

Call Table	
A	S20° W 62 P.
B	S61° 14' E 709.5'
C	N77° 47' E 594.0'
D	N60° 34' E 701.0'
E	N19° W 40 P.
WELL TIES	
①	S88° 33' E 1483'
②	S63° 14' W 369'
LOCATION REFERENCES	
S34° 43' W	132' 8" Red Oak
S81° 47' E	121' 8" White Oak
N30° 00' E	107' 8" Maple

Note: There are no known water supply sources located within 1000' of proposed well.

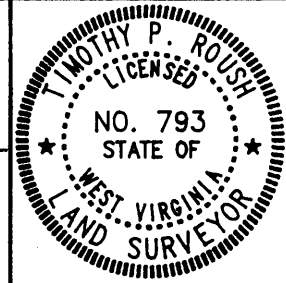
◆ Denotes a Water Supply Source

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

FILE NO. 1819
 MAP NO. N47 N S2 E W5
 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
 TIMOTHY P. ROUSH PS 793



STATE OF WEST VIRGINIA
 DIVISION OF ENERGY
 OIL AND GAS SECTION



DATE May 6, 19 96
 FARM Isaac Baker NO. 5
 API WELL NO. 47-095-01657-5

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1304' WATERSHED Indian Creek
 DISTRICT McElroy COUNTY Tyler
 QUADRANGLE Centerpoint 7.5'

SURFACE OWNER David W. Lemasters ACREAGE 54 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et al. LEASE ACREAGE 54
 LEASE NO. 14630-50

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 3304'
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT Philip S. Ondrusek
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519
Vienna, W.Va. 26105 Vienna, W.Va. 26105

AUG 5 1996
 9-0 96

RECEIVED
WV Division of
Environmental Protection

JAN 06 1997

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: Lemasters, David

Operator Well No.: I. Baker #5

LOCATION: Elevation: 1,304.00'

Quadrangle: Center Point

District: McElroy
Latitude: 9,700' Feet south of
Longitude: 9,800' Feet west of

County: Tyler
39 Deg 27 Min 30 Sec.
80 Deg 40 Min 0 Sec.

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

Agent: PHILIP S. ONDRUSEK

Inspector: Mike Underwood

Permit Issued: 8.22/96
Well work Commenced: 9/14/96
Well work Completed: 10/25/96

Verbal plugging permission granted on:
Rotary X Cable Rig

Total Depth (feet) 3360'

Fresh water depths (ft) NA

Salt water depths (ft) NA

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

Coal Depths (ft): 626-631

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	570'	570'	290 Sacks
4 1/2"	3235.7'	3235.7'	275 Sacks

OPEN FLOW DATA

*Well was drilled as a waterflood producer well. No open-flow data was obtained

Producing formation Gordon Pay zone depth (ft) 3158-3188

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: [Signature]

Date: 1/3/97

JAN 10 1997

Treatment :

Perforations: 3176' - 3180' - 4 holes/ft. (16 holes)

Treatment: Treated via 4.5" Casing with 300 gals. 15% HCl, 216 bbls.

Borate cross-linked gelled water and 12,500 lbs. of 20/40 sand.

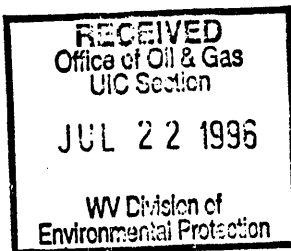
Well Log :

TD = 3360'

Shale	0	-	218
Sand	218	-	264
Shale	264	-	626
Pittsburg Coal	626	-	631
Shale	631	-	816
Sand	816	-	842
Sand & Shale	842	-	2364
Big Lime	2364	-	2438
Big Injun	2438	-	2590
Shale	2590	-	3158
Gordon	3158	-	3188
Shale	3188	-	3360

10

Permit COPY



1) Date July 16, 1996
 2) Well No. Isaac Baker No.5
 3) SIC Code _____
 4) API Well No. 47 - 095 - 1657-LI
 State County Permit
 5) UIC Code _____

