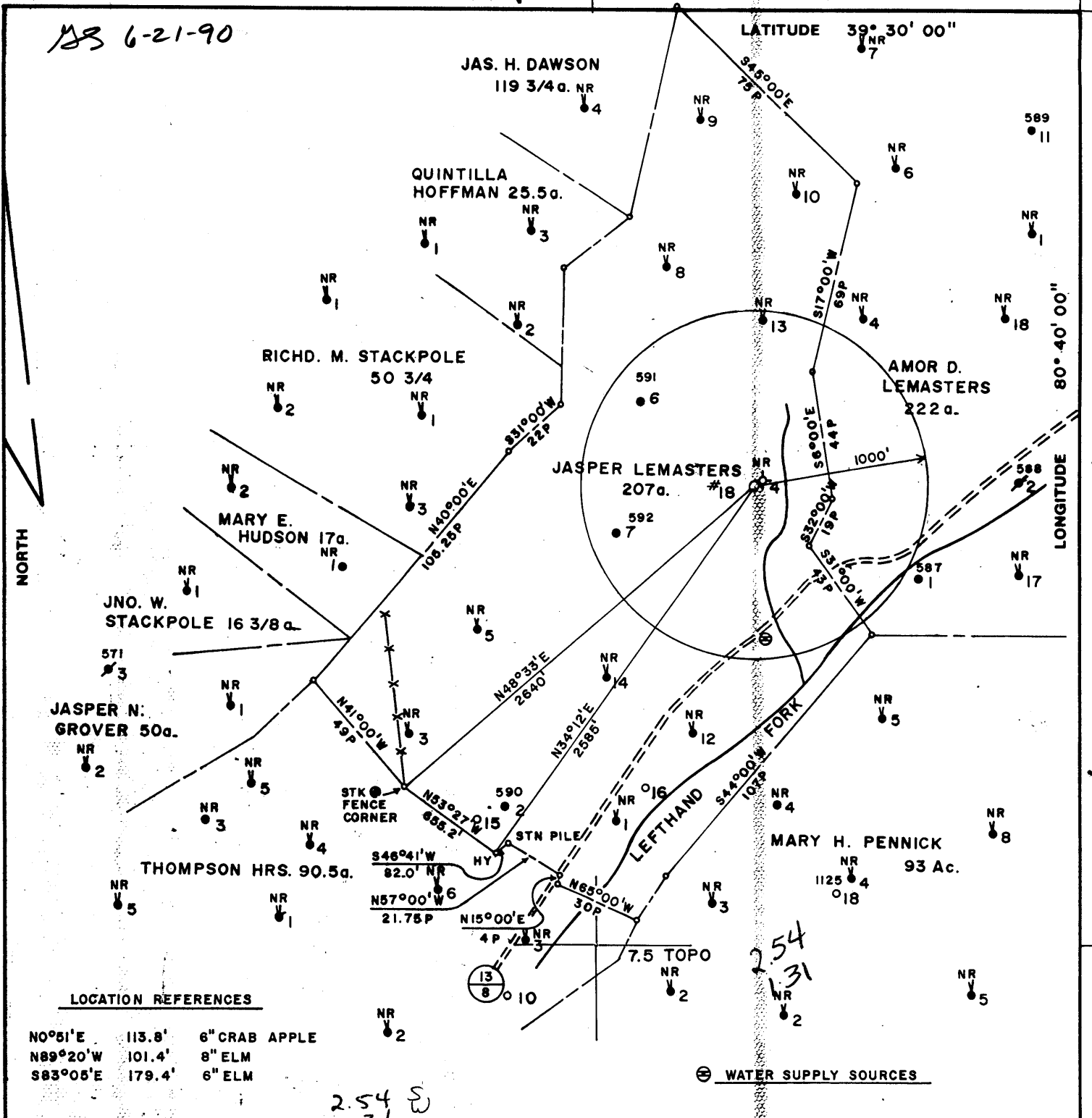


7,000'

MS 6-21-90



LOCATION REFERENCES

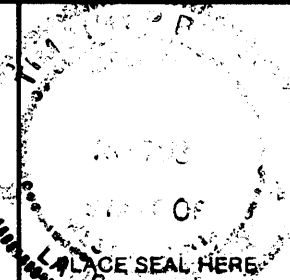
N0°51'E	113.8'	6" CRAB APPLE
N89°20'W	101.4'	8" ELM
S83°05'E	179.4'	6" ELM

⊕ WATER SUPPLY SOURCES

2.54 S  
1.31 Centerpoint NW1

FILE NO. 1753  
 MAP N47 SQS N1/2 W4/5  
 SCALE 1"=800'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION J. LEMASTERS 16  
(47-095-1135 = 854')

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  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE MAY 31 1990  
 FARM JASPER LEMASTERS NO. 18  
 API WELL NO.

