

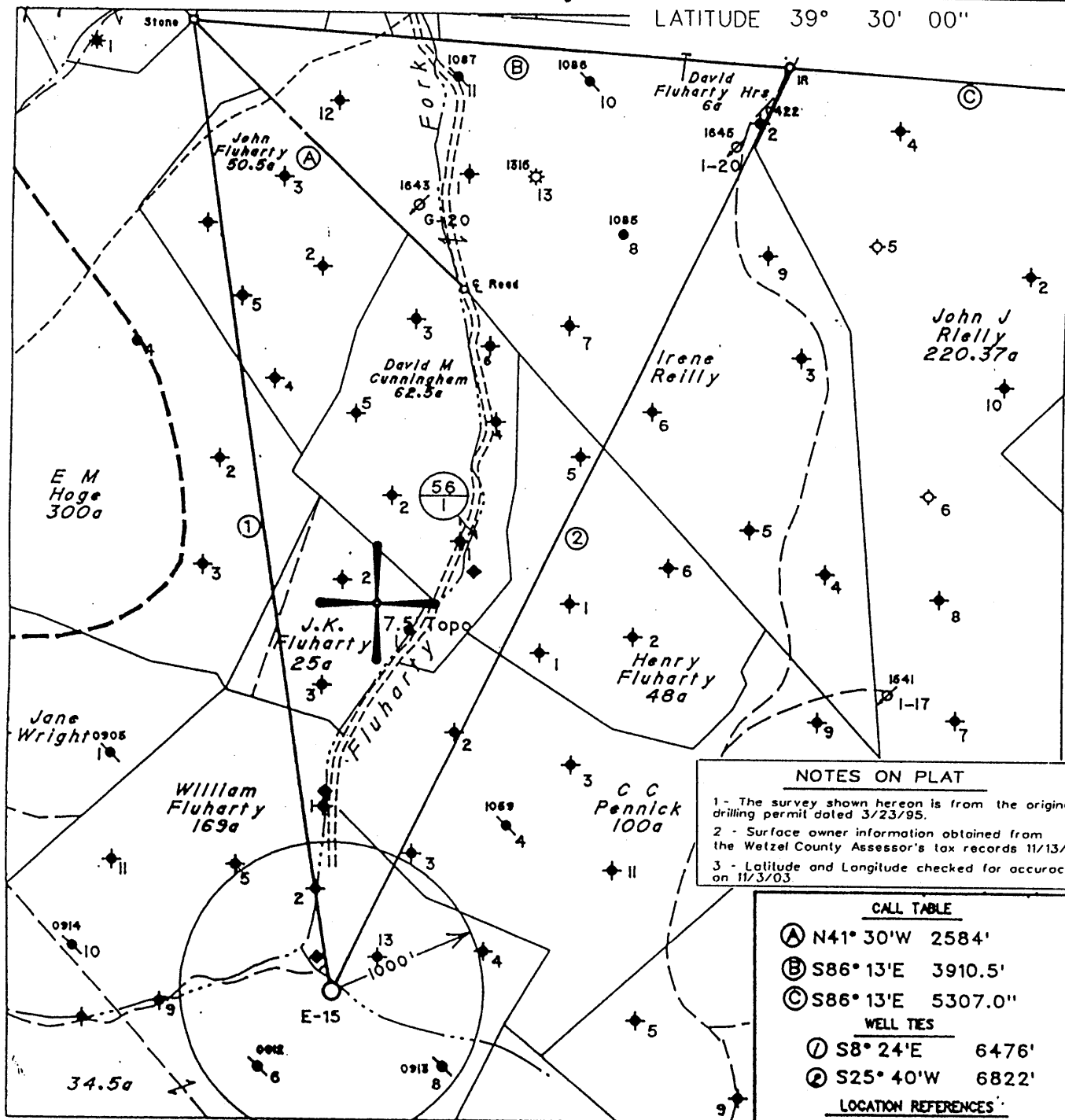
Longitude - 80° 42' 02.1"

9,575'

LATITUDE 39° 30' 00"

LONGITUDE 80° 08' 00"

Longitude - 39° 28' 39.2"



**NOTES ON PLAT**

- 1 - The survey shown hereon is from the original drilling permit dated 3/23/95.
- 2 - Surface owner information obtained from the Wetzel County Assessor's tax records 11/13/03.
- 3 - Latitude and Longitude checked for accuracy on 11/3/03.

