

Janie 9/16/89

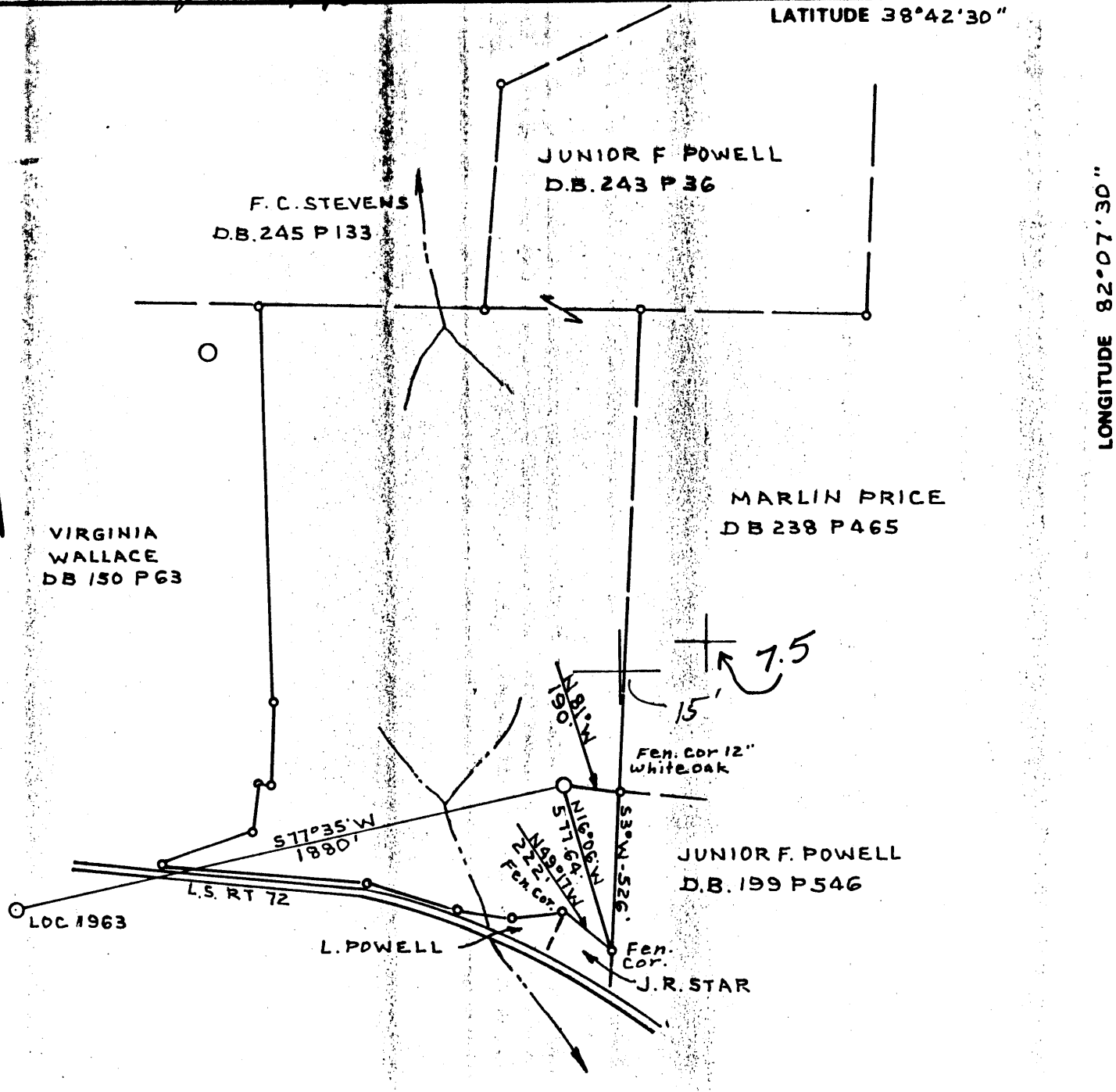
5600

LATITUDE 38°42'30"

LONGITUDE 82°07'30"

0598

NORTH



FILE NO. BK 81 P 28
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF
 ACCURACY 1:200'
 PROVEN SOURCE OF
 ELEVATION Road Forks
2800' S.E. of Loc E. 610.0'

