

10-7-83

Plot  Card  CSD

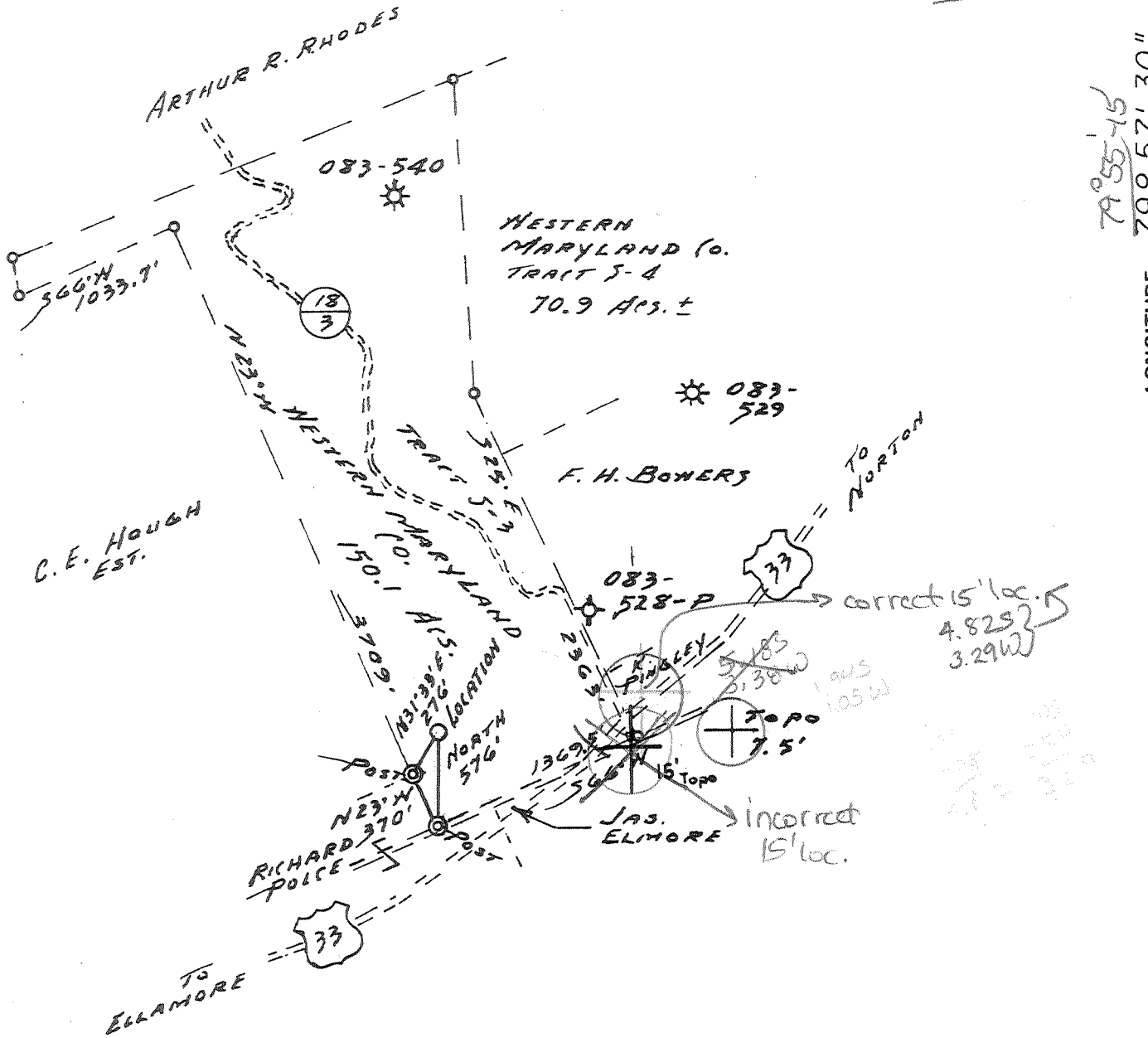
LATITUDE 38° 57' 30"

39° 00' - 15'

LONGITUDE 79° 55' - 15"

10,250'

NORTH



FILE NO. W.D.P. 3-36  
 DRAWING NO. 83-38  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION ROAD XING 1000' E. OF LOCATION  
EL. 2177

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) Thomas F. Weaver, Jr.  
 R.P.E. \_\_\_\_\_ L.L.S. 410

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE SEPT. 26 1983  
 OPERATOR'S WELL NO. 2-1923  
 API WELL NO. 47-083-0832  
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 2180 WATER SHED TYGART VALLEY RIVER  
 DISTRICT ROARING CREEK COUNTY RANDOLPH  
 QUADRANGLE JUNIOR 7.5' ELKINS 15' NW  
 SURFACE OWNER WESTERN MARYLAND CO. ACREAGE 150.1  
 OIL & GAS ROYALTY OWNER WESTERN MARYLAND CO. LEASE ACREAGE 150.1  
 LEASE NO. 510792 AMOCO  
 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 ELK ESTIMATED DEPTH 5600' Ellamore (333)  
 WELL OPERATOR UNION DRILLING, INC. DESIGNATED AGENT JOSEPH C. YANZANT, JR.  
 ADDRESS P.O. DRAWER 40 ADDRESS P.O. DRAWER 40  
BUCKHANNON, WY. 26201 BUCKHANNON, WY. 26201



