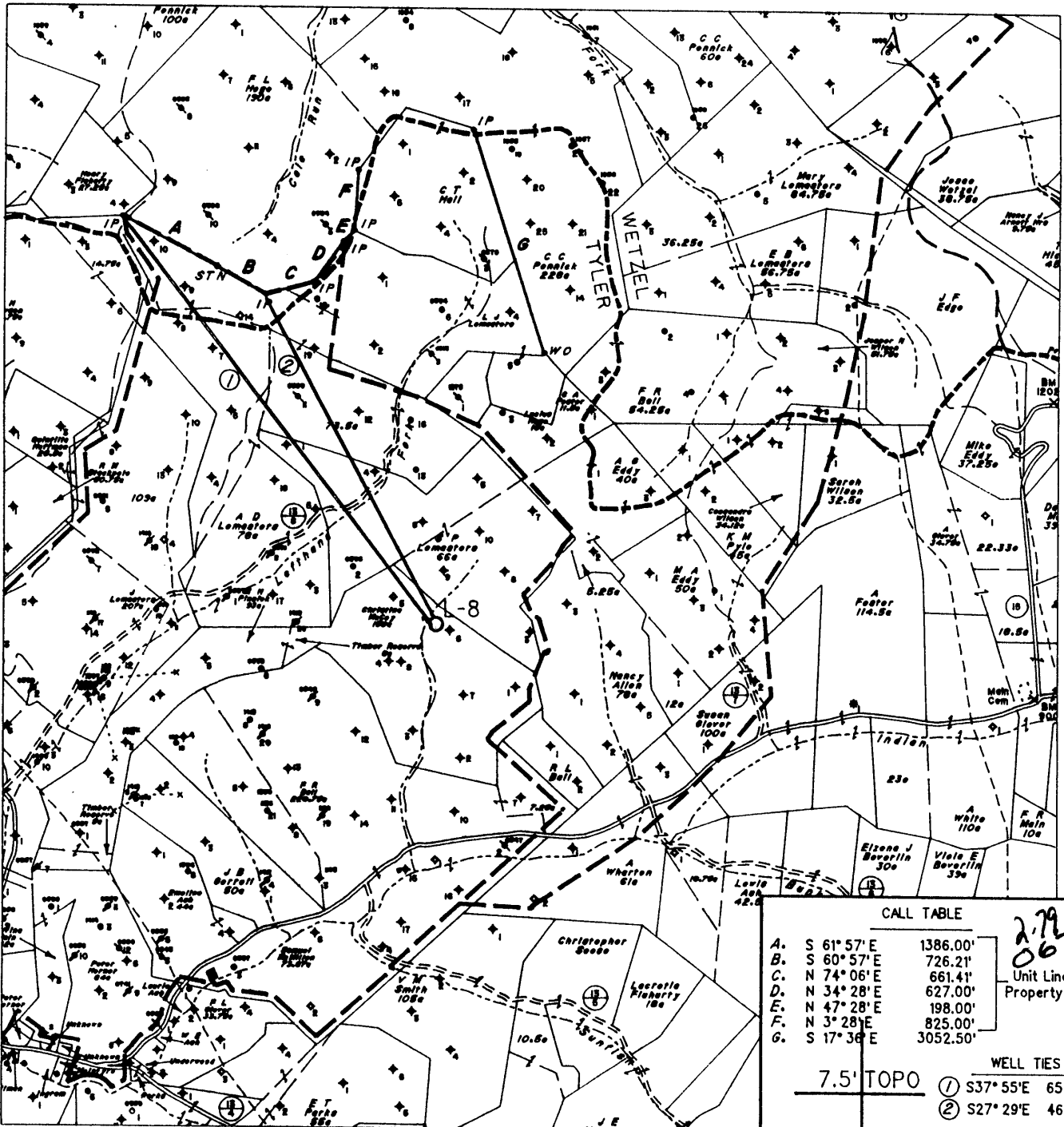


GS 1-5-93

3300'

LATITUDE 39° 30' 00"



LONGITUDE 80° 40' 00"

14,550'

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'

279
062
Unit Line &
Property Line

WELL TIES

- 7.5' TOPO ① S37° 55' E 6543'
- ② S27° 29' E 4687'

LOCATION REFERENCES

- N75° 23' E 156' 4" Beech
- S22° 50' E 1163' 6" Maple

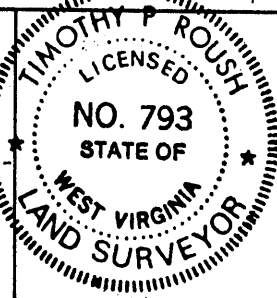
NOTE: NO KNOWN WATER SUPPLY SOURCES ARE LOCATED WITHIN 1000' Rad.

