

Long. = 80° 41' 42.1"

8,000'

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"

12.950'

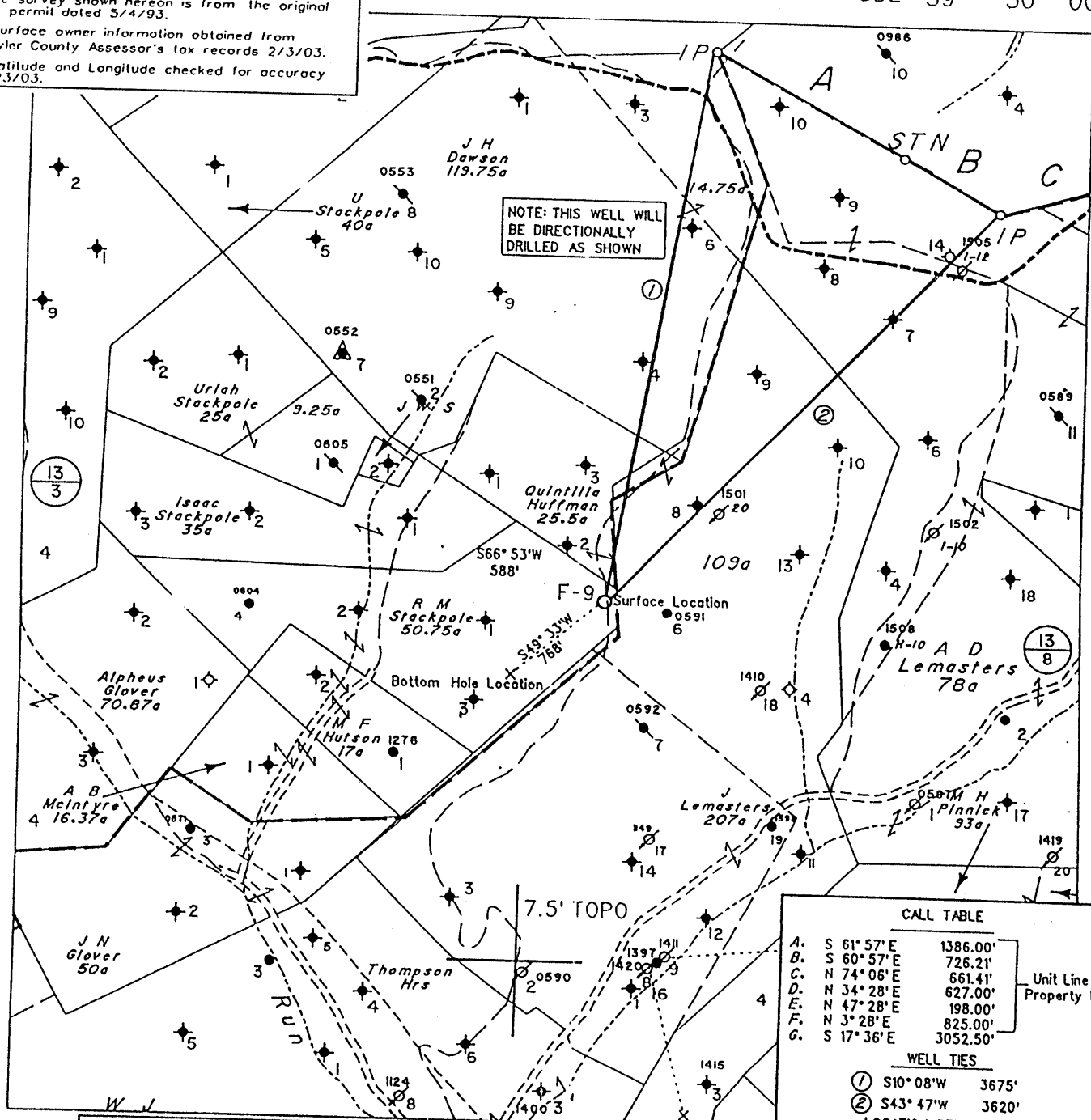
Lat. = 39° 27' 51.8"

TYL 1541F

NOTES ON PLAT

- 1 - The survey shown hereon is from the original drilling permit dated 5/4/93.
- 2 - Surface owner information obtained from the Tyler County Assessor's tax records 2/3/03.
- 3 - Latitude and Longitude checked for accuracy on 1/23/03.

