



FILE NO. BK 82 P 5
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200'
 PROVEN SOURCE OF ELEVATION USGS BM S-111 E 1567' 2750' ± NW LOC.

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. J. Volley, Jr.
 R.P.E. C.I.S. 92

PLACE SEAL HERE

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



DATE FEB 10, 1984
 OPERATOR'S WELL NO. 2015-2
 API WELL NO. _____
47 - 053 - 0344
 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 780.44 WATER SHED MUD RUN
 DISTRICT CLENDENIN COUNTY MASON
 QUADRANGLE APPLE GROVE 75 Glenwood 15' NW
 SURFACE OWNER VERLINE E. CHILDERS ACREAGE 0.178
 OIL & GAS ROYALTY OWNER VERLINE E. CHILDERS LEASE ACREAGE 178
 LEASE NO. C-2-606

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 WV 26201 BUCKHANNON WV 26201

APR 2 1984

IV-35
(Rev 8/85)

RECEIVED
DEC 10 1985

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



State of West Virginia
Department of Mines
Oil and Gas Division

Date December 9, 1985
Operator's Well No. 2 - 2015
Farm Verlin Childers #2
API No. 47 - 053 - 0344

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: 780' Watershed Mud Run
District: Clendenin County Mason Quadrangle Apple Grove

COMPANY Union Drilling, Inc.
ADDRESS P.O. Drawer 40, Buckhannon, WV 26201
DESIGNATED AGENT Joseph C. Pettey
ADDRESS P.O. Drawer 40, Buckhannon, WV 26201
SURFACE OWNER Verlin E. Childers
ADDRESS 174 Edison Dr., Huntington, WV 25705
MINERAL RIGHTS OWNER same as surface
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK
Jerry Tephabock ADDRESS Rt.1, Box 101A, Ripley, WV 25271
PERMIT ISSUED 3/26/84
DRILLING COMMENCED 10/3/85
DRILLING COMPLETED 10/10/85
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"	32.50'	32.50'	
9 5/8	723.90'	723.90'	269 cf
8 5/8			
7	2140.05'	686.55'	295 cf
5 1/2			
4 1/2		3322.65'	170 cf
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3500' feet
Depth of completed well 3398' feet Rotary xxx / Cable Tools
Water strata depth: Fresh 390' feet; Salt 1015', 1238' feet & 1301'
Coal seam depths: none Is coal being mined in the area? no

OPEN FLOW DATA
Producing formation Upper & Lower Huron, Devonian Shale Pay zone depth 3134' feet
Gas: Initial open flow no show Mcf/d Oil: Initial open flow Bbl/d
Final open flow 30 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 400# 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

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

Nowco - 1 stage Foam Frac - 10/16/85

Huron
2822/3134 - Devonian Shale - 90,000# sand, 162 Bbls water and 819,200 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
Dirt			0	6	
Sand & Shale			6	1312	3/4" stream fresh water @390'
Big Lime			1312	1367	1" stream salt water @1015'
Injun ro			1370	1504	3 1/2" stream salt water @1238'
Berea ro			1969	1993	1" stream salt water @1301'
Top of Devonian Shale			1994		
Upper Huron			2816	2830	
Lower Huron			2865	3139	
Angola Shale			3139	3398	
				<u>3398</u>	T.D. gas check @T.D. - 2906'

From nearby well:
top thickness
Jawa 3139 100
Angola 3229.

Center of well, 790' KB
H - 2816
I - 2143
A - 1015
B - 1301
C - 1238
D - 1015
E - 390'

813' up log

(Attach separate sheets as necessary)

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

12/9/85

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. 2015 - 2
 3) API Well No. 47 - 053 - 0344
 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 (If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X)
 5) LOCATION: Elevation: 780.44 Watershed: Mud Run
 District: Clendenin County: Mason Quadrangle: Apple Grove
 6) WELL OPERATOR Union Drilling, Inc. 7) DESIGNATED AGENT Joseph C. Vanzant, Jr.
 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 Tephahock 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 _____

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 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						<u>980'</u>	<u>980'</u>		Sizes
Intermediate	8-5/8		23	X		<u>1000'</u>	<u>1000'</u>	to surface	<u>NEAT</u>
Production	4-1/2	J	10 1/2	X		3500'	3500'	as required	Depths set
Tubing								<u>by rule 15.01</u>	Perforations:
Liners									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-053-0344 Date March 26, 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 26, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BLANK</u>	Agent: <u>lp</u>	Plat: <u>MW</u>	Casing: <u>MW</u>	Fee: <u>014-527</u>
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T. L. ...
 Administrator, Office of Oil and Gas