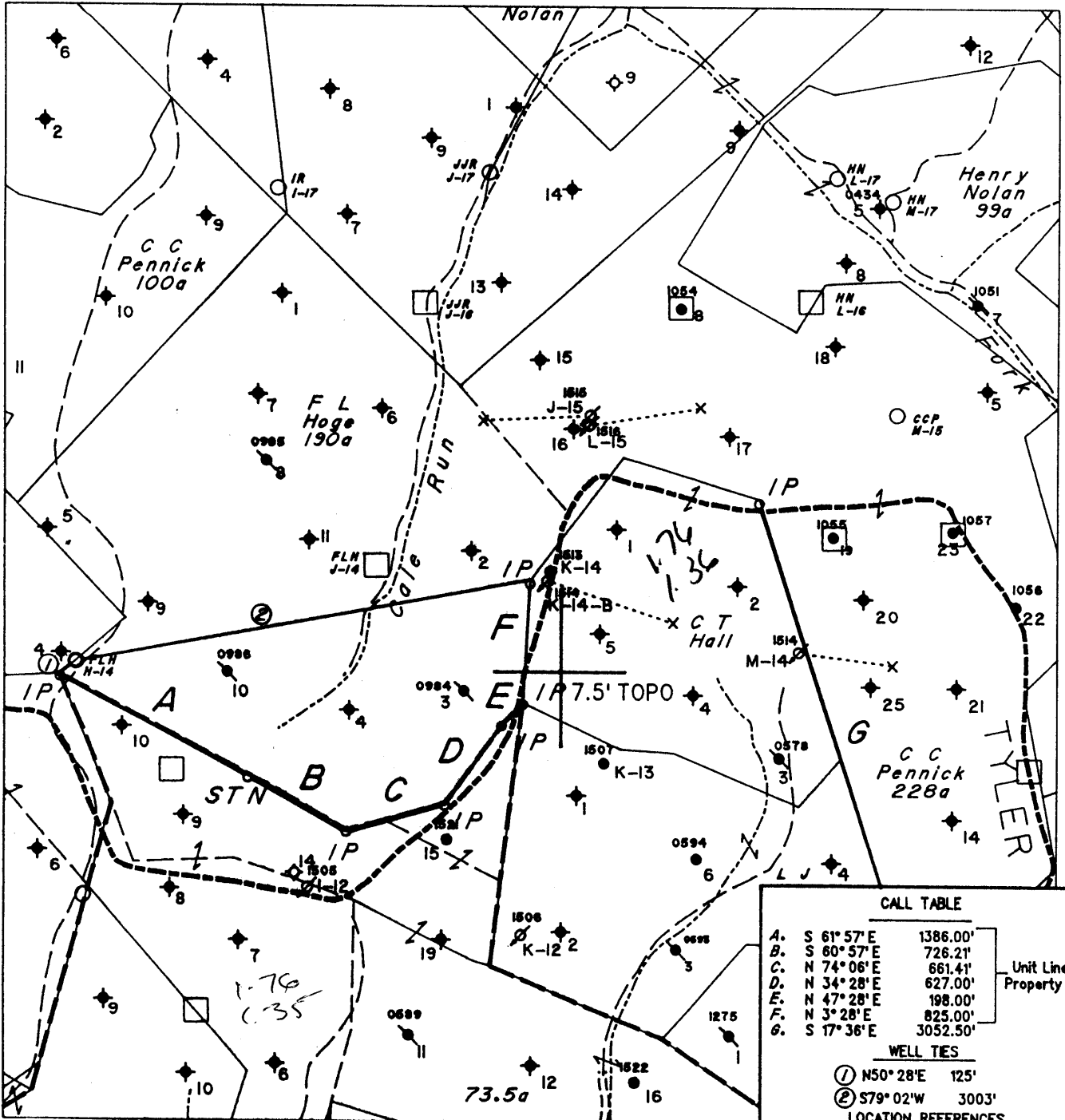


AS 5-6-93

7200'

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"



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

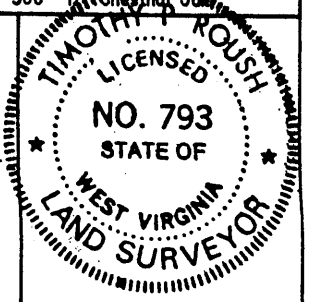
(H) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 1774
 MAP NO. N57 N 3 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 March 31, 19 93
 FARM F. L. Hoge NO. H-14
 API WELL NO. 47-103-1540-61

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION X WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1359' WATERSHED Fluharty Fork
 DISTRICT Green 5 COUNTY Wetzel
 QUADRANGLE Centerpoint 415 NW

SURFACE OWNER State of West Virginia ACREAGE 190 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 190 Ac.
 LEASE NO. FEE 3322

