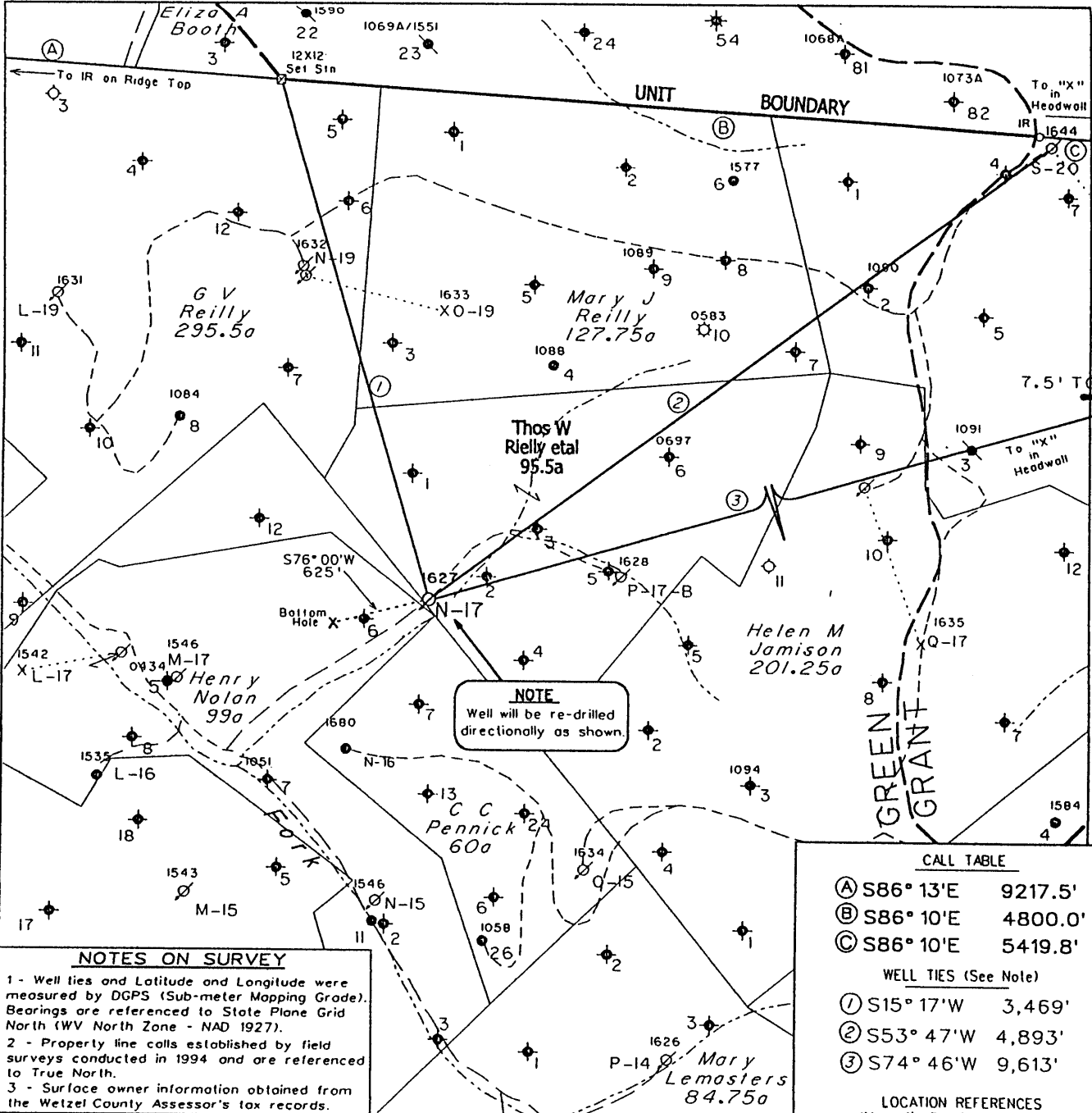


Longitude = 80° 40' 04.7"

