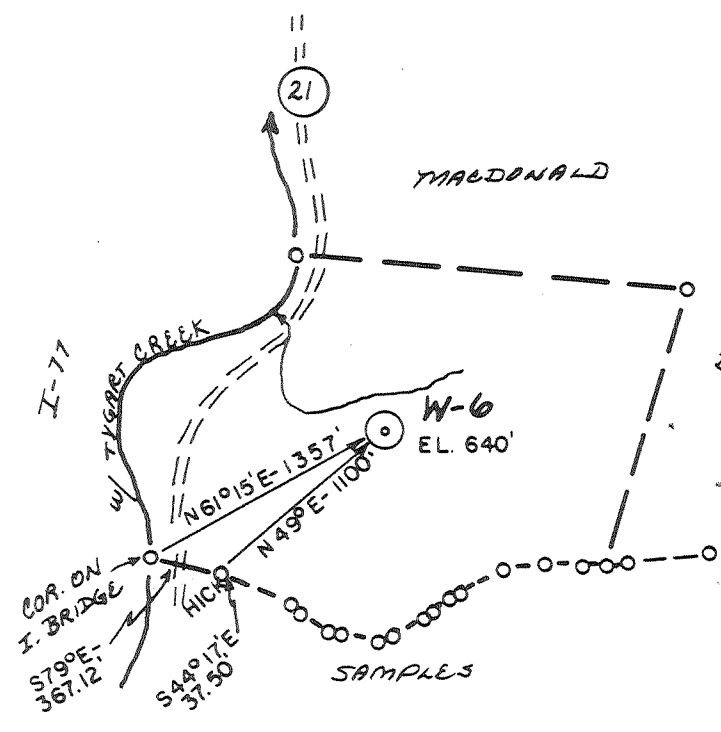


NORTH

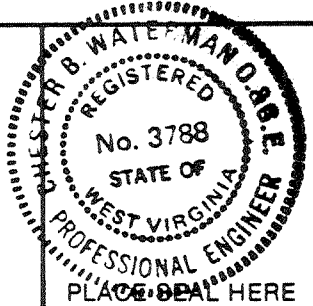


LONGITUDE 81° 32' 30"  
 1.525  
 0.120

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

FILE NO. 83-698  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1'/200'  
 PROVEN SOURCE OF ELEVATION U.S. ROUTE 21 (623')

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) Chet Waterman  
 R.P.E. 3788 L.L.S. \_\_\_\_\_



**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF MINES  
**OIL AND GAS DIVISION**



DATE 12-20, 19 83  
 OPERATOR'S WELL NO. W-6  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE X DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 640' WATERSHED TYGART CREEK  
 DISTRICT SLATE COUNTY WOOD  
 QUADRANGLE SOUTH PARKLASBURG 7.5 Bellville 15' EC  
 SURFACE OWNER R. R. PICKENS ACREAGE 87  
 OIL & GAS ROYALTY OWNER R. R. PICKENS LEASE ACREAGE 87

PROPOSED WORK: DRILL X 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 ORISKANY ESTIMATED DEPTH 5500'  
 WELL OPERATOR PRENCO DESIGNATED AGENT DENZIL PARTNER  
 ADDRESS P.O. BOX 91 ADDRESS SAME  
MINERAL WELLS, WV 26150

JAN 3 1984

FORM IV-6 (8-78)

COUNTY NAME  
 PERMIT

Deep Well 220 unnamed W) affects wood 90



1) Date: December 21, 1983  
 2) Operator's Well No. Pickens W-6  
 3) API Well No. 47 - 107 - 1303  
 State County Permit

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, OIL AND GAS DIVISION  
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil  / Gas   
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow )  
 5) LOCATION: Elevation: 640' Watershed: Tygart Creek  
 District: Slate County: Wood Quadrangle: S. Parkersburg 7 1/2  
 6) WELL OPERATOR PRENCO 7) DESIGNATED AGENT Denzil L. Prather  
 Address P.O. Box 91 Address P.O. Box 91  
Mineral Wells, WV 26150 Mineral Wells, WV 26150  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name J. Tephobock Name William H. Putnam  
 Address Rt. 1, Box 191-A Address Box 647  
Ripley, WV 25271 Ph: 372-6805 Marietta, OH 45750  
 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_  
 11) GEOLOGICAL TARGET FORMATION, Oriskany  
 12) Estimated depth of completed well, 5000 feet  
 13) Approximate trata depths: Fresh, n/a feet; salt, n/a feet.  
 14) Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes  No

