

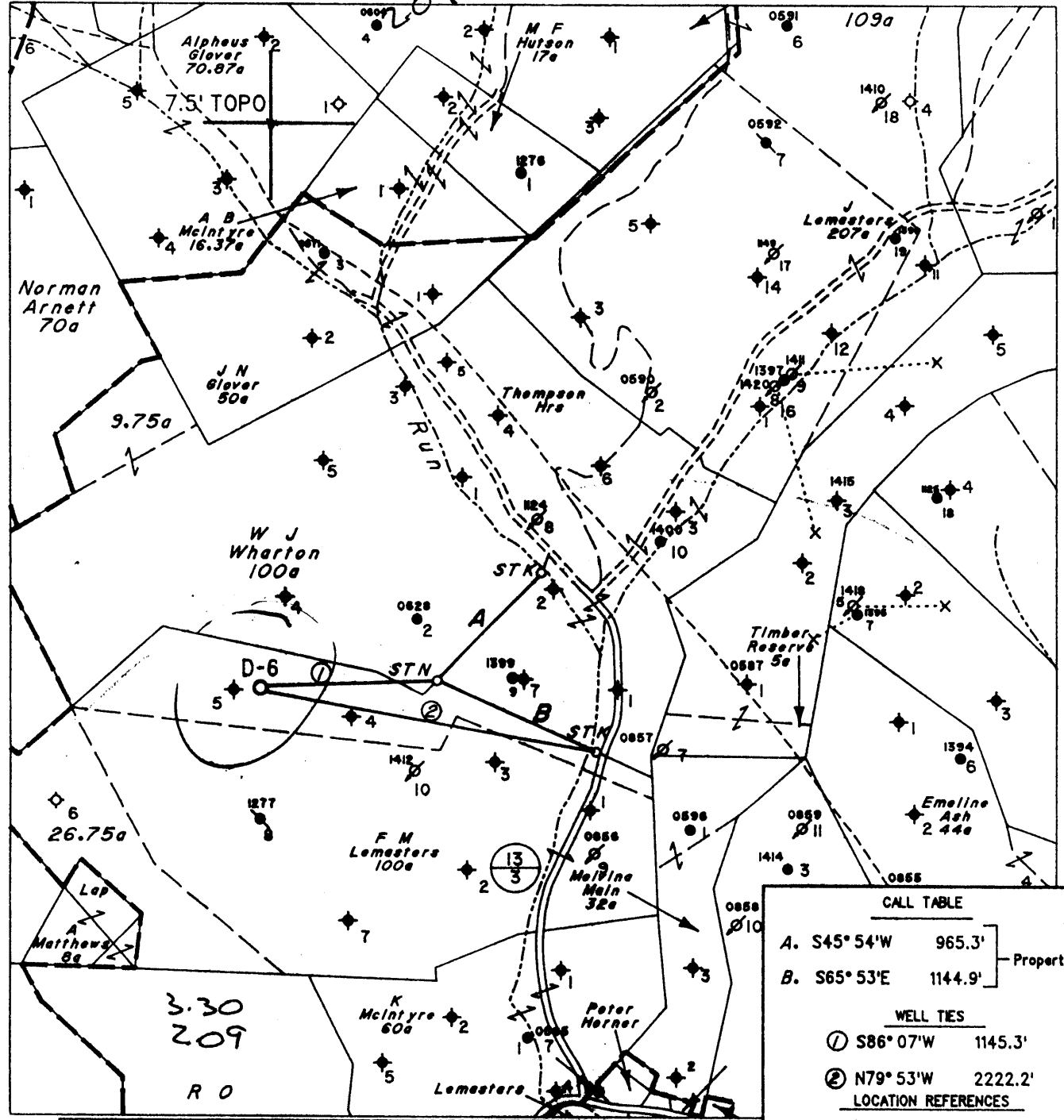
11,000'

LATITUDE 39° 27' 30"

MS 5-2-93

0.42
2.09

LONGITUDE 80° 40' 00"



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

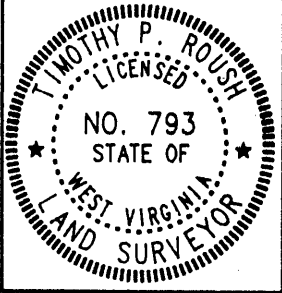
(H) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

CALL TABLE	
A. S45° 54' W	965.3'
B. S65° 53' E	1144.9'
Property Line	
WELL TIES	
① S86° 07' W	1145.3'
② N79° 53' W	2222.2'
LOCATION REFERENCES	
N89° 36' W	164' 12" Hickory
N47° 23' W	133' 10" Chestnut Oak
N66° 29' E	135' 3" Maple

FILE NO. 949
 MAP NO. N47 N 1 S E W 5
 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 April 21, 19 93
 FARM F. M. Lemasters NO. D-6
 API WELL NO. 47-095-1531-L1

