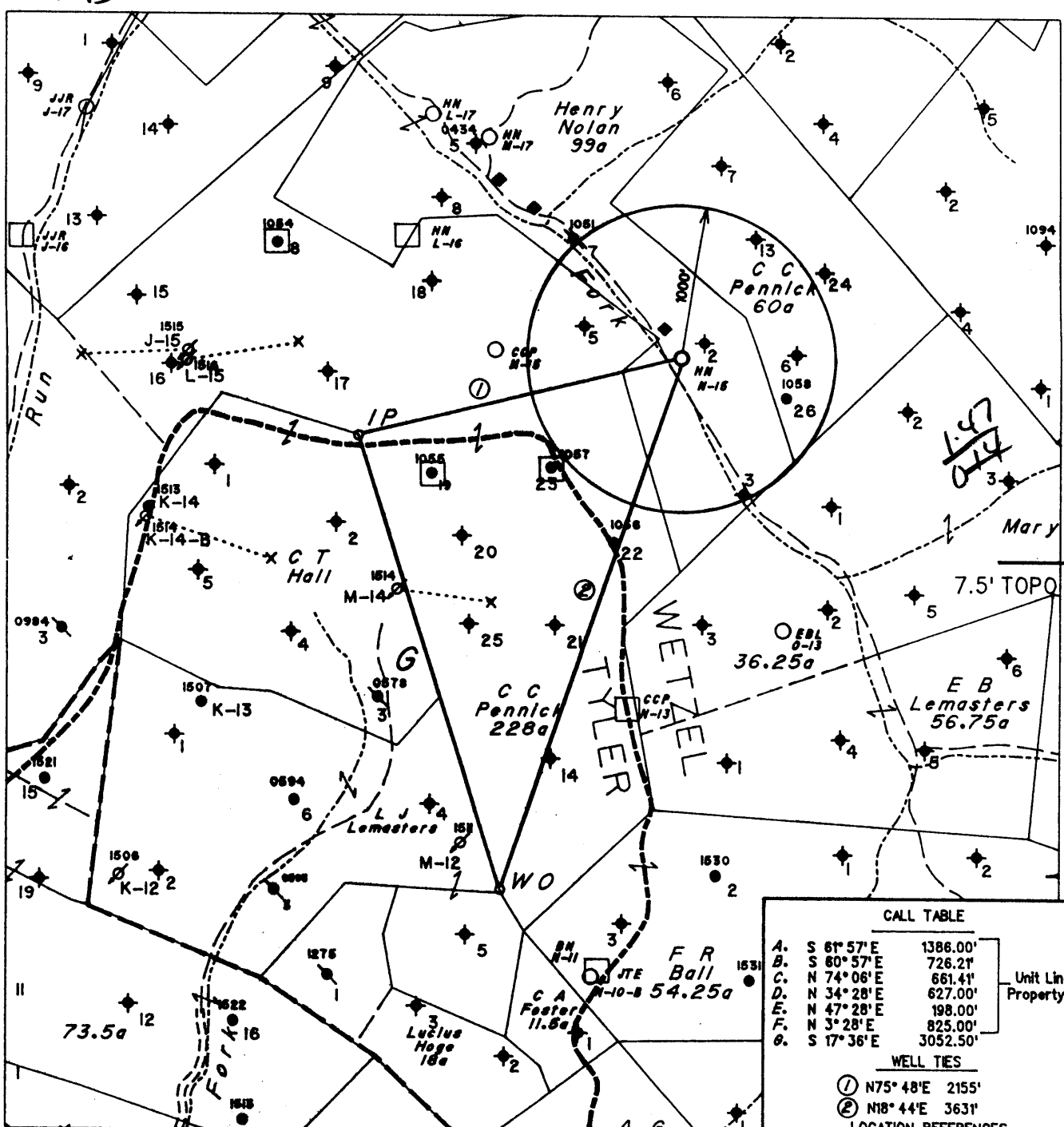


MS 5-6-93

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"



Note: All Known Water Supply Sources Located Within 1000' Of Proposed Well Are Shown

CALL TABLE		
A.	S 61° 57' E	1386.00'
B.	S 80° 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 N75° 48' E 2155'

② N18° 44' E 3631'

LOCATION REFERENCES

N58° 38' W 247' 5/8" Iron Rod

S52° 12' E 118' 8" Poplar

S59° 49' W 89' 8" Poplar

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

FILE NO. 523

MAP NO. N58 N 3 S E W 3

SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1 in 200

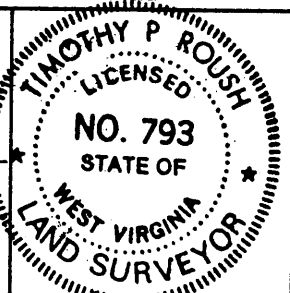
PROVEN SOURCE OF ELEVATION F.R. Ball No. 9

(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) [Signature]

TIMOTHY P. ROUSH PS 793



STATE OF WEST VIRGINIA
DIVISION OF ENERGY
OIL AND GAS SECTION



DATE March 31, 19 93

FARM Henry Nolan NO. N-15

API WELL NO. 47-103-1546-L1

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION X WASTE DISPOSAL ___

(IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___

LOCATION: ELEVATION 959' WATERSHED Piney Fork

DISTRICT Green 5 COUNTY Wetzel

QUADRANGLE Centerpoint & B NW

SURFACE OWNER State of West Virginia ACREAGE 110 Ac.

OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 160 Ac.

LEASE NO. 24422-50

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) ___

MAY 24 1993

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ 8-D Jacksonburg-Stringtown (095)

TARGET FORMATION Gordon ESTIMATED DEPTH 2955'

WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews

ADDRESS P. O. Box 5519 673 ADDRESS P. O. Box 5519

Vienna, W.Va. 26105 4670 Vienna, W.Va. 26105

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

Well Operator's Report of Well Work

Farm name: WVA. PUBLIC LAND CORP. Operator Well No.: H.NOLAND # N-15

LOCATION: Elevation: 959.00 Quadrangle: CENTER POINT

District: GREEN County: WETZEL
Latitude: 7700 Feet South of 39 Deg. 30Min. Sec.
Longitude 700 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: 9/10/93
Well work Completed: 10/10/93
Verbal Plugging _____
Permission granted on: _____
Rotary x Cable _____ Rig _____
Total Depth (feet) 2989
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	217	217	100 Sks.
4 1/2	2942.15	2942.15	300 Sks.

OPEN FLOW DATA

Producing formation Gordon Pay zone depth (ft) 2842 - 2908
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
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: 2878 - 2881 }
 2886 - 2892 } 2 Holes Per Foot - 18 Holes

Treated: 300 Gal. 15% HCL Acid, 279 Bbls. Gelled Water &
 1500# 80/100 Sand & 3500# 20/40 Sand

WELL LOG:

Sand & Shale	0 - 490
Sand	490 - 525
Sand & Shale	525 - 1030
Sand	1030 - 1070
Sand & Shale	1070 - 1375
Sand	1375 - 1490
Sand & Shale	1490 - 1800
Sand	1800 - 1830
Shale	1830 - 1975
Little Lime	1975 - 1981
Pencil Cave	1981 - 2005
Big Lime	2005 - 2050
Big Injun	2050 - 2270
Shale	2270 - 2842
Stray	2842 - 2850
Gordon	2850 - 2908
T.D.	2989

DF - 411
DFT - 419

17186

RECEIVED
Oil & Gas
UIC Section
APR 15 93



1) Date: April 13, 1993
 2) Operator's Well No. HENRY NOLAND #N-15
 3) SIC Code _____
 4) API Well NO. 47 - 103 - 1546-LI
 State County Permit

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

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

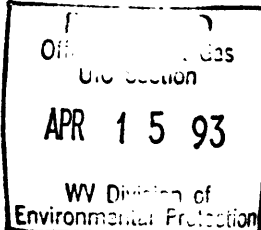
- 6) WELL TYPE: Liquid injection / Gas injection (not storage) _____ / Waste disposal _____
- 7) LOCATION: Elevation: 959' Watershed: Piney Fork District: Green County: Wetzel Quadrangle: Centerpoint *286*
- 8) WELL OPERATOR Pennzoil Products Co. 37450 Address P.O. Box 5519 Vienna, WV 26150
- 9) DESIGNATED 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 Blackshere Dr. Rt. #2, Box 135 Mannington, WV 26582 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 Depth 2854 feet(top) to 2869 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 2955 ft.
- 15) Approximate water strata depths; Fresh 139 feet; salt ~~770~~ feet.
- 16) Approximate coal seam depths: 770
- 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~~ 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 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		211	211	Cement to	Sizes
Coal								Surface	
Intermediate									
Production	4 1/2	J-55	10.5	X		2955	2955	Cement over	Depths set
Tubing								Salt Sand	
Liners									Perforations:
									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from Henry & Mary Noland
 by deed _____ / lease / other contract _____ / dated December 7, 1894, of record in the
Wetzel County Clerk's office in Lease Book 46 at page 93

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



1) Date April 13, 1993
Operator's
2) Well No. HENRY NOLAND #N-15
3) SIC Code
4) API Well No. 47 - 103 - 1546
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 N/A

Address _____

(i) Name WV Public Land Corp.

Address Bldg. #3, Room 643

1900 Kanawha Blvd., E.

7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:

Name _____

(ii) Name Charleston, WV 25305

Address _____

Address _____

Dept. Natural Resources

7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:

Name _____

(iii) Name 1304 Goose Run Road

Address Fairmont, WV 26554

Address _____

ATTN: Gary Foster

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