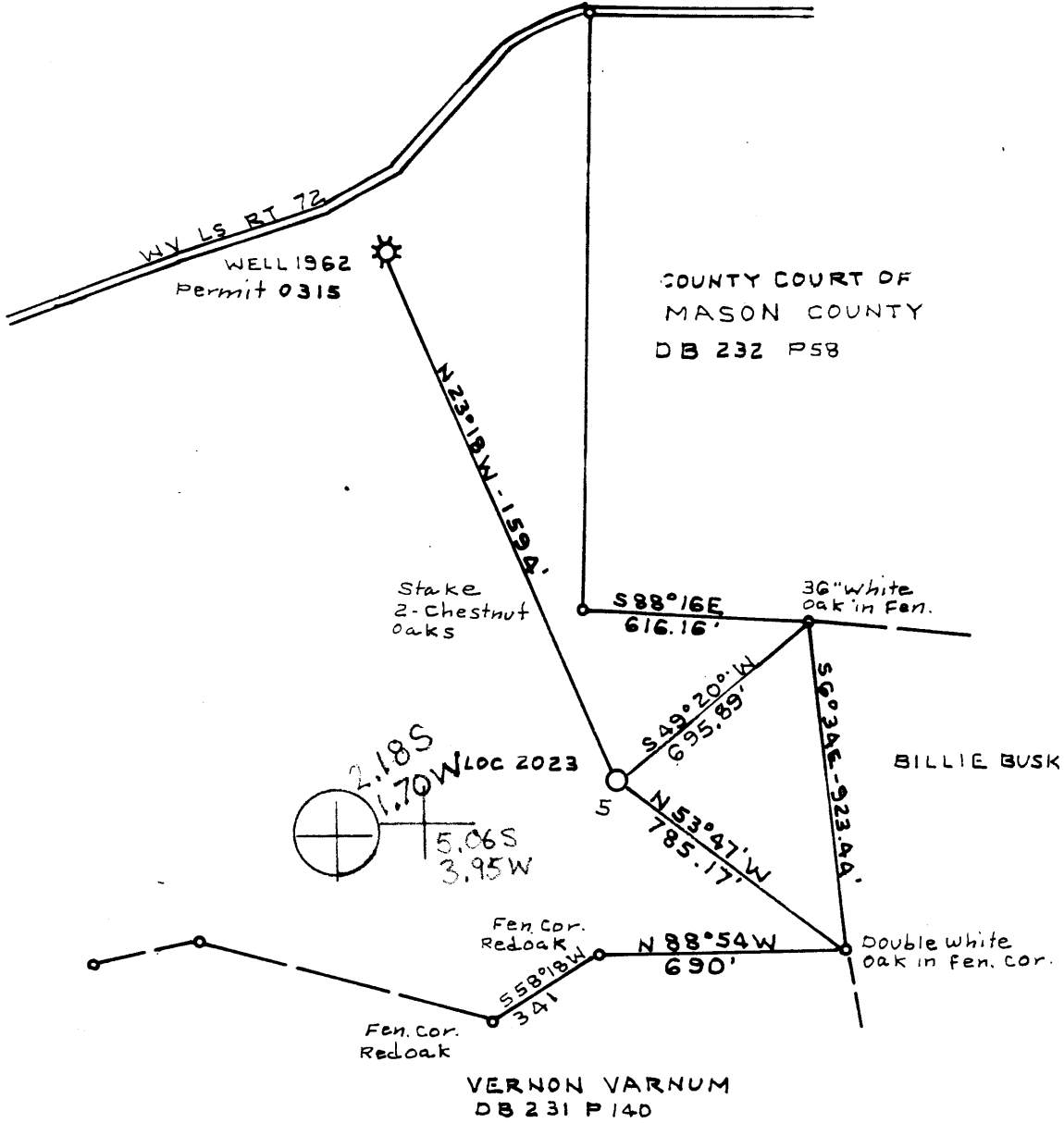


Plot Card CSD

NORTH



LONGITUDE 82° 07' 30"

82 05

11,450

FILE NO. BK 82 P 19
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF
 ACCURACY 1:200
 PROVEN SOURCE OF
 ELEVATION 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 REGU-
 LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
 MENT OF MINES.
 (SIGNED) C. J. Solley 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. 2023 - 5
 API WELL NO. _____
47 - 053 - 0340
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 804.00' WATERSHED FLATFOOT CREEK
 DISTRICT CLENDENIN COUNTY MASON
 QUADRANGLE APPLE GROVE 7.5' Glenwood 13' N₂
 SURFACE OWNER DALE NIBERT ACREAGE 452
 OIL & GAS ROYALTY OWNER DALE NIBERT LEASE ACREAGE 452
 LEASE NO. C-2-590
 PROPOSED WORK: DRILL 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 WV 26201 BUCKHANNON WV 26201

APR 2 1984

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

Halliburton - 1 stage Foam Frac - 11/13/84

Upper Huron] - 2930/3256 - 60,000# sand, 180 Bbls water and 1,593,000 scf nitrogen
Lower Huron]

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	2058	1" stream salt water @1330'
Berea			2058	2083	1" stream salt water @1457'
Sand & Shale			2083	2930	2" stream salt water @1605'
Upper Huron Shale			2930	2942	
Lower Huron Shale			2980	3256	
Angola Shale			3256	<u>3456'</u>	T.D.gas show

Handwritten notes:
810' RE
...

Handwritten notes:
857' 11/20/84

Handwritten notes:
2910
- 820
820

(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. 2023 - 5
 3) API Well No. 47 - 053 - 0340
 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: 804' Watershed: Flatfoot Creek
 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 DEPT. OF MINES

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									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 <u>by rule 1501</u>
Tubing									Perforations:
Liners									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-053-0340 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:	Agent: <u>lp</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>014-527</u>
-------	------------------	-----------------	-------------------	---------------------

[Signature]
 Administrator, Office of Oil and Gas

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