1457

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 08/22/96
 Expires 08/22/98

22446

WELL TYPE: Liquid Injection Gas Injection _____ Waste Disposal _____
 LOCATION: Elevation 1304 Watershed Indian Creek
 District McElroy County Tyler Quadrangle _____ Centerpoint _____
 WELL OPERATOR: Pennzoil Products Company 9) DESIGNATED AGENT: Philip S. Ondrusek
P.O. Box 5519 P.O. Box 5519
Vienna, WV 26105 Vienna, WV 26105

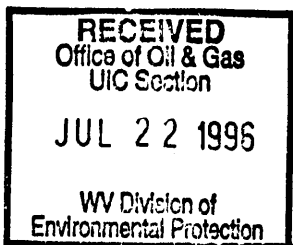
OIL & GAS INSPECTOR TO BE NOTIFIED: Name Mike Underwood
 Address Route 2, Box 135
Salem, WV 26426
 11) DRILLING CONTRACTOR: Name _____
 Address _____

- 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 Depth 3164 Ft. (Top) to 3179 Ft. (Bottom)
 14) Estimated depth of completed well (or actual depth of existing well) 3304 Ft.
 15) Approximate water strata depths: Fresh 484 Ft. Salt 1511 Ft.
 16) Approximate coal seam depths: 1116 Ft.
 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.
 20) Maximum proposed injection operations: Volume per hour 25 bbl. Bottom Hole Pressure 2332 psig.
 21) Detailed identification of materials to be injected, including additives: Fresh water, produced water, bactericides and other chemicals as needed to maintain water quality and 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 FILLUP OR SACKS	PACKERS
	Size	Grade	Weight	New	Used	For Drilling	Left in Well		
Conductor									Kinds
Fresh Water	8 5/8"	L.S.	20#	X		554	554	Cement To	
Coal								Surface	Sizes
Intermediate									
Production	4 1/2"	J-55	10.5#	X		3304	3304	Cement Over	Depths Set
Tubing								Salt Sand	
Liners									Perforations
									Top Bottom

25) APPLICANTS OPERATING RIGHTS were acquired from O.W. Baker et al.
 by Deed _____ Lease Other Contract _____ Dated March 15, 1894 of record in the
Tyler County Clerk's Office in Deed Book 23 Page 84



1) Date July 16, 1996
2) Well No. Isaac Baker No.5
3) SIC Code _____
4) API Well No. 47 - 095 - 1687-c1
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 David Lemasters
Address 220 Fair Ave.
Middlebourne, WV 26149

(ii) Name Dorsey Baker Estate
Address c/o Earle M. Long
117 Ellis Ave.

(iii) Name Elkins, WV 26241
Address _____

6 (iv) ADDITIONAL SURFACE OWNERS
Name _____
Address _____

7 (ii) COAL OWNER WITH DECLARATION ON RECORD:
Name N/A
Address _____

7(iii) COAL LESSEE WITH DECLARATION ON RECORD:
Name N/A
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 _____

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 [Signature]
Its Supervisor, Surveying/Mapping
Telephone (304) 422-6565

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-095-1657-LI

Date August 22, 1996 19

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and (if required) construction and reclamation plan, subject to any modifications and conditions specified below.

Permit expires 8-22-98 unless well work is commenced prior to that date and prosecuted with due diligence

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <u>MS</u>	Casing: <u>MS</u>	Fee: <u>CK*</u>
---	--	-----------------	-------------------	-----------------

0301420917

[Signature]
CHIEF, OFFICE OF OIL AND GAS

NOTE: Keep one copy of this permit posted at the drilling location.

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

OFFICE USE ONLY

This part of Form IV-3(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Follow-up inspection(s)	Date(s)
Application received			
Well work started		" "	
Total depth reached		" "	
Well Record received		" "	
Reclamation completed		" "	

OTHER INSPECTIONS

Reason: _____

Reason: _____