

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 - *Final*

DATE: 10-11-13  
API #: 47-017-06063

JK  
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Farm name: Beth Crowder & David Wentz Operator Well No.: 514211

LOCATION: Elevation: 1,178' Quadrangle: Smithburg

District: Grant County: Doddridge, WV  
Latitude: 2.869 Feet South of 39 Deg. 22 Min. 30 Sec.  
Longitude 8.668 Feet West of 80 Deg. 40 Min. 00 Sec.

Company: EQT Production Company

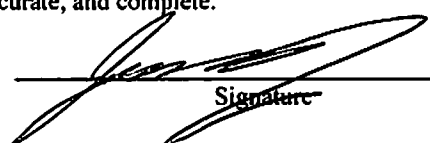
Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
EQT Plaza, Suite 1700 625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	45
Agent: Cecil Ray	13 3/8	1,042	1,042	1,160
Inspector: David Scranage	9 5/8	5,318	5,318	2,103
Date Permit Issued: 6/18/12	5 1/2	11,638	11,638	1,611
Date Well Work Commenced: 5/4/13				
Date Well Work Completed: 8/25/13				
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): 7,086'				
Total Measured Depth (ft): 11,638'				
Fresh Water Depth (ft.): 344', 919'				
Salt Water Depth (ft.): 1,187'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): N/A				
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) 7.031  
Gas: Initial open flow 3,318 MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 4,816 MCF/d Final open flow 48 Bbl/d  
Time of open flow between initial and final tests 46 Hours  
Static rock Pressure 2,922 psig (surface pressure) after 47 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

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

7/9/2014  
Date

09/19/2014

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 MWD, Gamma, & CBL 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****Amended Report with Flow Back Data**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 / 2,482 / 2,482 --

WEIR / 2,482 / 2,671 / 189 -- BEREA / 2,671 / 2,685 / 14 --

GANTZ / 2,685 / 2,752 / 67 -- 50F / 2,752 / 2,862 / 110 --

30F / 2,862 / 2,885 / 23 -- GORDON / 2,885 / 3,039 / 154 --

4TH / 3,039 / 3,179 / 140 -- 5TH / 3,179 / 3,536 / 357 --

WARREN / 3,536 / 3,759 / 223 -- SPEECHLEY / 3,759 / 4,096 / 337 --

BALLTOWN B / 4,096 / 4,142 / 46 -- BALLTOWN A / 4,142 / 4,485 / 343 --

BRADFORD / 4,485 / 5,216 / 731 -- BENSON / 5,216 / 5,468 / 252 --

ALEXANDER / 5,468 / 6,530 / 1,062 -- RHINESTREET / 6,530 / 6,652 / 132 --

Sonyea / 6,652 / 6,791 / 139 -- Middlesex / 6,791 / 6,823 / 32 --

Genesee / 6,823 / 6,932 / 109 -- Geneseo / 6,932 / 6,961 / 29 --

Tully / 6,961 / 6,988 / 101 -- Hamilton / 6,988 / 7,031 / 43 --

Marcellus / 7,031 / 7,086 / 55 --

**514211 - Perforations**

<b>Zone/Stage</b>	<b>Date</b>	<b>Top Plug Depth (ftKB)</b>	<b>Bottom Plug Depth (ftKB)</b>	<b>Top Perf Depth (ftKB)</b>	<b>Bottom Perf Depth (ftKB)</b>	<b>Shots/ft</b>
Toe Pop	3/3/14 14:35	11,477.00	NA	11,610.00	11,612.00	NA
1	3/3/14 19:11	11,477.00	NA	11,491.00	11,583.00	4
2	3/4/14 0:09	11,327.00	11,477.00	11,341.00	11,463.00	4
3	3/4/14 5:53	11,177.00	11,327.00	11,191.00	11,313.00	4
4	3/4/14 11:17	11,027.00	11,177.00	11,041.00	11,163.00	4
5	3/4/14 15:45	10,877.00	11,027.00	10,891.00	11,013.00	4
6	3/4/14 22:29	10,727.00	10,877.00	10,741.00	10,863.00	4
7	3/5/14 4:18	10,577.00	10,727.00	10,591.00	10,713.00	4
8	3/5/14 13:12	10,427.00	10,577.00	10,441.00	10,563.00	4
9	3/5/14 21:14	10,277.00	10,427.00	10,291.00	10,413.00	4
10	3/6/14 1:14	10,127.00	10,277.00	10,141.00	10,263.00	4
11	3/6/14 5:35	9,977.00	10,127.00	9,991.00	10,113.00	4
12	3/6/14 9:37	9,827.00	9,977.00	9,841.00	9,963.00	4
13	3/6/14 13:36	9,677.00	9,827.00	9,691.00	9,813.00	4
14	3/6/14 18:00	9,527.00	9,677.00	9,541.00	9,663.00	4
15	3/6/14 23:22	9,377.00	9,527.00	9,391.00	9,513.00	4
16	3/7/14 3:10	9,227.00	9,377.00	9,241.00	9,363.00	4
17	3/7/14 8:10	9,077.00	9,227.00	9,091.00	9,213.00	4
18	3/7/14 11:54	8,927.00	9,077.00	8,941.00	9,063.00	4
19	3/7/14 15:39	8,777.00	8,927.00	8,791.00	8,913.00	4
20	3/7/14 21:35	8,627.00	8,777.00	8,641.00	8,763.00	4
21	3/8/14 1:22	8,477.00	8,627.00	8,491.00	8,613.00	4
22	3/8/14 5:08	8,327.00	8,477.00	8,341.00	8,463.00	4
23	3/8/14 8:51	NA	8,327.00	8,191.00	8,313.00	4