47 - 095 - 1410-LI  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 913' WATER SHED LEFTHAND FORK  
 DISTRICT McELROY 5 COUNTY TYLER

QUADRANGLE CENTERPOINT 7 1/2  
 SURFACE OWNER FRANCES WADSWORTH ACREAGE 110  
 OIL & GAS ROYALTY OWNER DON E. RIDDLE LEASE ACREAGE 207

LEASE NO. RG 2171-00  
 PROPOSED WORK: DRILL X 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 2,949'  
 WELL OPERATOR PENNZOIL COMPANY ADDRESS P.O. BOX 5519  
673 DESIGNATED AGENT JAMES A. CREWS ADDRESS P.O. BOX 5519  
MIENNA, WV 26105 ADDRESS VIENNA, WV 26105

JUL 27 1990

8-0 Jacksonburg - Stratton (095)

FORM IV-6 (8-78) H. T. HALL

WR-39  
**RECEIVED**  
DIVISION OF ENERGY  
APR 15 1991

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: WADSWORTH, FRANCES Operator Well No.: J.LEMASTERS 18  
LOCATION: Elevation: 913.00 Quadrangle: CENTER POINT  
District: MCELROY County: TYLER  
Latitude: 13500 Feet South of 39 Deg. 30Min. 0 Sec.  
Longitude 7000 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: GLEN P. ROBINSON  
Permit Issued: 07/24/90  
Well work Commenced: 8-1-90  
Well work Completed: 10-23-90  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 3015  
Fresh water depths (ft) \_\_\_\_\_  
Salt water depths (ft) 1540  
(stream)  
Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 730

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft. To surface
8-5/8	212.45	212.45	160 Sks.
4-1/2	2878	2878	200 Sks.

OPEN FLOW DATA

Producing formation Gordon Pay zone depth (ft) 2799-2809  
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 N/A 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

\*Not tested, liquid injection well

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 Timothy P. Roush  
Date: April 11, 1991

APR 19 1991

Stimulation

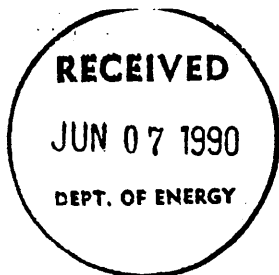
Perforated: Gordon 2812-2826 14 holes

Treated w/300 gals. reg. HF acid, 293 Bbls. gelled water and 1500# 80/100 and 3500, 20/40 sand.

Well Log

(Not available, hole was caving, ran 4-1/2" casing.)

10762



1) Date June 1, 1990  
Operator's  
2) Well No. JASPER LEMASTERS #18  
3) SIC Code \_\_\_\_\_  
4) API Well No. 47 - 095 - 1410-4  
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                             | 7 (i) COAL OPERATOR _____<br>Address _____                                      |
| (i) Name <u>Frances Wadsworth</u><br>Address <u>Alvy, W. Va. 26322</u> | 7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:<br>Name _____<br>Address _____ |
| (ii) Name _____<br>Address _____                                       | 7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:<br>Name _____<br>Address _____  |
| (iii) 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.

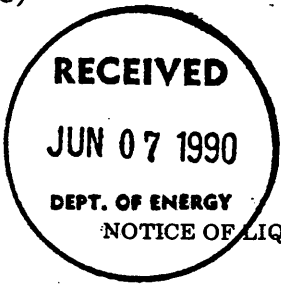
The person signing this document shall make the following certification:

"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  
Its Supervisor, Surveying/Mapping  
Telephone 304-422-6565

Issued 7/24/90  
Expires 7/24/92

- 1) Date: June 4, 1990  
 2) Operator's Well No. JASPER LEMASTERS NO. 18  
 3) SIC Code \_\_\_\_\_  
 4) API Well NO. 47 - 095 - 1410-LI  
State County Permit  
 5) UIC Permit No. 4102R09501AP 1410



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

- 6) WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_  
 7) LOCATION: Elevation: 913' Watershed: Left Hand Fork 286  
 District: McElroy (5) County: Tyler Quadrangle: Center Point 7.5'  
 8) WELL OPERATOR Pennzoil Products Company 37450 9) DESIGNATED AGENT James A. Crews  
 Address P.O. Box 5519 Address P.O. Box 5519  
Vienna, W. Va. 26105-5519 Vienna, W. Va. 26105-5519  
 10) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Glen P. Robinson  
 Address Rt. 1, #6 Mt. Pleasant Est.  
Mineral Wells, W. Va. 26150  
 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 Depth 2799 feet(top) to 2809 feet(bottom)  
 14) Estimated depth of completed well, (or actual depth of existing well) 2949 ft.  
 15) Approximate water strata depths: Fresh, 138 feet; salt, 1300 feet.  
 16) Approximate coal seam depths: \_\_\_\_\_  
 17) Is coal being mined in the area? Yes \_\_\_\_\_ / No   
 18) Virgin reservoir pressure in target formation 80 psig. Source Estimated  
 19) Estimated reservoir fracture pressure 3500 (Bottom Hole) psig (BHFP)  
 20) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour: 20.8 Bbls. Bottom hole pressure 2340 psi  
 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh and produced water  
from Stringtown field operations with bactericides.  
 22) FILTERS (IF ANY): Coal bed and/or cartridge 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	H-40	24	X		200'	200'	Cmt. to surface	38CSR 18-11.3
Coal									Sizes
Intermediate									
Production	4-1/2	J-55	9.5	X		2940'	2940'	300 sks.	Depths set 38CSR 18-11.1
Tubing									
Liners									Perforations:
									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from Jasper and Mary Lemasters  
 by deed \_\_\_\_\_ / lease  / other contract \_\_\_\_\_ / dated March 23, 1897, of record in the  
Tyler County Clerk's office in Deed Book 33 at page 73

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