

Call Table	
A	S20° W 62 P.
B	S61° 14' E 709.5'
C	N77° 47' E 594.0'
D	N60° 34' E 701.0'
E	N19° W 40 P.
WELL TIES	
①	N54° 45' E 3481'
②	N28° 43' E 2144'
LOCATION REFERENCES	
N34° 39' E	156' 4" Maple
N55° 13' W	97' 8" Hickory
S11° 15' E	198' 6" Maple

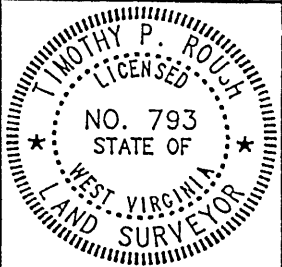
Note: There are no known water supply sources located within 1000' of proposed well.

◆ Denotes a Water Supply Source

FILE NO. 1820  
 MAP NO. N47 N S 1 E W 5  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM - 902

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 July 16, 19 96  
 FARM Martha Elder NO. 13  
 API WELL NO. 47-095-01654-5

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1174' WATERSHED McIntyre Fork  
 DISTRICT McElroy COUNTY Tyler  
 QUADRANGLE Centerpoint 7.5'

*Zodary road well*  
*Storage well cancelled 2/4/99*

SURFACE OWNER Forrest Glover ACREAGE 95.5 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 187.25 Ac.  
 LEASE NO. 99174-00

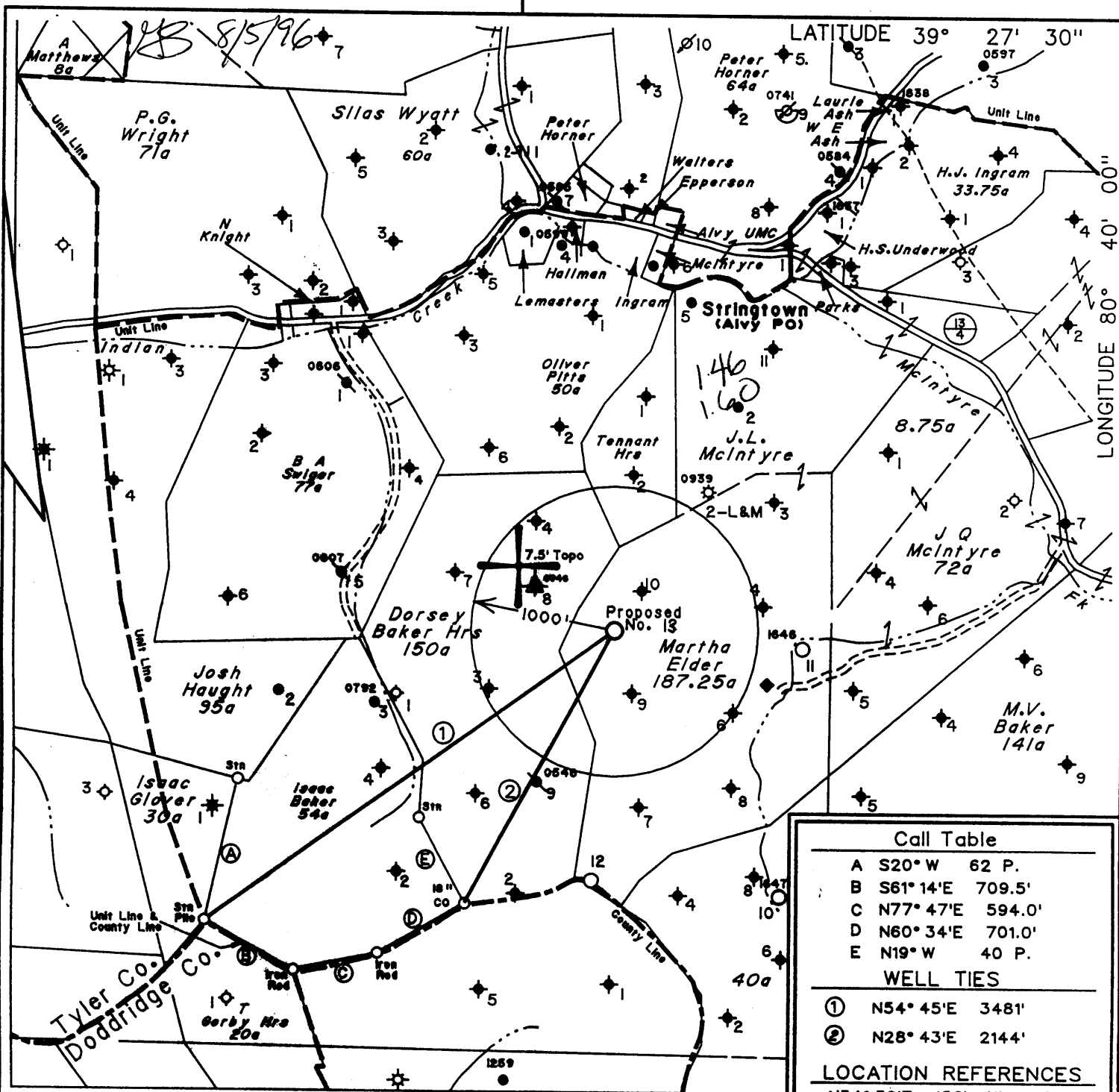
PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION Gordon ESTIMATED DEPTH 3174'

WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT Philip S. Ondrusek  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W.Va. 26105 Vienna, W.Va. 26105

FEB 0 1999

7,700'  
 8,400'  
 LATITUDE 39° 27' 30"  
 LONGITUDE 80° 40' 00"  
 TYL 1654-S CANC.

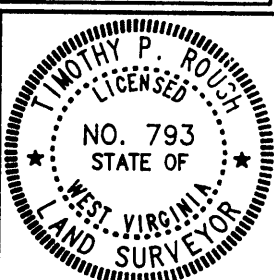


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Note: There are no known water supply sources located within 1000' of proposed well.   
 (H) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS   
 ♦ Denotes a Water Supply Source

FILE NO. 1820  
 MAP NO. N47 N S 1 E W 5  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM - 902

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



STATE OF WEST VIRGINIA  
 DIVISION OF ENERGY  
 OIL AND GAS SECTION

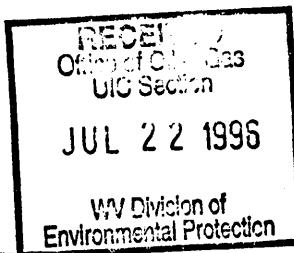


DATE July 16, 19 96  
 FARM Martha Elder NO. 13  
 API WELL NO. 47-095-01654-5

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1174' WATERSHED McIntyre Fork  
 DISTRICT McElroy COUNTY Tyler  
 QUADRANGLE Centerpoint 7.5'  
 SURFACE OWNER Forrest Glover ACREAGE 95.5 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 187.25 Ac.  
 LEASE NO. 99174-00  
 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 3174'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT Philip S. Ondrusek  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W.Va. 26105 4670 Vienna, W.Va. 26105

prob rec. & drilled  
 on 095 1667  
 loc 10/28/1998

AUG 2 1996



1) Date July 16, 1996  
 2) Well No. Martha Elder No.13  
 3) SIC Code \_\_\_\_\_  
 4) API Well No. 47 - 095 1654-11  
 State            County            Permit  
 5) UIC Code \_\_\_\_\_