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**514211 - Stimulated Stages**

<b>Zone/Stage</b>	<b>P Break (psi)</b>	<b>Avg Treat Pressure (psi)</b>	<b>Avg rate (bbl/min)</b>	<b>ISIP (psi)</b>	<b>Frac Gradient (psi/ft)</b>	<b>15 Min. SIP (psi)</b>	<b>Fluid Volume (bbl)</b>	<b>Start Date</b>	<b>End Date</b>	<b>Proppant (lb)</b>
Toe Pop	NA	8,252.00	14.1	NA	NA	NA	1,931	3/3/2014 15:10	3/3/2014 17:28	NA
1	6,138.00	8,433.00	93.4	2,486.00	0.93	2,789.00	5,158	3/3/2014 21:08	3/3/2014 22:45	202,700
2	6,374.00	8,598.00	93.1	2,479.00	1	2,941.00	5,754	3/4/2014 1:23	3/4/2014 4:00	200,700
3	6,343.00	8,648.00	96.7	2,540.00	1.08	2,971.00	5,231	3/4/2014 7:39	3/4/2014 8:58	203,500
4	7,134.00	8,681.00	96.3	2,446.00	0.96	2,860.00	5,080	3/4/2014 12:37	3/4/2014 14:16	202,000
5	7,516.00	8,460.00	97.1	2,289.00	1.03	3,158.00	5,120	3/4/2014 19:25	3/4/2014 21:02	198,900
6	6,365.00	7,998.00	86.5	2,487.00	1.18	3,125.00	5,173	3/5/2014 1:08	3/5/2014 2:31	205,500
7	6,376.00	8,626.00	97.4	2,196.00	1.18	3,295.00	5,063	3/5/2014 10:17	3/5/2014 11:29	200,000
8	6,705.00	8,326.00	98.0	2,551.00	1.06	3,341.00	4,994	3/5/2014 18:14	3/5/2014 19:28	196,600
9	6,236.00	8,377.00	97.8	2,585.00	1.06	3,319.00	4,987	3/5/2014 22:21	3/5/2014 23:34	199,600
10	6,358.00	8,285.00	98.1	2,479.00	1.06	3,291.00	4,957	3/6/2014 2:47	3/6/2014 4:00	198,500
11	6,277.00	8,202.00	100.4	2,377.00	1.04	3,122.00	5,024	3/6/2014 7:03	3/6/2014 8:14	198,700
12	6,957.00	8,352.00	98.5	2,352.00	1.22	3,652.00	5,006	3/6/2014 10:54	3/6/2014 12:02	200,000
13	7,181.00	8,230.00	100.5	2,825.00	1.23	3,709.00	4,934	3/6/2014 15:19	3/6/2014 16:26	201,200
14	6,661.00	7,843.00	99.1	2,705.00	1.07	3,378.00	4,993	3/6/2014 20:32	3/6/2014 21:44	200,700
15	6,922.00	7,879.00	99.2	2,703.00	1.09	3,591.00	5,035	3/7/2014 0:26	3/7/2014 1:37	200,200
16	6,875.00	7,849.00	100.7	2,727.00	1.18	3,723.00	5,088	3/7/2014 5:22	3/7/2014 6:46	202,400
17	8,193.00	8,208.00	99.8	3,037.00	1.19	3,844.00	4,945	3/7/2014 9:17	3/7/2014 10:42	202,900
18	7,802.00	8,127.00	99.7	3,039.00	1.22	4,077.00	4,964	3/7/2014 13:02	3/7/2014 14:26	201,700
19	7,098.00	7,819.00	100.2	2,937.00	1.07	3,656.00	5,003	3/7/2014 18:54	3/7/2014 20:04	201,100
20	6,406.00	7,724.00	95.3	3,027.00	1.09	3,672.00	5,358	3/7/2014 22:36	3/7/2014 23:53	200,000
21	6,809.00	7,724.00	99.2	2,990.00	1.11	3,995.00	4,922	3/8/2014 2:21	3/8/2014 3:31	198,700
22	5,940.00	7,525.00	100.3	2,974.00	1.2	4,236.00	4,928	3/8/2014 6:32	3/8/2014 7:54	200,200
23	5,969.00	7,962.00	98.9	3,245.00	1.11	3,604.00	4,951	3/8/2014 9:51	3/8/2014 11:29	200,000

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