

LU 7-9-85

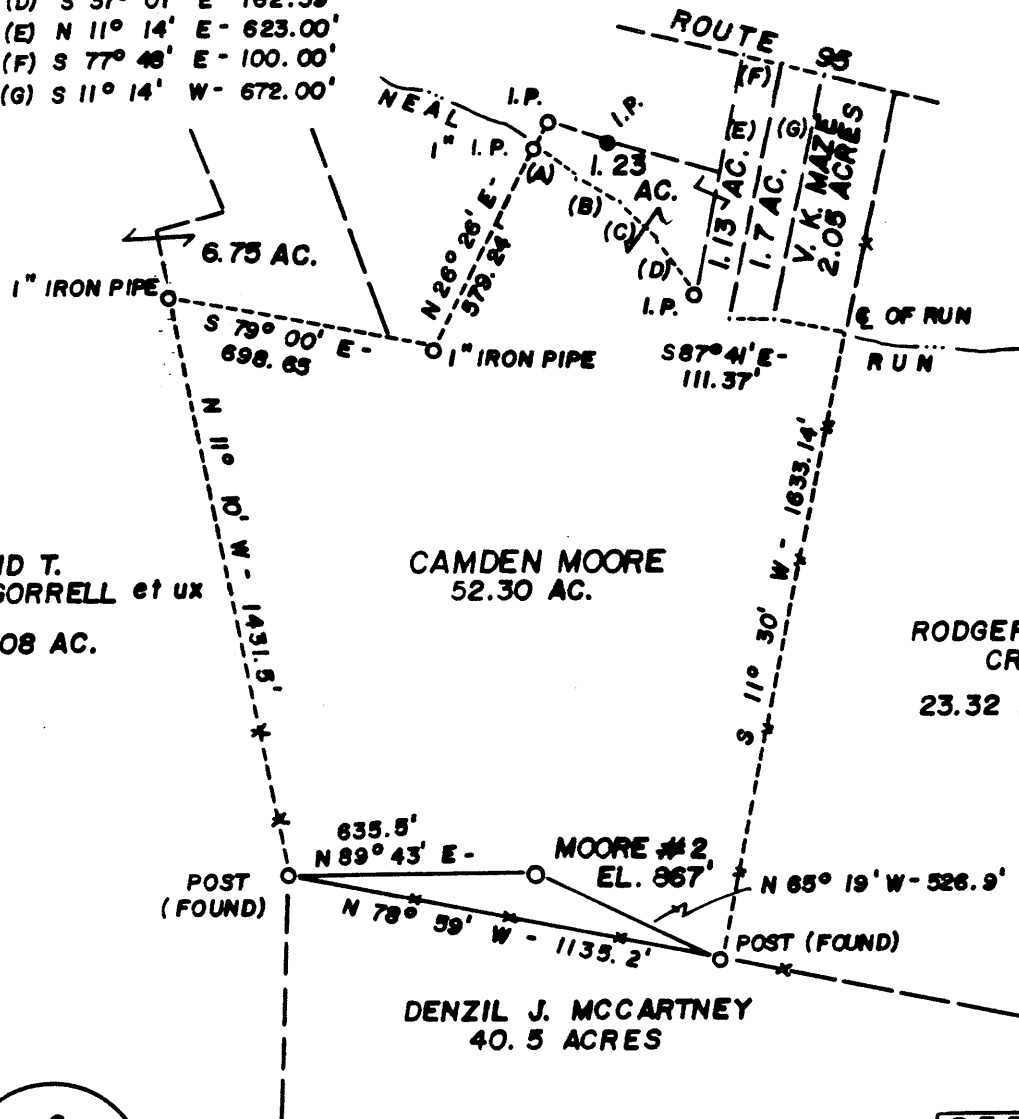
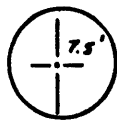
7,090'

LATITUDE 39° 15' 00"

0.34S
1.35W

0.34S
1.35W

- (A) S 54° 20' E - 135.38'
- (B) S 60° 51' E - 133.60'
- (C) S 42° 34' E - 138.52'
- (D) S 37° 01' E - 162.39'
- (E) N 11° 14' E - 623.00'
- (F) S 77° 48' E - 100.00'
- (G) S 11° 14' W - 672.00'



NORTH

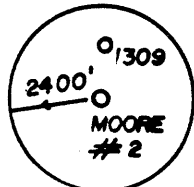
LONGITUDE 81° 35' 00"

DAVID T. GORRELL et ux
53.08 AC.

