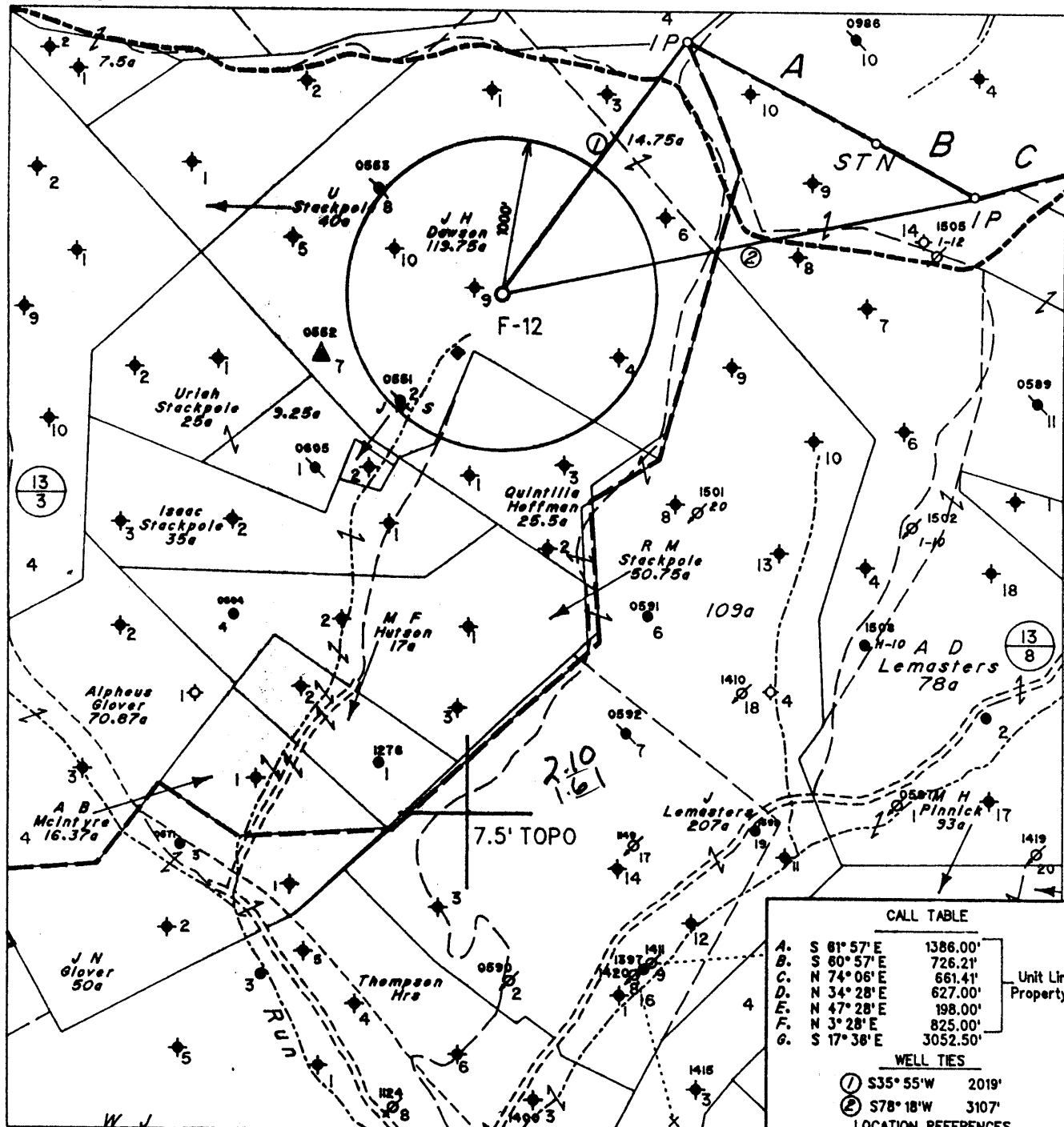


MS 5-25-93



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° 38' E	3052.50'

Unit Line & Property Line

WELL TIES		
①	S35° 55' W	2019'
②	S78° 18' W	3107'

LOCATION REFERENCES

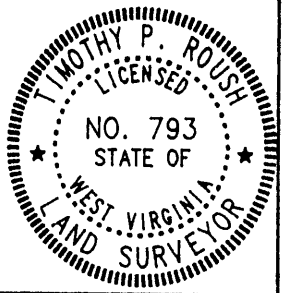
N37° 03' W	96' 4" Maple
N28° 16' E	112' 6" Elm
S9° 12' W	165' 8" Pine

Note: All Known Water Supply Sources Located Within 1000' Of Proposed Well Are Shown ◆ - Water Supply Source  
 (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 1783  
 MAP NO. N47 N 2 S E W 4  
 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 May 4, 19 93  
 FARM J. H. Dawson NO. F-12  
 API WELL NO. 47-095-1539-LI

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION X WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 961' WATERSHED Stackpole Run  
 DISTRICT McElroy S COUNTY Tyler  
 QUADRANGLE Centerpoint & 15 NW  
 SURFACE OWNER Stackpole Heirs ACREAGE 22 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 135 Ac.  
 LEASE NO. 13568-50  
 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 2950'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
 Vienna, W.Va. 26105 623 Vienna, W.Va. 26105 8-0 95

JUN 1 1 1993

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: Stackpole Heirs

Operator Well No.: J. H. Dawson F-12

LOCATION: Elevation: 961'

Quadrangle: Centerpoint

District: McElroy

County: Tyler

Latitude: 8500 Feet South of 39 Deg. 30 Min. 00 Sec.  
Longitude 10950 Feet West of 80 Deg. 40 Min. 00 Sec.

