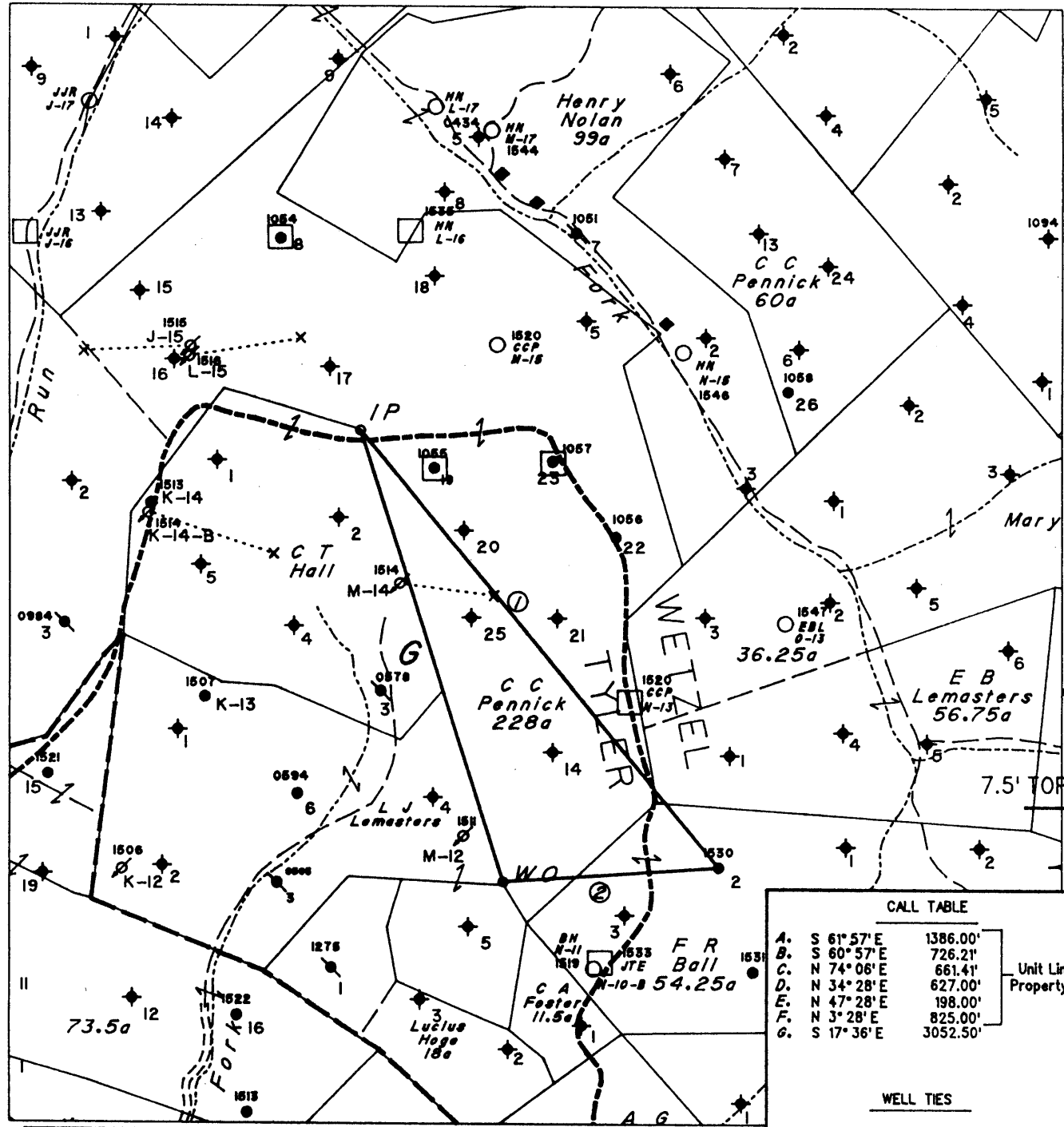


YS 7-2-93

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 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

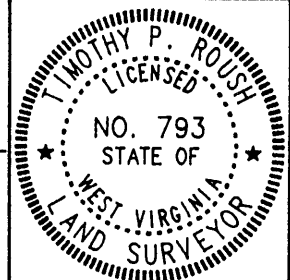
WELL TIES

- ① N39° 44' E 3633'
- ② N85° 16' E 1404'

FILE NO. 1777  
 MAP NO. N48 N 2 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 June 24, 19 93  
 FARM Ball Hrs. NO. 2  
 API WELL NO. 47-103-1530-L1

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1257' WATERSHED Piney Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint

WAO 103 71773

SURFACE OWNER State of West Virginia ACREAGE 54.5 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 54.25 Ac.  
 LEASE NO. 26357-50

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

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION Gordon ESTIMATED DEPTH 3090'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W.Va. 26105 ADDRESS Vienna, W.Va. 26105

