

WR-35
Rev (9-11)

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

DATE: 1/3/2013
API #: 47-001-03133F

Farm name: Ward, A.M. & Jean W. Operator Well No.: Ward 2245H

LOCATION: Elevation: 1284' Quadrangle: Brownnton

District: Union County: Barbour
Latitude: 10,801' Feet South of 39 Deg. 10 Min. 00 Sec.
Longitude 14,023' Feet West of 80 Deg. 10 Min. 00 Sec.

Company: XTO Energy Inc

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>PO Box 1008, Jane Lew, WV 26378</u>	<u>20"</u>	<u>40'</u>	<u>40'</u>	<u>CTS</u>
Agent: <u>Gary Beall</u>	<u>13-3/8"</u>	<u>294'</u>	<u>294'</u>	<u>CTS</u>
Inspector: <u>Bryan Harris</u>	<u>9-5/8"</u>	<u>2644'</u>	<u>2644'</u>	<u>CTS</u>
Date Permit Issued: <u>4/23/2010</u>	<u>5-1/2"</u>	<u>10505'</u>	<u>10505'</u>	<u>Lead 220lbs/Tall 1300 ax</u>
Date Well Work Commenced: <u>2/2/2011</u>				
Date Well Work Completed: <u>10/1/2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7,666</u>				
Total Measured Depth (ft): <u>10,505</u>				
Fresh Water Depth (ft.): <u>None Noted</u>				
Salt Water Depth (ft.): <u>1,288</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None Noted</u>				
Void(s) encountered (N/Y) Depth(s) <u>None Noted</u>				

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

Producing formation Marcellus Pay zone depth (ft) 7802-7731

Gas: Initial open flow 123 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 1318 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 24 Hours

Static rock Pressure 1480 psig (surface pressure) after 17 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.


Signature

1-4-13
Date

01/25/2013

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, ROP, Directional Survey, Total Gas, Mudlogs

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:

Stg 1 Marcellus; 10,259'-10,446'; 72 shots; Slick water frac; Avg treating 5596 psi@86 bpm; 104,283#s 100 mesh; 302,869#s 30/50 mesh; 9224 bbl water, 0 bbl treated water

Stg 2 Marcellus; 9844'-10,175'; 60 shots; Slick water frac; Avg treating 5596 psi@81 bpm; 102,874#s 100 mesh; 240,855#s 30/50 mesh; 9018 bbl water, 0 bbl treated water

Stg 3 Marcellus; 9616'-9789'; 60 shots; Slick water frac; Avg treating 6629 psi@94 bpm; 102,885#s 100 mesh; 302,348#s 30/50 mesh; 9903 bbl water, 0 bbl treated water

Stg 4 Marcellus; 9317'-9547'; 60 shots; Slick water frac; Avg treating 5556 psi@94 bpm; 102,230#s 100 mesh; 300,902#s 30/50 mesh; 9995 bbl water, 0 bbl treated water

Stg 5 Marcellus; 9003'-9233'; 60 shots; Slick water frac; Avg treating 5308 psi@83 bpm; 100,196#s 100 mesh; 302,814#s 30/50 mesh; 9389 bbl water, 0 bbl treated water

Stg 6 Marcellus; 8689'-8919'; 60 shots; Slick water frac; Avg treating 5648 psi@84 bpm; 101,500#s 100 mesh; 301,317#s 30/50 mesh; 9379 bbl water, 0 bbl treated water

Plug Back Details Including Plug Type and Depth(s):

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

Shale - Grey	0-100
SS - Grey	100-130
SS & SH- Brown	130-200
SH - Red	200-215
SH - Brown/Grey	215-595
SH - Red	595-620
SH & SS-Grey	620-735
SS-White	735-790
SS & SH Grey	790-1000
SH- Black	1000-1040
SS & SH-Grey	1040-1375
SH - Red	1375-1420
SH & SS-Grey	1420-1823

continued on attached page

01/25/2013

API# 47-001-03133

Well Name: Ward 2245H

~~API# 47-001-03133~~

Perforated Intervals, Fracturing, or Stimulation

Stg 7 Marcellus;8375'-8605'; 60 shots; Slick water frac; Avg treating 5619 psi@83 bpm; 100,435#s 100 mesh; 300,548#s 30/50 mesh; 9727 bbl water

Stg 8 Marcellus; 8061'-8242'; 60 shots; Slick water frac; Avg treating 6138 psi@82 bpm; 99,496#s 100 mesh; 250,067#s 30/50 mesh; 8518 bbl water

04/25/2013

API# 47-001-03133

Ward 2245H

FORMATION	TVD
BIG INJUN*	1823
BASE*	1900
GANTZ SAND*	2060
BASE*	2079
50FT SAND*	2107
BASE*	2192
30FT SAND*	2205
BASE*	2262
GORDON SAND*	2280
BASE*	2308
4TH SAND*	2537
BASE*	2556
5TH SAND*	2621
BASE*	2662
UPPER BALLTOWN*	3439
BASE*	3453
BALLTOWN*	3517
BASE*	3528
LOWER BALLTOWN*	3723
BASE*	3748
GENESEO SHALE	7418
BASE	7447
TULLY LIMESTONE	7447
BASE	7484
HAMILTON SHALE	7484
BASE	7602
MARCELLUS SHALE	7602
BASE	7731
PURCELL LIMESTONE	7664
BASE	7668
ONONDAGA LIMESTONE	7731
BASE**	7748

* Tops projected from offset log due to air drilling and therefore not logging this section

** Tops projected from offset isopach did not drill through these tops