

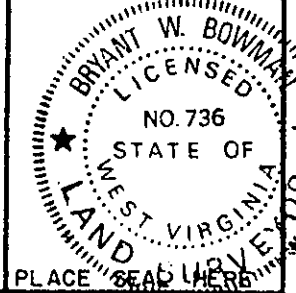
COORDINATES  
 267443.259  
 1831142.067  
 NAD 27  
 WV SOUTH

REFERENCES NO SCALE

NO KNOWN WATER WELLS WITHIN 1000'

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=500'  
 MINIMUM DEGREE OF ACCURACY 1/10000  
 PROVEN SOURCE OF ELEVATION COPPER PLUG IN ROCK  
 NE OF LOCATION ELE. 2783.54

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) Bryant W. Bowman  
 R. P. E. \_\_\_\_\_ L. L. S. 736



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



DATE AUGUST 22, 19 98  
 OPERATOR'S WELL NO. LC54C-63  
 API WELL NO. 17-109-07763C  
 STATE COUNTY PERMIT

FORM IV-6 (8-78) WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS #10 McJUNKIN ROAD NITRO, WEST VIRGINIA 25143-2506

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS", PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_)  
 LOCATION: ELEVATION 1662 WATER SHED TONEY FORK  
 DISTRICT OCEANA COUNTY WYOMING  
 QUADRANGLE MATHENY, WV 7.5'

SURFACE OWNER POCAHONTAS LAND CORPORATION ACREAGE 29500±  
 OIL & GAS ROYALTY OWNER POCAHONTAS LAND CORPORATION LEASE ACREAGE 29500±  
 LEASE NO. \_\_\_\_\_

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 Beckley, Fire Creek Poca 6,5,4 ESTIMATED DEPTH 1500' 6-6 248  
 WELL OPERATOR PENN VIRGINIA OIL & GAS CORP DESIGNATED AGENT MR. HARRY JEWEL  
 ADDRESS 999 EXECUTIVE PARK BLVD, SUITE 300 ADDRESS PO BOX 460  
KINGSPORT, TN 37660 RAVENCLIFF, WV 25913

WVD 1763C

WR-35

25-Sep-98  
API # 47-109-01763 C

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Reviewed 

Well Operator's Report of Well Work

Farm name: POCAHONTAS LAND CORP. Operator Well No.: LC54C-63

LOCATION: Elevation: 1,662.00 Quadrangle: MATHENY

District: OCEANA County: WYOMING  
Latitude: 6200 Feet South of 37 Deg. 45Min. 0 Sec.  
Longitude 12220 Feet West of 81 Deg. 32 Min. 30 Sec.

Company: PENN VIRGINIA OIL AND GAS  
999 EXEC. PARK BLVD., STE. 300  
KINGSPORT, TN 37660-0000

Agent: HARRY JEWELL, III

Inspector: OFIE HELMICK  
Permit Issued: 09/25/98  
Well work Commenced: 11/08/98  
Well work Completed: 12/01/98  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary x Cable \_\_\_\_\_ Rig  
Total Depth (feet) 1441'  
Fresh water depths (ft) Damp at 1200'

Salt water depths (ft) \_\_\_\_\_

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 132-133, 186-188,  
516-518

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
9 5/8"	20'	20'	0
7"	616'	616'	130
4 1/2"	1397'	1397'	189
2 3/8"		1332	

OPEN FLOW DATA

Poca 6 Coal, Poca 5 Sand  
Poca 4 Coal, Upper Fire  
Creek Coal & Sand, Lower Fire Creek

Producing formation Coal and Beckley Coal Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow show MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure N/A psig (surface pressure) after \_\_\_\_\_ Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Stamp: JUL 0 1999  
WV Division of Environmental Protection

For: PENN VIRGINIA OIL AND GAS CORPORATION

By: William M. Ryan  
Date: 7/2/99

JUL 19 1999

WYO 1763C

FORM WR-35R  
(REVERSE)

PERMIT #: 47-109-01763 C  
WELL#: 54C-63

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC

Stage 1	Poca 6 Coal Poca 5 Sand & Poca 4 Coal	Perforated the Poca 6 Coal from 1180' to 1184' with 12 holes, Poca 5 Sand from 1250' to 1254' with 5 holes and the Poca 4 Coal from 1300' to 1302' with 6 holes. Breakdown with 500 gallons of 7½% HCL acid and water. Treated with 302 bbls of water and 7,000 lbs of 20/40 sand. ATR: 18.5 BPM                  ATP: 2000 psi                  ISIP: 1250 psi
Stage 2	Upper Fire Creek Coal/ Sand, Lower Fire Creek Coal	Perforated the Upper Fire Creek Coal/Sand from 1122' to 1124' with 5 holes and from 1126' to 1130' with 9 holes and the Lower Fire Creek Coal from 1138' to 1144' with 13 holes. Breakdown with 500 gallons of 7½% HCL acid and water. Treated with 342 bbls of water and 16200 lbs 20/40 sand. ATR: 18.5 BPM                  ATP: 2300 psi                  ISIP: 1150 psi
Stage 3	Lower Beckley Coal	Perforated from 1075' to 1083' with 24 holes. Breakdown with 500 gallons of 7½% HCL acid and water. Treated with 364 bbls of water and 10,000 lbs of 20/40 sand. ATR: 14 BPM                  ATP: 2700 psi                  ISIP: 1600 psi

Install pump jack and pump off water.

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand, Shale & Coals	0	190	
Sand	190	240	
Shale	240	275	
Sand	275	440	
Sand, Shale & Coal	440	585	
Sand	585	840	
Sand & Shale	840	955	
Sand	955	1060	
Shale	1060	1075	
Coal <i>Lower Beckley (549)</i>	1075	1083	
Shale	1083	1124	
Sand	1124	1141	
Coal <i>Lower Fire Creek (551)</i>	1141	1142	
Shale	1142	1181	
Coal <i>Poca 6 (556)</i>	1181	1184	
Shale	1184	1210	
Sand <i>Poca 5 Sand</i>	1210	1290	
Shale	1290	1300	
Coal <i>Poca 4 (558)</i>	1300	1301	
Sand	1301	1382	
Shale	1382	1443	No shows reported

Office of Oil & Gas  
Permitting  
JUL 07 1993  
WV Division of  
Environmental Protection