**CALL TABLE**

Ⓐ N41° 30' W 2584'

Ⓑ S86° 13' E 3910.5'

Ⓒ S86° 13' E 5307.0'

**WELL TIES**

① S8° 24' E 6476'

② S25° 40' W 6822'

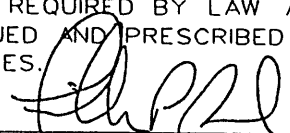
**LOCATION REFERENCES**

N52° 10' E 103' Apple at Creek  
 S63° 24' E 131' 10" Pine  
 S11° 18' W 108' 8" Maple

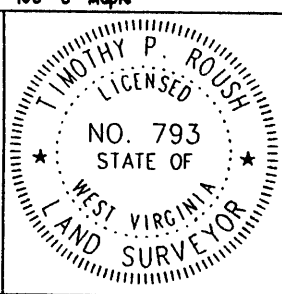
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
 MAP NO. \_\_\_\_\_ N \_\_\_\_\_ S \_\_\_\_\_ E \_\_\_\_\_ W \_\_\_\_\_  
 SCALE \_\_\_\_\_ 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY \_\_\_\_\_ 1 in 200  
 PROVEN SOURCE OF ELEVATION WVDEP Records

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 PS 793



**WEST VIRGINIA**  
 Division of Environmental Protection  
 Office of Oil and Gas  
 1356 Hansford St.  
 Charleston, West Virginia 25301



DATE November 13, 2003  
 FARM William Fluharty NO. E-15  
 API WELL NO. 47-103-1671F

WELL TYPE: OIL \_\_\_\_\_ GAS \_\_\_\_\_ LIQUID INJECTION  WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS") PRODUCTION \_\_\_\_\_ STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_  
 LOCATION: ELEVATION 1,022' WATERSHED Fluharty Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint 7.5'  
 SURFACE OWNER W.Va. Public Land Corporation ACREAGE 168.5  
 OIL & GAS ROYALTY OWNER East Resources, et al. LEASE ACREAGE 240 Ac.  
 LEASE NO. 15577-50  
 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 3,007'  
 WELL OPERATOR East Resources, Inc. DESIGNATED AGENT Michael McCown  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W.Va. 26105 Vienna, W.Va. 26105

DEC 05 2003

8-0 JACKSONBURK STRIP 2 VI (95)

