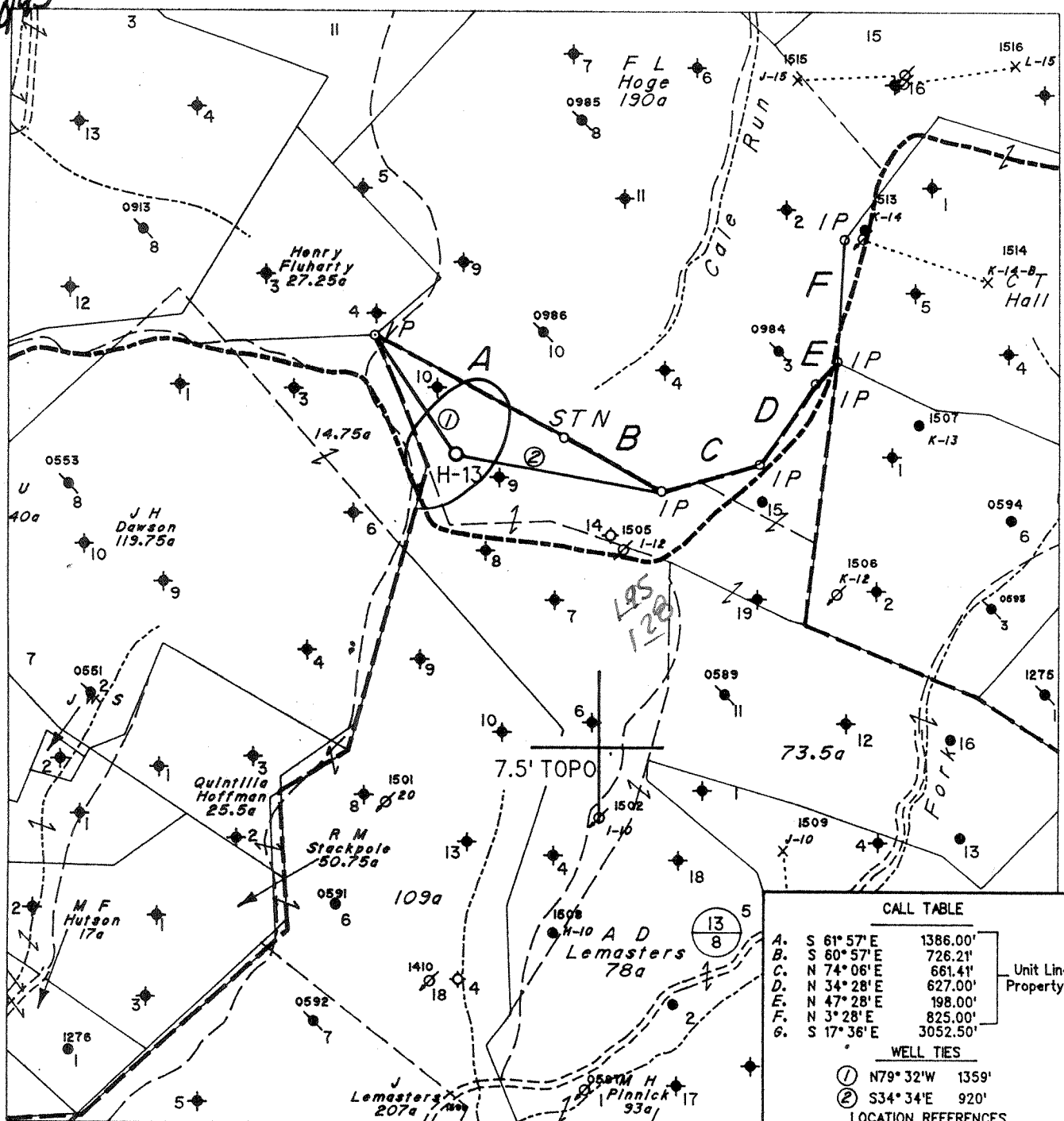


James A. Crews
4/30/93



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	N79° 32' W 1359'
②	S34° 34' E 920'

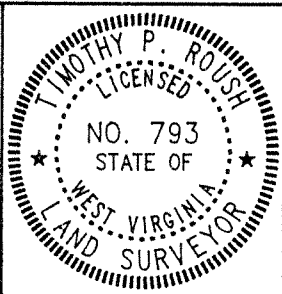
LOCATION REFERENCES	
S32° 12' E 142'	12" Elm
S60° 50' W 108'	10" Maple
N67° 24' W 135'	5" Hickory

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

FILE NO. 431
 MAP NO. N47 N 2 S E W 4
 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 16, 19 93
 FARM A.D. Lemasters NO. H-13
 API WELL NO. 47-103-1536

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

LOCATION: ELEVATION 1249' WATERSHED Cale Run
 DISTRICT Green 5 COUNTY Wetzel
 QUADRANGLE Centerpoint NW

