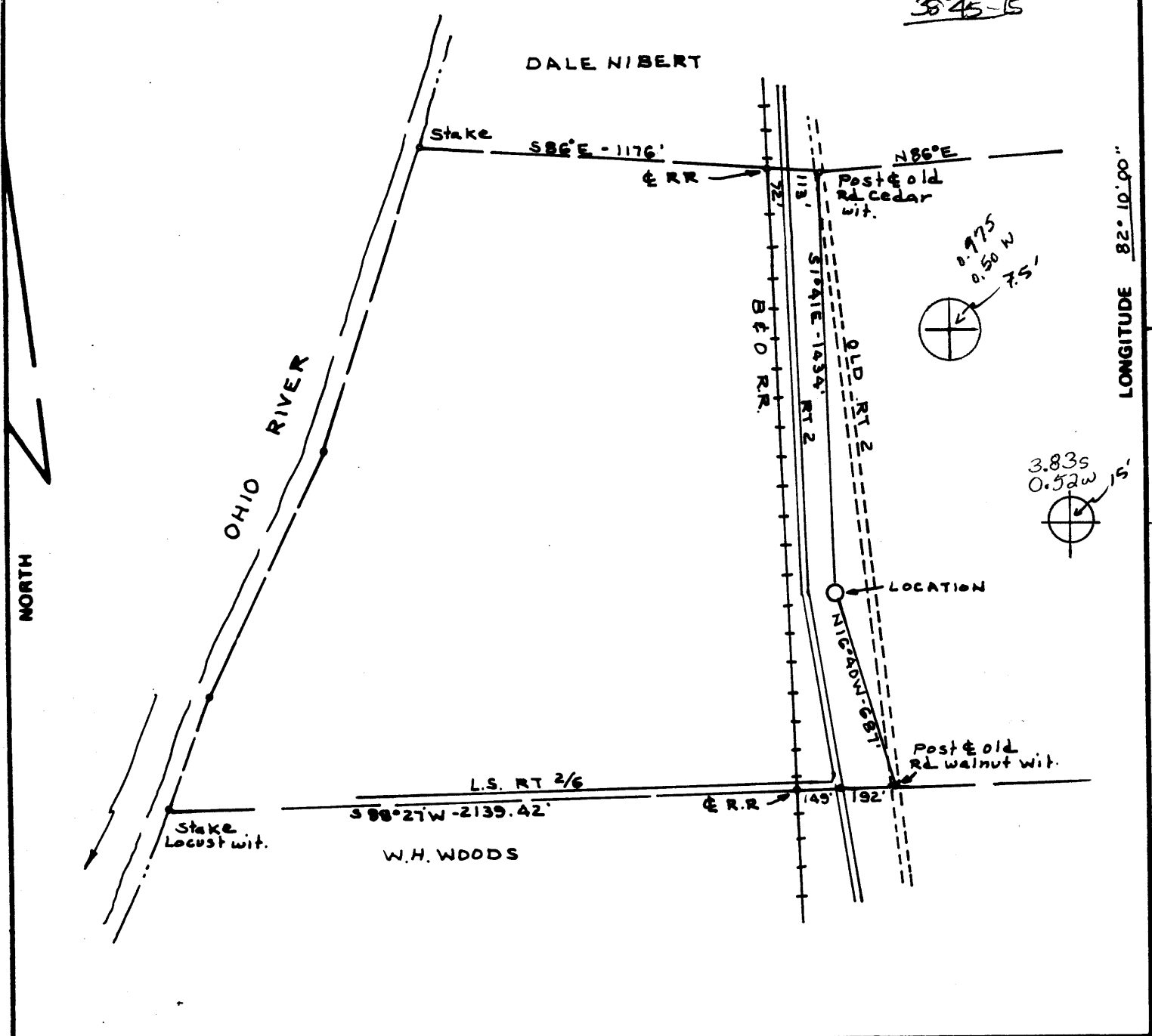


38° 45' 15"



