

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

Farm name: State of WV DNR B BRK 3H Operator Well No.: 835460

LOCATION: Elevation: 1180 Quadrangle: Steubenville East, WV

District: Cross Creek County: Brooke
Latitude: 7810' Feet South of 40 Deg. 22 Min. 30 Sec.
Longitude: 12480' Feet West of 80 Deg. 30 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"	125'	125'	465 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	313'	313'	336 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	1510'	1510'	696 Cu. Ft.
Date Permit Issued: 6-27-2012	5 1/2"	11677'	11677'	2936 Cu. Ft.
Date Well Work Commenced: 7-1-2012				
Date Well Work Completed: 9-17-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 5630'				
Total Measured Depth (ft): 11681'				
Fresh Water Depth (ft.): 193'				
Salt Water Depth (ft.): 1210'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 654'				
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) 5,900'-11,495'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow Not Tested 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

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

DEC 11 2012

WV DEPT. OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

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.

Markus Williams
Signature

12-14-2012
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 4906-11681' 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):

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

See attached

RECEIVED

DEC 17 2014

WYOMING DEPARTMENT OF ENERGY
NATURAL GAS DIVISION

PERFORATION RECORD ATTACHMENT

Well Number and Name: 835460 State of WV DNR B BRK 3H

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval Treated		Fluid		Propping Agent		Average Injection
	From	To		Type	Amount	Type	Amount			
9/6/2012	11,053	11,495	9/6/2012	11,053	11,495	Sik wtr	12,576	Sand	701,180	79.9
9/7/2012	10,537	10,980	9/8/2012	10,537	10,980	Sik wtr	11,620	Sand	698,400	77
9/8/2012	10,022	10,464	9/8/2012	10,022	10,464	Sik wtr	12,001	Sand	704,860	80.1
9/8/2012	9,507	9,949	9/8/2012	9,507	9,949	Sik wtr	11,850	Sand	704,520	79.7
9/9/2012	8,992	9,433	9/9/2012	8,992	9,433	Sik wtr	12,146	Sand	703,040	79.9
9/10/2012	8,476	8,918	9/10/2012	8,476	8,918	Sik wtr	12,741	Sand	701,040	79.9
9/10/2012	7,942	8,395	9/11/2012	7,942	8,395	Sik wtr	11,990	Sand	699,900	79.7
9/11/2012	7,444	7,887	9/11/2012	7,444	7,887	Sik wtr	12,119	Sand	701,060	79.8
9/11/2012	6,931	7,373	9/12/2012	6,931	7,373	Sik wtr	11,647	Sand	701,880	78.4
9/12/2012	6,415	6,857	9/13/2012	6,415	6,857	Sik wtr	11,787	Sand	701,660	79.8
9/14/2012	5,900	6,342	9/17/2012	5,900	6,342	Sik wtr	11,435	Sand	691,600	80

RECEIVED

DEC 17 2012

WV DEPT OF ENVIRONMENT & NATURAL RESOURCES
 600 UNIVERSITY AVENUE
 MARTINSBURG, WV 26105

LATERAL WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5630 ft TVD @ 6257 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS/LS/SH	0	0	420	420
SHALE	420	420	480	480
SS/LS/SH	480	480	654	654
KITTANING COAL	654	654	660	660
SHALE	660	660	720	720
SS	720	720	840	840
SHALE	840	840	990	990
SS	990	990	1080	1080
BIG LIME	1080	1080	1135	1135
BIG INJUN (SS)	1135	1135	1368	1368
SHALE	1368	1368	5528	5463
GENESEO (SH)	5528	5463	5555	5480
TULLY (LS)	5555	5480	5653	5534
HAMILTON (SH)	5653	5534	5838	5600
MARCELLUS (SH)	5838	5600		
TD OF LATERAL			11681	5580

RECEIVED

DEC 17 2007

WV DEPT. OF ENVIRONMENT & NATURAL RESOURCES
REC'D - DEPT. OF ENVIRONMENT & NATURAL RESOURCES