Company: PENNZOIL PRODUCTS COMPANY  
P. O. BOX 5519  
VIENNA, WV 26105-5519

Agent: JAMES A. CREWS

Inspector: Mike Underwood

Permit Issued: 5/20/93

Well work Commenced: 6/7/93

Well work Completed: 5/25/94

Verbal Plugging

Permission granted on:

Rotary  Cable \_\_\_\_\_ Rig \_\_\_\_\_

Total Depth (feet) 2966'

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	220'	220'	100 Sk.
4-1/2	2922.25	2922.25	300 Sk.

OPEN FLOW DATA

WATER INJECTION WELL

Producing formation Gordon

Pay zone depth (ft) 2822'-2882'

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: 7/8/94

*[Handwritten initials]*

Treatment:

Perforated Gordon 2849'-2852' 7 holes 2855'-2858' 7 holes  
Treated with 300 gal. 15% HCl 325 bbl. gelled water and 1500#  
80/100 sand and 5000# 20/40 sand

Well Log:

Sand & Shale	0' - 610'
Sand	610' - 658'
Sand & Shale	658' - 820'
Sand	820' - 860'
Sand & Shale	860' - 1410'
Sand	1410' - 1440'
Sand & Shale	1440' - 1595'
Sand	1595' - 1628'
Shale	1628' - 1780'
Sand	1780' - 1828'
Shale	1828' - 1970'
Little Lime	1970' - 1986'
Pencil Cave	1986' - 2000'
Big Lime	2000' - 2035'
Shale	2035' - 2100'
Big Injun	2100' - 2254'
Shale	2254' - 2822'
Stray	2822' - 2836'
Gordon	2836' - 2882'
T.D.	2966'

10/91

MAY 12 1993

WV Division of Environmental Protection



1) Date: May 10, 1993

2) Operator's Well No. J. H. DAWSON F-12

3) SIC Code

4 API Well NO. 47 State 095 County 1539-LI Permit

5. UIC Permit No.

Issued 06/07/93

Expires 06/07/95

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

17353

WELL TYPE: Liquid injection X Gas injection (not storage) Waste disposal LOCATION: Elevation: 961' District: McElroy Watershed: Stackpole Run County: Tyler Quadrangle: Centerpoint WELL OPERATOR Pennzoil Products Co. 37450 9) DESIGNATED AGENT J.A. Crews Address P.O. Box 5519 Vienna, WV 26105

OIL & GAS INSPECTOR TO BE NOTIFIED Name Mike Underwood Address Rt. #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 Depth 2850 feet(top) to 2860 feet(bottom)

14) Estimated depth of completed well, (or actual depth of existing well) 2950 ft.

15) Approximate water strata depths; Fresh, 141 feet; salt, 1168 feet.

16) Approximate coal seam depths: 773

17) Is coal being mined in the area? Yes No X

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

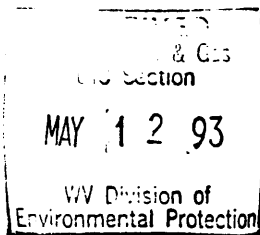
23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL:

24) CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft., New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, Perforations: Top, Bottom)

25) APPLICANT'S OPERATING RIGHTS were acquired from J.H. & M.A. Dawson by deed lease X other contract dated April 2, 1894, of record in the Tyler County Clerk's office in Book 23 at page 526

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



- 1) Date May 10, 1993
  - Operator's \_\_\_\_\_
  - 2) Well No. J. H. DAWSON F-12
  - 3) SIC Code \_\_\_\_\_
  - 4) API Well No. 47 - 095 - 1539
- 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

- 6) SURFACE OWNER(S) OF RECORD TO BE SERVED
  - (i) Name Bea Stackpole Heirs  
Address c/o Darrell Stackpole  
Alvy, WV 26322
  - (ii) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (iii) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 7 (i) COAL OPERATOR N/A  
Address \_\_\_\_\_
- 7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
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 \_\_\_\_\_, 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*  
Timothy P. Roush  
Its Supervisor - Surveying/Mapping  
Telephone (304) 422-6565

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-095-1539-LI

June 7th 19 93  
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 6-7-95 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <i>MS</i>	Casing: <i>MS</i>	Fee: <input checked="" type="checkbox"/> <i>18939</i>
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*[Signature]*

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

CHIEF, OFFICE OF OIL AND GAS

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	Date(s)
Application received		
Well work started		" "
Total depth reached		" "
Well Record received		" "
Reclamation completed		" "
OTHER INSPECTIONS		

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

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