surveys conducted in 1994 and are referenced to True North.  
 3 - Surface owner information obtained from the Wetzel County Assessor's tax records.

**CALL TABLE**

(A)	S86° 13'E	9217.5'
(B)	S86° 10'E	4800.0'
(C)	S86° 10'E	5419.8'

**WELL TIES (See Note)**

(1)	S45° 50'W	1,964'
(2)	S81° 43'W	6,338'
(3)	S87° 18'W	11,612'

**LOCATION REFERENCES**  
(Magnetic Bearing - Slope Dist.)  
Existing Well

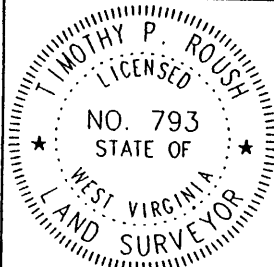
NOTE: No known water supply sources are located within 1000' of proposed well.  
 (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

Denotes Water Supply Source.

FILE NO. 1038-03  
 MAP NO. N S E W  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION DGPS Survey 4/9/03

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) *[Signature]*  
 TIMOTHY P. ROUSH PS 793



**WEST VIRGINIA**  
 Division of Environmental Protection  
 Office of Oil and Gas  
 1356 Hansford St.  
 Charleston, West Virginia 25301



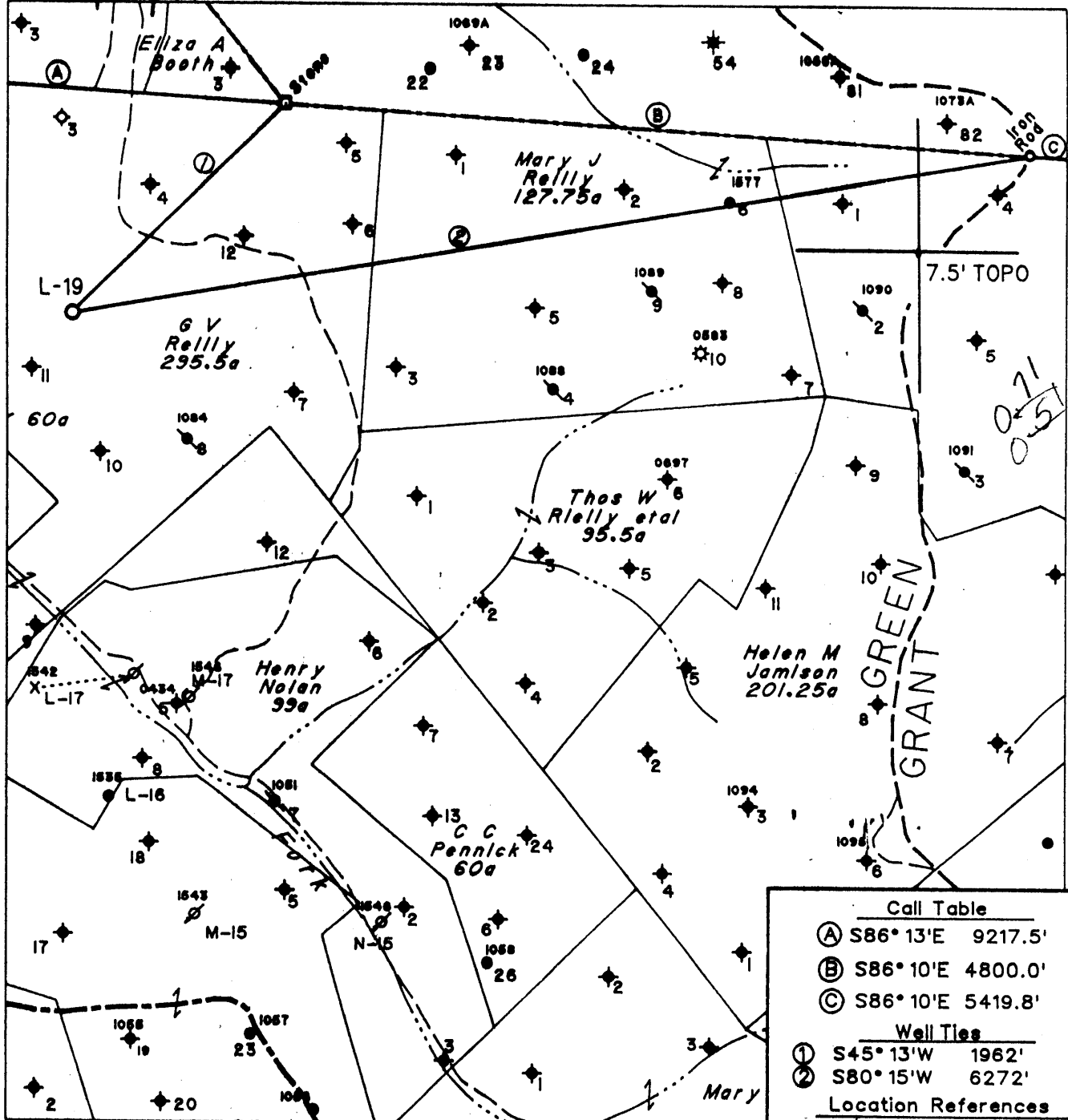
DATE April 11, 2003  
 FARM G.V. Reilly NO. L-19  
 API WELL NO. 47-103-01631W

