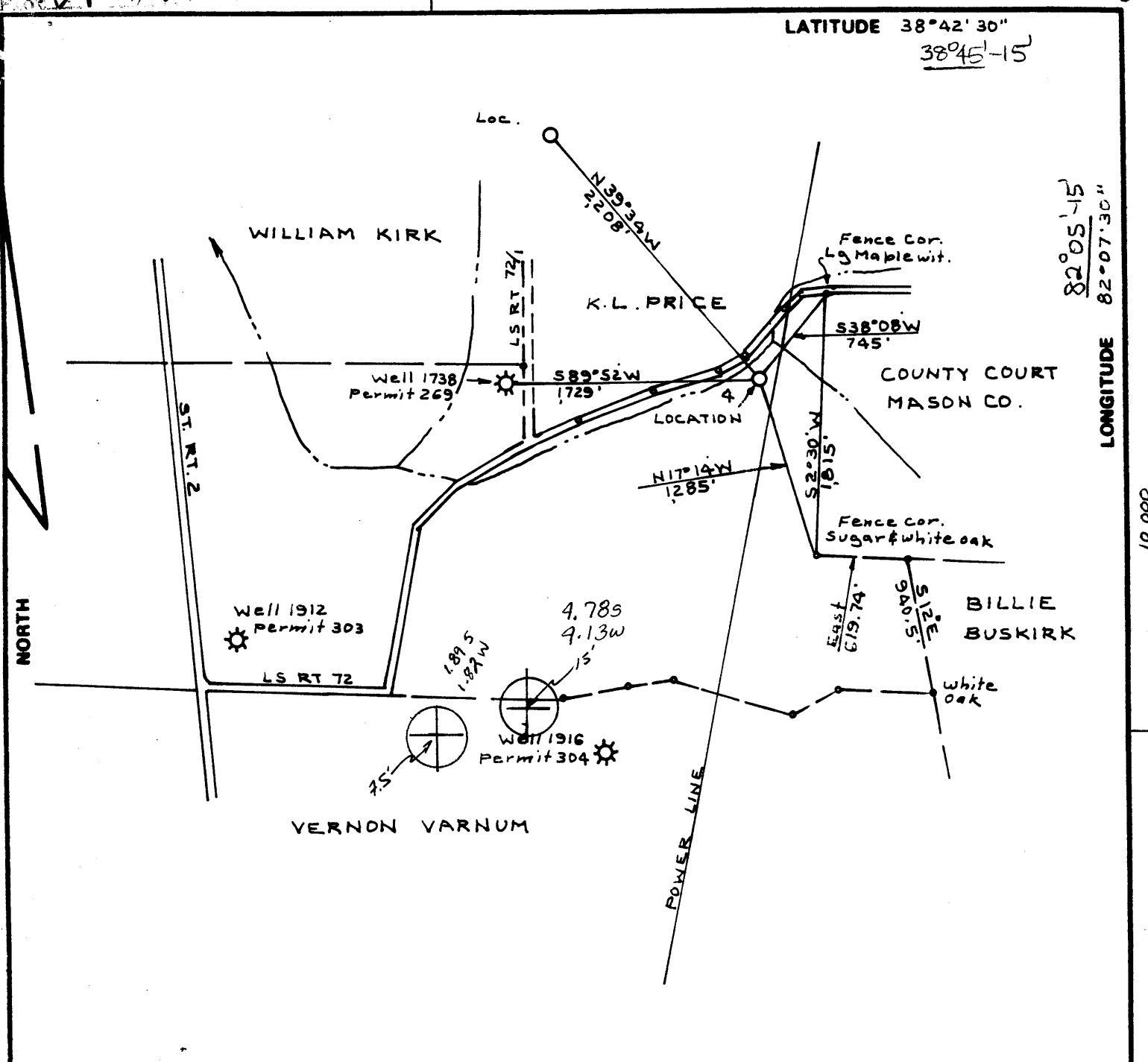


LATITUDE 38°42'30"
38°45'-15"



LONGITUDE 82°05'-15"
82°07'30"

10,000

FILE NO. BK 79 P 96
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION UNION DRILLING
WELL 1738 PERMIT NO 269
EL. 564.70'

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. _____ U.S. 92

PLACE SEAL HERE

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



DATE OCT 31, 1983
 OPERATOR'S WELL NO. 4-1962
 API WELL NO. _____
47 - 053 - 0315
 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 557.11' WATER SHED FLATFOOT CREEK
 DISTRICT CLENDENIN COUNTY MASON
 QUADRANGLE APPLE GROVE 7.5' Glenwood 15' NQ
 SURFACE OWNER DALE NIBERT ACREAGE 452
 OIL & GAS ROYALTY OWNER DALE NIBERT LEASE ACREAGE 452
 LEASE NO. C-2-590
 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

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FEB 22 1984



IV-35
(Rev 8-81)

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

Date February 14, 1984
Operator's
Well No. 4 - 1962
Farm Dale Nibert #4
API No. 47 - 053 - 0315

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: 657' 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 Dale & Nancy Niebert
ADDRESS Apple Grove, WV 25502
MINERAL RIGHTS OWNER same
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK

Jerry Tephahock ADDRESS Rt #1, Box 101-A, Ripley, WV 25271
PERMIT ISSUED 11/28/83
DRILLING COMMENCED 2/2/84
DRILLING COMPLETED 2/8/84

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"	27'		
9 5/8	921'		101 cf
8 5/8			
7	1992.25	708.45	65 cf
5 1/2			
4 1/2	3179.80		96 cf
3			
2			
Liners used			

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3500' feet
Depth of completed well 3256' feet Rotary X / Cable Tools
Water strata depth: Fresh feet; Salt feet
Coal seam depths: none Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Lower Huron Pay zone depth feet
Gas: Initial open flow show Mcf/d Oil: Initial open flow Bbl/d
Final open flow 189 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 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

MAR 12 1984

(Continue on reverse side)

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

B.J.Hughes - 1 stage Foam Frac - 2/15/84

2733/3054 - Lower Huron - 65,000 # sand, 238 Bbls water and 1,259,000 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	130	
Red Rock			130	168	
Sand & Shale			168	1215	1/2" stream of water @812'
Big Lime			1215	1329	1/4" stream of water @1032;1369; & 1434'
Injun			1348	1646	
Berea			1875	1899 ✓	see log
Lower Huron			2790	3066	
<u>Angola</u>			3066	3205	
				<u>3256</u>	T.D. Gas Odor
					from GP log - el. 667' vs H- 2725-3066 241 J- 3066-3192 652 A 3172-

(Attach separate sheets as necessary)

UNION DRILLING, INC.

Well Operator

By:

Joseph C. Petty

Date:

Vice President of Production

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



1) Date: November 9, 19 83
 2) Operator's Well No. 4-1962
 3) API Well No. 47 - 053 - 0315
 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: 657.11 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 _____

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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	Left in well		
Conductor	11-3/4		32		X	30'	30'		Kinds
Fresh water						150'	150'		
Coal									<i>Cement to surface by rule 15:05</i>
Intermediate	8-5/8		23		X	1000'	1000'	286 sacks	Sizes
Production	4-1/2	J-55	10.5	X		3500'	3500'	1013 sacks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-053-0315 Date November 28 1983

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: <u>✓</u>	Plat: <u>✓</u>	Casing: <u>✓</u>	Fee
<u>3000</u>	<u>LO</u>	<u>MH</u>	<u>MH</u>	<u>10574</u>

Administrator, Office of Oil and Gas

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