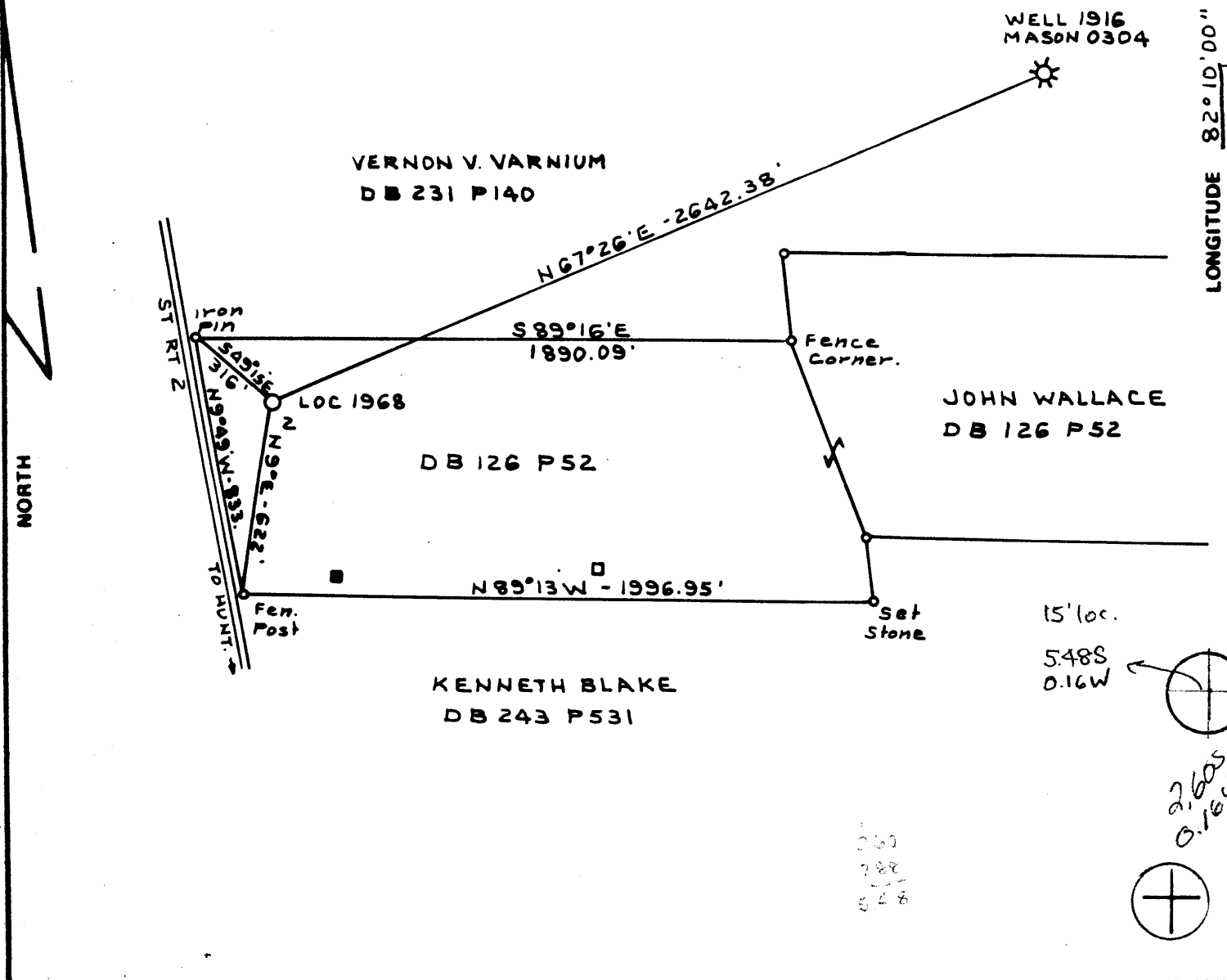


Plot Card CSD

LATITUDE 38° 42' 30"
38° 45' - 15'

LONGITUDE 82° 10' 00"

007E1



FILE NO. BK 81 P18
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION USGS BM G-118 EL 579.85

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. Solley 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 NOV 29, 1983
 OPERATOR'S WELL NO. 1968 (2)
 API WELL NO. _____
47 - 053 - 0322
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

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

LOCATION: ELEVATION 590.94 WATERSHED JERRY'S RUN
 DISTRICT CLENDEMIN COUNTY MASON
 QUADRANGLE APPLE GROVE 7.5' Glenwood 15' NW

