

WR-35  
Rev (9-11)

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

DATE: 08-09-2013  
API #: 47-009-00112 **R**

Farm name: John Harwatt BRK 3H Operator Well No.: 834170

LOCATION: Elevation: 1135' Quadrangle: Bethany WV

District: Buffalo County: Brooke  
Latitude: 2650' Feet South of 40 Deg. 12 Min. 30 Sec.  
Longitude 10230' 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	13 3/8"	371'	371'	499.646 Cu. Ft.
Agent: Eric Gillespie	9 5/8"	1810'	1810'	814 Cu. Ft.
Inspector: <b>Bill Hendershot</b>	5 1/2"	10030'	10030'	2408 Cu. Ft.
Date Permit Issued: 11-21-2011				
Date Well Work Commenced: 2-21-2012				
Date Well Work Completed: 8-16-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 5980'				
Total Measured Depth (ft): 10039'				
Fresh Water Depth (ft.): 70', 300'				
Salt Water Depth (ft.): 1090'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 319'				
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) 6,237'-9,898'  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 1,189\* MCF/d Final open flow 190 Bbl/d  
Time of open flow between initial and final tests 48 Hours  
Static rock Pressure 3,887\* 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

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

8-12-2013  
Date

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PERFORATION RECORD ATTACHMENT

Well Number and Name: 834170 John Harwatt BRK 3H

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval Treated		Fluid		Propping Agent		Average Injection
	From	To		Type	Amount	Type	Amount			
6/27/2012	9,352	9,898	7/12/2012	9,352	9,898	Slk wtr	12,633	Sand	630,240	80
7/12/2012	8,729	9,275	7/12/2012	8,729	9,275	Slk wtr	12,622	Sand	623,540	80
7/12/2012	8,106	8,652	7/16/2012	8,106	8,652	Slk wtr	12,716	Sand	629,800	80
7/16/2012	7,483	8,029	7/16/2012	7,483	8,029	Slk wtr	12,637	Sand	628,340	80
7/16/2012	6,860	7,406	7/17/2012	6,860	7,406	Slk wtr	12,488	Sand	623,760	80
7/17/2012	6,237	6,783	7/17/2012	6,237	6,783	Slk wtr	12,554	Sand	625,700	80

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

**Maximum TVD of wellbore: 5980 ft TVD @ 6774 ft MD**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	319	319
PITTSBURG COAL	319	319	327	327
LS/SS	327	327	760	760
SS	760	760	960	960
SS/SH	960	960	1090	1090
SS	1090	1090	1300	1300
LS	1300	1300	1330	1330
BIG INJUN (SS)	1330	1330	1630	1630
SHALE	1630	1630	5805	5779
GENESEO (SH)	5805	5779	5823	5794
TULLY (LS)	5823	5794	5896	5848
HAMILTON (SH)	5896	5848	6106	5947
MARCELLUS (SH)	6106	5947		
TD OF LATERAL			10039	5935

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