

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

DATE: 8-15-2012  
API #: 47-051-01458

Farm name: Fork Ridge MSH 5H Operator Well No.: 833095

LOCATION: Elevation: 1391' Quadrangle: Glen Easton

District: Cameron County: Marshall  
Latitude: 3808 Feet South of 39 Deg. 52 Min. 30 Sec.  
Longitude 1223 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'	95 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	996'	996'	1016 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2524'	2524'	1134 Cu. Ft.
Date Permit Issued: 5-17-2011	5 1/2"	12368'	12368'	2891 Cu. Ft.
Date Well Work Commenced: 7-17-2011				
Date Well Work Completed: 4-12-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6827'				
Total Measured Depth (ft): 12379'				
Fresh Water Depth (ft.): 120'				
Salt Water Depth (ft.): 1660'				
Is coal being mined in area (N/Y)? Y				
Coal Depths (ft.): 960'				
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) 7,403' - 12,241'  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 3,524\* MCF/d Final open flow 41 Bbl/d  
Time of open flow between initial and final tests 64 Hours \*Calculated  
Static rock Pressure 4,419\* 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

RECEIVED  
Office of Oil & Gas  
AUG 16 2012  
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

8-15-2012  
Date

01/11/2013

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, density, neutron,  
resistivity to 2550'; LWD GR from 6300' to TD.

**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):

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
-------------------------------------	-----------	---	--------------

(see attachment)

RECEIVED  
Office of Oil & Gas

AUG 16 2012

WV Department of  
Environmental Protection 01/11/2013

PERFORATION RECORD ATTACHMENT

Well Number and Name: 833095 Fork Ridge MSH 5H

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval Treated		Fluid		Propping Agent		Average Injection
	From	To		Type	Amount	Type	Amount			
3/13/2012	11,818	12,241	4/2/2012	11,818	12,241	Slk wtr	9,831	Sand	490,620	77
4/2/2012	11,292	11,750	4/3/2012	11,292	11,750	Slk wtr	14,176	Sand	494,220	85
4/9/2012	10,836	11,259	4/9/2012	10,836	11,259	Slk wtr	9,854	Sand	490,440	84
4/10/2012	10,345	10,768	4/10/2012	10,345	10,768	Slk wtr	8,650	Sand	491,680	86
4/10/2012	9,860	10,277	4/10/2012	9,860	10,277	Slk wtr	9,655	Sand	490,460	82
4/10/2012	9,364	9,786	4/10/2012	9,364	9,786	Slk wtr	9,685	Sand	489,860	85
4/10/2012	8,873	9,299	4/11/2012	8,873	9,299	Slk wtr	10,073	Sand	490,400	82
4/11/2012	8,382	8,804	4/11/2012	8,382	8,804	Slk wtr	9,455	Sand	490,460	85
4/11/2012	7,891	8,313	4/11/2012	7,891	8,313	Slk wtr	9,931	Sand	489,880	81
4/12/2012	7,403	7,826	4/12/2012	7,403	7,826	Slk wtr	10,191	Sand	491,760	82

RECEIVED  
 Office of Oil & Gas  
 AUG 16 2012  
 WV Department of  
 Environmental Protection

01/11/2013

HORIZONTAL WELL (No pilot hole associated with this pad)				
Maximum TVD of wellbore:	6827 ft TVD @ 8214 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	170	170
SS and minor LS	170	170	280	280
SH and minor SS	280	280	310	310
SS and LS	310	310	420	420
SS and minor LS	420	420	490	490
SH and SS	490	490	610	610
SS	610	610	730	730
SS and minor LS	730	730	790	790
SS and LS	790	790	840	840
LS and minor SS	840	840	880	880
LS	880	880	960	960
Pittsburgh Coal	960	960	1000	1000
SS	1000	1000	1036	1036
SS and minor LS	1036	1036	1060	1060
SS and minor SILTSTN	1060	1060	1150	1150
SS	1150	1150	1860	1860
Maxton	1787	1787	1802	1802
SS	1802	1802	1860	1860
SS and minor LS	1860	1860	1880	1880
SS	1880	1880	2011	2011
Big Lime	2011	2011	2020	2020
SS and LS	2020	2020	2044	2044
Big Injun	2044	2044	2050	2050
SS	2050	2050	2430	2430
SH	2430	2430	6840	6574
Middlesex	6840	6574	6953	6655
Geneseo	6953	6655	6984	6666
Tully	6984	6666	7028	6700
Hamilton	7028	6700	7340	6799
Marcellus	7340	6800		
End of Well			12379	6798

RECEIVED  
Office of Oil & Gas

AUG 16 2012

WV Department of  
Environmental Protection

01/11/2013