IV-B  
(Rev) **RECEIVED**  
DEC 27 1983  
OIL & GAS DIVISION  
DEPT. OF MINES

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date December 21, 1983  
Operator's  
Well No. 2-1923  
Farm Western Maryland #2  
API No. 47 - 083 - 0832

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 2180' Watershed Tygart Valley River  
District: Roaring Creek County Randolph Quadrangle Junior

COMPANY Union Drilling, Inc  
ADDRESS P.O. Drawer 40, Buckhannon, WV 26201  
DESIGNATED AGENT Joseph C. Vanzant, Jr.  
ADDRESS P.O. Drawer 40, Buckhannon, WV 26201  
SURFACE OWNER Western Maryland Co.  
ADDRESS 707 E. Main St. Richmond, Virginia 23219  
MINERAL RIGHTS OWNER Same  
ADDRESS       
OIL AND GAS INSPECTOR FOR THIS WORK       
Phil Tracy ADDRESS Gen. Del. Ellamore 26267  
PERMIT ISSUED 10/28/83  
DRILLING COMMENCED 11/15/83  
DRILLING COMPLETED 11/21/83  
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 Cord.			
13-10"			
9 5/8			
8 5/8	1052.75	1052.75	245 SL'S
7			
5 1/2			
4 1/2	5372.95		1330 CF
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Elk Depth 5600' feet  
Depth of completed well 5479' feet Rotary x / Cable Tools       
Water strata depth: Fresh      feet; Salt      feet  
Coal seam depths: None Is coal being mined in the area? Yes

OPEN FLOW DATA  
Producing formation Alexander, Elk Pay zone depth 5240 feet  
Gas: Initial open flow 119 Mcf/d Oil: Initial open flow      Bbl/d  
Final open flow 355 Mcf/d Oil: Final open flow      Bbl/d  
Time of open flow between initial and final tests 2 hours  
Static rock pressure 675 psig (surface measurement) after 24 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation      Pay zone depth      feet  
Gas: Initial open flow      Mcf/d Oil: Initial open flow      Bbl/d  
Final open flow      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

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Newsco Water Fractured 12/5/83

- 1678/82 Squaw 45,000# sand and 402 bbl water
- 2838/78 Speechly 45,000# sand and 402 bbl water
- 3840/99 Benson 45,000# sand and 440 bbls water
- 4488/94 Alexander 45,000# sand and 400 bbls water
- 5001/240 Elk 45,000# sand and 445 bbls water

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			0	1426	
Big Lime			1426	1480	
Injun			1552	1610	
Squaw			1676	1688	
Fifth Sand			2226	2240	
Bayard			2273	2303	
Elizabeth			2429	2444	
Warren			2474	2488	
Speechly			2848	2878	
Riley			3709	3733	
Benson			3834	3914	
Alexander			4360	4496	
Elk			4998	5064	

*Brallin*  
*@TD*  
*TD 5479*

(Attach separate sheets as necessary)

Union Drilling, Inc  
Well Operator  
By: *Joseph C. Pettey*  
Date: Joseph C. Pettey, Vice President of Production

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."



1) Date: October 6, 1983, 19\_\_  
 2) Operator's Well No. 2-1923  
 3) API Well No. 47 - 083 - 0832  
 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 X /  
 B (If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow X)
- 5) LOCATION: Elevation: 2180 Watershed: Tygart Valley River  
 District: Roaring Creek County: Randolph Quadrangle: Junior
- 6) WELL OPERATOR Union Drilling, Inc.  
 Address Post Office Drawer 40  
Buckhannon, WV 26201
- 7) DESIGNATED AGENT Joseph C. Vanzant, Jr.  
 Address Post Office Drawer 40  
Buckhannon, WV 26201
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Phil Tracy  
 Address General Delivery  
Ellamore, WV 26267
- 9) DRILLING CONTRACTOR:  
 Name Union Drilling, Inc.  
 Address Post Office Drawer 40  
Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate \_\_\_\_\_  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Elk
- 12) Estimated depth of completed well, \_\_\_\_\_ 5600 feet
- 13) Approximate trata depths: Fresh, \_\_\_\_\_ 50 feet; salt, \_\_\_\_\_ feet.
- 14) Approximate coal seam depths: 246, 390, 456, 517, 827. Is coal being mined in the area? Yes X No \_\_\_\_\_
- 15) CASING AND TUBING PROGRAM 840

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 OCT - 7 1983

OIL & GAS DIVISION  
 DEPT. OF MINE

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	11-3/4			X		<del>20</del> 20	20			Kinds
Fresh water										
Coal										Sizes
Intermediate	8-5/8		23	X		900	900	300		
Production	4-1/2	K-55	10 1/2	X		5600	5600	500		Depths set
Tubing										
Liners										Perforations: Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-083-0832 Date October 28, 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 October 28, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent	Plat	Casing	Fee
<b>LANCKET BOND</b>	<i>[Signature]</i>	<i>[Signature]</i>		9500

*[Signature]*  
 Administrator, Office of Oil and Gas

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