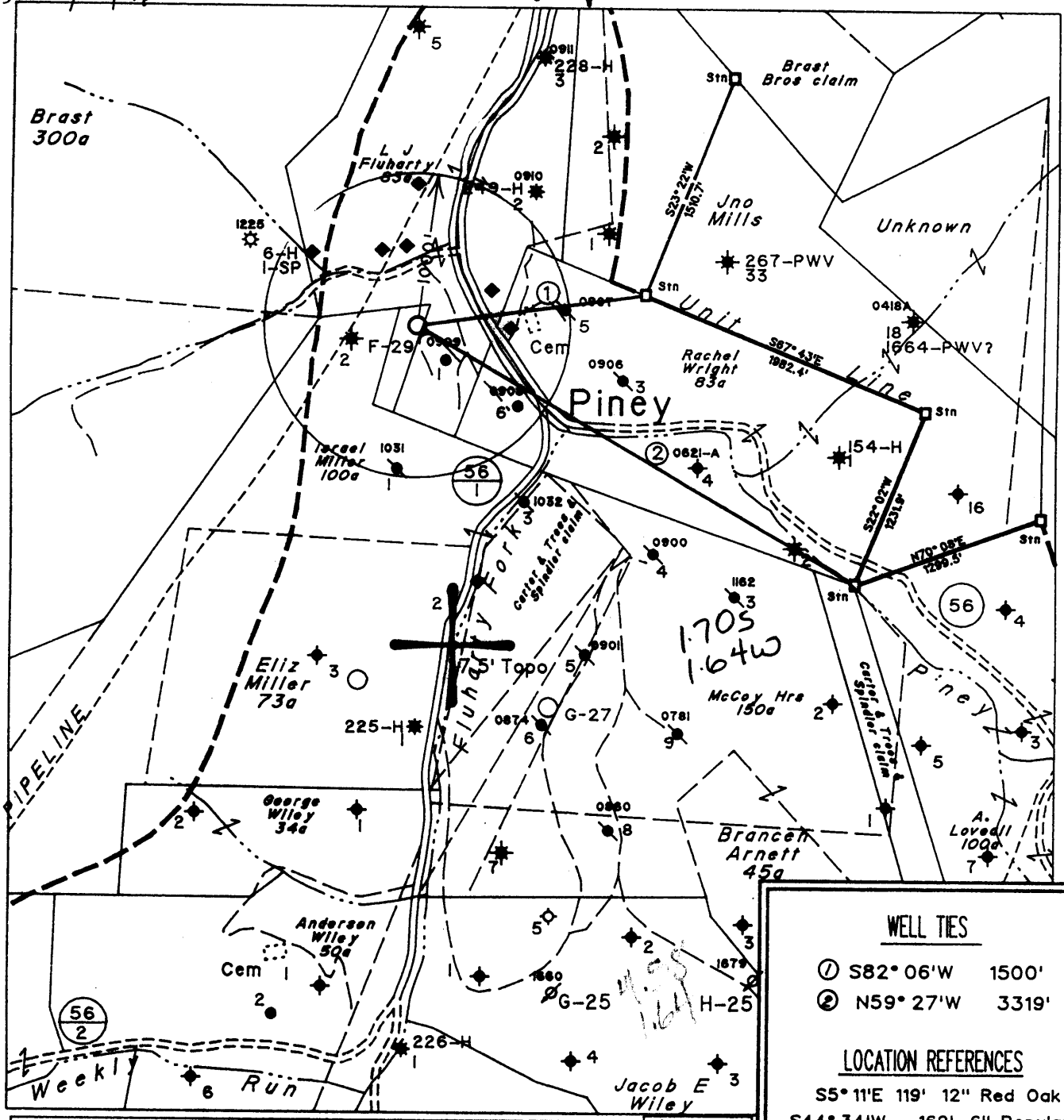


MS 2/15/96

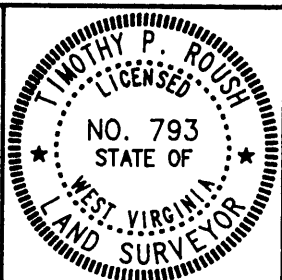


WELL TIES	
①	S82° 06'W 1500'
②	N59° 27'W 3319'
LOCATION REFERENCES	
S5° 11'E 119' 12"	Red Oak
S44° 34'W 162' 6"	Popular
S76° 14'W 169' 6"	Maple

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

FILE NO. 1814
 MAP NO. N57 N 5 S E W 5
 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 February 13, 19 96
 FARM L.J. Fluharty NO. F-29
 API WELL NO. 47-103-01493-5

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION X WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 964' WATERSHED Piney Fork
 DISTRICT Green COUNTY Wetzel
 QUADRANGLE Pine Grove
 SURFACE OWNER Patrick & Lori Ice ACREAGE 17.2 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 100 Ac.
 LEASE NO. 16103-50
 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 2964'
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT Philip S. Ondrusek
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519
 Vienna, W.Va. 26105 4670 ADDRESS P. O. Box 5519
 Vienna, W.Va. 26105 9-0 95

RECEIVED
JUN 6 1997
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: Ice,Patrick & Lori I.

