

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

DATE: 8-6-2012
API #: 47-009-00102

Farm name: Kathy Mayhew BRK 5H Operator Well No.: 833621

LOCATION: Elevation: 1280' Quadrangle: Bethany

District: Buffalo County: Brooke
Latitude: 11.010 Feet South of 40 Deg. 12 Min. 30 Sec.
Longitude 5800 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"	482'	482'	547 Cu. Ft.
Agent: Eric Gillespie	9 5/8"	1885'	1885'	836 Cu. FT
Inspector: Bill Hendershot	5 1/2"	10247'	10247'	2728 Cu. Ft.
Date Permit Issued: 07/05/2011				
Date Well Work Commenced: 9/29/2011				
Date Well Work Completed: 2/17/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6009'				
Total Measured Depth (ft): 10247'				
Fresh Water Depth (ft.): 300'				
Salt Water Depth (ft.): 900'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 434'				
Void(s) encountered (N/Y) Depth(s) Y 420'				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,781' - 10,114'
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 578* MCF/d Final open flow 111 Bbl/d
Time of open flow between initial and final tests 66 Hours * Calculated
Static rock Pressure 3,895* 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 and Gas

SEP 05 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

9-4-2012
Date

11/09/2012

Were core samples taken? Yes _____ No N

Were cuttings caught during drilling? Yes _____ No Y

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list _____
LWD GR from 5500-10247' 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):

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

(See Attached)

RECEIVED
Office of Oil and Gas

SEP 05 2012

WV Department of
Environmental Protection
11/09/2012

PERFORATION RECORD ATTACHMENT

Well Number and Name: 833621 Kathy Mayhew BRK 5H

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval Treated		Fluid		Propping Agent		Average Injection
	From	To				Type	Amount	Type	Amount	
1/25/2012	9,911	10,114	2/10/2012	9,911	10,114	Sik wtr	5,593	Sand	270,751	79
2/10/2012	9,464	9,848	2/11/2012	9,464	9,848	Sik wtr	10,563	Sand	573,803	72
2/11/2012	9,017	9,394	2/12/2012	9,017	9,394	Sik wtr	9,700	Sand	570,000	86
2/12/2012	8,570	8,954	2/13/2012	8,570	8,954	Sik wtr	10,209	Sand	571,046	85
2/13/2012	8,123	8,507	2/14/2012	8,123	8,507	Sik wtr	9,500	Sand	570,955	86
2/14/2012	7,675	8,060	2/15/2012	7,675	8,060	Sik wtr	9,394	Sand	572,715	88
2/15/2012	7,228	7,612	2/16/2012	7,228	7,612	Sik wtr	9,226	Sand	574,481	86
2/16/2012	6,781	7,165	2/17/2012	6,781	7,165	Sik wtr	9,759	Sand	569,223	86

RECEIVED
Office of Oil and Gas

SEP 05 2012

WV Department of
Environmental Protection
11/09/2012

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

Maximum TVD of wellbore: 6009 ft TVD @ 7116 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	434	434
PITTSBURG COAL	434	434	446	446
SS	446	446	1440	1440
BIG LIME (LS)	1440	1440	1490	1490
BIG INJUN (SS)	1490	1490	1740	1740
SHALE	1740	1740	5962	5826
GENESEO (SH)	5962	5826	5984	5842
TULLY (LS)	5984	5842	6069	5895
HAMILTON (SH)	6069	5895	6550	5981
MARCELLUS (SH)	6550	5981		
TD OF LATERAL			10247	5974

RECEIVED
Office of Oil and Gas

SEP 05 2012

WV Department of
Environmental Protection

11/09/2012