SURFACE OWNER JOHN B. WALLACE ACREAGE 110
 OIL & GAS ROYALTY OWNER JOHN B. WALLACE LEASE ACREAGE 110
 LEASE NO. C-2-194

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

JAN 3 1984

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 3000
 WELL OPERATOR UNION DRILLING DESIGNATED AGENT JOSEPH VANZANT
 ADDRESS P.O. DRAWER 40 BUCKHANNON WVA 26201 ADDRESS P.O. DRAWER 40 BUCKHANNON WVA 26201

IV-35
(Rev 8-81)

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APR 5 - 1984 State of West Virginia

OIL & GAS DIVISION Department of Mines
DEPT. OF MINES Oil and Gas Division

Date April 4, 1984
Operator's
Well No. 2 - 1968
Farm John B. Wallace #2
API No. 47 - 053 - 0322

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: 590' Watershed Jerrys Run
District: Clendenin County Mason Quadrangle Apple Grove

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 John B. Wallace
ADDRESS Apple Grove, WV 25502
MINERAL RIGHTS OWNER Same
ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK
Jerry Tephacock ADDRESS Rt #1, Box 101-A, Ripley, WV 25271

PERMIT ISSUED 12/29/83
DRILLING COMMENCED 3/7/84
DRILLING COMPLETED 3/13/84

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 Cord.			
13-10"			
9 5/8	781.85'		
8 5/8			
7	1926.15	713.55'	59 cf
5 1/2			
4 1/2	3168.65'		119 cf
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Lower Huron Depth 3000' feet
Depth of completed well 3222' feet Rotary x / Cable Tools
Water strata depth: Fresh 90', 1130' feet; Salt 855' feet
Coal seam depths: 330/336 Is coal being mined in the area? no

OPEN FLOW DATA
Producing formation Huron Pay zone depth 3002' feet
Gas: Initial open flow show Mcf/d Oil: Initial open flow Bbl/d
Final open flow 119 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 6 days hours

Static rock pressure not taken psig (surface measurement) after 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

APR 24 1984

(Continue on reverse side)

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

3/25/84 - Halliburton - 1 stage Foam Frac

2685/3002 - Huron - 60,000# 20/40 sand, 247 Bbls water and 1,009,000 scf nitrogen

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	154	1 1/2" stream water @90'
Red Rock			154	330	
Coal			330	336	
Sand & Shale			336	1153	1/2" stream salt water @855'
Big Lime			1153	1255	1 1/2" stream water @1130'
Sand & Shale			1255	1307	
Injun			1307	1397	
Sand & Shale			1397	1828	
Berea			1828	1852	
Upper Huron			2672	2808	
Lower Huron			2808	3010	
				2508	T.D. gas show @T.D. (3200) 10.275

from @P log - 601 KB
Berea 225 1858 (33)
H-2465-3008 (243)
I 3008-3112 (104)
A 3112-
907' depth

(Attach separate sheets as necessary)

UNION DRILLING, INC.

Well Operator

By: Joseph C. Pettey

Date: Joseph C. Pettey, Vice President of Production

4/4/84

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: December 8, 19 83
 2) Operator's Well No. 1968 (2)
 3) API Well No. 47 - 053 - 0322
 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: 590.94 / Watershed: Jerrys Run
 District: Clendenin / County: Mason / Quadrangle: Apple Grove
- 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 Jerry Tephabock
 Address Route 1, Box 101-A
Ripley, WV 25271
- 9) DRILLING CONTRACTOR:
 Name Union Drilling, Inc.
 Address Post Office Drawer X 40
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 Lower Huron
- 12) Estimated depth of completed well, 3000 feet
- 13) Approximate trata depths: Fresh, ? feet; salt, ? feet.
- 14) Approximate coal seam depths: ? Is coal being mined in the area? Yes _____ No X

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 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		
Conductor	11-5/8		32		X	30'	30'	Kinds
Fresh water								
Coal								Sizes
Intermediate	8-5/8		23		X	1000' 790'	1000' 790'	210 sacks
Production	4-1/2	J	10.5	X		3000'	3000'	640 sacks
Tubing								Depths set
Liners								or as req. by rule 1501
								Perforations:
								Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-053-0322 Date December 29, 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 December 29, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

AGENT BOND	Agent: <u>✓</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>594</u>
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Margaret J. Hesse
 Administrator, Office of Oil and Gas

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