

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

Farm name: Robert Young MSH 8H Operator Well No.: 833798

LOCATION: Elevation: 1,240' Quadrangle: 486-Moundsville

District: Webster County: Marshall  
Latitude: 2360 Feet South of 39 Deg. 57 Min. 30 Sec.  
Longitude 10130 Feet West of 80 Deg. 37 Min. 30 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"	100'	100'	314 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	864'	864'	982 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2520'	2520'	1111 Cu. Ft.
Date Permit Issued: 10-24-2011	5 1/2"	12841	12841'	3143 Cu. Ft.
Date Well Work Commenced: 4-7-2012				
Date Well Work Completed: 6-18-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6702' (cement plug @ 5656'-6706')				
Total Measured Depth (ft): 12841'				
Fresh Water Depth (ft.): 310'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 710				
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) 6,800'-12,702'

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

Final open flow 2,387 MCF/d Final open flow 53 Bbl/d

Time of open flow between initial and final tests 57 Hours

Static rock Pressure 4,272 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

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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

9-18-2012  
Date

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 GR, neutron, density, and resistivity  
open hole logs run from 0' - 6,720' MD; sonic log from 5,540' - 6,721' MD and OBMI logs from 5,602' - 6,715' MD; LWD GR from 5,712' - 12,779' MD.

**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 Attached)

Plug Back Details Including Plug Type and Depth(s): Cement plug @ 5656' - 6706'

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

(See Attached)

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**PERFORATION RECORD ATTACHMENT**

Well Number and Name: 833798 Robert Young MSH 8H

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval Treated		Fluid		Propping Agent		Average Injection
	From	To		Type	Amount	Type	Amount			
5/25/2012	12,129	12,702	6/12/2012	12,129	12,702	Slk wtr	13,933	Sand	694,700	79.9
6/12/2012	11,463	12,035	6/13/2012	11,463	12,035	Slk wtr	13,768	Sand	688,760	79.8
6/13/2012	10,797	11,369	6/14/2012	10,797	11,369	Slk wtr	13,485	Sand	693,260	79.7
6/14/2012	10,131	10,703	6/15/2012	10,131	10,703	Slk wtr	13,568	Sand	688,720	79.8
6/15/2012	9,464	10,037	6/15/2012	9,464	10,037	Slk wtr	13,386	Sand	690,360	79.9
6/15/2012	8,798	9,371	6/16/2012	8,798	9,371	Slk wtr	13,306	Sand	685,100	80
6/16/2012	8,132	8,705	6/17/2012	8,132	8,705	Slk wtr	13,310	Sand	688,080	78.4
6/17/2012	7,466	8,039	6/17/2012	7,466	8,039	Slk wtr	13,336	Sand	681,900	78.7
6/17/2012	6,800	7,372	6/18/2012	6,800	7,372	Slk wtr	13,740	Sand	679,820	78.8

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**VERTICAL PILOT HOLE**

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
SS/SILTSTONE	0	710
PITTSBURG COAL	710	720
SS	720	790
SH/SILTSTONE	790	1410
SS	1410	1530
SH/SILTSTONE	1530	2040
BIG INJUN (SS)	2040	2350
SH/SILTSTONE	2350	3810
SHALE	3810	6474
GENESEO (SH)	6474	6497
TULLY (LS)	6497	6528
HAMILTON (SH)	6528	6627
MARCELLUS (SH)	6627	6682
ONONDAGA (LS)	6682	
TD OF PILOT HOLE		6702

**LATERAL SIDETRACK  
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS/SILTSTONE	0	0	710	710
PITTSBURG COAL	710	710	720	720
SS	720	720	790	790
SH/SILTSTONE	790	790	1410	1410
SS	1410	1410	1530	1530
SH/SILTSTONE	1530	1530	2040	2040
BIG INJUN (SS)	2040	2040	2350	2350
SH/SILTSTONE	2350	2350	3810	3810
SHALE	3810	3810	6485	6332
GENESEO (SH)	6485	6332	6505	6348
TULLY (LS)	6505	6348	6547	6381
HAMILTON (SH)	6547	6381	6699	6467
MARCELLUS (SH)	6699	6467		
TD OF LATERAL			12841	6574

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