CAMDEN MOORE
52.30 AC.

RODGER A. CRAMLET
23.32 AC.

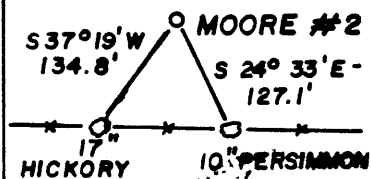
DENZIL J. MCCARTNEY
40.5 ACRES



BELLVILLE 15'

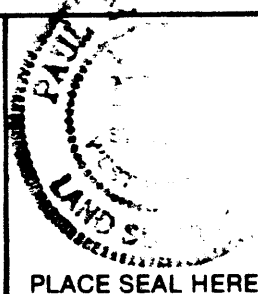
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

REFERENCE POINTS



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION TOP OF RIDGE
899'

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) Paul K Marshall
 R.P.E. _____ L.L.S. 580



PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE JUNE 18 19 85
 OPERATOR'S WELL NO. MOORE #2
 API WELL NO. 47-107-1370
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 867' WATER SHED NEAL RUN
 DISTRICT LUBECK 3 COUNTY WOOD
 QUADRANGLE SOUTH PARKERSBURG 7.5 615 Bellville 009 NC 2
 SURFACE OWNER CAMDEN MOORE ACREAGE 52.3 AC.
 OIL & GAS ROYALTY OWNER CAMDEN MOORE LEASE ACREAGE 52.3 ACRES
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION _____ PERFORATE NEW
 FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
JUL 22 1985
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 4000'
 WELL OPERATOR LARRY MORRIS S# 588 DESIGNATED AGENT LARRY MORRIS
 ADDRESS ROUTE #1 ADDRESS SAME
WASHINGTON, WV 26181

COUNTY NAME PERMIT

FORM IV-6 (8-78) H.J. HALL



IV-35
(Rev 8-81)

Date 12-16-85
Operator's
Well No. Moore #2
Farm _____
API No. 47 - 107 - 1370

State of West Virginia

Department of Mines
Oil and Gas Division

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 X / Underground Storage ___ / Deep ___ / Shallow ___ /)

LOCATION: Elevation: 867 Watershed Neal Run
District: Lubeck County Wood Quadrangle South Parkersburg

COMPANY Larry Morris
ADDRESS Rt. 1, Washington, WV
DESIGNATED AGENT Same
ADDRESS Same
SURFACE OWNER C.A. Moore
ADDRESS _____
MINERAL RIGHTS OWNER Same
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK _____
Robinson ADDRESS Mineral Wells
PERMIT ISSUED June 18, 1985
DRILLING COMMENCED July 19, 1985
DRILLING COMPLETED October 21, 1985
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 Cond.			
18 -10"		350	To Surface
9 5/8			
8 5/8	1254		
7	1892		
5 1/2			
4 1/2		4000	160 SK.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 4000 feet
Depth of completed well 4000 feet Rotary ___ / Cable Tools X
Water strata depth: Fresh 250 feet; Salt 1510 feet
Coal seam depths: None Is coal being mined in the area? ___

OPEN FLOW DATA

Producing formation Shale Pay zone depth 3415 feet
Gas: Initial open flow 10 Mcf/d Oil: Initial open flow None Bbl/d
Final open flow (200) Mcf/d Final open flow None Bbl/d
Time of open flow between initial and final tests 72 hours
Static rock pressure 585 psig (surface measurement) after 48 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

(Continue on reverse side)

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

Perforated 21 holes between ^{Huron} 3843 and 3415 fractured with 1,500,000 Cubic feet 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
Red Rock			0	62	
Sand			62	77	
Slate			77	85	
Red Rock			85	95	
Slate			95	118	
Red Rock			118	128	
Sand			128	140	Water at 135
Slate			140	190	
Red Rock			190	248	
Slate			248	303	
Sand			303	320	
Slate			320	330	Water
Sand			330	365	
Slate			365	390	
Pink Rock			390	395	
Sand			395	405	
Slate			405	483	
Red Rock			483	510	
Slate			510	570	
Sand Sharp			570	600	
Slate			600	665	
Red Rock			665	675	
Slate			675	705	
Sand			705	730	
Slate Limey			730	745	Started Dumping Water 745ft.
Pink Rock			745	819	
Red Rock			819	840	
Slate & Lime Shells			840	865	
Red Rock			865	872	
Limey Slate			872	885	
Red Rock - Caved Bad at 913			885	924	
Slate			924	1005	
Lime (Hard)			1005	1008	
Sand			1008	1015	
Slate			1015	1045	
Sand - little water			1045	1066	
Slate			1066	1115	
Lime Gritty			1115	1158	
Sand (Sharp)			1158	1210	