FILE NO. Bk 79 P 91
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION USGS B.M. E-118
EL. 558.0'

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) C. S. Valley Jr.
 R.P.E. L.S. 92

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-B
 (8-78)



DATE OCT 31, 1983
 OPERATOR'S WELL NO. 1-1960
 API WELL NO. _____
47 - 053 - 0313
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DEC 0 6 1983

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 560.27 WATER SHED FLATFOOT CREEK
 DISTRICT CLENDENIN COUNTY MASON
 QUADRANGLE APPLE GROVE 7.5' Greenwood 15' NW
 SURFACE OWNER W.H. WOODS ACREAGE 272
 OIL & GAS ROYALTY OWNER W.H. WOODS LEASE ACREAGE 504
 LEASE NO. C-2-588
 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 DEVONIAN SHALE ESTIMATED DEPTH 3500'
 WELL OPERATOR UNION DRILLING INC DESIGNATED AGENT JOSEPH VANZANT
 ADDRESS P.O. DRAWER 40 ADDRESS P.O. DRAWER 40
BUCKHANNON WVA 26201 BUCKHANNON WVA 26201

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

Newsco - 1 stage Foam Frac - 3/11/84

2618/3026 - Huron - Angola - 60,000# 20/40 sand, 265 Bbls water and 828,500 scf nitrogen

H 2618-2941
J 2941-3026

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	188	1" stream water @35'
Red Rock			188	1050	1" stream water @930'
Little Lime			1050	1080	
Big Lime			1090	1126	
Injun			1257	1307	1 " stream water @ 1470'
Berea			1811	1837	1775-1800
Upper Huron			2618	2633	
Lower Huron			2672	2942	
Angola			2942	3060	
				3160	T.D. gas show

From 2618-2941 (3A)
J 2941-3042 (4A)
A 3042
800 yd deep

(Attach separate sheets as necessary)

UNION DRILLING, INC.

Well Operator

By: Joseph C. Petty

Date: Joseph C. Petty, Vice President of Production

3/17/84

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 ... encountered in the drilling of a well."



1) Date: November 9, 19 83
 2) Operator's Well No. 1-1960
 3) API Well No. 47 - 053 - 0313
 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: 560.27 / Watershed: Flatfoot Creek
 District: Clendenin / County: Mason / Quadrangle: Apple Grove
- 6) WELL OPERATOR Union DRilling, Inc. / 7) DESIGNATED AGENT Joseph Vanzant
 Address Post Office Drawer 40 / Address Post Office Drawer 40
Buckhannon, WV 26201 / Buckhannon, WV 26201
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED / 9) DRILLING CONTRACTOR:
 Name Jerry Tephabock / Name Union Drilling, Inc.
 Address Route 1, Box 101-A / Address Post Office Drawer 40
Ripley, WV 25271 / Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate X /
 Plug off old formation _____ / Perforate new formation _____ /
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Devonian Shale
- 12) Estimated depth of completed well, 3500 feet
 13) Approximate trata depths: Fresh, ? feet; salt, ? feet.
 14) Approximate coal seam depths: ? Is coal being mined in the area? Yes OIL & GAS DIVISION

RECEIVED
 NOV 10 1983

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		
Conductor	11-3/4		32		X	30'	30'		Kinds
Fresh water						100'	100'	<u>cement to surface by</u>	Sizes <u>rule 15.05</u>
Coal									
Intermediate	8-5/8		23		X	1000'	1000'	286 sacks	
Production	4-1/2	J-55	10.5	X		3500'	3500'	1013 sacks	<u>or as req. by</u> Depths set <u>rule 15.01</u>
Tubing									
Liners									Perforations: Top _____ Bottom _____

DEPT. OF MINES

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-053-0313 / Date November 28, 19 83

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 November 28, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>10</u>	<u>✓</u>	<u>M21</u>	<u>M/A</u>	<u>10574</u>

[Signature]
 Administrator, Office of Oil and Gas

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

File