

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

Farm name: Lynette Howes Operator Well No.: 5H (831596)

LOCATION: Elevation: 1850' Quadrangle: Buckhannon

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District: Washington County: Upshur  
Latitude: 11.182' Feet South of 38 Deg. 55 Min. 00 Sec.  
Longitude 979' Feet West of 80 Deg. 10 Min. 00 Sec.

MAR 20 2012

WV GEOLOGICAL SURVEY  
MORGANTOWN, WV

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"	20'	20'	Driven
Agent: Eric Gillespie	13 3/8"	500'	500'	478 cf
Inspector: Bill Hatfield	9 5/8"	2460'	2460'	1129 cf
Date Permit Issued: 4/29/2010	5 1/2"	13259'	13259'	2178 cf
Date Well Work Commenced: 7/19/2010				
Date Well Work Completed: 1/20/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7335'				
Total Measured Depth (ft): 13259'				
Fresh Water Depth (ft.): 400'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None				
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) 7,996'-13,118'

Gas: Initial open flow 1,959 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 3,301 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

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.

Madalene Williams  
Signature

3-19-2012  
Date

Were core samples taken? Yes \_\_\_\_\_ No N

Were cuttings caught during drilling? Yes Y No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list \_\_\_\_\_  
LWD GR from 5561-13259' 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): PBTD cement @ 13,168'

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

See Attached

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<b>Formation/Lithology</b>	<b>Top Depth (ft)</b>	<b>Bottom Depth (ft)</b>
SS/LS	0	500
SS/SHALE	500	800
SHALE/SS	800	1100
SHALE/SS	100	1400
Big Lime	1400	1600
Big Injun	1600	1710
SHALE/SS	1710	2450
SILT/SHALE	2450	6050
SHALE/LS	6050	6750
SHALE	6750	7413
Geneseo	7413	7493
Tully	7493	7527
Hamilton	7527	7693
Marcellus	7693	13259

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**PERFORATION RECORD ATTACHMENT**

**Well Name and Number: Lynette Howes 5H (831596)**

PERFORATION RECORD			STIMULATION RECORD								
Date	Interval Perforated		Date	Interval Treated			Fluid		Propping Agent		Average Injection
	From	To		Type	Amount	Type	Amount				
1/8/2011	12,796	13,118	1/8/2011	12,796	13,118	Slk Wtr	8,975	Sand	404,692	91.0	
1/9/2011	12,396	12,718	1/9/2011	12,396	12,718	Slk Wtr	11,966	Sand	401,511	84.0	
1/12/2011	12,002	12,318	1/12/2011	12,002	12,318	Slk Wtr	10,931	Sand	400,473	90.0	
1/13/2011	11,596	11,918	1/13/2011	11,596	11,918	Slk Wtr	9,365	Sand	403,449	92.0	
1/14/2011	11,202	11,524	1/14/2011	11,202	11,524	Slk Wtr	8,974	Sand	407,258	88.0	
1/15/2011	10,796	11,118	1/15/2011	10,796	11,118	Slk Wtr	8,905	Sand	404,399	92.0	
1/16/2011	10,396	10,718	1/16/2011	10,396	10,718	Slk Wtr	9,923	Sand	405,365	94.0	
1/17/2011	9,996	10,318	1/17/2011	9,996	10,318	Slk Wtr	9,754	Sand	403,992	94.0	
1/18/2011	9,596	9,918	1/18/2011	9,596	9,918	Slk Wtr	9,570	Sand	401,258	90.0	
1/19/2011	9,196	9,518	1/19/2011	9,196	9,518	Slk Wtr	8,998	Sand	400,241	87.0	
1/19/2011	8,796	9,118	1/19/2011	8,796	9,118	Slk Wtr	9,382	Sand	406,549	91.0	
1/20/2011	8396	8718	1/20/2011	8,396	8,718	Slk Wtr	9,753	Sand	413,000	87.0	
1/20/2011	7996	8318	1/20/2011	7,996	8,318	Slk Wtr	9,755	Sand	426,538	94.0	

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