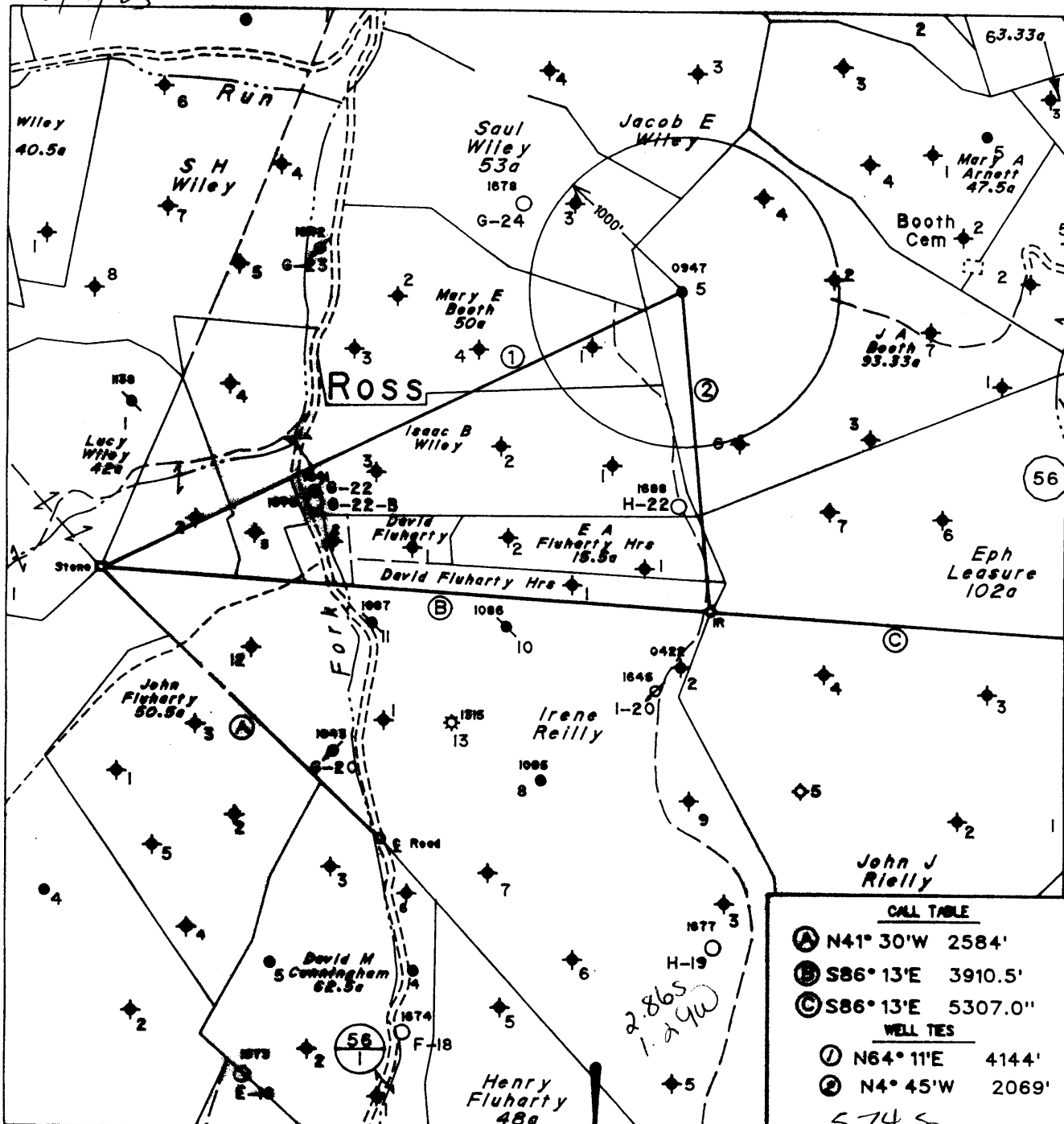


GS 8/4/95



Note: No Known Water Supply Sources Are Located Within 1000' Of Subject Well

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

CALL TABLE

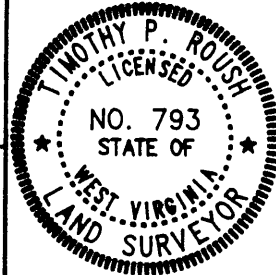
- (A) N41° 30' W 2584'
 - (B) S86° 13' E 3910.5'
 - (C) S86° 13' E 5307.0'
- WELL TES
- (1) N64° 11' E 4144'
 - (2) N4° 45' W 2069'

5.745
1.290

FILE NO. 1812
 MAP NO. N58 N 4 S E W 4
 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 26, 19 95
 FARM James A. Booth NO. 5
 API WELL NO. 47-103-0947-S