LATITUDE 39° 30' 00" 375'

LONGITUDE 80° 40' 00" 5.675'  
Latitude = 39° 29' 03.7"



**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)	S15° 17'W	3,469'
(2)	S53° 47'W	4,893'
(3)	S74° 46'W	9,613'

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

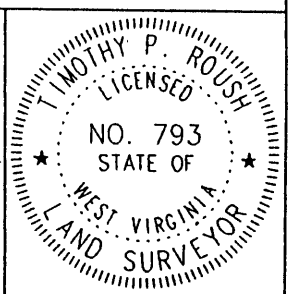
Existing Well

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. 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) *Timothy P. Roush*  
 TIMOTHY P. ROUSH PS 793



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

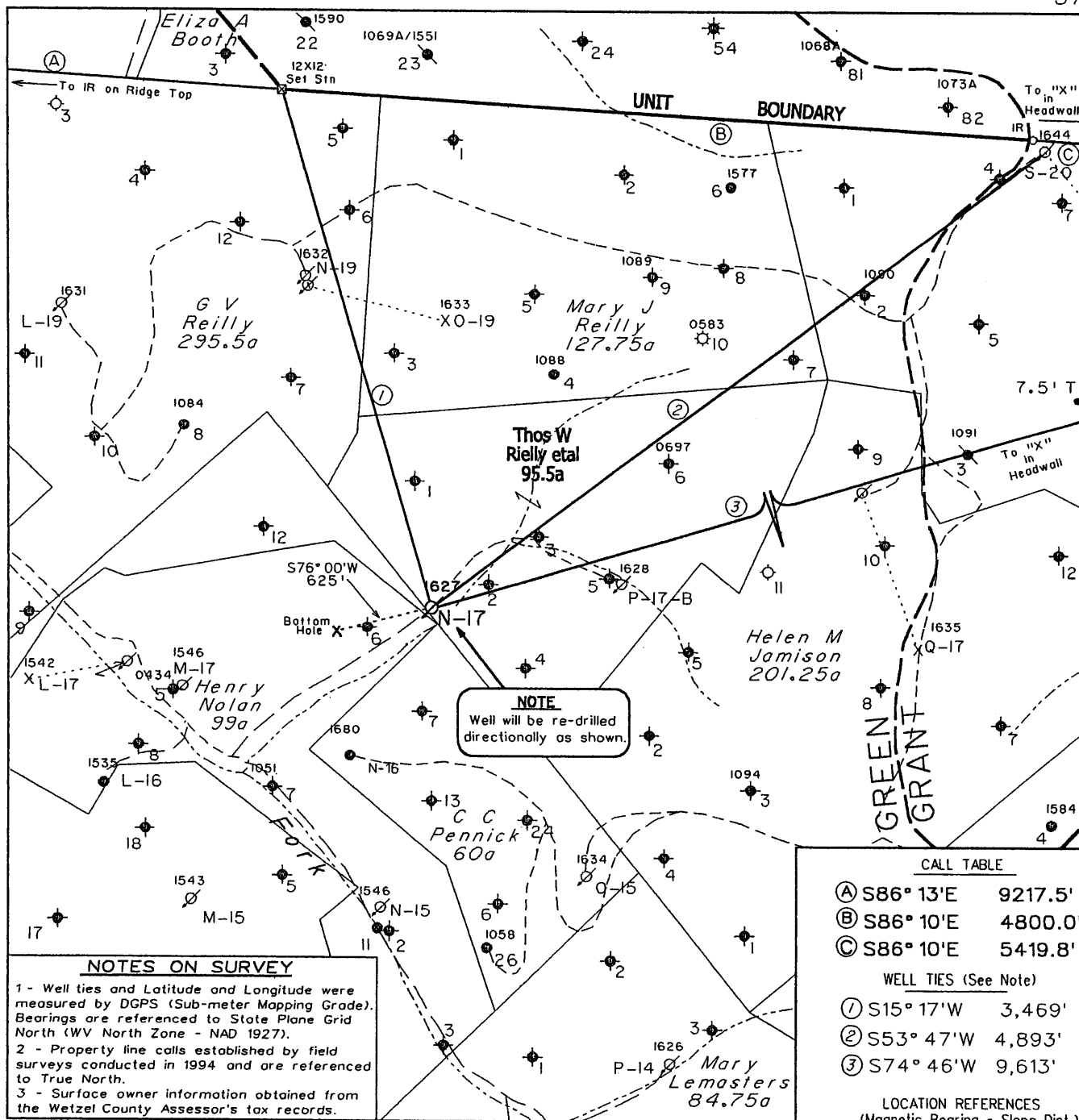


DATE April 11, 2003  
 FARM T.W. Reilly NO. N-17  
 API WELL NO. 47-103-01627W

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION X WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 991' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint 7.5'  
 SURFACE OWNER W.Va. Public Lands Corp. ACREAGE 95 Ac.  
 OIL & GAS ROYALTY OWNER East Resources, et al. LEASE ACREAGE 95.5 Ac.  
 LEASE NO. 57094-00  
 PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL X FRACTURE OR STIMULATE X PLUG OFF 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 3,250' 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 1027W