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) ___

MAY 24 1993

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ 8-0 Jacksonburg - Springtown (095)
 TARGET FORMATION Gordon ESTIMATED DEPTH 3340'

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

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

SEP 16 93
Permitting
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: WVA. PUBLIC LAND CORP. Operator Well No.: F.L. HOGE H-14

LOCATION: Elevation: 1,359.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL
Latitude: 9250 Feet South of 39 Deg. 30Min. Sec.
Longitude 7200 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: RANDAL MICK
Permit Issued: 05/12/93
Well work Commenced: 08/23/93
Well work Completed: 09/16/93
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 3336
Fresh water depths (ft) N/A

Salt water depths (ft) N/A

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	606'	606'	200 sks.
4-1/2"	3313.80'	3313.80'	300 sks.

OPEN FLOW DATA (Water Injection Well)

Producing formation Gordon Pay zone depth (ft) 3240-3285
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: Timothy P. Roush, Supervisor - Surveying/Mapping
Date: September 15, 1993

Treatment

Perforated: Gordon from 3246' - 3254' (16 holes)

Treated: w/290 bbls. of gelled water, 1500# of 80/100 sand and 3500# of 20/40 sand.

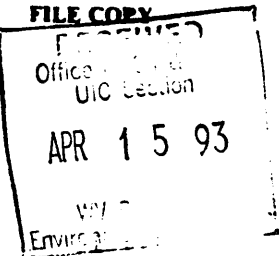
Well Log

Sand & Shale	0 - 674
Shale	674 - 795
Sand	795 - 822
Shale	822 - 904
Limestone & Shale	904 - 1008
Limestone	1008 - 1056
Shale	1056 - 1174
Limestone	1174 - 1184
Sand & Shale	1184 - 1394
Shale	1394 - 1594
Sand	1594 - 1650
Shale	1650 - 1775
Sand	1775 - 1838
Sand & Shale	1838 - 1980
Sand	1980 - 2010
Sand & Shale	2010 - 2205
Sand	2205 - 2236
Shale	2236 - 2364
Little Lime	2364 - 2377
Shale	2377 - 2390
Blue Monday	2390 - 2410
Big Lime	2410 - 2464
Big Injun	2464 - 2650
Shale	2650 - 3240
Gordon	3240 - 3285
Total Depth	3390'

DF-44
DF 419

08121

FILE COPY



- 1) Date: April 13, 1993
- 2) Operator's Well No. F.L. HOGE #H-14
- 3) SIC Code _____
- 4 API Well NO. 47 - 103 - 1540-LI
State County Permit
- 5. UIC Permit No. _____

Issued 05/12/93
Expires 05/12/95

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: 1359' / Watershed: Fluharty Fork
District: Green / County: Wetzel / Quadrangle: Centerpoint 286
- 8) WELL OPERATOR Pennzoil Products Co. 37450
Address P.O. Box 5519
Vienna, WV 26105
- 9) DESIGNATED AGENT J.A. Crews
Address P.O. Box 5519
Vienna, WV 26105
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Randall Mick Mike Underwood
Address 111 Blackshire Dr. Rt. #2 Box 135
Mannington, WV Salem, WV 26426
26582
- 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 3240 feet(top) to 3255 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3340 ft.
- 15) Approximate water strata depths; Fresh, 539 feet; salt, ~~550~~ feet.
- 16) Approximate coal seam depths: 1170
- 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 necessary to maintain water quality and improve oil recovery.
- 22) FILTERS (IF ANY): Cartridge Filters and/or Coal Bed Filters recovery.
- 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	8 5/8	L.S.	20	X		611	611	Cement to	
Coal								Surface	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		3340	3340	Cement over	Depths set
Tubing								Salt Sand	
Liners									Perforations:
									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from Richard H. Hoge
by deed / lease _____ / other contract _____ / dated January 30, 19 85, of record in the
Wetzel County Clerk's office in Deed Book 306 at page 415

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

RECEIVED
Oil & Gas
Section
APR 15 93
WV Division of
Environmental Protection

1) Date April 13, 1993
Operator's
2) Well No. F. L. HOGE #H-14
3) SIC Code _____
4) API Well No. 47 - 103 - 1540
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 WV Public Land Corp.
Address Bldg. #3, Room 643
1900 Kanawha Blvd., E.
(ii) Name Charleston, WV 25305
Address _____
Dept. Natural Resources
(iii) Name 1304 Goose Run Road
Address Fairmont, WV 26554
ATTN: Gary Foster

7 (i) ~~COAL~~ OPERATOR Richard H. Evans
Address P.O. Box 35
New Martinsville, WV 261
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
Timothy P. Roush
Its Supervisor - Surveying/Mapping
Telephone (304) 422-6565