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. _____ L.S. 92

PLACE SEAL HERE

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



DATE NOV 29, 1983
 OPERATOR'S WELL NO. 1970
 API WELL NO. _____
47 - 053 - 0319 - P
 STATE COUNTY PERMIT

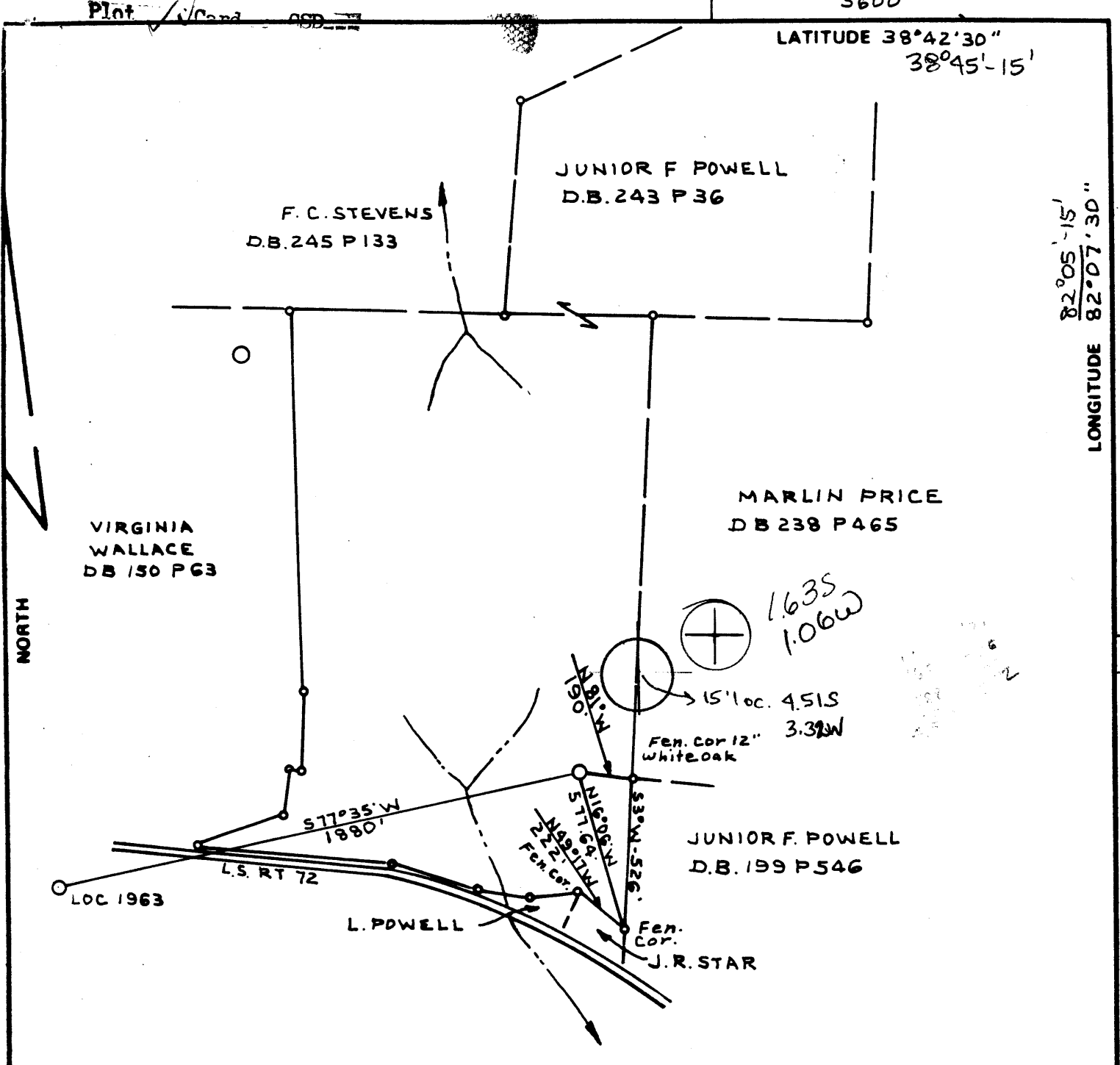
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 738.59 WATERSHED MILLSTONE CREEK
 DISTRICT CLENDENIN COUNTY MASON
 QUADRANGLE APPLE GROVE 7.5'
 SURFACE OWNER JUNIOR F. POWELL ACREAGE 85.5
 OIL & GAS ROYALTY OWNER JUNIOR F POWELL LEASE ACREAGE 85.5
 LEASE NO. C-2-184
 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) _____

SEP 23 1988

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 3000
 WELL OPERATOR EQUITABLE RESOURCES DESIGNATED AGENT Douglas P. Terry
 ADDRESS P.O. DRAWER 40 ADDRESS P.O. DRAWER 40
BUCKHANNON WVA 26201 BUCKHANNON WVA 26201

MASON 319



LATITUDE 38°42'30"
38°45'-15'

LONGITUDE 82°05'-15"
82°07'30"

8650

FILE NO. BK 81 P 28
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200'
 PROVEN SOURCE OF ELEVATION Road Forks
2800' S.E. of Loc E1.610.0'

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 NOV 29, 1983
 OPERATOR'S WELL NO. 1970
 API WELL NO. _____
47 - 053 - 0319
 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 739.59 WATER SHED MILLSTONE CREEK
 DISTRICT CLENDENIN COUNTY MASON
 QUADRANGLE APPLE GROVE 7.5' 15' NE Glenwood
 SURFACE OWNER JUNIOR F. POWELL ACREAGE 85.5
 OIL & GAS ROYALTY OWNER JUNIOR F POWELL LEASE ACREAGE 85.5
 LEASE NO. C-2-184
 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 3000
 WELL OPERATOR UNION DRILLING DESIGNATED AGENT JOSEPH VANZANT
 ADDRESS P.O. DRAWER 40 ADDRESS P.O. DRAWER 40
BUCKHANNON WVA 26201 BUCKHANNON WVA 26201