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION  WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1,242' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint 7.5'  
 SURFACE OWNER W.Va. Public Lands Corp. ACREAGE 259 Ac.  
 OIL & GAS ROYALTY OWNER East Resources, et al. LEASE ACREAGE 260 Ac.  
 LEASE NO. 15544-260 Ac.  
 PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Plug Back and Re-drill Directionally as Shown.  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Gordon ESTIMATED DEPTH 3,425' MD  
 WELL OPERATOR East Resources, Inc. DESIGNATED AGENT Michael McCown  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
 Vienna, W.Va. 26105 Vienna, W.Va. 26105

MAY 02 2003

WET 1631W

NS 4/29/94



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

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

Call Table

- (A) S86° 13'E 9217.5'
- (B) S86° 10'E 4800.0'
- (C) S86° 10'E 5419.8'

Well Ties

- (1) S45° 13'W 1962'
- (2) S80° 15'W 6272'

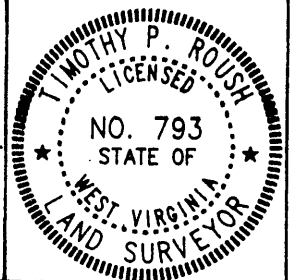
Location References

- N5° 39'E 156' 6" Maple
- N69° 05'E 142' 4" Poplar
- S57° 51'E 166' 6" Red Oak

FILE NO. 1082  
 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) [Signature]  
 TIMOTHY P. ROUSH PS 793



STATE OF WEST VIRGINIA  
 DIVISION OF ENERGY  
 OIL AND GAS SECTION



DATE April 20, 19 94  
 FARM G.V. Reilly NO. L-19  
 API WELL NO. 47-103-1631-41

WELL TYPE: OIL    GAS    LIQUID INJECTION X WASTE DISPOSAL     
 (IF "GAS") PRODUCTION    STORAGE    DEEP    SHALLOW     
 LOCATION: ELEVATION 1025' WATERSHED Piney Fork

DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint 15 NW

SURFACE OWNER State of West Virginia ACREAGE 259 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 260 Ac.  
 LEASE NO. 15544-260 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)   

PLUG AND ABANDON    CLEAN OUT AND REPLUG     
 TARGET FORMATION Gordon ESTIMATED DEPTH 3222'  
 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

3-095

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.: G.V.REILLY L-19  
LOCATION: Elevation: <sup>1250 - topo map elevation - kb 7/28/97</sup> 1,025.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL  
Latitude: 3750 Feet South of 39 Deg. 30Min. Sec.  
Longitude 2700 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: RANDAL MICK  
Permit Issued: 05/25/94  
Well work Commenced: 09/13/94  
Well work Completed: 09/23/94  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary \_\_\_\_\_ Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 3268  
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.
8-5/8	400	400	To surface 50 sks.
4-1/2	3190	3190	300 sks.

OPEN FLOW DATA

\* Water Injection Well

Producing formation Gordon Pay zone depth (ft) 3116-3140  
 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 3133'-3139'. Treated with 300 gallons 15% HCL acid, 442 barrels gelled water and 18,500# 20/40 sand.

WELL LOG

Sand & Shale	0'-1560'
Sand	1560'-1628'
Shale	1628'-1658'
Sand & Shale	1658'-2050'
Sand	2050'-2088'
Shale	2088'-2350'
Big Injun	2350'-2524'
Shale	2524'-3107'
Stray	3107'-3116'
Gordon	3116'-3140'
T.D.	3268'

10/91

19234

APR 26 94



- 1) Date: April 21, 19 94
- 2) Operator's Well No. G. V. REILLY #L-19
- 3) SIC Code \_\_\_\_\_
- 4 API Well NO. 47 - 103 - 1631-LI  
State County Permit
- 5. UIC Permit No. \_\_\_\_\_

*Issued 05/25/94*

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

*Expires 05/25/96*

- WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_
- LOCATION: Elevation: 1242 Watershed: Piney Fork  
District: Green County: Wetzel Quadrangle: Centerpoint 281
- 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 3122 feet(top) to 3137 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3222 ft.
- 15) Approximate water strata depths; Fresh, 422 feet; salt, 1449 feet.
- 16) Approximate coal seam depths: 1054
- 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 FILLUP OR SACS (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		492'	492'	Cement to surface	Sizes
Coal									
Intermediate									
Production	4-1/2	J-55	10.5	X		3222'	3222'	Cement over salt sand	Depth set
Tubing									
Liners									Perforations: Top Bottom

- 25) APPLICANT'S OPERATING RIGHTS were acquired from George V. Reilly et ux  
by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated September 23, ~~18~~ 1895, of record in the  
Wetzel County Clerk's office in Lease Book 47 at page 34

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. G. V. REILLY #L-19
- 3) SIC Code \_\_\_\_\_
- 4) API Well No. 47 - 103 - 163-21  
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>Dep't. of Natural Resources</u></p> <p>(iii) Name <u>1304 Goose Run Road</u><br/>Address <u>Fairmont, WV 26554</u><br/><u>Attn: Gary Foster</u></p> | <p>7 (i) COAL OPERATOR <u>N/A</u><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.

Pennzcoil Products Company  
Well Operator

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