

WR-35
Rev (5-01)

DATE: October 30, 2006
API # 047 - 015 - 02549F

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm Name: Paul B. Barringer II, et al Operator Well No. PMOG 5
LOCATION: Elevation: 1400 Quadrangle: Swandale
District: Buffalo County: Clay
Latitude: 4475 Feet South of 38 Deg. 30 Min. 00 Sec.
Longitude: 13950 Feet West of 80 Deg. 55 Min. 00 Sec.

Company: Range Resources-Pine Mtn., Inc
Address: P.O. Box 2136
Abingdon, Virginia 24212
Agent: Geary Legg
Inspector: Terry Urban
Date Permit Issued: 9/6/05
Date Well Work Commenced: 5/2/06
Date Well Work Completed: 5/08/06
Verbal Plugging: _____
Date Permission granted on: _____
Rotary Cable Rig _____
Total Depth (feet): 2369
Fresh Water Depth (ft.): 40, 135
Salt Water Depth (ft.): 713, 1216
Is coal being mined in area (N/Y)? N
Coal Depths (ft.): 75, 153, 243

Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
11 3/4	14		
8 3/4	532	532	CTS
4 1/2	2279	2279	310 sx
2 3/4		2188	
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OPEN FLOW DATA

Producing Formation: Big Lime Pay zone depth 2076-2185 (ft)
Gas: Initial open flow: _____ MCF/d Oil: Initial open flow: _____ Bbl/d
Final open flow: 146 MCF/d Final open flow: _____ Bbl/d
Time of open flow between initial and final tests 8 Hours
Static Rock Pressure 140 Psig (surface pressure) after 24 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 THE 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: Range Resources
By: [Signature]
Date: 8/22/13

08/30/2013

Well Log

15-02549F

Formation	Top Feet*	Bottom Feet*
Sand and Shale	0	1460
Upper Maxon	1460	1512
Shale	1512	1673
Middle Maxon	1673	1734
Shale	1734	1834
Lower Maxon	1834	1871
Shale	1871	1924
Little Lime	1924	1963
Shale	1963	1972
Blue Monday	1972	2010
Pencil Cave	2010	2024
Big Lime	2024	2229
Shale	2229	2369

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Well PMOG 5
Permit 47-015-02549F

15-02549F

	Stage 1	Stage 2
Date	5/4/2006	5/4/2006
Frac Formation(s)	75Q N2 Foam Big Lime	75Q N2 Foam Big Lime
Interval	2177-2185	2076-2093
# of Perf	18	9
BD Press	2275 psi	2687 psi
Avg Treating Press	2807 psi	4021 psi
Max Treating Press	3108 psi	4106 psi
Avg Rate (dh)	19.5 bpm	11.6 bpm
ISIP	531 psi	2115 psi
5 min SIP	426 psi	1918 psi
Total Acid	500 gal	500 gal
Total N2	157800 scf	341200 scf
Total H2O	138 bbl	195 bbl
Total Sand	394 sk	259 sk

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