NOTE: THIS WELL WILL BE DIRECTIONALLY DRILLED AS SHOWN



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.	S 61° 57' E	1386.00'
B.	S 60° 57' E	726.21'
C.	N 74° 06' 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'

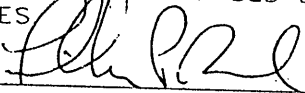
Unit Line & Property Line

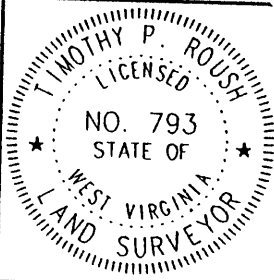
WELL TIES	
①	S10° 08' W 3675'
②	S43° 47' W 3620'

LOCATION REFERENCES	
N21° 22' W	245' 12" Hickory
N0° 04' W	204' 3" Black Oak
S5° 39' E	123' 14" Red Oak

FILE NO. \_\_\_\_\_  
 MAP NO. N47 N 2 S E W 5  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION WVDEP Records

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 PS 793



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



DATE February 3, 2003  
 FARM R.M. Stackpole NO. F-9  
 API WELL NO. 47-095-1541F

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION X WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1,256' WATERSHED Stackpole Run  
 DISTRICT McElroy COUNTY Tyler  
 QUADRANGLE Centerpoint 7.5'  
 SURFACE OWNER Luella Edna Stackpole et al. ACREAGE 50.75 Ac.  
 OIL & GAS ROYALTY OWNER East Resources, et al. LEASE ACREAGE 250 Ac.  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL \_\_\_ 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 3,420'  
 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

