

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

DATE: 5/10/2013  
API #: 47-103-02673

Farm name: John W. & Florence E. Kilcoyne Operator Well No.: 513472

LOCATION: Elevation: 860' Quadrangle: Big Run

District: Grant County: Wetzel  
Latitude: 8,292' Feet South of 39 Deg. 35 Min. 00 Sec.  
Longitude 5,310' Feet West of 80 Deg. 32 Min. 30 Sec.

Company: EQT Production Company

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
EQT Plaza, Suite 1700 625 Liberty Avenue, Pittsburgh, PA 15222	20	42	42	39
Agent: Cecil Ray	16	280	280	357
Inspector: David Scranage	13 3/8	850	850	357
Date Permit Issued: 7/14/2011	9 5/8	3,083	3,083	1,425
Date Well Work Commenced: 10/6/2011	5 1/2	12,141	12,141	1,581
Date Well Work Completed: 5/13/2012				
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): 7,031'				
Total Measured Depth (ft): 12,159'				
Fresh Water Depth (ft.): 155', 220'				
Salt Water Depth (ft.): No visible show.				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 413', 596', 614'				
Void(s) encountered (N/Y) Depth(s) No				

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

Producing formation Marcellus Pay zone depth (ft) 7,012

Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow 9,408 MCF/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ Hours

Static rock Pressure 3,376 psig (surface pressure) after 69 Hours

Second producing formation No second 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

AUG - 9 2013

Office of Oil and Gas  
WV Dept. 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.

*Mich Bob*

Signature

5/10/2013

Date

09/27/2013

103-02673

Were core samples taken? Yes \_\_\_\_\_ No X

Were cuttings caught during drilling? Yes X No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes: Gyro & MWD Gamma Logs

**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 Attachment**

Plug Back Details Including Plug Type and Depth(s): N/A

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		
Sand/Shale / 0 / 413 / 413 -- Coal / 413 / 419 / 6 -- Sand/Shale / 419 / 596 / 177 --		
Pittsburgh Coal / 596 / 603 / 7 -- Sand / Shale / 603 / 614 / 11 --		
Coal / 614 / 620 / 6 -- Sand / Shale / 620 / 3,309 / 2,689 --		
Warren / 3,309 / 3,358 / 48 -- B-5 / 3,358 / 3,462 / 104 --		
Speechley / 3,462 / 3,873 / 411 -- Balltown A / 3,873 / 4,340 / 466 --		
Riley / 4,340 / 4,985 / 645 -- Benson / 4,985 / 5,326 / 340 --		
Alexander / 5,326 / 6,542 / 1,216 -- Rhinestreet / 6,542 / 6,554 / 12 --		
Sonyea / 6,554 / 6,724 / 170 -- Middlesex / 6,724 / 6,776 / 52 --		
Genesee / 6,776 / 6,859 / 83 -- Geneseo / 6,859 / 6,893 / 34 --		
Tully / 6,893 / 6,922 / 29 -- Hamilton / 6,922 / 7,012 / 90--		
Marcellus / 7,012 / 7,031 / 19		

**Received**

405 - 9 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

09/27/2013

103-02673

**EQT WR-35      Completion      Attachment      Well 513472      Treatment      Summary**

<b>Stage</b> 1	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/9/2012	<b>From / To</b> 11872 - 12114	<b># of perfs</b>	<b>BD Press</b> 8,114.00	<b>ATP Psi</b> 8,180.00	<b>SIP Detail</b> 5 Min: 3958 10 Min: 3763 15 Min: 3658
<b>Avg Rate</b> 91.70	<b>Max Press PSI</b> 8,464.00	<b>ISIP</b> 4,503.00	<b>Frac Gradient</b> 1.08		
<b>Sand Proppant</b> 379,755.00	<b>Water-bbl</b> 11,088.00	<b>SCF N2</b>	<b>Acid-Gal</b> 2,000.00		

<b>Stage</b> 2	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/9/2012	<b>From / To</b> 11572 - 11812	<b># of perfs</b>	<b>BD Press</b> 6,928.00	<b>ATP Psi</b> 8,192.00	<b>SIP Detail</b> 5 Min: 4585 10 Min: 4344 15 Min: 4200
<b>Avg Rate</b> 83.80	<b>Max Press PSI</b> 9,388.00	<b>ISIP</b> 5,724.00	<b>Frac Gradient</b> 1.25		
<b>Sand</b> 293,974.00	<b>Water-bbl</b> 8,489.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

