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WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 12-16-2013
API #: 47-051-01586

Farm name: Gladys Briggs MSH 8H Operator Well No.: 835559

LOCATION: Elevation: 1,396' Quadrangle: Cameron

District: Liberty County: Marshall
Latitude: 9,304' Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 12,563' Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496 Oklahoma City, OK 73154-0496	20"	117'	117'	214 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	793'	793'	892 Cu. Ft.
Inspector: Derek Haught	9 5/8"	2,640'	2,640'	1,179' Cu. Ft.
Date Permit Issued: 12-10-2012	5 1/2"	12,668'	12,668'	2,874' Cu. Ft.
Date Well Work Commenced: 3-20-2013				
Date Well Work Completed: 9-21-2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7,146'				
Total Measured Depth (ft): 12,668'				
Fresh Water Depth (ft.): 732'				
Salt Water Depth (ft.): 1,248'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 1,140'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,300-12,512
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 7,583* MCF/d Final open flow 12 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 4,645* psig (surface pressure) after 48 Hours *Calculated

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

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WV Department of Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams Signature 12-17-2013 Date

03/07/2014

Were core samples taken? Yes _____ No

Were cuttings caught during drilling? Yes _____ No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes. Resistivity and Porosity logs for freshwater analysis over surface hole, and resistivity, neutron density, and gamma ray logs were recorded over intermediate hole.

NOTE: IN THE AREA BELOW 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 THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See attachment

Plug Back Details Including Plug Type and Depth(s):

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
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Surface:

See attachment

PERFORATION RECORD ATTACHMENT

Well Number and Name: 835559 Gladys Briggs MSH 8H

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval	Treated	Fluid		Propping Agent		Average Injection
	From	To				Type	Amount	Type	Amount	
8/16/2013	12,269	12,512	8/17/2013	12,269	12,512	Sik wtr	10,977	Sand	554,700	78
8/17/2013	11,959	12,196	8/17/2013	11,959	12,196	Sik wtr	9,051	Sand	554,040	79
8/17/2013	11,648	11,890	8/17/2013	11,648	11,890	Sik wtr	8,901	Sand	555,260	79
8/17/2013	11,338	11,580	8/18/2013	11,338	11,580	Sik wtr	9,281	Sand	551,740	73
8/18/2013	11,027	11,265	8/18/2013	11,027	11,265	Sik wtr	9,483	Sand	554,340	78
8/18/2013	10,700	10,959	8/18/2013	10,700	10,959	Sik wtr	12,853	Sand	555,640	72
8/19/2013	10,406	10,648	8/19/2013	10,406	10,648	Sik wtr	9,115	Sand	555,120	76
8/19/2013	10,095	10,337	8/19/2013	10,095	10,337	Sik wtr	9,039	Sand	554,300	78
8/19/2013	9,782	10,029	8/19/2013	9,782	10,029	Sik wtr	9,598	Sand	553,660	79
8/19/2013	9,474	9,716	8/20/2013	9,474	9,716	Sik wtr	8,817	Sand	558,240	80
8/19/2013	9,164	9,406	8/20/2013	9,164	9,406	Sik wtr	8,894	Sand	554,860	80
8/19/2013	8,855	9,095	8/20/2013	8,855	9,095	Sik wtr	10,066	Sand	556,780	73
8/20/2013	8,542	8,785	8/20/2013	8,542	8,785	Sik wtr	8,698	Sand	554,340	80
8/21/2013	8,232	8,474	8/21/2013	8,232	8,474	Sik wtr	9,725	Sand	554,980	79
8/20/2013	7,921	8,163	8/21/2013	7,921	8,163	Sik wtr	8,760	Sand	554,040	79
8/21/2013	7,611	7,853	8/21/2013	7,611	7,853	Sik wtr	8,828	Sand	557,020	79
8/21/2013	7,300	7,539	8/22/2013	7,300	7,539	Sik wtr	8,888	Sand	555,500	78

HORIZONTAL WELL (No pilot hole associated with this pad)				
Maximum TVD of wellbore:	7146 ft TVD @ 12668 ft MD			
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS and LS	0	0	760	760
SS and SH	760	760	1083	1083
Pittsburgh Coal	1083	1083	1100	1100
SILTSTN and SH	1100	1100	2178	2178
Big Lime	2178	2178	2224	2224
Big Injun	2224	2224	2490	2490
SH and SILTSTN	2490	2490	7009	6989
Geneseo	7009	6989	7030	7006
Tully	7030	7006	7062	7031
Hamilton	7062	7031	7208	7123
Marcellus	7208	7123	7224	7129
Purcell	7224	7129		
End of Well			12668	7146