Operator Well No.: L.J. Fluharty F-29

LOCATION: Elevation: 964.00'

Quadrangle: Pine Grove

District: Green

County: Wetzel

Latitude: 8950' Feet south of

39 Deg 32 Min 30 Sec.

Longitude: 8650' 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: 3/4/96

Well work Commenced: 6/1/96

Well work Completed: 9/3/96

Verbal plugging

permission granted on:

Rotary Cable Rig

Total Depth (feet) 2925'

Fresh water depths (ft) NA

Salt water depths (ft) NA

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

Coal Depths (ft): 203-210

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	263'	263'	155 Sacks
4 1/2"	3006.35'	3006.35'	275 Sacks

OPEN FLOW DATA

*Well was drilled as a waterflood injection well. No open-flow data was obtained

Producing formation Gordon Pay zone depth (ft) 2778-2797

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: 12/97

JAN 10 1997

Treatment :

Perforations:

2790' - 2796' - 6 holes/ft. (36 holes)

Treatment:

Treated via 4.5" Casing with 300 gals. 15% HCl, 220 bbls.

Borate cross-linked gelled water and 12,400 lbs. of 20/40 sand.

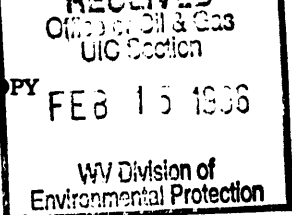
Well Log :

TD - 2925

Sand & Shale	0	-	203
Coal	203	-	210
Shale	210	-	532
Sand	532	-	586
Shale	586	-	810
Sand	810	-	834
Shale	834	-	1188
Sand	1188	-	1258
Shale	1258	-	1446
Sand	1446	-	1488
Shale	1488	-	1520
Sand	1520	-	1546
Shale	1546	-	1610
Sand	1610	-	1660
Shale	1660	-	1715
Sand	1715	-	1732
Shale	1732	-	1909
Big Lime	1909	-	1964
Big Injun	1964	-	2172
Shale	2172	-	2750
Sand	2750	-	2766
Shale	2766	-	2778
Gordon	2778	-	2797
Shale	2797	-	2925

FILE

COPY



- 1) Date February 12, 1996
- 2) Well No. L.J. Fluharty No. F-29
- 3) SIC Code _____
- 4) API Well No. 47 - 103 - 1693-S
State County Permit
- 5) UIC Code _____

Issued 03/04/96

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 03/04/98

21605

WELL TYPE: Liquid Injection Gas Injection _____ Waste Disposal _____

LOCATION: Elevation 964 Watershed Piney Fork 548
District Green County Wetzel Quadrangle Pine Grove

WELL OPERATOR: Pennzoil Products Company 4670 9) DESIGNATED AGENT: Philip S. Ondrusek
P.O. Box 5519
Vienna, WV 26105 Vienna, WV 26105

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 419 Depth 2844 Ft. (Top) t 2859 Ft. (Bottom)

14) Estimated depth of completed well (or actual depth of existing well) 2964 Ft.

15) Approximate water strata depths: Fresh 144 Ft. Salt 1171 Ft.

16) Approximate coal seam depths: 776 Ft.

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.

20) Maximum proposed injection operations: Volume per hour 25 bbl. Bottom Hole Pressure 2332 psig.

21) Detailed indentification 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

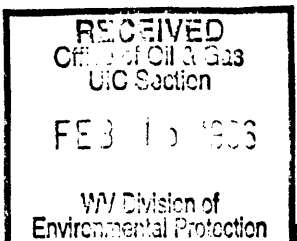
23) Specifications for cathodic protection and other corrosion control: _____

24) CASING AND TUBING PROGRAM:

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILLUP OR SACKS	PACKERS
	Size	Grade	Weight	New	Used	For Drilling	Left in Well		
Conductor									Kinds
Fresh Water	8 5/8"	L.S.	20#	X		214 250	214 250	Cement To	
Coal								Surface	Sizes
Intermediate									
Production	4 1/2"	J-55	10.5#	X		2964	2964	Cement Over	Depths Set
Tubing								Salt Sand	
Liners									Perforations
									Top Bottom

25) APPLICANTS OPERATING RIGHTS were acquired from Louisa J. Fluharty
by Deed _____ Lease Other Contract _____ Dated January 16, 1896 of record in the
Wetzel County Clerk's Office in Lease Book 49 at Page 44

4



1) Date February 12, 1996
2) Well No. L.J. Fluharty No. F-29
3) SIC Code _____
4) API Well No. 47 - 103 - 1693-5
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 Patrick & Lori I. Ice
Address H.C. 60, Box 274
Reader, WV 26167

(ii) Name _____
Address _____

(iii) Name _____
Address _____

7 (i) COAL OPERATOR:
Name N/A
Address _____

7 (ii) COAL OWNER WITH DECLARATION ON RECORD:
Name N/A
Address _____

7(iii) COAL LESSEE WITH DECLARATION ON RECORD:
Name N/A
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 _____

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 _____

19

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

Bond: ✓	Agency: ✓	Plat: <i>HS</i>	Casing: <i>HS</i>	Fee: <i>CK # 0301298031</i>
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Michael W. Jones

CHIEF, 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	Follow-up inspection(s)	Date(s)
Application received			
Well work started		
Total depth reached		
Well Record received		
Reclamation completed		

OTHER INSPECTIONS

Reason: _____
Reason: _____