<b>Stage</b> 3	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/10/2012	<b>From / To</b> 11272 - 11514	<b># of perfs</b>	<b>BD Press</b> 6,537.00	<b>ATP Psi</b> 7,999.00	<b>SIP Detail</b> 5 Min: 4685 10 Min: 4669 15 Min: 4401
<b>Avg Rate</b> 95.50	<b>Max Press PSI</b> 8,579.00	<b>ISIP</b> 5,160.00	<b>Frac Gradient</b> 1.17		
<b>Sand</b> 406,154.00	<b>Water-bbl</b> 9,286.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

<b>Stage</b> 8	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/10/2012	<b>From / To</b> 9772 - 10014	<b># of perfs</b>	<b>BD Press</b> 6,783.00	<b>ATP Psi</b> 8,049.00	<b>SIP Detail</b> 5 Min: 5439 10 Min: 5191 15 Min: 4849
<b>Avg Rate</b> 95.90	<b>Max Press PSI</b> 8,829.00	<b>ISIP</b> 5,894.00	<b>Frac Gradient</b> 1.27		
<b>Sand</b> 399,619.00	<b>Water-bbl</b> 9,109.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

Received

AUG - 9 2012

103-02673

<b>Stage</b> 4	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/10/2012	<b>From / To</b> 10972 - 11214	<b># of perfs</b>	<b>BD Press</b> 6,264.00	<b>ATP Psi</b> 8,247.00	<b>SIP Detail</b> 5 Min: 5135 10 Min: 4867 15 Min: 4658
<b>Avg Rate</b> 80.20	<b>Max Press PSI</b> 8,909.00	<b>ISIP</b> 5,478.00	<b>Frac Gradient</b> 1.29		
<b>Sand Proppant</b> 385,689.00	<b>Water-bbl</b> 9,367.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

<b>Stage</b> 5	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/11/2012	<b>From / To</b> 10372 - 10614	<b># of perfs</b>	<b>BD Press</b> 6,330.00	<b>ATP Psi</b> 8,415.00	<b>SIP Detail</b> 5 Min: 5097 10 Min: 4818 15 Min: 4622
<b>Avg Rate</b> 95.80	<b>Max Press PSI</b> 8,803.00	<b>ISIP</b> 5,897.00	<b>Frac Gradient</b> 1.28		
<b>Sand Proppant</b> 398,833.00	<b>Water-bbl</b> 9,023.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

<b>Stage</b> 6	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/11/2012	<b>From / To</b> 10372 - 10614	<b># of perfs</b>	<b>BD Press</b> 6,854.00	<b>ATP Psi</b> 8,450.00	<b>SIP Detail</b> 5 Min: 4144 10 Min: 3996 15 Min: 3889
<b>Avg Rate</b> 94.00	<b>Max Press PSI</b> 8,929.00	<b>ISIP</b> 4,569.00	<b>Frac Gradient</b> 1.08		
<b>Sand Proppant</b> 787,380.00	<b>Water-bbl</b> 9,229.00	<b>SCF N2</b>	<b>Acid-Gal</b>		

<b>Stage</b> 7	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/11/2012	<b>From / To</b> 10372 - 10614	<b># of perfs</b>	<b>BD Press</b> 6,854.00	<b>ATP Psi</b> 7,937.00	<b>SIP Detail</b> 5 Min: 4144 10 Min: 3996 15 Min: 3888
<b>Avg Rate</b> 96.40	<b>Max Press PSI</b> 8,725.00	<b>ISIP</b> 5,863.00	<b>Frac Gradient</b> 1.27		
<b>Sand Proppant</b> 393,690.00	<b>Water-bbl</b> 9,229.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

Received

APR - 9 2013

09/27/2013

103-02673

<b>Stage</b> 9	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/11/2012	<b>From / To</b> 9472 - 9714	<b># of perfs</b>	<b>BD Press</b> 8,175.00	<b>ATP Psi</b> 7,784.00	<b>SIP Detail</b> 5 Min: 4367 10 Min: 4145 15 Min: 462
<b>Avg Rate</b> 94.20	<b>Max Press PSI</b> 8,602.00	<b>ISIP</b> 4,864.00	<b>Frac Gradient</b> 1.13		
<b>Sand Proppant</b> 401,099.00	<b>Water-bbl</b> 9,220.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