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

FILE NO. 1776
 MAP NO. N47 N S E W
 SCALE 1" = 2000'
 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 December 28, 19 92
 FARM Christina McCoy NO. L-8
 API WELL NO. 47-095-1515-L1

WELL TYPE: OIL GAS LIQUID INJECTION X WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1000' WATERSHED Indian Creek
 DISTRICT McElroy 5 COUNTY Tyler
 QUADRANGLE Centerpoint 4 15 NW

SURFACE OWNER Pennzoil Products Co. ACREAGE 150 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 150 Ac.
 LEASE NO. FEE - 2168

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 2985'

WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews
 ADDRESS 673 P. O. Box 5519 ADDRESS P. O. Box 5519
Vienna, W. Va. 26105 8-O Jacksonburg-Stringtown Vienna, W. Va. 26105 (095)

SEP 15 93

Permitting
Office of Oil & Gas

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

Well Operator's Report of Well Work

Farm name: PENNZOIL PRODUCTS COMPANY

Operator Well No.: C. McCOY L-8

LOCATION: Elevation: 1,000.00 Quadrangle: CENTER POINT

District: MCELROY County: TYLER
Latitude: 14,550 Feet South of 39 Deg. 30Min. 0 Sec.
Longitude 3,300 Feet West of 80 Deg. 40 Min. 0 Sec.

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

Agent: JAMES A. CREWS

Inspector: MIKE UNDERWOOD
Permit Issued: 01/08/93
Well work Commenced: 01/09/93
Well work Completed: 02/16/93
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 3005
Fresh water depths (ft) N/A
Salt water depths (ft) N/A

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	309.40'	309.40'	150 sks.
4-1/2"	2984.35'	2984.35'	300 sks.

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

OPEN FLOW DATA (Water Injection Well)

Producing formation Gordon Pay zone depth (ft) 2874-2934
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: Timothy P. Roush, Supervisor, Surveying/Mapping
Date: September 14, 1993

SEP 16 1993

Treatment

Perforated: Gordon w/20 holes 2906' - 2916'

Treated: w/300 gal. reg. HF acid, 266 bbls. gelled water, 1500# 80/100 sand and 3500# 20/40 sand.

Well Log

Sand	0 - 60
Shale	60 - 134
Sand and Shale	134 - 460
Shale	460 - 593
Sand	593 - 630
Limestone	630 - 695
Shale	695 - 815
Limestone	815 - 830
Shale	830 - 870
Sand	870 - 895
Shale	895 - 1008
Sand	1008 - 1022
Shale	1022 - 1220
Sand	1220 - 1276
Shale	1276 - 1364
Sand	1364 - 1686
Shale	1686 - 1733
Sand	1733 - 1766
Shale	1766 - 1832
Sand	1832 - 1870
Shale	1870 - 2050
Little Lime	2050 - 2064
Shale	2064 - 2094
Big Lime	2094 - 2172
Big Injun	2172 - 2322
Shale	2322 - 2874
Gordon	2874 - 2934
T.D.	3005

DF 411

DF-49



1) Date: December 23, 19 92
 2) Operator's Well No. CHRISTINA MCCOY L-8
 3) SIC Code _____
 4) API Well NO. 47 - 095 - 1515-LI
 State County Permit
 5) UIC Permit No. _____

Issued 01/08/93
Expires 01/08/95

STATE OF WEST VIRGINIA
 NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
 DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

- 6) WELL TYPE: Liquid injection / Gas injection (not storage) _____ / Waste disposal _____
 7) LOCATION: Elevation: 1000' / Watershed: Indian Creek
 District: McElroy / County: Tyler / Quadrangle: Centerpoint
 8) WELL OPERATOR Pennzoil Products Co. 37450
 Address P.O. Box 5519 4670
 Vienna, WV 26105
 9) DESIGNATED AGENT J.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 2119 Depth 2885 feet (top) to 2900 feet (bottom)
 14) Estimated depth of completed well, (or actual depth of existing well) 2985 ft.
 15) Approximate water strata depths: Fresh, 150' feet; salt, > 150' feet.
 16) Approximate coal seam depths: N/A
 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 2470
 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh water, produced water, bactericides, and other chemicals as necessary 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 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		250	250	Cement to Surface	Sizes
Coal									
Intermediate									
Production	4 1/2	J-55	10.5	X		2985	2985	Cement over Salt Sand	Depths set
Tubing									
Liners									Perforations: Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from C. & Z. McCoy
 by deed _____ / lease / other contract _____ / dated March 18, 1897, of record in the
Tyler County Clerk's office in Lease Book 33 at page 112

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

16622

1) Date December 23, 1992
Operator's
2) Well No. CHRISTINA MCCOY L-8
3) SIC Code
4) API Well No. 47 - 095 - 1515 - 0
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 Pennzoil Products Company
Address P.O. Box 5519
Vienna, WV 26105
(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.

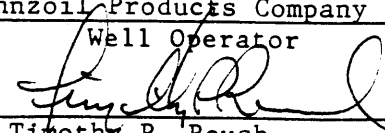
The date proposed for the first injection or waste disposal is _____, 19____.

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

**OFFICE USE ONLY
DRILLING PERMIT**

Permit number _____

_____ Date 19 _____

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 _____ unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: ✓	Agent: ✓	Plat: <i>AS</i>	Casing: <i>AS</i>	Fee
---------	----------	-----------------	-------------------	-----

Michael W. Lewis
Director, Oil and Gas Division

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: _____