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1105' WATERSHED Stackpole Run
 DISTRICT McElroy 5 COUNTY Tyler
 QUADRANGLE Centerpoint NW
 SURFACE OWNER Yvonne Wadsworth / Juanita Weedon ACREAGE 152 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 152 Ac.
 LEASE NO. 47221-00
 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 ESTIMATED DEPTH 3100'
 TARGET FORMATION Gordon
 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

FORM IV-6

MAY 17 1993

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

Well Operator's Report of Well Work

DEC 07 93

Farm name: WADSWORTH, YVONNE

Operator Well No.: LEMASTERS D-6

LOCATION: Elevation: 1,105.00 Quadrangle: CENTER POINT

District: MCELROY County: TYLER
Latitude: 2200 Feet South of 39 Deg. 27Min. 30 Sec.
Longitude 11000 Feet West of 80 Deg. 40 Min. Sec.

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

Agent: JAMES A. CREWS

Inspector: MIKE UNDERWOOD
Permit Issued: 05/06/93
Well work Commenced: 5/17/93
Well work Completed: 10/15/93
Verbal Plugging
Permission granted on:
Rotary X Cable _____ Rig
Total Depth (feet) 3090
Fresh water depths (ft) N/A
Salt water depths (ft) N/A

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8	348.75	348.75	120 Sks.
4 1/2	3046.85	3046.85	300 Sks.

OPEN FLOW DATA

Producing formation Gordon Pay zone depth (ft) 2952 - 2990
 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
 * Water Injection Well - Not Tested
 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: 12/6/93

TREATMENT:

Perforated: 2982 - 2990 2 Holes Per Foot, 16 Holes
Treated: 300 Gal. 15% HCL Acid, 269 Bbl. Gelled Water & 1700# 80/100 Sand & 4000# 20/40 Sand

WELL LOG:

Sand & Shale	0 - 540
Sand	540 - 562
Sand & Shale	562 - 638
Sand	638 - 648
Sand & Shale	648 - 910
Limestone	910 - 930
Shale	930 - 958
Sand	958 - 1000
Sand & Shale	1000 - 1518
Sand	1518 - 1570
Sand & Shale	1570 - 1730
Sand	1730 - 1754
Sand & Shale	1754 - 1912
Sand	1912 - 1940
Sand & Shale	1940 - 2105
Little Lime	2105 - 2119
Pencil Cave	2119 - 2128
Blue Monday	2128 - 2157
Big Lime	2157 - 2230
Big Injun	2230 - 2393
Shale	2393 - 2952
Stray	2952 - 2977
Gordon	2977 - 2990
T.D.	3090

DF - 411
DFT - 419

10/91 RECEIVED
Oil & Gas
UIC Section
APR 23 93
WV Division of
Environmental Protection



1) Date: April 22, 19 93
 2) Operator's Well No. F.M. LEMASTERS D-6
 3) SIC Code _____
 4) API Well NO. 47 - 095 - 1531-LI
 State County Permit
 5) UIC Permit No. issued 05/06/93
Expired 05/06/95

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

- 6) WELL TYPE: Liquid injection / Gas injection (not storage) _____ / Waste disposal _____
- 7) LOCATION: Elevation: 1105' Watershed: Stackpole Run District: McElroy County: Tyler Quadrangle: Centerpoint
- 8) WELL OPERATOR Pennzoil Products Co. 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 11) DRILLING CONTRACTOR:
 Address Rt. #2, Box 135 Name _____
Salem, WV 26426 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 2985 feet(top) to 3000 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3100 ft.
- 15) Approximate water strata depths; Fresh, 285 feet; salt, 917 feet.
- 16) Approximate coal seam depths: 917
- 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 2380
- 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh water, produced water, bactericides, and other chemicals as needed to maintain water quality & improve oil recovery
- 22) FILTERS (IF ANY): Cartridge Filters and/or Coal Bed Filters
- 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: _____

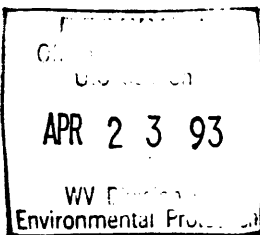
24) CASING AND TUBING PROGRAM

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		360	360	Cement to	
Coal								Surface	Sizes
Intermediate									
Production	4 1/2	J-55	10.5#	X		3100	3100	Cement over	Depths set
Tubing								Salt Sand	
Liners									Perforations:
									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from Grace I. Teters, etal.
 by deed _____ / lease / other contract _____ / dated August 21, 19 78, of record in the
Tyler County Clerk's office in Lease Book 216 at page 717

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

FORM WW-3(A)
Obverse



1) Date April 22, 1993
Operator's
2) Well No. F.M. LEMASTERS D-6
3) SIC Code
4) API Well No. 47 - 095 - 1531-L
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 Yvonne Wadsworth
Address c/o Juanita L. Weedon
536 Elizabeth Lane
- (ii) Name Glen Burnie, MD 26061
Address _____
- (iii) Name Dorothy Walters *No interest in property. On it per Tim Couch request. HS*
Address Alvy, WV 26322
- 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