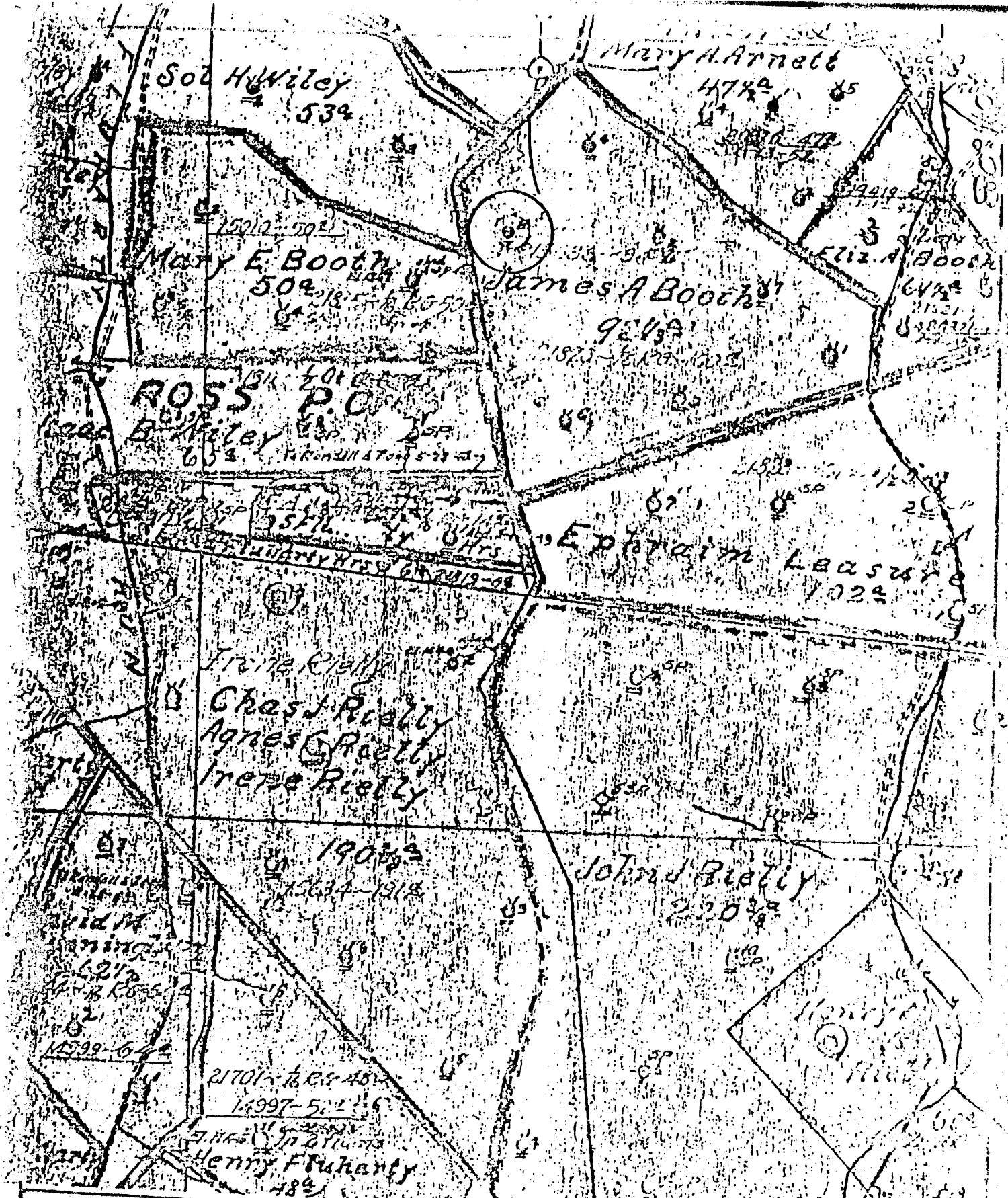
WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___

LOCATION: ELEVATION 1217 WATERSHED Piney Fork
 DISTRICT Green COUNTY Wetzel
 QUADRANGLE Pine Grove hillebr SW

SURFACE OWNER John & Stanley Pittman ACREAGE 93.2 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 93.2 Ac.
 LEASE NO. 15636-50

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 3099'
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519
 Vienna, W.Va. 26105 Vienna, W.Va. 26105



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

FORM IV-6
(8-78)

N57 N4 W4



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE 1-4-1978
OPERATOR'S WELL NO. 5
API WELL NO. 47-103-0947
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS", PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 1220 WATER SHED FLUHARTY FORK
DISTRICT GREEN COUNTY WETZEL
QUADRANGLE CENTREPOINT 7.5'

SURFACE OWNER _____
OIL & GAS ROYALTY OWNER _____ ACREAGE _____
LEASE NO. _____ LEASE ACREAGE _____

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

PLUS AND ABANDON CLEAN OUT AND REPLUS
TARGET FORMATION _____ ESTIMATED DEPTH _____
WELL OPERATOR Pennzoil Company DESIGNATED AGENT James A. Crows
ADDRESS P. O. Box 1588 ADDRESS P. O. Box 1588
Parkersburg, WV 26101 Parkersburg, WV 26101

S.A. Booth - 5

RECEIVED
WV Division of
Environmental Protection

APR 18 1996

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: PITTMAN, JOHN & STANLEY Operator Well No.: J.A. BOOTH #5

LOCATION: Elevation: 1,217 Quadrangle: PINE GROVE
District: GREEN County: WETZEL
Latitude: 15,100 Feet south of 39 Deg 32 Min 30 Sec.
Longitude: 6,800 Feet west of 80 Deg 40 Min 0 Sec.