SEP 8 1993  
 8-0 95

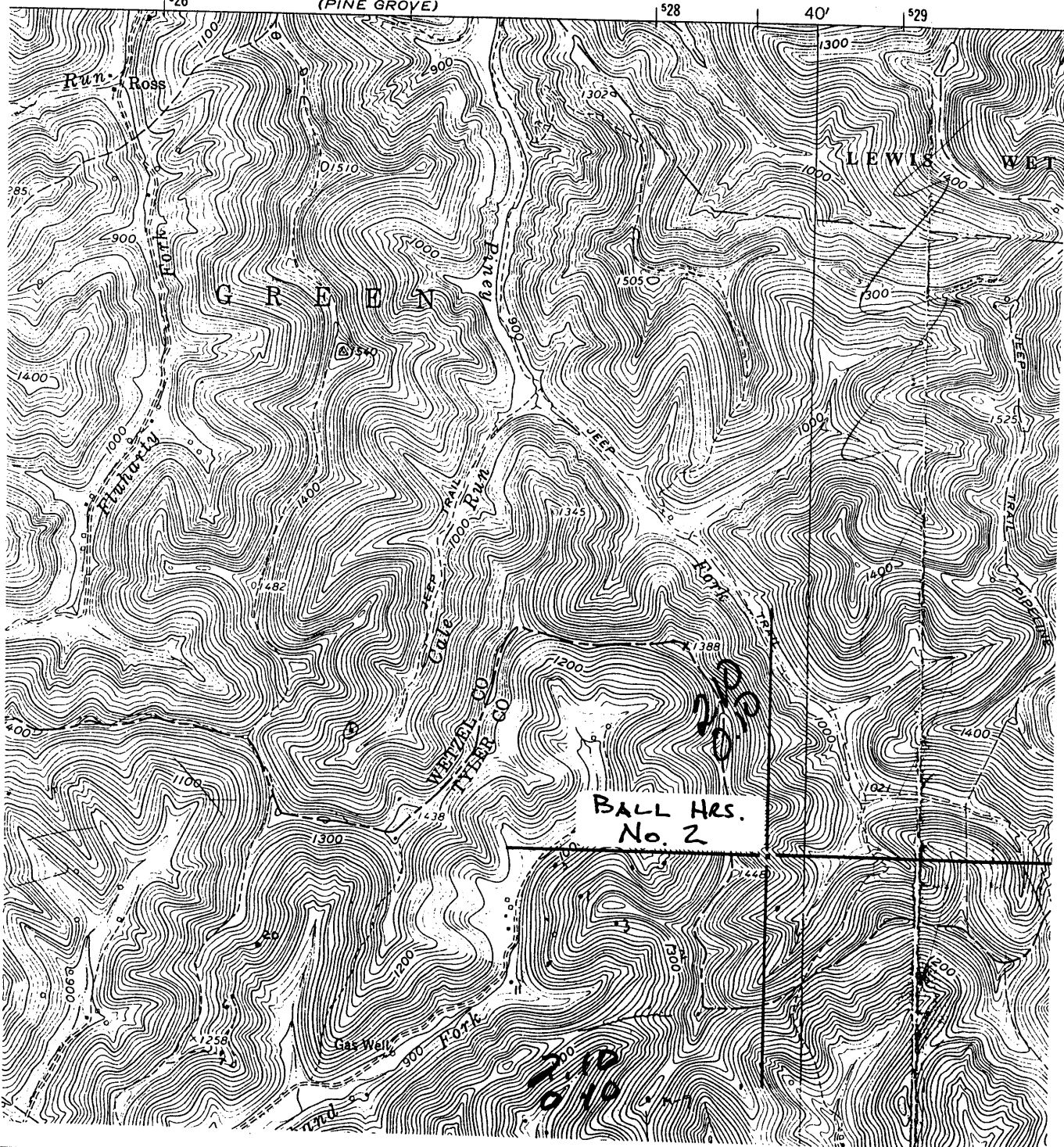
FORM IV-6

GS 3-2-93

450'

LATITUDE 39° 30' 00"

4863 II SW (PINE GROVE)



LONGITUDE 80° 40' 00"

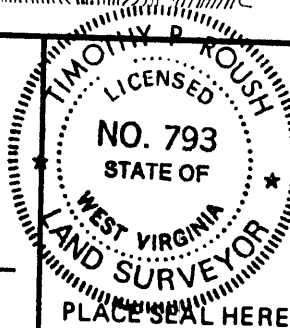
NORTH

16883

FILE NO. \_\_\_\_\_  
 MAP NO. N47 sqs.  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY \_\_\_\_\_  
 PROVEN SOURCE OF ELEVATION PZL Co. 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  
 TIMOTHY P. ROUSH P.S. 793



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE FEB. 26, 1993

FARM BALL HEIRS NO. 2

API WELL NO. \_\_\_\_\_

47 - 103 - 1530-d

STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE: OIL  GAS \_\_\_\_\_ LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_\_\_ STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_

LOCATION: ELEVATION 1257' WATER SHED PINEY FORK

DISTRICT GREEN COUNTY WETZEL

QUADRANGLE CENTERPOINT

SURFACE OWNER STATE OF W.VA. ACREAGE 54.5

OIL & GAS ROYALTY OWNER PENNZOIL Co. et al LEASE ACREAGE 5675  
 LEASE NO. 26357-50

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 3075'

WELL OPERATOR PENNZOIL PRODUCTS CO. DESIGNATED AGENT JAMES A. CREWS

ADDRESS P.O. BOX 5519 VIENNA WV 25105 ADDRESS P.O. BOX 5519

(095)

FORM WW-6

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
SECTION OF OIL AND GAS

WELL REGISTER ASSIGNMENT

This API Number 47-103-01530, issued to PENNZOIL PRODUCTS COMPANY is evidence of permission to operate the well that is referenced at the location described on the attached plat, subject to the provisions of Chapters 22 and 22B of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder. The name and telephone number of the Oil and Gas Inspector for this well is RANDAL MICK -  
304-269-2335.

