

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

DATE: 2-1-2012  
API #: 47-009-00089

Farm name: Mark Owen 8H Operator Well No.: 832802

LOCATION: Elevation: 1173' Quadrangle: Bethany, WV

District: Buffalo County: Brooke  
Latitude: 1060 Feet South of 40 Deg. 15 Min. 00 Sec.  
Longitude 10760' Feet West of 80 Deg. 32 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"	93'	93'	Driven
Agent: Eric Gillespie	13 3/8"	390'	390'	478 Cu. Ft.
Inspector: <b>Bill Hendershot</b>	9 5/8"	1790'	1790'	819 Cu. Ft.
Date Permit Issued: 1/31/2011	5 1/2"	11380'	11380'	2293 Cu. Ft.
Date Well Work Commenced: 3/12/2011				
Date Well Work Completed: 11/5/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6,104' (cement plug 5226')				
Total Measured Depth (ft): 11,393'				
Fresh Water Depth (ft.): 175'				
Salt Water Depth (ft.): 1271'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 280'				
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) 6,184'-11,256'

Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 2,730 MCF/d Final open flow 290 Bbl/d

Time of open flow between initial and final tests 72 Hours

Static rock Pressure 3,968 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

JUL 31 2012  
[Stamp]

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

7-30-2012  
Date

08/17/2012

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 GR, neutron, density, and resistivity  
open hole logs run from 0-6096' MD; LWD GR from 5202-11393' 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): Cement @ 5,226'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
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(See Attached)

JUL 31 2012

08/17/2012

PERFORATION RECORD ATTACHMENT

Well Name and Number: Mark Owen 8H (832802)

PERFORATION RECORD			STIMULATION RECORD							
Date	Interval Perforated		Date	Interval Treated		<i>Fluid</i>		<i>Propping Agent</i>		Average Injection
	From	To		Type	Amount	Type	Amount			
10/30/2011	10,934	11,256	10/30/2011	10,934	11,256	Slk Wtr	10,217	Sand	479,960	73
10/31/2011	10,459	10,841	10/31/2011	10,459	10,841	Slk Wtr	15,413	Sand	571,220	71
11/1/2011	9,984	10,366	11/1/2011	9,984	10,366	Slk Wtr	9,108	Sand	570,400	83
11/2/2011	9,509	9,891	11/2/2011	9,509	9,891	Slk Wtr	9,543	Sand	573,000	86
11/2/2011	9,034	9,416	11/2/2011	9,034	9,416	Slk Wtr	9,360	Sand	571,008	85
11/2/2011	8,559	8,941	11/2/2011	8,559	8,941	Slk Wtr	9,986	Sand	575,920	83
11/3/2011	8,084	8,466	11/3/2011	8,084	8,466	Slk Wtr	9,731	Sand	563,940	83
11/4/2011	7,609	7,991	11/4/2011	7,609	7,991	Slk Wtr	8,934	Sand	574,200	77
11/4/2011	7,134	7,516	11/4/2011	7,134	7,516	Slk Wtr	9,298	Sand	567,220	85
11/5/2011	6,659	7,041	11/5/2011	6,659	7,041	Slk Wtr	9,746	Sand	571,260	83
11/5/2011	6,184	6,566	11/5/2011	6,184	6,566	Slk Wtr	9,705	Sand	571,400	85

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**VERTICAL PILOT HOLE**

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SHLE	0	280
PITTSBURG COAL	280	290
LS/SHALE	290	460
SHALE	460	500
LS/SHALE	500	680
SHALE	680	900
SS/SHALE	900	1350
BIG LIME (LS)	1350	1455
BIG INJUN (SS)	1455	1796
SHALE	1796	5826
GENESEO (SH)	5826	5841
TULLY (LS)	5841	5895
HAMILTON (SH)	5895	6004
MARCELLUS (SH)	6004	6062
ONONDAGA (LS)	6062	
TD OF PILOT HOLE		6090

**LATERAL SIDETRACK WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SHLE	0	0	280	280
PITTSBURG COAL	280	280	290	290
LS/SHALE	290	290	460	460
SHALE	460	460	500	500
LS/SHALE	500	500	680	680
SHALE	680	680	900	900
SS/SHALE	900	900	1350	1350
BIG LIME (LS)	1350	1350	1455	1455
BIG INJUN (SS)	1455	1455	1796	1796
SHALE	1796	1796	5846	5823
GENESEO (SH)	5846	5823	5869	5841
TULLY (LS)	5869	5841	5939	5896
HAMILTON (SH)	5939	5896	6129	6005
MARCELLUS (SH)	6129	6005		
TD OF LATERAL			11393	6104

JUL 31 2012

08/17/2012