**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'
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**LOCATION REFERENCES (Magnetic Bearing - Slope Dist.)**

Existing Well

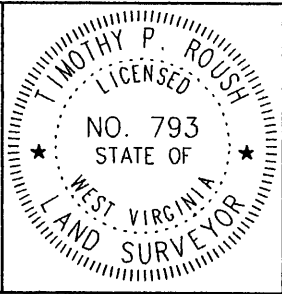
NOTE: No known water supply sources are located within 1000' of proposed well. (H) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

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) *Timothy P. Roush*  
 TIMOTHY P. ROUSH PS 793



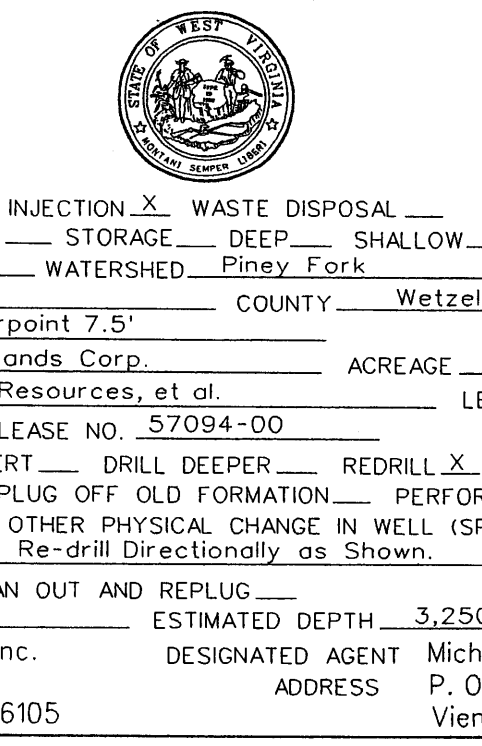
**WEST VIRGINIA**  
 Division of Environmental Protection  
 Office of Oil and Gas  
 1356 Hansford St.  
 Charleston, West Virginia 25301

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION \_\_\_  WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 991' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint 7.5'  
 SURFACE OWNER W.Va. Public Lands Corp. ACREAGE 95 Ac.  
 OIL & GAS ROYALTY OWNER East Resources, et al. LEASE ACREAGE 95.5 Ac.  
 LEASE NO. 57094-00

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Plug Back and Re-drill Directionally as Shown.

