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

DATE: API#: 47-109-01986

Well Operator's Report of Well Work

Farm name: Pocahontas Land Corporation	Oper	rator Well No.:	LC-203	3		
LOCATION: Elevation: 2134	Quad	drangle: Pi	lot Knob and	Arnette 7.5		
District: Oceana	Coun	tv	Wyoming			
Latitude: 1480 Feet South of 37				*		
Longitude 11100 Feet West of 81						
Bonghade 11100 1 cet west of or			<u> </u>			
Company: Penn Virginia Oil & Gas Corporation	Casing & Tubing	Used in drilling	Left in we	Cement fill up Cu. Ft.		
Address: P.O. Box 387	13 3/8"	30'	30'	0		
Duffield, VA 24244	7"	1802'	1802'	351		
Agent: Harry Jewell	4 1/2"	3479'	3479'	295		
Inspector: Ofie Helmick						
Date Permit Issued: 1-22-01				***************************************		
Date Well Work Commenced: 2-5-01			- Ing	RECEIVED		
Date Well Work Completed: 4-2-01				Clifico of Oil & Gae		
Verbal Plugging:		<u> </u>		Permitting		
Date Permission granted on:				111 0 2 2001		
Rotary X Cable Rig			<u></u>	<u> </u>		
Total Depth (feet): 4320'			+	146,5		
			- 	WV Department of Environmental Protection		
Fresh Water Depth (ft.): Damp @ 162'		-	1	-minerital Protection		
Salt Water Depth (ft.):						
Is coal being mined in area (N/Y)? N						
Coal Depths (ft.): 273-275, 493-495, 592-595, 917-						
918, 1500-1501, 1582-1593, 1706-1707						
OPEN FLOW DATA						
Draduaina formation Princeton Payanaliff	f Rig Lime	Pay zone d	lenth (ft)			
Producing formation Princeton, Ravencliff, Big Lime Pay zone depth (ft)						
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d						
Final open flow 278 MCF/d Final open flowBbl/d						
Time of open flow between initial and final tests 4 Hours						
Static rock Pressure <u>260</u> psig (surface pressure) after <u>48</u> Hours						
\cdot						
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			ırs			
Static rock Pressure psig (surface			ours			
Static fock i ressurepsig (surface	e pressure) a		Cars			
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.						
Signed:				to Marie		
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PERMIT #: 47-109-01986 WELL #: LC-203

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

Stage 1 – Big Lime – Perforated from 3344' to 3354' with 20 holes and from 3384' to 3388' with 4 holes. Breakdown with 500 gallons 15% HCL acid and water. Treated with 2000 gallons 15% HCL acid and 113000 SCF N2. ISIP: 1593 psi. ATP: 1640 psi. ATR:20 BPM.

Stage 2 – Ravencliff – Perforated from 2274' to 2282' with 16 holes. Breakdown with 250 gallons 15% HCL acid and N2. Treated with 118 bbls water, 20000 lbs 20/40 sand, and 261000 SCF N2. ISIP: 3630 psi. ATP: 3429 psi. ATR: 20 BPM.

Stage 3 – Princeton – Perforated from 2148' to 2156' with 16 holes. Breakdown with 250 gallons 15% HCL acid and N2. Treated with 160 barrels water, 35200 lbs 20/40 sand and 247000 SCF N2. ISIP: 2730 psi. ATP: 2816 psi. ATR: 20 BPM.

<u>FORMATIONS</u>	<u>TOP</u>	BOTTOM	<u>REMARKS</u>
Sand, Shale & Coal	0	1707	
Sand & Shale	1707	2129	
Princeton Sand	2129	2163	
Sand & Shale	2163	2252	Gas check @ 2213 - NS
Ravencliff Sand	2252	2283	
Avis Limestone	2283	2320	
Shale	2320	2440	Gas check @ 2432 - NS
Shale & Red Rock	2440	2674	
Sand	2674	2707	
Sand, Shale & Red Rock	2707	2950	
Little Lime	2950	3023	Gas check @ 2950 - NS
Shale & Lime	3023	3053	
Big Lime	3053	3418	
Shale	3418	3588	
Weir, Sand & Shale	3588	3621	
Shale	3621	3970	
Coffee Shale	3970	3982	
Shale	3982	4162	Gas check @ 4000 - NS
Gordon	4162	4180	
Shale	4180	4320	Gas check @ T.D. – 84MCF/D