



FILE NO. BK 82 P 27  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:200'  
 PROVEN SOURCE OF ELEVATION BM F-118  
EI 582.23

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. Y. Valley Jr.  
 R.P.E. \_\_\_\_\_ L.L.S. 92

PLACE SEAL HERE

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



DATE FEB 15, 1984  
 OPERATOR'S WELL NO. 2022 - 2  
 API WELL NO. 47 - 053 - 0339  
 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 637.24 WATERSHED FLATFOOT CREEK  
 DISTRICT CLENDENIN 2 COUNTY MASON  
 QUADRANGLE APPLE GROVE 7.5' Glenwood (S) NW  
 SURFACE OWNER W.E. KIRK ACREAGE 174  
 OIL & GAS ROYALTY OWNER W.E. KIRK LEASE ACREAGE 174  
 LEASE NO. C-2-181  
 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 APR 2 1984  
 ADDRESS P.O. DRAWER 40 ADDRESS P.O. DRAWER 40  
BUCKHANNON WV 26201 BUCKHANNON WV 26201

RECEIVED



IV-35 (Rev 8-81) NOV 26 1984

OIL & GAS DIVISION DEPT. OF MINES

State of West Virginia Department of Mines Oil and Gas Division

Date November 20, 1984 Operator's Well No. 2 - 2022 Farm William Kirk #2 API No. 47 - 053 - 0339

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: 637' Watershed Flatfoot Creek 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 William Kirk ADDRESS Rt. #1, Box 123, Gallipolis Ferry, WV 25515 Same MINERAL RIGHTS OWNER Jerry Tephabock ADDRESS Rt. 1, Box 101A, Ripley, WV 25271 PERMIT ISSUED 3/26/84 DRILLING COMMENCED 10/28/84 DRILLING COMPLETED 11/1/84

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16, 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 3253' feet Rotary XX / Cable Tools Water strata depth: Fresh none feet; Salt 702' 1315' feet 1900' Coal seam depths: 10/14 Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Upper & Lower Huron, Angola Pay zone depth 3051' 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 4 days hours Static rock pressure 500# psig (surface measurement) after 4 days hours shut in (If applicable due to multiple completion--)

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

Halliburton - 1 stage Foam Frac - 11/8/84

2736/3051 - Upper Huron - 60,000# sand, 165 Bbls water and 855,000 scf nitrog  
 Lower Huron -  
~~Angola Shale -?~~

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	10	
Coal			10	14	1 1/2" stream salt water @702'
Sand & Shale			14	1879	1 1/2" stream salt water @1315'
Berea			1879	1905	1 1/2" stream salt water @1900'
Upper Huron Shale			2735	2744	
Lower Huron Shale			2784	3054	
Angola Shale			3054	3253 T.D.	gas show

*from G.P. ...*  
*2710*  
*1905*  
*805' depth*

(Attach separate sheets as necessary)

UNION DRILLING, INC.

Well Operator

By: Joseph C. Pettey  
 Date: Joseph C. Pettey, Vice President of Production

11/20/84

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. 2022 - 2  
 3) API Well No. 47 - 053 - 0339  
 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: 637.24' Watershed: Flatfoot Creek  
 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 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 \_\_\_\_\_ No X

RECEIVED  
 FEB 27 1984  
 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	Left in well		
Conductor	11-3/4		32	X		30'	30'		Kinds
Fresh water									
Coal						837'	837'		Sizes
Intermediate	8-5/8		23	X		1000'	1000'	to surface	NEAT
Production	4-1/2	J	10 1/2	X		3500'	3500'	as required	Depths set
Tubing									by rule 15.01
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-053-0339 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.

Bonds	Agent: <u>LS</u>	Plat: <u>MW</u>	Casing: <u>MW</u>	Fee: <u>0.14 - 5.27</u>
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T. J. ...  
 Administrator, Office of Oil and Gas