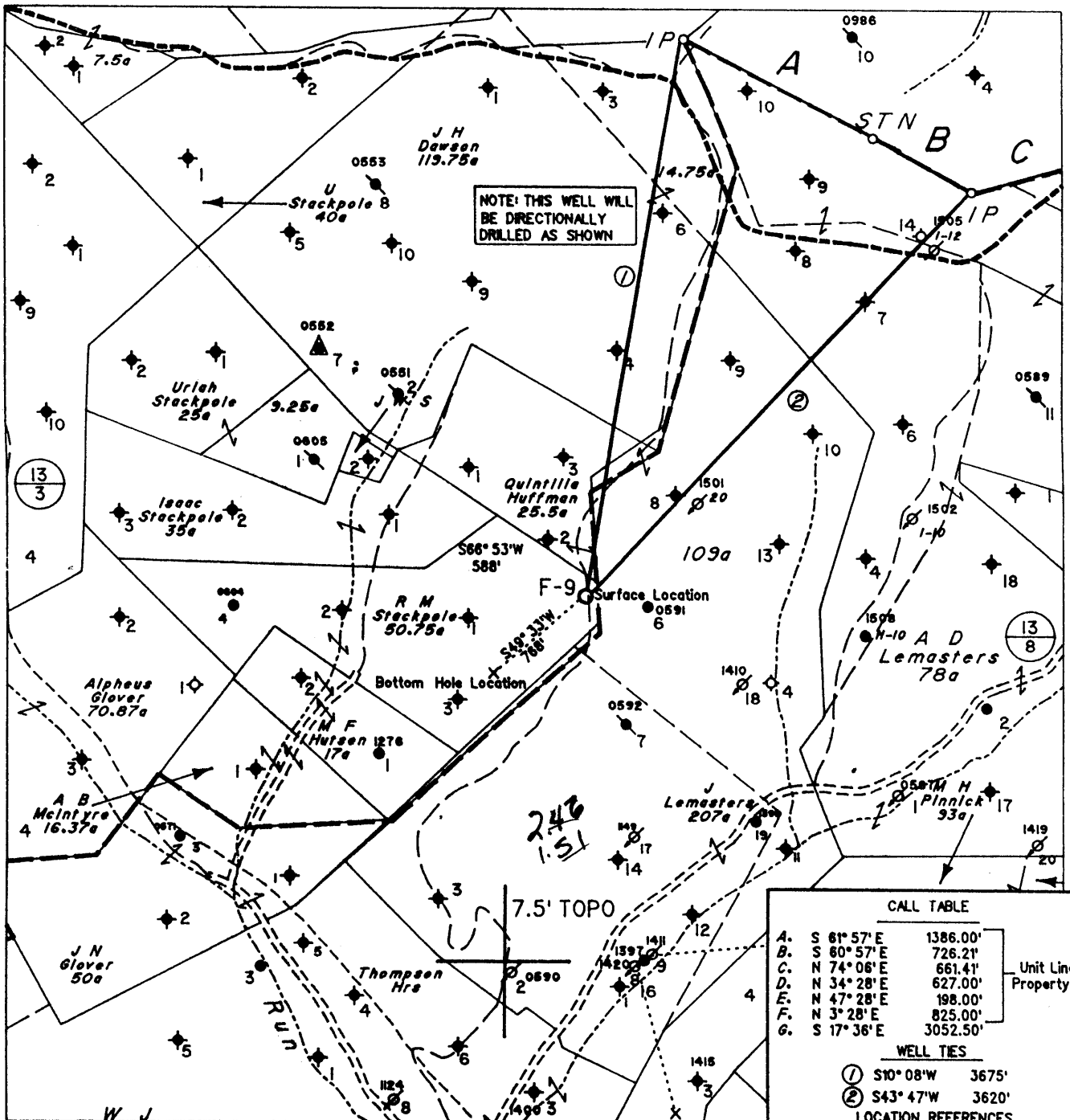
FEB 28 2003

MS 5-25-93

8,000'

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"



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.	S 81° 57' E 1386.00'
B.	S 80° 57' E 726.21'
C.	N 74° 06' 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

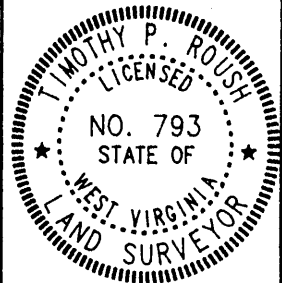
WELL TIES	
①	S10° 08' W 3675'
②	S43° 47' W 3620'

LOCATION REFERENCES	
N21° 22' W	245' 12" Hickory
N0° 04' W	204' 3" Black Oak
S5° 39' E	123' 14" Red Oak

FILE NO. 1787  
 MAP NO. N47 N 2 S E W5  
 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 May 4, 19 93  
 FARM R.M. Stackpole NO. F-9  
 API WELL NO. 47-095-1541-L1

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1256' WATERSHED Stackpole Run  
 DISTRICT McElroy 5 COUNTY Tyler  
 QUADRANGLE Centerpoint 15 NW

SURFACE OWNER Darrell & Grace Stackpole ACREAGE 24 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 50.75 Ac.  
 LEASE NO. 12959-50

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

JUN 11 1993

PLUG AND ABANDON  CLEAN OUT AND REPLUG  8-0 Jacksonburg-Stringtown (095)  
 TARGET FORMATION Gordon ESTIMATED DEPTH 3315'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W.Va. 26105 675 4670 ADDRESS 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 DEC 07 93

Farm name: STACKPOLE, DARRELL/ GRACE Operator Well No.: STACKPOLE F-9

LOCATION: Elevation: 1,256.00 Quadrangle: CENTER POINT

District: MCELROY County: TYLER  
Latitude: 12950 Feet South of 39 Deg. 30Min. Sec.  
Longitude 8000 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: MIKE UNDERWOOD  
Permit Issued: 06/07/93  
Well work Commenced: 7/23/93  
Well work Completed: 9/28/93

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 3420  
Fresh water depths (ft) N/A

Salt water depths (ft) N/A

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8	507	507	165 Sks.
4 1/2	3389.3	3389.3	300 Sks.