JAN 3 1984

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APR 19 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 17, 1984 Operator's Well No. 1 - 1970 Farm Junior F. Powell #1 API No. 47 - 053 - 0319

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: 738' Watershed Millstone 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 Junior F. Powell ADDRESS Apple Grove, WV 25502 MINERAL RIGHTS OWNER Same ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK Jerry Tephabock ADDRESS Rt #1, Box 101-A, Ripley, WV 25271 PERMIT ISSUED 12/28/83 DRILLING COMMENCED 2/21/84 DRILLING COMPLETED 2/26/84

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 Lower Huron Depth 3000' feet Depth of completed well 3405' feet Rotary x / Cable Tools Water strata depth: Fresh 54' 1213 feet; Salt 1320' feet Coal seam depths: none Is coal being mined in the area? no

OPEN FLOW DATA Producing formation Huron Pay zone depth 3206' feet Gas: Initial open flow show Mcf/d Oil: Initial open flow Bbl/d Final open flow 60 Mcf/d Final open flow Bbl/d Time of open flow between initial and final tests 6 days hours Static rock pressure not taken psig (surface measurement) after hours shut in (If applicable due to multiple completion--)

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

Halliburton - 1 stage Foam Frac - 4/10/84

2880/3206 - Huron - 60,000# 20/40/ sand, 347 Bbls water and 1,016,000 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	69	1/4" stream water @54'
Red Rock			69	222	
Sand & Shale			222	1245	1/2" stream water @1213
Big Lime			1372	1450	1 1/2" stream salt water @1320'
Injun			1466	1500	
Berea			1990	2015	2018-GR log (28)
Lower Huron			2878	2891	
Upper Huron			2928	3215	
				3405	T.D. gas show
From GR log - 749' KB H 2853-2215 (262) J 3215-3320 (05) A 3320 - 835 op Dr.					Angola @ TD

(Attach separate sheets as necessary)

UNION DRILLING, INC.

Well Operator

By: Joseph C. Pettey

Date: Joseph C. Pettey, 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 ..., encountered in the drilling of a well."



1) Date: December 9, 19 83
 2) Operator's Well No. 1970
 3) API Well No. 47 - 053 - 0319
 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: 738.59 Watershed: Millstone 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 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 LOWER HURON
- 12) Estimated depth of completed well, 3000 feet
 13) Approximate trata depths: Fresh, ? feet; salt, ? / feet.
 14) Approximate coal seam depths: ? Is coal being mined in the area? Yes / No X

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' 438'	1000' 438'	210 sacks	<u>CTS - NEAT</u>
Production	4-1/2	J-55	10.5	X		3000'	3000'	640 sacks	Depths set
Tubing									<u>or as req. by rule 15.01</u>
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-053-0319 Date December 28, 19 83

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 December 28, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent: <u>✓</u>	Plat:	Casing	Fee
<u>NET BOND</u>	<u>LP</u>	<u>MW</u>	<u>MW</u>	<u>011 602</u>

Margaret J. Reese
 Administrator, Office of Oil and Gas

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

RECEIVED
JAN 09 1989

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

REVISED

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVITE SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: POWELL, JUNIOR F. Operator Well No.: 1-1970

LOCATION: Elevation: 738.00 Quadrangle: APPLE GROVE
District: CLENDENIN County: MASON
Latitude: 8650 Feet South of 38 Des. 42 Min. 30 Sec.
Longitude 5600 Feet West of 82 Des. 7 Min. 30 Sec.

Company: Equitable Resources Exploration, Inc Coal Operator Junior F. Powell
P. O. Drawer 40 or Owner Apple Grove, WV 25502
Buckhannon, WV 26201

Agent: Douglas P. Terry Coal Operator
Inspector: Jerry Tephabock or Owner
Permit Issued: 09/23/88

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Upshur ss:

Larry Grubb and Phillip Pulliam being

first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by Equitable Resources Exploration, Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 14 day of December, 1988, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
6% gel 1400 gal	TD	2900	1605 (4')	1700 (4')
Cement 8 sks	2900	2800		
6% gel 1860 gal	2800	1730		696 (7')
Cement 25 sks	1730	1630		
6% gel 1050 gal	1630	1400		
Cement 37 sks	1400	1300		
6% gel 830 gal	1300	960		
Cement 37 sks	960	860		913 (9 5/8')
6% gel 530 gal	860	100		
Cement 37 sks	100	0		

Description of monument: 7" pipe three feet above ground with API number

and that the work of plugging and filling said well was completed on the 14 day of December, 1988.

And further deponents saith not.

Larry Grubb JAN 23 1989
Phillip Pulliam

Sworn and subscribe before me this 27 day of December, 1988
My commission expires: 6/1/83

Joyce K. Harlow
Notary Public

