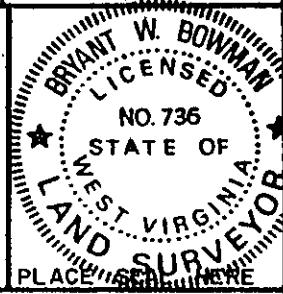


FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=2000'  
 MINIMUM DEGREE OF ACCURACY 1/300  
 PROVEN SOURCE OF ELEVATION USGS BM ON MCDONALD MILL BRANCH ELEVATION 1410

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  
 FORM IV-6 (8-78)

DATE JUNE 20 20 01  
 OPERATOR'S WELL NO. SLC-4  
 API WELL NO. 47-109-2094C  
 STATE COUNTY PERMIT

Division of Environmental Protection  
 Office of Oil & Gas

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS", PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_)

LOCATION: ELEVATION 1456 WATER SHED UT OF MCDONALD MILL CREEK  
 DISTRICT CLEAR FORK COUNTY WYOMING  
 QUADRANGLE OCEANA

SURFACE OWNER R. C. CROUCH ET AL ACREAGE 4012.7±  
 OIL & GAS ROYALTY OWNER R. C. CROUCH ET AL LEASE ACREAGE 4012.7±  
 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) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_

WELL OPERATOR PENN VIRGINIA OIL & GAS CORP DESIGNATED AGENT MR. HARRY JEWEL  
 ADDRESS PO BOX 387 DUFFIELD, VA 24244-0387 ADDRESS PO BOX 460 RAVENCLIFF, WV 25913

WYO 2094 C

State of West Virginia  
Division of Environmental Production  
Section of Oil and Gas  
Well Operator's Report of Well Work

*ACB*

Farm Name Crouch, R.C., etal  
LOCATION: Elevation: 1456

Operator Well No.: SLC-4  
Quadrangle: Oceana

District: Clear Fork County: Wyoming  
Latitude: 1550 Feet South of 37 Deg. 40 Min. 00 Sec.  
Longitude: 1400 Feet West of 81 Deg. 37 Min. 30 Sec.

Company:  
Penn Virginia Oil & Gas Corporation

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: P.O. Box 387	13 3/8"	31'	31'	0
Duffield, VA 24244	9 5/8"	130'	130'	50
Agent: Harry Jewell	4 1/2"	1256'	1256'	430
Inspector: Ofie Helmick				
Date Permit Issued: 09/26/2001				
Date Well Work Commenced: 10/01/2001				
Date Well Work Completed: 11/12/2001				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 1,416				
Fresh Water Depth (ft):				
Damp @ 140'				
Salt Water Depth (ft):				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft):				
See log				

OPEN FLOW DATA

Producing formation Beckley, Poca 6 & Poca 5 Coal Pay zone depth (ft) \_\_\_\_\_

Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow Not taken MCF/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests: \_\_\_\_\_ Hours

Static rock pressure Not taken 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 CHANE, TEC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: \_\_\_\_\_  
By: William M. Payne  
Date: 11/12/01

MAR 15 2002

WV 2094 C

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC.

PERFORATIONS AND FRACTURING

Stage 1-Poca 5 Coal-Perforated from 1064' to 1067' with 12 holes. Breakdown with 250 gallons 7.5% HCL acid and water. Treated with 130 bbls water and 1300 lbs 20/40 sand. ISiP: 2100 psi. ATP: 3936 psi. ATR: 7.5 BPM.

Stage 2-Poca 6 Coal-Perforated from 993' to 996' with 12 holes. Breakdown with 250 gallons 7.5% HCL acid and water. Treated with 212 bbls water and 4800 lbs 20/40 sand. ISiP: 1208 psi. ATP: 3670 psi. ATR: 18 BPM.

Stage 3-Beckley Coal-Perforated from 825' to 828' with 12 holes. Breakdown with 250 gallons 7.5% HCL acid and water. Treated with 328 bbls water and 12100 lbs 20/40 sand. ISiP: 2760 psi. ATP: 3700 psi. ATR: 19 BPM.

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand	0	192	Coal @ 236-238, 290-292
Sand, shale & coal	192	488	
Sand	488	670	
Sand & shale	670	790	
Shale	790	825	
Beckley coal	825	828	
Shale	828	907	
Sand	907	945	
Lower Fire Creek Coal	945	946	
Sand & shale	946	988	
Pocahontas 6 Coal	988	991	
Sand	991	1064	
Pocahontas 5 Coal	1064	1067	
Sand & shale	1067	1120	
Sand	1120	1310	
Shale	1310	1416	No shows reported