OPEN FLOW DATA

Producing formation Gordon Pay zone depth (ft) 3262 - 3318  
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

\* Water Injection Well - Not Tested  
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: 12/6/93

TREATMENT:

Perforated: 3288 - 3292, 3295 - 3302 2 Holes Per Foot - 22 Holes  
Treated: 300 Gal. 15% HCL Acid, 287 Bbl. Gelled Water &  
1500# 80/100 Sand & 3500# 20/40 Sand

WELL LOG:

Sand & Shale	0 - 915
Sand	915 - 965
Sand & Shale	965 - 1140
Sand	1140 - 1190
Sand & Shale	1190 - 1540
Sand	1540 - 1578
Shale	1578 - 1740
Limestone	1740 - 1790
Sand & Shale	1790 - 1920
Sand	1920 - 2018
Sand & Shale	2018 - 2142
Sand	2142 - 2200
Shale	2200 - 2360
Little Lime	2360 - 2378
Pencil Cave	2378 - 2390
Blue Monday	2390 - 2420
Big Lime	2420 - 2500
Big Injun	2500 - 2685
Shale	2685 - 3262
Stray	3262 - 3284
Gordon	3284 - 3318

T.D. 3420

DF -411  
DFT-419

MAY 1 1993



- 1) Date: May 10, 19 93
- 2) Operator's Well No. R. M. STACKPOLE F-9
- 3) SIC Code \_\_\_\_\_
- 4 API Well NO. 47 - 095 - 1541-LI  
State County Permit
- 5. UIC Permit No. \_\_\_\_\_

*Issued 06/07/93*

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 06/07/95*

17356

- 8) WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_
- 9) LOCATION: Elevation: 1256' Watershed: Stackpole Run *286*  
District: McElroy County: Tyler Quadrangle: Centerpoint
- 10) WELL OPERATOR Pennzoil Products Co. 37450 9) DESIGNATED AGENT J.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 Rt. #2, Box 135 Name \_\_\_\_\_  
Salem, WV 26426 Address \_\_\_\_\_
- \* WELL WILL BE DIRECTIONALLY DRILLED
- 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 Depth 3215 feet(top) to 3230 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3315 ft.
- 15) Approximate water strata depths; Fresh, 436 feet; salt, 1463 feet.
- 16) Approximate coal seam depths: 1080
- 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 2380
- 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh water, produced water, bactericides, and other chemicals as needed to maintain water quality & improve oil recovery.
- 22) FILTERS (IF ANY): Cartridge Filters and/or Coal Bed Filters
- 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: \_\_\_\_\_

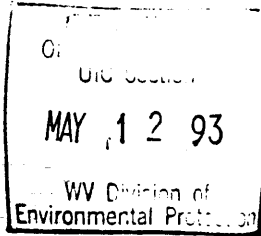
24) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT 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	L.S.	20	X		506	506	Cement to	Sizes
Coal								Surface	
Intermediate									
Production	4 1/2	J-55	10.5	X		3315	3315	Cement over	Depths set
Tubing								Salt Sand	
Liners									Perforations:
									Top Bottom

- 25) APPLICANT'S OPERATING RIGHTS were acquired from R. M. Stackpole  
by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated April 6, 1984, of record in the  
Tyler County Clerk's office in Book 23 at page 117

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

FORM WW-3(A)  
Obverse



- 1) Date May 10, 1993  
Operator's
- 2) Well No. R. M. STACKPOLE F-9
- 3) SIC Code \_\_\_\_\_
- 4) API Well No. 47 - 095 - 1541  
State County Permi

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>Darrell &amp; Grace Stackpole</u><br/>Address <u>Alvy, WV 26322</u></p> <p>(ii) Name _____<br/>Address _____</p> <p>(iii) Name _____<br/>Address _____</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.

Pennzoil Products Company  
Well Operator

By [Signature]  
Timothy P. Roush  
Its Supervisor - Surveying/Mapping

Telephone (304) 422-6565