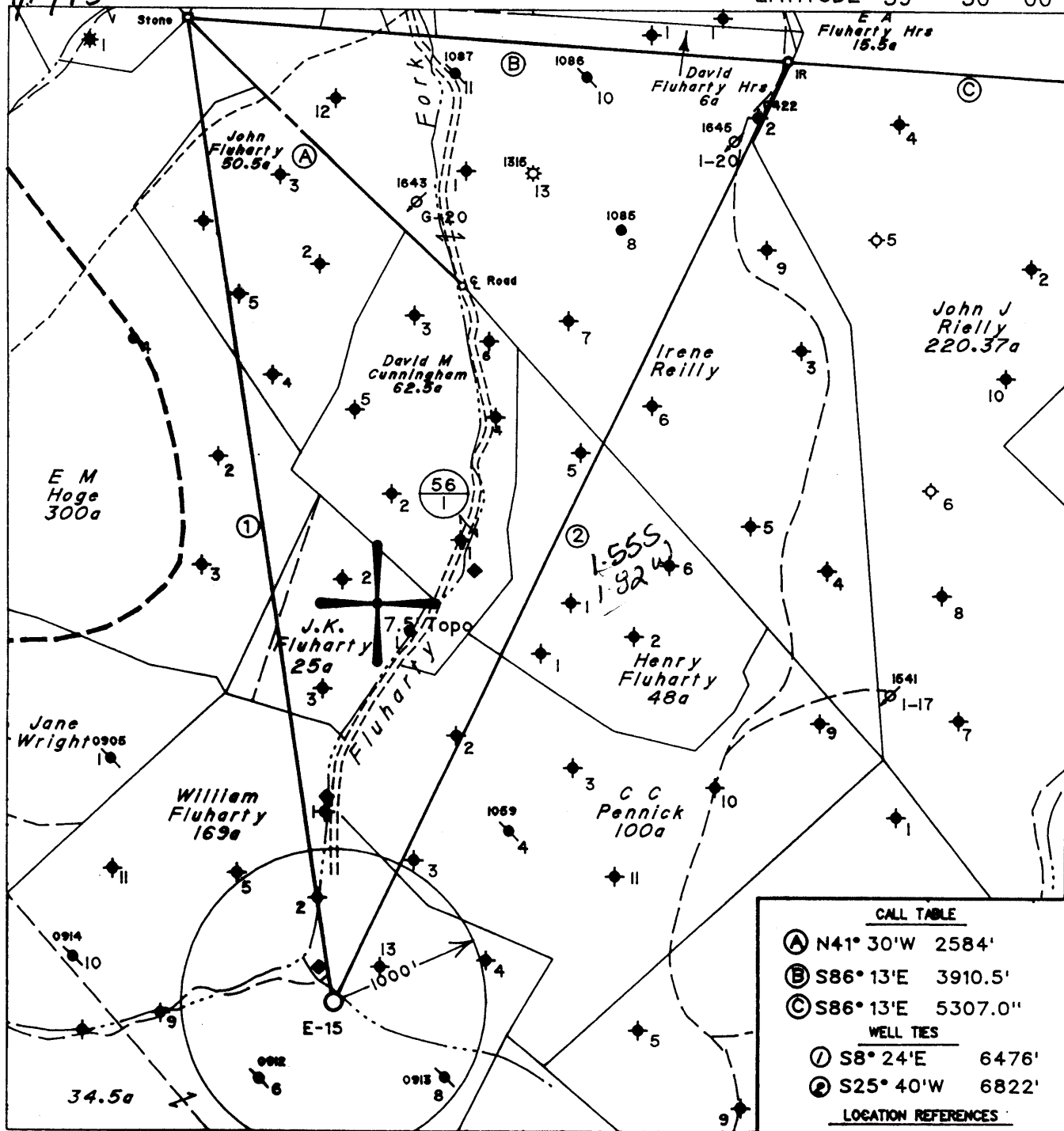
WET 1671 F

9,600'

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"

GS 4/10/95



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

◆ Denotes a Water Supply Source

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

CALL TABLE

- (A) N41° 30' W 2584'
- (B) S86° 13' E 3910.5'
- (C) S86° 13' E 5307.0'

WELL TIES

- ① S8° 24' E 6476'
- ② S25° 40' W 6822'

LOCATION REFERENCES

- N52° 10' E 103' Apple at Creek
- S63° 24' E 131' 10" Pine
- S11° 18' W 108' 8" Maple

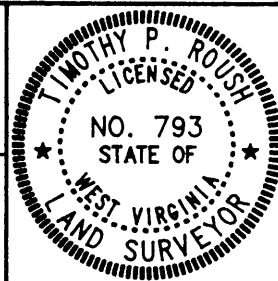
FILE NO. 1061  
 MAP NO. N57 N 3 S E W 5  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM - 902

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

PS 793



STATE OF WEST VIRGINIA  
 DIVISION OF ENERGY  
 OIL AND GAS SECTION



DATE March 23, 19 95  
 FARM William Fluharty NO. E-15  
 API WELL NO. 47-103-1671-S

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

LOCATION: ELEVATION 1022' WATERSHED Fluharty Fork  
 DISTRICT Green COUNTY Wetzel  
 QUADRANGLE Centerpoint NW

SURFACE OWNER Virginia Fluharty Drew et al ACREAGE 168.5 Ac.  
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 240 Ac.  
 LEASE NO. 15577-50

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 3020'

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

MAY 5 1995

8-0 95

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

AP

Well Operator's Report of Well Work

Farm name: DREW, VIRGINIA FLUHARTY
LOCATION: Elevation: 1,022.00
District: GREEN
Latitude: 8,200 Feet south of
Longitude: 9,600 Feet west of

Operator Well No.: WM FLUHARTY E-15
Quadrangle: CENTERPOINT 7.5'
County: WETZEL
39 Deg 30 Min 0 Sec.
80 Deg 40 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK
Inspector: MIKE UNDERWOOD
Permit Issued: 12/04/03
Well work Commenced: 02/14/04
Well work Completed: 02/18/04
Verbal plugging permission granted on:
Rotary X Cable Rig
Total Depth (feet) 3007
Fresh water depths (ft) NA
Salt water depths (ft) NA
Is coal being mined in area (Y/N) N
Coal Depths (ft): NA

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement Fill Up Cu. Ft.
Rows: 8 5/8" (308.00', 308.00', 90 sks), 4 1/2" (2980.30', 2980.30', 170 sks)

RECEIVED
Office of Oil & Gas
Office of Chief
MAY 20 2004
WV Department of Environmental Protection

OPEN FLOW DATA Water Injection Well

Producing formation Gordon Pay zone depth (ft) 2855-2920
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: EAST RESOURCES, INC.
By: [Signature]
Date: 5/18/04

WET 1671

JUN 18 2004

**Treatment :**

Treated perforations 2892' -2902' w/ 250 gals 15% HCL, 327 Bbls cross linked gel and 20,500 # 20/40 sand

**Well Log :**

See original well record

**RECEIVED**  
WV Division of  
Environmental Protection

APR 10 1996

Permitting  
Office of Oil & Gas

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

Well Operator's Report of Well Work

Farm name: DREW, VIRGINIA FLUHARTY

Operator Well No.: WM FLUHARTY E-15

LOCATION: Elevation: 1,022

Quadrangle: CENTERPOINT

District: GREEN

County: WETZEL

Latitude: 8,200 Feet south of 39 Deg 30 Min 0 Sec.