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Gordon ESTIMATED DEPTH 3,250' 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



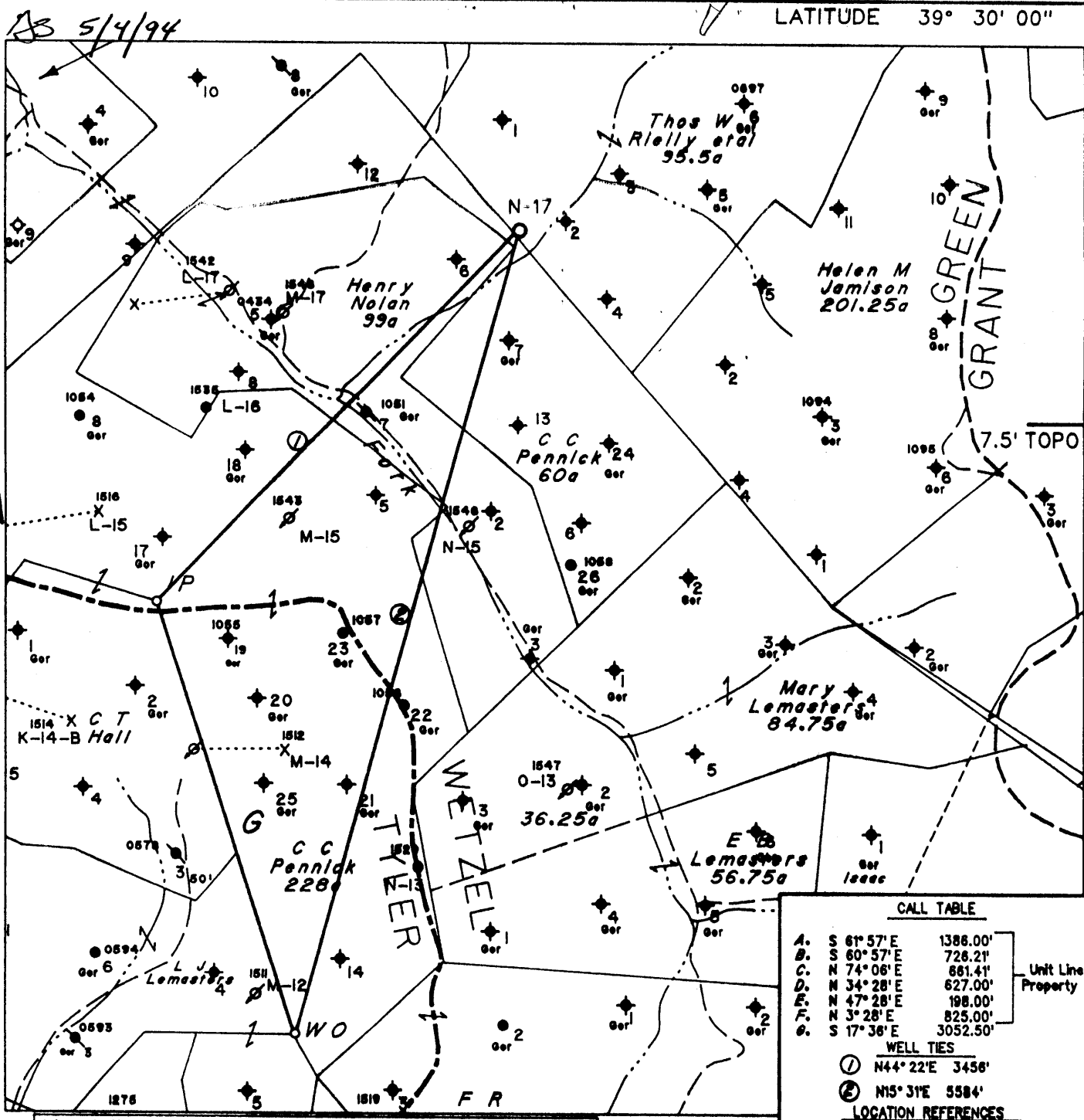
DATE April 11, 2003  
 FARM T.W. Reilly NO. N-17  
 API WELL NO. 47-103-01627W

**CANCELLED**

MAR 10 2006

FURM IV-0

NET 1627 CANC.



