

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

DATE: 10/08/2013
API #: 47-8509989

PM

Farm name: Mary Jane Wilson ET AL Operator Well No.: 513027

LOCATION: Elevation: 957' Quadrangle: Pennsboro

District: Clay County: Ritchie
Latitude: 12.923 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 2.091 Feet West of 80 Deg. 57 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 Ave, Pittsburgh PA 15222	20"	40'	40'	45
Agent: <u>Rex C. Ray</u>	13-3/8"	939'	939'	885
Inspector: <u>David Cowan</u>	9-5/8"	5,122'	5,122'	2276
Date Permit Issued: <u>03/26/2013</u>	5-1/2"	11,388'	11,388'	1571
Date Well Work Commenced: <u>4/27/2013</u>				
Date Well Work Completed: <u>10/06/2013</u>				
Verbal Plugging: <u>N/A</u>				
Date Permission granted on: <u>N/A</u>				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>6,265'</u>				
Total Measured Depth (ft): <u>11,388'</u>				
Fresh Water Depth (ft.): <u>137'</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>155' & 563'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

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

Producing formation Marcellus Pay zone depth (ft) 6,228
Gas: Initial open flow 2,784 MCF/d Oil: Initial open flow 79.2 Bbl/d
Final open flow 5,904 MCF/d Final open flow 84 Bbl/d
Time of open flow between initial and final tests 65.5 Hours
Static rock Pressure 1,380 psig (surface pressure) after 67.5 Hours

Second producing formation N/A 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

3/25/2014
Date

06/27/2017

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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 Gyro, Gamma, & CBL

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

~~No FB data at this time - will send amended report once well is flowed back~~

~~Amended~~
Amended

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

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

Sand / Shale 0/ 155/ 155 -- Coal 155/ 157/ 2 -- Sand / Shale 157/ 563/ 406 -- Coal 563/ 565/ 2 --
Sand / Shale 565/ 1625/ 1060 -- Maxton 1625/ 1918/ 293 -- Big Lime 1918/ 1963/ 45 -- Keener 1963/ 2238/ 275 --
Weir 2238/ 2459/ 221 -- Gantz 2459/ 2660/ 201 -- 30F 2660/ 2697/ 37 -- Gordon 2697/ 2778/ 81 --
4th 2778/ 3341/ 563 -- Warren 3341/ 3375/ 34 -- Speechley 3375/ 4436/ 1061 -- Riley 4436/ 4763/ 327 --
Java 4763/ 5035/ 272 -- Alexander 5035/ 5792/ 757 -- Rhinestreet 5792/ 5963/ 172 -- Sonyea 5963/ 6072/ 109 --
Middlesex 6072/ 6122/ 49 -- Genesee 6122/ 6182/ 60 -- Geneseo 6182/ 6211/ 28 -- Tully 6211/ 6222/ 11 --
Hamilton 6222/ 6228/ 6 -- Marcellus 6228/ 6265/ 38 --

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513027 - Perforations

Zone/Stage	Date	Top Plug Depth (ftKB)	Bottom Plug Depth (ftKB)	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Shots/ft
Toe Pop	11/2/13 22:55	11,228.00	NA	11,363.00	11,365.00	NA
1	11/3/13 4:20	11,228.00	NA	11,242.00	11,334.00	4
2	11/3/13 10:53	11,078.00	11,228.00	11,214.00	11,092.00	4
3	11/3/13 15:14	10,928.00	11,078.00	10,942.00	11,064.00	4
4	11/3/13 20:53	10,778.00	10,928.00	10,792.00	10,914.00	4
5	11/4/13 1:20	10,628.00	10,778.00	10,642.00	10,764.00	4
6	11/4/13 4:44	10,478.00	10,628.00	10,492.00	10,614.00	4
7	11/4/13 9:48	10,328.00	10,478.00	10,342.00	10,464.00	4
8	11/4/13 14:00	10,178.00	10,328.00	10,192.00	10,314.00	4
9	11/4/13 19:46	10,028.00	10,178.00	10,042.00	10,164.00	4
10	11/4/13 23:43	9,878.00	10,028.00	9,892.00	10,014.00	4
11	11/5/13 3:52	9,728.00	9,878.00	9,742.00	9,864.00	4
12	11/5/13 6:49	9,578.00	9,728.00	9,592.00	9,714.00	4
13	11/5/13 11:09	9,428.00	9,578.00	9,442.00	9,562.00	4
14	11/5/13 15:10	9,278.00	9,428.00	9,292.00	9,414.00	4
15	11/5/13 21:06	9,128.00	9,278.00	9,142.00	9,264.00	4
16	11/6/13 0:56	8,978.00	9,128.00	8,992.00	9,114.00	4
17	11/6/13 5:03	8,828.00	8,978.00	8,842.00	8,964.00	4
18	11/6/13 8:56	8,678.00	8,828.00	8,692.00	8,814.00	4
19	11/6/13 16:32	8,528.00	8,678.00	8,542.00	8,664.00	4
20	11/6/13 20:45	8,378.00	8,528.00	8,392.00	8,514.00	4
21	11/7/13 0:39	8,228.00	8,378.00	8,242.00	8,364.00	4
22	11/7/13 3:00	8,073.00	8,228.00	8,092.00	8,214.00	4
23	11/7/13 8:44	7,928.00	8,073.00	7,942.00	8,057.00	4
24	11/7/13 13:30	7,778.00	7,928.00	7,792.00	7,914.00	4
25	11/7/13 17:20	7,628.00	7,778.00	7,642.00	7,764.00	4
26	11/7/13 22:00	7,478.00	7,628.00	7,492.00	7,614.00	4
27	11/8/13 1:30	NA	7,478.00	7,342.00	7,464.00	4