SURFACE OWNER Frances and C.I. Wadsworth ACREAGE 80.13 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 222 Ac.
 LEASE NO. 12958-50

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 3230' 6-6 Jacksonburg-Stringtown

WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519
Vienna, W.Va. 26105 673 ADDRESS Vienna, W.Va. 26105

MAY 07 1993 (095)

RECEIVED
DEC 07 93

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

Well Operator's Report of Well Work

Permitting
of Oil & Gas

Farm name: WADSWORTH, FRANCES & C.I. Operator Well No.: LEMASTERS H-13

LOCATION: Elevation: 1249' Quadrangle: Centerpoint

District: GREEN County: WETZEL
Latitude: 10,150 Feet South of 39 Deg. 30 Min. 00 Sec.
Longitude 6,750 Feet West of 80 Deg. 40 Min. 00 Sec.

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

Agent: JAMES A. CREWS

Inspector: RANDAL MICK
Permit Issued: 05/05/93
Well work Commenced: 8/12/93
Well work Completed: 9/30/93
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 3271
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	501	501	145 Sks.
4 1/2	3233.85	3233.85	300 Sks.

OPEN FLOW DATA

Producing formation Gordon Pay zone depth (ft) 3120 - 3184
 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

* Waterflood Producer - 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

DEC 24 1993

Reviewed TMG
Recorded _____

TREATMENT:

PERFORATED: 3144 - 3146 }
3150 - 3159 } 2 Holes Per Foot - 22 HOLES
3172 - 3174 }

TREATED: 300 Gal. 15% HCL Acid & 289 Bbl. Gelled Water & 1500#
80/100 Sand & 3500 # 20/40 Sand.

WELL LOG:

Sand & Shale	0 - 672
Sand	672 - 708
Shale	708 - 786
Sand	786 - 850
Sand & Shale	850 - 1490
Sand	1490 - 1560
Sand & Shale	1560 - 1860
Sand	1860 - 1918
Shale	1918 - 2266
Little Lime	2266 - 2280
Pencil Cave	2280 - 2292
Big Lime	2292 - 2320
Shale	2320 - 2360
Big Injun	2360 - 2545
Shale	2545 - 3120
Stray	3120 - 3126
Gordon	3126 - 3184
T.D.	3271

DE-411
DET-419

103-1536
Issued 05/05/93
Expires 05/05/95
Page 3 of 4

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Pennzoil Products Company 37450 (5) 286
- 2) Operator's Well Number: A.D. LEMASTERS #H-13 3) Elevation: 1249'
- 4) Well type: (a) Oil X/ or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Gordon
- 6) Proposed Total Depth: 3230 feet
- 7) Approximate fresh water strata depths: 430
- 8) Approximate salt water depths: ~~2440~~
- 9) Approximate coal seam depths: 1061
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Drill & Stimulate New Well
- 12)

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WV Division of
Environmental Protection
APR 19 93
Permitting
Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor						38CSR18/1/3
Fresh Water	8 5/8	L.S.	20	500	500	Cement to Surface
Coal						38CSR18/1/2
Intermediate						
Production	4 1/2	J-55	10.5	3230	3230	Cement over Salt Sand
Tubing						38CSR18/1/1
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

1891/7
 Fee(s) paid: Well Work Permit Reclamation Fund
 Plat WW-9 WW-2B Bond Surety Blanket

RECEIVED
WV Division of
Environmental Protection
APR 19 93
Permitting
Office of Oil & Gas

1) Date: April 16, 1993
2) Operator's well number
A. D. LEMASTERS #H-13
3) API Well No: 47 - 103 - 1536
State - County - Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Frances & C.I. Wadsworth
Address Alvy, WV 26322

(b) Name _____
Address _____

(c) Name _____
Address _____

5) (a) Coal Operator:
Name N/A
Address _____

(b) Coal Owner(s) with Declaration
Name _____
Address _____

Name _____
Address _____

6) Inspector Mike Underwood
Address Rt. #2, Box 135
Salem, WV 26426
Telephone (304)- 782-1043

(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:
_____ Personal Service (Affidavit attached)
X _____ Certified Mail (Postmarked postal receipt attached)
_____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form 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.
Well Operator Pennzoil Products Company
By: Timothy P. Roush *[Signature]*
Its: Supervisor - Surveying/Mapping
Address P.O. Box 5519
Vienna, WV 26105
Telephone (304) 422-6565

Subscribed and sworn before me this 16th day of April, 19 93

[Signature]
My commission expires October 24, 1999

OFFICIAL SEAL
NOTARY PUBLIC
Notary Public
STATE OF WEST VIRGINIA
JOYCE M. SOARD
P. O. Box 5519
Vienna, West Virginia 26105