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

Agent: PHILIP S. ONDRUSEK

Inspector: RANDAL MICK

Permit Issued: 9/6/95

Well work Commenced: 1/18/96

Well work Completed: 3/29/96

Verbal plugging permission granted on: _____

Rotary _____ Cable _____ Rig _____

Total Depth (feet) 3,099'

Fresh water depths (ft) NA

Salt water depths (ft) NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
10	680	680	
8 1/4	792'	792'	
6 5/8"	2495'	2495'	
4 1/2"	3093.45	3093.45	250 SKS

OPEN FLOW DATA * Water Injection Well

Producing formation Gordon Pay zone depth (ft) 3072-3086

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: 4/8/96

Treatment: Perforated Gordon 3082'-3085' (12 Holes) Treated J/A 4 1/2" CSG 300 gal
15% HCl Acid, 225 BBL gelled water & 11,000 LB 20/40 sand

Well Log: SEE ORIGINAL RECORD

No. 1

SOUTH PENN OIL COMPANY—COMPLETION

SERIAL NO. _____ FARM James Booth, WELL NO. 5.
 ELEVATION 1220 N. 4. ACRES 23/1-3. W. 4.
 LEASE NO. _____
 WATERS OF Nolan Fork Piney,
 DISTRICT Greene, COUNTY Wetzel, STATE W. Va.
 DRILLING COMMENCED 10/25-1898 COMPLETED 12/27-1898 DEPTH 3099'

SANDS	TOP	BOTTOM	ELEV. TOP	CASING
PEN. COAL	969'			
Big Injun Sand.	2270'	2410'		10" 680'
Stray Sand.	3025'			6 1/4" 1471'
Gordon Sand.	3072'	3086'		6-5/8" 2495'
				PACKERS AND DEPTH SET

INITIAL PROD. 10 Bbls. SAND Gordon. DEPTH 2130'

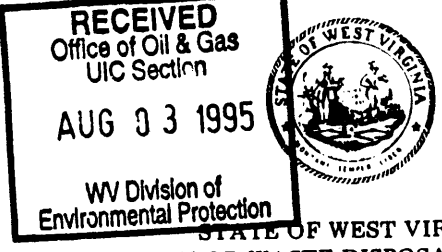
GAS TEST _____
 SHOT 12/28-1898 QUARTS 30 -- 5/21-1901--60qts. 11/26-1902

REMARKS 120qts. Show of oil in Injun Sand at 2380'
Show of oil in Stray Sand at 3027'

REPORTED BY Piney District. ABANDONED

47-103.0947

21073



2) Operator's Well No. James A. Booth No. 5
 3) SIC Code _____
 4) API Well NO. 47 - 103 - 0947-21
 State County Permit

Issued 09/06/95
expires 09/06/97

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

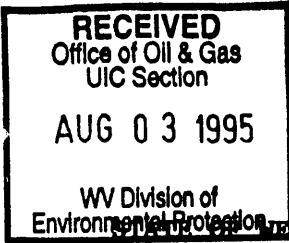
- 7) WELL TYPE: Liquid injection / Gas injection (not storage) _____ / Waste disposal _____
 7) LOCATION: Elevation: 1217' Watershed: Piney Fork 548
 District: Green County: Wetzel Quadrangle: Pine Grove
 8) WELL OPERATOR Pennzoil Products Co. 37450 9) DESIGNATED AGENT Philip S. Ondrusek
 Address P. O. Box 5519 4670 Address P. O. Box 5519
 Vienna, WV 26105 Vienna, WV 26105
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED 11) DRILLING CONTRACTOR:
 Name Mike Underwood Name _____
 Address Route 2, Box 135 Address _____
Salem, WV 26426
- 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 49 Depth 3072 feet(top) to 3086 feet(bottom)
 14) Estimated depth of completed well, (or actual depth of existing well) 3099 ft.
 15) Approximate water strata depths; Fresh 397 feet; salt, 1424 feet.
 16) Approximate coal seam depths: _____
 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, 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 (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	See original well record								Sizes
Coal									
Intermediate Production	4-1/2	J-55	10.5	X		3090'	3090'	cement to 2600'	Depths set
Tubing									Perforations:
Liners									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from James A. & M.E. Booth
 by deed _____ / lease / other contract _____ / dated 10/15, 1895, of record in the
Wetzel County Clerk's office in Book 47 at page 198

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



1) Date July 31, 1995
Operator's _____
2) Well No. J. A. Booth No. 5
3) SIC Code _____
4) API Well No. 47 - 103 - 0947-1
State County Permit _____

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

7 (i) COAL OPERATOR N/A
Address _____

(i) Name John & Stanley Pittman
Address P. O. Box 10
Reader, WV 26167

7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____

(ii) Name _____
Address _____

7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____

(iii) 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 [Signature] Timothy P. Roush
Its Supervisor, Surveying/Mapping
Telephone (304) 422-6565