

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

DATE: March 8, 2012  
API #: 47-103-02625

Farm name: West Virginia Division of Natural Resources Operator Well No.: WVDNR 1102

LOCATION: Elevation: 805' Quadrangle: Center Point

District: Grant County: Wetzel  
Latitude: 39.504472 Feet South of 39 Deg. 30 Min. 13.90 Sec.  
Longitude -80.6356 Feet West of 80 Deg. 38 Min. 14.90 Sec.

Company: Triad Hunter, LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>P.O. Box 430 Reno, Ohio 45773</u>				
Agent: <u>Kimberly Arnold</u>	<u>20"</u>	<u>44'</u>	<u>44'</u>	
Inspector: <u>David Scranage</u>	<u>13 3/8"</u>	<u>793.8'</u>	<u>793.8'</u>	<u>719.8 cu. ft.</u>
Date Permit Issued: <u>01/20/2011</u>	<u>9 5/8"</u>	<u>3140.55'</u>	<u>3140.55'</u>	<u>1174.1 cu. ft.</u>
Date Well Work Commenced: <u>03/04/2011</u>	<u>5 1/2"</u>	<u>13182.26'</u>	<u>13182.26'</u>	<u>3293.28 cu. ft.</u>
Date Well Work Completed: <u>09/16/2011</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>6914'</u>				
Total Measured Depth (ft): <u>12517'</u>				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>225'-340', 380'-394', 590'-598'</u>				
Void(s) encountered (N/Y) Depth(s) <u>None</u>				

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

Producing formation Marcellus Shale Pay zone depth (ft) 6820'  
Gas: Initial open flow 3.8 M MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 4.93 M MCF/d Final open flow 59 Bbl/d  
Time of open flow between initial and final tests 117 Hours  
Static rock Pressure 2879 psig (surface pressure) after 117 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]  
Signature

3-8-12  
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 \_\_\_\_\_

**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:

Please refer to attached perforation and fracture treatment report

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

Formations Encountered: \_\_\_\_\_ Top Depth \_\_\_\_\_ / \_\_\_\_\_ Bottom Depth \_\_\_\_\_  
Surface: \_\_\_\_\_

0'-35' sand	520'-580' shale	2465'-2470' Berea
35'-50' shale	580'-590' sand	2470'-2650' shale
50'-65' sand	590'-598' shale	2650'-2710' Gordon
65'-185' shale	598'-601' coal	2710'-2805' shale
185'-225' sand	601'-700' shale	2805'-2815' Fourth Sd
225'-340' shale	700'-760' sand	2815'-2900' Shale
340'-343' coal	760'-960' shale	2900'-2905' Fifth Sd
343'-355' shale	960'-1600' sand and shale	2905'-6759' Devonian Shale
355'-380' sand	1600'-1655' sand	6759'-6783' Hamilton
380'-394' shale	1655'-1795' shale	6783'-6874' Tully
394'-395' coal	1795'-1810' Little Lime	6874' Marcellus
395'-415' shale	1810'-1835' Pencil Cave	
415'-430' sand	1835'-1885' Big Lime	
430'-460' shale	1885'-2085' Big Injun	
460'-520' sand	2085'-2465' shale	

WV DNR 1102  
Perf Spacing for 16 stages

Stage Length: 310  
 Num Clusters: 4 to 5  
 Dist between Perfs: 41'-77'  
 Perf length: 3'  
 Stages: 16  
 Start Depth: 12460  
 90 @: 7597'

	Plug Depth	Interval 1	Interval 2	Interval 3	Interval 4	Interval 5	FT	PSI	PSI	BPM	BPM	Fluid Vol	lbs
Stage 1	12460	12426'-12423'	12377'-12374'	12314'-12311'	12251'-12248'	12188'-12185'	316	7463	7731	78.6	84.5	10152	431400
Stage 2	12144	12112'-12109'	12035'-12032'	11958'-11955'	11881'-11878'		304	7643	8635	81.3	83.3	10162	427000
Stage 3	11840	11802'-11799'	11725'-11722'	11648'-11645'	11571'-11568'		310	7616	8113	80.1	84.1	10087	427000
Stage 4	11530	11492'-11489'	11415'-11412'	11338'-11335'	11261'-11258'		310	7552	8040	83.8	85.2	10024	427000
Stage 5	11220	11182'-11179'	11105'-11102'	11028'-11025'	10951'-10948'		310	7466	8159	79.5	84	40432	427000
Stage 6	10910	10872'-10869'	10795'-10792'	10718'-10715'	10641'-10638'		310	7403	7623	83.9	84.7	9960	427200
Stage 7	10600	10562'-10559'	10485'-10482'	10408'-10405'	10331'-10328'		310	7403	7785	82.2	85.2	9684	426800
Stage 8	10290	10252'-10249'	10175'-10172'	10098'-10095'	10021'-10018'		305	7760	8611	81.3	84	11242	426500
Stage 9	9985	9942'-9939'	9865'-9862'	9788'-9785'	9711'-9708'		315	7519	7909	82.4	83.2	9934	427200
Stage 10	9670	9632'-9626'	9555'-9552'	9478'-9475'	9401'-9398'		302	7303	7579	83.3	84.4	10069	427100
Stage 11	9368	9322'-9319'	9245'-9242'	9168'-9165'	9091'-9088'		318	7180	7469	85.3	86.3	9970	427000
Stage 12	9050	9012'-9009'	8935'-8932'	8858'-8855'	8778'-8781'		310	7110	7481	84.2	86.3	10121	427000
Stage 13	8740	8702'-8699'	8625'-8622'	8548'-8545'	8471'-8468'		400	7281	7591	84.1	87.1	9899	427400
Stage 14	8340	8392'-8389'	8315'-8312'	8238'-8235'	8261'-8158'		220	7415	7900	83.2	86	10057	427100
Stage 15	8120	8082'-8079'	8005'-8002'	7928'-7925'	7851'-7848'		310	7203	7608	83.9	84.7	9997	427000
Stage 16	7810	7772'-7769'	7695'-7692'	7618'-7615'	7541'-7538'		310	7231	6969	83.6	85.3	9827	427000