Longitude: 9,600 Feet west of 80 Deg 40 Min 0 Sec.

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

Agent: PHILIP S. ONDRUSEK

Inspector: RANDAL MICK

Permit Issued: 5/3/95

Well work Commenced: 8/5/95

Well work Completed: 10/3/95

Verbal plugging permission granted on:

Rotary  Cable  Rig

Total Depth (feet) 3,007'

Fresh water depths (ft) NA

Salt water depths (ft) NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8	308'	308'	90 SKS
4 1/2"	2980.3'	2980.3'	170 SKS

OPEN FLOW DATA

\*Waterflood Injection Well

Producing formation GORDON Pay zone depth (ft) 2855-2920  
 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:

Date:

*Philip S. Ondrusek*  
4/8/96

**Treatment:**

Perforated Gordon 2892-2902 (40 Holes) Treated Via 4 1/2" with 550 gals  
15% HCl, 221 BBL gelled water & 15,300# 20/40 Sand.

**Well Log:**

Sand & Shale	0	-	1220'
Sand	1220'	-	1270'
Sand & Shale	1270'	-	1785'
Sand	1785'	-	1856'
Shale	1856'	-	2002'
Sand	2002'	-	2052'
Shale	2052'	-	2108'
Sand	2108'	-	2279'
Shale	2279'	-	2855'
Gordon	2855'	-	2920'
T.D.	3007'		

FORM WW-3( )  
 erse)  
 91  
 20607

**RECEIVED**  
 Office of Oil & Gas  
 UIC Section  
**MAR 27 1995**  
 WV Division of  
 Environmental Protection



1) Date: March 24, 1995  
 2) Operator's Wm. Fluharty No. E-15  
 Well No. \_\_\_\_\_  
 3) SIC Code \_\_\_\_\_  
 4) API Well NO. 47 - 103 - 1671-S  
                   State       County       Permit  
 5) UIC Permit No. Issued 05/03/95

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

Expires 05/03/97

21497

- 6) WELL TYPE: Liquid injection  / Gas injection (not storage) \_\_\_\_\_ / Waste disposal \_\_\_\_\_ /
- 7) LOCATION: Elevation: 1022 Watershed: Fluharty Fork  
 District: Green County: Wetzel Quadrangle: Centerpoint
- 8) WELL OPERATOR Pennzoil Products Co. 37450 9) DESIGNATED AGENT James 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  
 Address Route 2, Box 135  
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 419 Depth 2902 feet(top) to 2917 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3020 ft.
- 15) Approximate water strata depths; Fresh, 202 feet; salt, 1229 feet.
- 16) Approximate coal seam depths: 834
- 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 2332
- 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 and/or Coalbed filters
- 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: \_\_\_\_\_

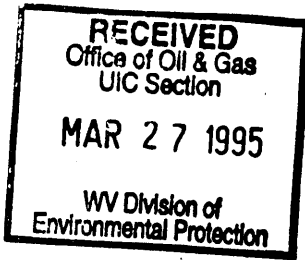
24) CASING AND TUBING PROGRAM

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	<u>8-5/8</u>	<u>L.S.</u>	<u>20</u>	<input checked="" type="checkbox"/>		<u>272</u>	<u>272</u>	<u>Cement to surface</u>	Sizes
Coal									
Intermediate									
Production	<u>4-1/2</u>	<u>J-55</u>	<u>10.5</u>	<input checked="" type="checkbox"/>		<u>3020</u>	<u>3020</u>	<u>Cement over salt sand</u>	Depths set
Tubing									Perforations:
Liners									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from Wm. Fluharty et al  
 by deed  / lease \_\_\_\_\_ / other contract \_\_\_\_\_ / dated April 9, 1986, of record in the  
Wetzel County Clerk's office in Deed Book 49 at page 133

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

File



- 1) Date March 24, 1995  
Operator's \_\_\_\_\_
- 2) Well No. Wm. Fluharty No. E-15
- 3) SIC Code \_\_\_\_\_
- 4) API Well No. 47 - 103 - 1671  
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

ck #  
21497

- 6) SURFACE OWNER(S) OF RECORD TO BE SERVED
  - (i) Name Virginia Fluharty Drew  
Address 2831 Washington Avenue  
St. Albans, WV 25177
  - (ii) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (iii) Name \_\_\_\_\_  
Address \_\_\_\_\_

- 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