Spills or emergency discharges must be reported to 1-800-654-3312.

Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of your permits and in addition may result in civil and/or criminal penalties.

The enclosed WR-35 must be completed by you and returned to this office. In addition annual production reports must be submitted on this well and failure to do so may require you to plug the well.

Theodore M. Streit  
Chief

By: 

Title: \_\_\_\_\_

Operator's Well No: BALL HEIRS #2

Farm Name: WEST VIRGINIA, STATE OF

API Well Number : 47-103-01530 N

Date Issued : 03/03/93

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.: BALL HEIRS #2

LOCATION: Elevation: 1,257.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL  
Latitude: 10950 Feet South of 39 Deg. 30Min. 0 Sec.  
Longitude 400 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: RANDAL MICK  
Permit Issued: 09/01/93  
Well work Commenced: 11/10/93  
Well work Completed: 6/7/94

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary \_\_\_\_\_ Cable X Rig  
Total Depth (feet) 3216'  
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 Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
	See original	well record	
3-1/2	3193'	3193'	50 Sks.

OPEN FLOW DATA Water Injection Well

Producing formation Gordon Pay zone depth (ft) 3149'-3171'  
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: 7/8/94

10/91

RECEIVED  
Office of Oil & Gas  
UIC Section  
JUL 28 93  
WV Division of  
Environmental Protection



- 1) Date: July 22, 19 93
- 2) Operator's Well No. BALL HEIRS #2
- 3) SIC Code \_\_\_\_\_
- 4 API Well NO. 47 - 103 - 1530-11  
State County Permit
- 5. UIC Permit No. Issued 09/01/93

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

17906

WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_

LOCATION: Elevation: 1257' Watershed: Piney Fork  
District: Green 46705 County: Wetzel Quadrangle: Centerpoint

WELL OPERATOR Pennzoil Products Company 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  
Address Rt. #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) Sidetrack
- 13) GEOLOGICAL TARGET FORMATION, Gordon Depth 3149' feet(top) to 3181' feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3195' ft.
- 15) Approximate water strata depths; Fresh, 437' feet; salt, 1464' feet.
- 16) Approximate coal seam depths: 1069'
- 17) Is coal being mined in the area? Yes \_\_\_\_\_ / No
- 18) Virgin reservoir pressure in target formation 1260' 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: Fresh water and/or produced water from waterflood operations.
- 22) FILTERS (IF ANY): Cartridge Filter
- 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: \_\_\_\_\_

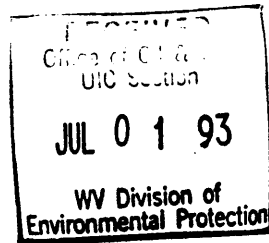
24) CASING AND TUBING PROGRAM

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									
Coal									Size
Intermediate									
Production	3-1/2		9.2	X		---	3195'	cement to	Depths set
Tubing	1-1/2		2.75	X			3100'	2600'	
Liners									Perforations:
									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from Helen Bunner etal  
by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated March 8, 19 85, of record in the  
Wetzel County Clerk's office in Deed Book 68-A at page 217

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

FORM WW-3(A)  
Obverse



- 1) Date June 30, 1993
  - Operator's
  - 2) Well No. BALL HEIRS #2
  - 3) SIC Code \_\_\_\_\_
  - 4) API Well No. 47 - 103 - 1530
- 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<br>(i) Name <u>WV Public Lands Corp.</u><br>Address <u>Bldg. #3 Room 643</u><br><u>1900 Kanawha Blvd., East</u><br>(ii) Name <u>Charleston, WV 25305</u><br>Address _____<br><u>WV D.N.R.</u><br>(iii) Name <u>ATTN: Gary Foster</u><br>Address <u>1304 Goose Run Road</u><br><u>Fairmont, WV 26554</u> | 7 (i) COAL OPERATOR <u>N/A</u><br>Address _____<br>7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:<br>Name _____<br>Address _____<br>7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:<br>Name _____<br>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 47-103-1530-LI

September 1st. 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 9-1-95 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: <i>100000</i>
---	--	-----------------	-------------------	--------------------

*M. Malone*  
VIC District  
SWEET, 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	Date(s)
Application received		
Well work started		" "
Total depth reached		" "
Well Record received		" "
Reclamation completed		" "
<b>OTHER INSPECTIONS</b>		

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