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513027 - Stimulated Stages

Zone/Stage	P Break (psi)	Avg Treat Pressure (psi)	Avg rate (bbl/min)	ISIP (psi)	Frac Gradient (psi/ft)	15 Min. SIP (psi)	Fluid Volume (bbl)	Start Date	End Date	Proppant (lb)
Toe Pop	NA	7,479.00	98.3	NA	NA	NA	1,249	11/3/2013 2:38	11/3/2013 4:13	NA
1	5,191.00	8,192.00	89.5	4,864.00	1.21	2,411.00	6,699	11/3/2013 6:59	11/3/2013 9:40	170,207
2	6,376.00	7,805.00	86.0	4,876.00	1.22	2,706.00	5,218	11/3/2013 12:44	11/3/2013 14:22	131,706
3	6,025.00	7,579.00	91.2	4,109.00	1.09	2,214.00	5,129	11/3/2013 17:30	11/3/2013 19:00	201,604
4	5,980.00	7,767.00	92.4	4,303.00	1.12	2,340.00	5,112	11/3/2013 22:18	11/3/2013 23:33	200,551
5	5,813.00	7,791.00	95.9	4,946.00	1.23	2,555.00	5,112	11/4/2013 2:42	11/4/2013 3:53	201,473
6	6,108.00	7,855.00	98.7	3,810.00	1.04	2,482.00	5,184	11/4/2013 7:49	11/4/2013 9:00	200,681
7	5,754.00	7,694.00	95.6	3,612.00	1.23	2,469.00	4,983	11/4/2013 11:59	11/4/2013 13:10	200,865
8	5,623.00	8,137.00	98.7	4,491.00	1.15	2,718.00	5,010	11/4/2013 16:06	11/4/2013 17:15	200,347
9	5,571.00	8,122.00	98.3	4,719.00	1.19	2,643.00	5,129	11/4/2013 21:05	11/4/2013 22:14	251,198
10	6,273.00	7,761.00	94.9	3,673.00	1.02	2,520.00	5,055	11/5/2013 1:17	11/5/2013 2:27	201,416
11	6,632.00	7,794.00	99.8	3,865.00	1.05	2,535.00	5,012	11/5/2013 5:00	11/5/2013 6:06	201,696
12	5,559.00	7,775.00	91.7	3,747.00	1.03	2,700.00	4,910	11/5/2013 9:17	11/5/2013 10:27	200,401
13	5,558.00	7,834.00	97.8	4,161.00	1.1	2,591.00	5,119	11/5/2013 13:16	11/5/2013 14:26	200,461
14	5,460.00	7,717.00	98.0	4,027.00	1.08	2,671.00	5,136	11/5/2013 17:30	11/5/2013 18:30	200,613
15	5,910.00	7,676.00	99.0	4,200.00	1.11	2,623.00	5,008	11/5/2013 22:08	11/5/2013 23:18	202,393
16	6,322.00	7,581.00	97.7	3,977.00	1.07	2,676.00	5,032	11/6/2013 2:17	11/6/2013 3:28	200,560
17	5,880.00	7,645.00	99.0	4,521.00	1.16	2,753.00	3,238	11/6/2013 6:16	11/6/2013 7:23	201,200
18	5,990.00	7,410.00	96.0	3,764.00	1.04	2,525.00	3,515	11/6/2013 13:49	11/6/2013 14:56	200,530
19	5,712.00	7,442.00	98.4	4,562.00	1.16	2,573.00	4,974	11/6/2013 18:09	11/6/2013 19:16	202,253
20	6,503.00	7,367.00	99.4	4,754.00	1.2	2,539.00	5,007	11/6/2013 22:06	11/6/2013 23:30	201,007
21	5,902.00	7,306.00	99.0	4,479.00	1.15	2,657.00	4,965	11/7/2013 1:51	11/7/2013 2:59	199,643
22	5,721.00	7,743.00	88.8	8,613.00	1.49	2,742.00	3,569	11/7/2013 5:53	11/7/2013 6:59	196,558
23	5,300.00	7,285.00	100.1	4,752.00	1.19	2,461.00	5,033	11/7/2013 10:43	11/7/2013 11:51	203,929
24	5,115.00	7,223.00	100.3	4,966.00	1.23	2,661.00	4,142	11/7/2013 14:49	11/7/2013 15:55	200,267
25	5,146.00	7,013.00	99.1	5,064.00	1.24	3,354.00	5,183	11/7/2013 18:28	11/7/2013 19:37	202,682
26	5,539.00	7,150.00	99.1	4,976.00	1.23	3,204.00	5,091	11/7/2013 22:10	11/7/2013 23:18	220,393
27	5,827.00	6,943.00	99.6	3,242.00	0.95	2,316.00	5,176	11/8/2013 1:49	11/8/2013 2:56	211,088

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