CALL TABLE

A.	S 61° 57' E	1386.00'
B.	S 60° 57' E	726.21'
C.	N 74° 06' E	681.41'
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 N44° 22' E 3456'
- ② N15° 31' E 5584'

LOCATION REFERENCES

- N70° 38' E 192' 6" Beech
- S16° 52' E 120' 8" Beech
- N51° 55' W 127' 8" Sassafras

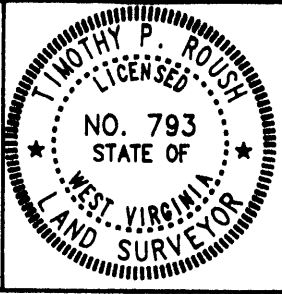
Note: No Known Water Supply Sources Are Located Within 1000' Of Proposed Well

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

FILE NO. 1797  
 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 April 19, 19 94  
 FARM T.W. Reilly NO. N-17  
 API WELL NO. 47-103-1627-41

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 991' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint 15 NW  
 SURFACE OWNER State of West Virginia ACREAGE 95 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 95.5 Ac.  
 LEASE NO. 57094-00  
 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 2971'  
 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

8-0 95

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.: TOM REILLY N-17

LOCATION: Elevation: 991.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL  
Latitude: 5700 Feet South of 39 Deg. 30Min. Sec.  
Longitude 400 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: 05/12/94  
Well work Commenced: 08/21/94  
Well work Completed: 10/20/94  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 3070  
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	266	266	50 sks.
4-1/2	2993	2993	300 sks.

OPEN FLOW DATA

\* Water Injection Well

Producing formation Gordon Pay zone depth (ft) 2884-2933  
 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 16 holes 2906'-2914'. Treated with 300 gallons 15% HCL acid, 460 barrels gelled water and 20,000# 20/40 sand.

## WELL LOG

Sand & Shale	0'- 920'
Sand	920'- 948'
Shale	948'-1012'
Sand	1012'-1028'
Sand & Shale	1028'-1720
Sand	1720'-1786'
Shale	1786'-2078'
Big Injun	2078'-2256'
Shale	2256'-2870'
Stray	2870'-2874'
Gordon	2884'-2933'
T.D.	3070'

10/91

19101

APR 26 91



- 1) Date April 21, 1983  
 2) Operator's Well No. THOMAS W. REILLY #N-1  
 3) SIC Code \_\_\_\_\_  
 4) API Well NO. 47 - 103 - 16279  
                   State       County       Perm  
 5) UIC Permit No. \_\_\_\_\_

103-1627

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 05/12/94  
 Expires 05/12/96

- 6) WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_  
 7) LOCATION: Elevation: 991' / Watershed: Piney Fork 286  
                   District: Green / County: Wetzel / Quadrangle: Centerpoint  
 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  
       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 2871' feet (top) to 2886 feet (bottom)  
 14) Estimated depth of completed well, (or actual depth of existing well): 2971 ft.  
 15) Approximate water strata depths: Fresh 171 feet; salt 1198 feet.  
 16) Approximate coal seam depths: 803  
 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  
 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		241'	241'	Cement to surface	Seals
Coal									
Intermediate									
Production	4-1/2	J-55	10.5	X		2971'	2971'	Cement over salt sand	Depths set
Tubing									
Liners									Perforations: Top                      Bottom

- 25) APPLICANT'S OPERATING RIGHTS were acquired from Union National Bank of West Virginia  
 by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated August 31, 1983, of record in the  
Wetzel County Clerk's office in Lease Book 65A at page 408

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. THOMAS W. REILLY #E-17  
3) SIC Code \_\_\_\_\_  
4) API Well No. 47 - 103 - 1627  
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 _____                                                                                       | 7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:<br>Name _____<br>Address _____  |
| (iii) Name <u>Dep't. of Natural Resources</u><br><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.

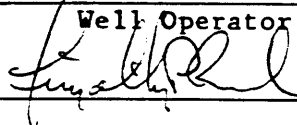
The date proposed for the first injection or waste disposal is \_\_\_\_\_, 19\_\_\_\_.

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