

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 #: 47-069-00069

Farm name: Roy Ferrell 8H Operator Well No.: 832804

**RECEIVED**

LOCATION: Elevation: 1210' Quadrangle: Valley Grove WV

AUG 16 2012

District: Triadelphia County: Ohio  
Latitude: 8650' Feet South of 40 Deg. 05 Min. 00 Sec.  
Longitude 14610' Feet West of 80 Deg. 30 Min. 00 Sec.

WV GEOLOGICAL SURVEY  
MORGANTOWN, WV

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'	Driven
Agent: Eric Gillespie	13 3/8"	735'	735'	830 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2202'	2202'	976 Cu. Ft.
Date Permit Issued: 12/22/2010	5 1/2"	12950'	12950'	2770 Cu. Ft.
Date Well Work Commenced: 2/1/2011				
Date Well Work Completed: 8/14/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6703' (cement plug @ 4898' - 6647')				
Total Measured Depth (ft): 12960'				
Fresh Water Depth (ft.): 230' , 350'				
Salt Water Depth (ft.): 970', 1179', 1330'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 685'				
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 Macellus Pay zone depth (ft) 7,119' - 12,641'

Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 2,491\* MCF/d Final open flow 61 Bbl/d  
Time of open flow between initial and final tests 69 Hours \*Calculated  
Static rock Pressure 4,343\* 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

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

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, neutron, density, resistivity  
microresistivity, sonic

**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 plug@ 4898' - 6647'

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

(see attached pages)



VERTICAL PILOT HOLE				
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS	0	0	120	120
SHALE	120	120	270	270
SHALE/SS/LS	270	270	330	330
SHALE	330	330	430	430
SHALE/LS	430	430	685	685
PITTSBURGH COAL	685	685	690	690
SHALE/LS	690	690	740	740
SS	740	740	770	770
SHALE	770	770	970	970
LS	970	970	1010	1010
SHALE	1010	1010	1160	1160
SS	1160	1160	1220	1220
SHALE	1220	1220	1430	1430
SS	1430	1430	1490	1490
SHALE	1490	1490	1566	1566
MAXTON	1566	1566	1640	1640
SHALE	1640	1640	1820	1820
BIG INJUN	1841	1841	2054	2054
SHALE	2054	2054	5974	5974
RHINESTREET SHALE	5974	5974	6370	6370
MIDDLESEX SHALE	6370	6370	6468	6468
GENESEO SHALE	6468	6468	6482	6482
TULLY LIMESTONE	6482	6482	6508	6508
MAHANTANGO SHALE	6508	6508	6628	6628
MARCELLUS SHALE	6628	6628	6685	6685
ONONDAGA LS	6685	6685		
TD OF PILOT HOLE			6700	6700

LATERAL WELLBORE				
Maximum TVD of wellbore:	6703 ft TVD @ 12123 ft MD			
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS	0	0	120	120
SHALE	120	120	270	270
SHALE/SS/LS	270	270	330	330
SHALE	330	330	430	430
SHALE/LS	430	430	685	685
PITTSBURGH COAL	685	685	690	690
SHALE/LS	690	690	740	740
SS	740	740	770	770
SHALE	770	770	970	970
LS	970	970	1010	1010
SHALE	1010	1010	1160	1160
SS	1160	1160	1220	1220
SHALE	1220	1220	1430	1430
SS	1430	1430	1490	1490
SHALE	1490	1490	1566	1566
MAXTON	1566	1566	1640	1640
SHALE	1640	1640	1820	1820
BIG INJUN	1841	1841	2054	2054
SHALE	2054	2054	5974	5947
RHINESTREET SHALE	5974	5947	6370	6295
MIDDLESEX SHALE	6370	6295	6468	6377
GENESEO SHALE	6574	6455	6607	6479
TULLY LIMESTONE	6607	6479	6654	6510
MAHANTANGO SHALE	6654	6510	6964	6631
MARCELLUS SHALE	6964	6631		
TD OF WELL			12960	6682