*Issued 08/07/96*

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

*Expires 08/07/98*

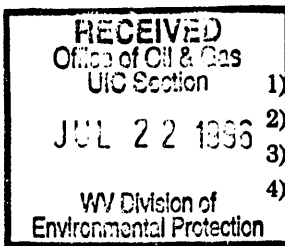
- 1) WELL TYPE: Liquid Injection X Gas Injection \_\_\_\_\_ Waste Disposal \_\_\_\_\_
- 2) LOCATION: Elevation 1174 Watershed McIntyre Fork  
 District McElroy County 3 Tyler            Quadrangle            Centerpoint
- 3) WELL OPERATOR: Pennzoil Products Company 4670  
P.O. Box 5519  
Vienna, WV 26105 3786
- 9) DESIGNATED AGENT: Philip S. Ondrusek  
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 X Drill Deeper \_\_\_\_\_ Redrill \_\_\_\_\_ Stimulate X  
 Plug Off Old Formation \_\_\_\_\_ Perforate New Formation \_\_\_\_\_ Convert \_\_\_\_\_  
 Other Physical Change in Well (specify) \_\_\_\_\_
- 13) Geological target formation Gordon 419 Depth 3034 Ft. (Top) t 3049 Ft. (Bottom)
- 14) Estimated depth of completed well (or actual depth of existing well) 3174 Ft.
- 15) Approximate water strata depths: Fresh 354 Ft. Salt 1381 Ft.
- 16) Approximate coal seam depths: 986 Ft.
- 17) Is coal being mined in the area? Yes X No
- 18) Virgin reservoir pressure in target formation: 1400 psig. Source Estimated
- 19) Estimated reservoir fracture pressure: 3500 psig.
- 20) Maximum proposed injection operations: Volume per hour 25 bbl. Bottom Hole Pressure 2332 psig.
- 21) Detailed indentification of materials to be injected, including additives: Fresh water, produced water, bactericides and other chemicals as needed to maintain water quality and improve oil recovery.
- 22) Filters (if any): Cartridge filters and/or coal bed 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	PACKERS
	Size	Grade	Weight	New	Used	For Drilling	Left in Well		
Conductor									Kinds
Fresh Water	8 5/8"	L.S.	20#	X		424	424	Cement To	
Coal								Surface	Sizes
Intermediate									
Production	4 1/2"	J-55	10.5#	X		3174	3174	Cement Over	Depths Set
Tubing								Salt Sand	
Liners									Perforations
									Top Bottom

25) APPLICANTS OPERATING RIGHTS were acquired from Martha E. Elder et al.  
 by Deed \_\_\_\_\_ Lease X Other Contract \_\_\_\_\_ Dated July 9, 1993 of record in the  
Tyler County Clerk's Office in Deed Book 305 Page 131

21945



1) Date July 16, 1996  
2) Well No. Martha Elder No. 13  
3) SIC Code \_\_\_\_\_  
4) API Well No. 47 - 095 - 1654-21  
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

6) SURFACE OWNER(S) OF RECORD TO BE SERVED

(i) Name Forrest Glover  
Address P.O. Box 332  
Middlebourne, WV 26149  
(ii) Name Dorsey Baker Estate  
Address c/o Earle M. Long  
117 Ellis Ave.  
(iii) Name Elkins, WV 26241  
Address \_\_\_\_\_

6 (iv) ADDITIONAL SURFACE OWNERS

Name \_\_\_\_\_  
Address \_\_\_\_\_

7 (ii) COAL OWNER WITH DECLARATION ON RECORD:

Name N/A  
Address \_\_\_\_\_

7(iii) COAL LESSEE WITH DECLARATION ON RECORD:

Name N/A  
Address \_\_\_\_\_

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 \_\_\_\_\_

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]  
Its Supervisor, Surveying/Mapping  
Telephone (304) 422-6565

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-095-1654-31

August 7th. 19 96  
Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and (if required) construction and reclamation plan, subject to any modifications and conditions specified below.

Permit expires 8-7-98 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
✓	✓	BS	BS	

0301420908

*Michael D. Jones*  
CHIEF, OFFICE OF OIL AND GAS

NOTE: Keep one copy of this permit posted at the drilling location.

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

OFFICE USE ONLY

This part of Form IV-3(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Follow-up inspection(s)	Date(s)
Application received			
Well work started		.. ..	
Total depth reached		.. ..	
Well Record received		.. ..	
Reclamation completed		.. ..	

OTHER INSPECTIONS

Reason: \_\_\_\_\_

Reason: \_\_\_\_\_