<b>Stage</b> 10	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/12/2012	<b>From / To</b> 9172 - 9414	<b># of perfs</b>	<b>BD Press</b> 7,272.00	<b>ATP Psi</b> 8,072.00	<b>SIP Detail</b> 5 Min: 5276 10 Min: 4909 15 Min: 4706
<b>Avg Rate</b> 90.70	<b>Max Press PSI</b> 8,971.00	<b>ISIP</b> 6,373.00	<b>Frac Gradient</b> 1.34		
<b>Sand Proppant</b> 373,401.00	<b>Water-bbl</b> 9,472.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

<b>Stage</b> 11	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/12/2012	<b>From / To</b> 8872 - 9114	<b># of perfs</b>	<b>BD Press</b> 9,682.00	<b>ATP Psi</b> 7,857.00	<b>SIP Detail</b> 5 Min: 5426 10 Min: 5056 15 Min: 4851
<b>Avg Rate</b> 100.30	<b>Max Press PSI</b> 8,211.00	<b>ISIP</b> 6,070.00	<b>Frac Gradient</b> 1.3		
<b>Sand Proppant</b> 802,968.00	<b>Water-bbl</b> 9,068.00	<b>SCF N2</b>	<b>Acid-Gal</b>		

<b>Stage</b> 12	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/12/2012	<b>From / To</b> 8572 - 8814	<b># of perfs</b>	<b>BD Press</b> 6,572.00	<b>ATP Psi</b> 7,488.00	<b>SIP Detail</b> 5 Min: 4857 10 Min: 4646 15 Min: 4478
<b>Avg Rate</b> 96.80	<b>Max Press PSI</b> 8,086.00	<b>ISIP</b> 5,035.00	<b>Frac Gradient</b> 1.15		
<b>Sand Proppant</b> 400,805.00	<b>Water-bbl</b> 8,799.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

Received

AUG - 9 2013

103-02673

<b>Stage</b> 13	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/12/2012	<b>From / To</b> 8272 - 8514	<b># of perfs</b>	<b>BD Press</b> 6,893.00	<b>ATP Psi</b> 7,883.00	<b>SIP Detail</b> 5 Min: 5472 10 Min: 5397 15 Min: 5042
<b>Avg Rate</b> 97.50	<b>Max Press PSI</b> 8,767.00	<b>ISIP</b> 5,949.00	<b>Frac Gradient</b> 1.28		
<b>Sand Proppant</b> 399,243.00	<b>Water-bbl</b> 8,993.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		
<b>Stage</b> 14	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/12/2012	<b>From / To</b> 7972 - 8214	<b># of perfs</b>	<b>BD Press</b> 6,318.00	<b>ATP Psi</b> 8,413.00	<b>SIP Detail</b> 5 Min: 4704 10 Min: 4457 15 Min: 4282
<b>Avg Rate</b> 91.30	<b>Max Press PSI</b> 8,931.00	<b>ISIP</b> 5,357.00	<b>Frac Gradient</b> 1.2		
<b>Sand Proppant</b> 400,337.00	<b>Water-bbl</b> 9,036.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		
<b>Stage</b> 15	<b>Formation</b> MARCELLUS	<b>Frac Type</b> Slickwater			
<b>Date</b> 5/13/2012	<b>From / To</b> 7809 - 7931	<b># of perfs</b>	<b>BD Press</b> 7,018.00	<b>ATP Psi</b> 7,992.00	<b>SIP Detail</b> 5 Min: 5145 10 Min: 4834 15 Min: 4611
<b>Avg Rate</b> 89.90	<b>Max Press PSI</b> 8,926.00	<b>ISIP</b> 5,945.00	<b>Frac Gradient</b> 1.28		
<b>Sand Proppant</b> 187,097.00	<b>Water-bbl</b> 4,680.00	<b>SCF N2</b>	<b>Acid-Gal</b> 750.00		

Received

AUG - 9 2013

Office of Oil and Gas  
WV Dept. of Environmental Protection

09/27/2013