

Plot Card CSD

Well 1916
Permit 0304

S 60° 42' W - 1860.16

JOHN WALLACE
DB 126 P 52

LOC. 1967
Permit 0326

S 72° 06' W - 2552.59

LONGITUDE 82° 07' 30"

Fence Cor.
Large Hickory

S 7° 15' E
201'

N 88° 36' W - 3175.24

Large white
Oak in Fen. Cor.

set Stone
in Fen. Cor

S 59° 12' E
376.56'

DEED BOOK 243 PAGE 531
69.06 AC TR., TR 2

LOC. 2043

NORTH

Fence
corner

N 8° 46' E
465.40'

S 9° 15' E

stone in
fence cor.

5.62 S
4.25 W

APPLACHAIN POWER
D.B. 243 P 29

2.74 S
2.00 W
1.98 W

FILE NO. BK 82 P 31
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF
ACCURACY 1:200'
PROVEN SOURCE OF
ELEVATION USGS BM G-118
E.L. 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 REGU-
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
MENT OF MINES.

(SIGNED) C. S. Volley Jr.
R.P.E. _____ C.L.S. 92

PLACE SEAL HERE

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

FORM IV-8
(8-78)



DATE FEB 21, 1984
OPERATOR'S WELL NO. 2043
API WELL NO. _____
47 - 053 - 0335
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 663.44 WATERSHED JERRYS RUN

DISTRICT CLENDENIN 2 COUNTY MASON 051

QUADRANGLE APPLE GROVE 216 Glenwood 15' NO 2

SURFACE OWNER KENNETH W. BLAKE ACREAGE 161

OIL & GAS ROYALTY OWNER KENNETH W. BLAKE LEASE ACREAGE 161

LEASE NO. C-2-849

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) _____

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 WY 26201

BUCKHANNON WY 26201

MAR 26 1984

RECEIVED

APR 11 1984



IV-35 (Rev 8-81)

OIL & GAS DIVISION DEPT. OF MINES

State of West Virginia Department of Mines Oil and Gas Division

Date April 10, 1984 Operator's Well No. 1 - 2043 Farm Kenneth Blake #1 API No. 47 - 053 - 0335

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: 663' Watershed Jerry's 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 Kenneth W. Blake ADDRESS 688 Sycamore Dr., Independence, KY 41051 MINERAL RIGHTS OWNER Same ADDRESS OIL AND GAS INSPECTOR FOR THIS WORK Jerry Tephadock ADDRESS Rt. 1, Box 101-A, Ripley, WV 25271 PERMIT ISSUED 3/19/84 DRILLING COMMENCED 3/22/84 DRILLING COMPLETED 3/27/84 IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16 Cord, 13-10", 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3500' feet Depth of completed well 3314' feet Rotary x / Cable Tools Water strata depth: Fresh 890' feet; Salt 1240' feet Coal seam depths: none 2028' Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Huron Pay zone depth 3100' feet Gas: Initial open flow Show Mcf/d Oil: Initial open flow Bbl/d Final open flow 158 Mcf/d Final open flow Bbl/d Time of open flow between initial and final tests 6 days Static rock pressure not taken psig (surface measurement) after hours shut in (If applicable due to multiple completion--)

(Continued on reverse side)

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

4/3/84 - Dowell - 1 stage Foam Frac

2776/3100 - Huron - 4890 gals methanol, 60,000# 20/40 sand, 325 Bbls water
and 1,104,000 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	171	
Red Rock			171	181	
Sand & Shale			181	1291	1" stream water @890'
Big Lime			1291	1358	1" salt water @1240'
Sand & Shale			1358	1445	
Injun			1445	1514	
Sand & Shale			1514	1925	
Berea Sandstone (25)			1925 1915	1940	
Sand & Shale			1940	2028	2" stream water @2028'
Upper Huron			2771	2828	
Lower Huron			2828	3125	
Angola Shale			3125	3144	
				3314	T.D.

Ann. 2010' 673' 100
H - 2750 - 3105 (355)
J 3105 3208 (103)
A 3208

815' up to 2000'

(Attach separate sheets as necessary)

UNION DRILLING, INC.

Well Operator

By: *Joseph C. Pettey*

Date: Joseph C. Pettey, Vice President of Production

4/10/84

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: February 24, 19 84
 2) Operator's Well No. 2043
 3) API Well No. 47 - 053 - 0335
 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: 663.44' 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 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
- 12) Estimated depth of completed well, 3500' feet
- 13) Approximate strata depths: Fresh, ? feet; salt, ? feet.
- 14) Approximate coal seam depths: ? Is coal being mined in the area? Yes _____
- 15) CASING AND TUBING PROGRAM

RECEIVED
 FEB 27 1984

OIL & GAS DIVISION

DEPT. OF MINES

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									
Coal						863'	863'		Sizes
Intermediate	8-5/8		23	X		1000'	1000'	to surface	<u>NEAT</u>
Production	4-1/2	J	10 1/2	X		3500'	3500'	as required	Depths set
Tubing									Perforations:
Liners									Top Bottom

**OFFICE USE ONLY
 DRILLING PERMIT**

Permit number 47-053-0335 Date March 19, 19 84

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 March 19, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BLANKET</u>	Agent: <u>✓</u>	Plat: <u>MW</u>	Casing: <u>MW</u>	Fee: <u>014-527</u>
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Margaret J. Lass
 Administrator, Office of Oil and Gas

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

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File