

REFERENCES NO SCALE

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1:2000'  
 MINIMUM DEGREE OF ACCURACY 1:5000  
 PROVEN SOURCE OF ELEVATION USGS BM Q180  
 ELEVATION 1407.84'

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) Raymond Bowman  
 R. P. E. \_\_\_\_\_ L. L. S. 736

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6  
 (8-78)



DATE MARCH 29, 20 01  
 OPERATOR'S WELL NO. WP-78C  
 API WELL NO. 47-109-02029C  
 STATE COUNTY PERMIT

Division of Environmental Protection  
 Office of Oil & Gas

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS", PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_)  
 LOCATION: ELEVATION 1609 WATER SHED LAUREL FORK  
 DISTRICT SLAB FORK & OCEANA COUNTY WYOMING  
 QUADRANGLE MATHENY, WV 7.5'  
 SURFACE OWNER GEORGIA PACIFIC CORPORATION ACREAGE 1504±  
 OIL & GAS ROYALTY OWNER PENN VIRGINIA OIL & GAS CORPORATION LEASE ACREAGE 30582±  
 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, FireCreek, Poca 6544 COAL ESTIMATED DEPTH 1300  
 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

MAY 18 2001

6-1 748

CHARLESTON BLUEPRINT 092941

LONGITUDE 81°32'30"

9400'

WVD 2029C

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

10710 *MB*

Well Operator's Report of Well Work

Farm Name Georgia Pacific Corporation

Operator Well No.: WP-78C

LOCATION Elevation: 1609

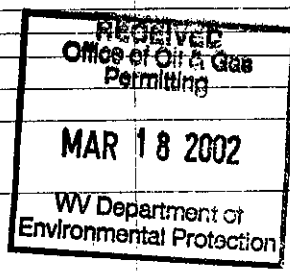
Quadrangle: Matheny 7 1/2'

District: Slab Fork County: Wyoming  
Latitude: 9400 Feet South of 37 Deg. 42 Min. 30 Sec.  
Longitude: 12100 Feet West of 81 Deg. 30 Min. 00 Sec.

Company:

Penn Virginia Oil & Gas Corporation

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 2550 East Stone Drive, Suite 110 Kingsport, TN 37660	9 5/8"	40'	40'	0
Agent: Harry Jewell	7"	488'	488'	103
Inspector: Ofie Helmick	4 1/2"	1190'	1190'	201
Date Permit Issued: 05/15/2001				
Date Well Work Commenced: 06/11/2001				
Date Well Work Completed: 01/18/2002				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 1,230				
Fresh Water Depth (ft):				
Damp @ 310; 1 1/2" @ 395'				
Salt Water Depth (ft):				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft):				



OPEN FLOW DATA

Producing formation Poca 5 & 6 Coals 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. Rogers  
Date: 3/13/02

MAR 22 2002

WYO 2009 C

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

Stage 1 - Poca 5 Coal - Perforated from 949' to 959' with 40 holes. Breakdown with 250 gallons 7.5 % HCL acid and water. Treated with 234 bbls water and 6800 lbs 20/40 sand. ISIP: 1433 psi. ATP: 3685 psi. ATR : 19 BPM Stage 2- Pocat 6 Coal - Perforated from 905' to 909' with 16 holes. Breakdown with 250 gallons of 7.5% HCL acid and water. Treated with 190 bbls water and 3600 lbs 20/40 sand. ISIP: 1550 psi. ATP: 3140 psi. ATR: 18 BPM.

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand & Shale	0	260	
Sand	260	400	
Coal	400	401	
Sand & Shale	401	650	
Beckley Coal	650	652	
Sand & Shale	652	803	
Fire Creek Coal	803	806	
Sand	806	904	
Pocahontas 6 Coal	904	909	
Sand & Shale	909	949	
Shale & Coal	949	959	Poca 6 Coal
Sand	959	1062	
Pocahontas 4 Coal	1062	1063	
Sand & Shale	1063	1230	No Shows Reported