(Attach separate sheets as necessary)

Larry Morris

Well Operator

By: 

Date: 4-16-85

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 coal, encountered in the drilling of a well."

2,107 1370

Formation Color Hard or Soft	Top Feet	Bottom Feet	Remarks
Slate	1210	1300	
Sand	1300	1350	
Black Slate	1350	1360	
Sand	1360	1385	
Black Slate	1385	1391	
Sand (Hard)	1391	1413	
Slate	1413	1480	
Broken Sand	1480	1487	
Sand (Sharp)	1487	1545	
Black Slate	1545	1580	
Slate & Shells	1580	1650	
Sand (Hard)	1650	1700	Gas 1687 800 M.C.F.
Settling Sand	1700	1732	Hole full of water 171
Slate & Shells	1732	1737	
Sand	1737	1871	
Slate	1871	1917	
Sand-Weir	1917	1940	
Slate & Shells	1940	2009	
Lime	2009	2012	
Slate & Shells	2012	2030	
Limey Slate	2030	2075	
Slate & Shells	2075	2131	
Brown Shale	2131	2161	Good Gas Show
Berea Sand	2161	2166	
Sandy Shale	2166	2208	
Lime	2208	2270	
Slate & Shells	2270	2320	
Limey Shale	2320	2325	
Lime	2325	2329	
Sandy Shale	2329	2350	
Shale	2350	2434	
Sandy Shale (Hard)	2434	2455	
Shale Gritty	2455	2490	
Sandy Shale (Hard)	2490	2535	
Shale	2535	2735	
Slate & Shells	2735	3100	
Lime	3100	3115	
Slate & Shells	3115	3340	
Brown Shale	3340	3899	Gas Show 3415
Gray Slate	3899	4000	Gas Show 3776
			Gas Show 3843 Oil sh

~~Hand~~ @ TD
Jawa

DEC 30 1985

FILE COPY
JUL 9 1985



1) Date: June 18, 19 85
2) Operator's Well No. Moore #2
3) API Well No. 47 107 -1370
State County Permit

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

**STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
APPLICATION FOR A WELL WORK PERMIT**

- 4) WELL TYPE: A Oil / Gas
B (If "Gas", Production / Underground storage _____ / Deep _____ / Shallow)
- 5) LOCATION: Elevation: 867' Watershed: Neal Run
District: Lubeck County: Wood Quadrangle: South Parkersburg 7.5'
- 6) WELL OPERATOR Larry Morris 588 7) DESIGNATED AGENT Larry Morris
Address Route 1 Address Same
Washington, W.V. 26181 33675
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
Name Glen P. Robinson Name _____
Address Route 1 #6 Mt. Pleasants Estate Address _____
Mineralwells, W.V. 26150
- 10) PROPOSED WELL WORK: Drill / Drill deeper _____ / Redrill _____ / Stimulate
Plug off old formation _____ / Perforate new formation _____
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Marcellus Shale (401)
- 12) Estimated depth of completed well, 4000' feet
13) Approximate strata depths: Fresh, 650' feet; salt, 450' feet.
14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes _____ / No

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	10"			X		250'	250'	CTS Neat	Kinds
Fresh water	8 1/4"			X		1150'	4000'	CTS	
Coal									Sizes
Intermediate	7"			X		1900'	1900	50SX	
Production	4 1/2"			X			4000' CTS	400 sacks	as required by rule 15.01
Tubing									
Liners									Perforations: Top Bottom

**OFFICE USE ONLY
DRILLING PERMIT**

Permit number 47-107-1370 Date July 9 19 85

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 July 9, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
4999	ALB	MU	MU	1243

Margaret J. Hesse
Administrator, Office of Oil and Gas

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

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File