**RECEIVED**  
 DEC 21 1983  
 OIL & GAS DIVISION  
 DEPT. OF MINES

15) 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		Kinds	Sizes
Conductor										
Fresh water	11-3/8			X			200	To surface		
Coal										
Intermediate	8-5/8			X			2000	To surface		
Production	4 1/2			X			4900	225 sks.	Depths set	
Tubing								<i>or as req. by rule 15-c1</i>		
Liners									Perforations:	
									Top	Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-107-1303 Date December 21, 1983

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 reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires December 21, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent: <u>LO</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>2301</u>
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Margaret J. Hulse  
 Administrator, Office of Oil and Gas

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



IV-35  
(Rev 8-81)

**RECEIVED**

JUN 11 1984

OIL & GAS DIVISION  
**DEPT. OF MINES**

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date June 8, 1984  
Operator's Well No. W-6  
Farm Robert R. Pickens  
API No. 47-107-1303

**WELL OPERATOR'S REPORT  
OF**

**DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE**

WELL TYPE: Oil    / Gas XX / Liquid Injection    / Waste Disposal    /  
(If "Gas," Production XX / Underground Storage    / Deep    / Shallow XX /)

LOCATION: Elevation: 640' Watershed Tygart Creek  
District: Slate County Wood Quadrangle S Parkersburg 7 1/2'

COMPANY PRENCO  
ADDRESS Box 91, Mineralwells WV  
DESIGNATED AGENT Denzil L. Prather  
ADDRESS Same  
SURFACE OWNER Robert R. Pickens  
ADDRESS Rt 3, Box 47, Mineralwells WV  
MINERAL RIGHTS OWNER Same  
ADDRESS Same  
OIL AND GAS INSPECTOR FOR THIS WORK J. Tephacock  
ADDRESS Ripley, WV  
PERMIT ISSUED 12-21-83  
DRILLING COMMENCED 1-4-84  
DRILLING COMPLETED 1-13-84  
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON   

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	203'	203'	124 ft <sup>3</sup>
9 5/8			
8 5/8	1946'	1946'	502 ft <sup>3</sup>
7			
5 1/2			
4 1/2		4702'	547 ft <sup>3</sup>
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Depth 5000 feet  
Depth of completed well 4530 feet Rotary XX / Cable Tools     
Water strata depth: Fresh n/a feet; Salt n/a feet  
Coal seam depths: none Is coal being mined in the area? no

**OPEN FLOW DATA**

Producing formation Devonian shale (Harrell) Pay zone depth 4290-4490 feet  
Gas: Initial open flow    Mcf/d Oil: Initial open flow    Bbl/d  
Final open flow 50 Mcf/d Final open flow -0- Bbl/d  
Time of open flow between initial and final tests    hours  
Static rock pressure 1200 psig (surface measurement) after 96 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation Devonian shale (Balltown) Pay zone depth 3743-3949 feet  
Gas: Initial open flow    Mcf/d Oil: Initial open flow    Bbl/d  
Final open flow mingled with above fm. Mcf/d Oil: Final open flow    Bbl/d  
Time of open flow between initial and final tests    hours  
Static rock pressure    psig (surface measurement) after    hours shut in

- 2-8-84: fractured open hole (4706-4774) with 800 gal 15% HCl and 880 MSCF N<sub>2</sub>.
- 3-20-84: set cast-iron bridge plug at 4550.
- 4-9-84: set cast-iron bridge plug at 4530.
- 5-2-84: perforated 4290 to 4490 with 30 holes.
- 5-3-84: fractured with 750 gal 15% HCl and 540 MSCF N<sub>2</sub>.
- 5-15-84: perforated 3743-3949 with 30 holes and set ball plug at 4000.
- 5-16-84: fractured with 750 gal 15% HCl and 540 MSCF N<sub>2</sub>.

*Rhinestreet*

*Huron*

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
shale and sandstone			0	460	
sandstone			460	520	
shale			520	595	
sandstone			595	642	
shale and sandstone			642	884	
sandstone			884	905	
sandy shale			905	960	
sandstone			960	1062	
shale			1062	1168	
sandstone			1168	1280	
shale			1280	1435	
sandstone			1435	1469	
shale			1469	1498	
sandstone			1498	1724	
siltstone and shale			1724	4636	Berea horizon at 2108
limestone			4636	4760	
sandstone			4760	4774	TD <del>Rhinestreet</del> @ T.D.

$$\begin{array}{r} 21 \\ 1050 \\ \hline 3950 \\ 35 \\ \hline 4300 \end{array}$$

*TD in Oriskany*

(Attach separate sheets as necessary)

PRENCO

Well Operator

By: *David W. Batten*

Geologist

Date: *May 30, 1984*

Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."