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: 12/10/13
API #: 47-103-02819

Farm name: Richard Dallison et al Operator Well No.: 513534

LOCATION: Elevation: 1,452' Quadrangle: Big Run

District: Grant County: Wetzel, WV
Latitude: 5,124 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 11,617 Feet West of 80 Deg. 32 Min. 30 Sec.

Company: EQT Production Company

Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	45
Agent: Cecil Ray	13 3/8	868	868	897
Inspector: Bill Hatfield	9 5/8	3,745	3,745	1,523
Date Permit Issued: 10/26/2012	5 1/2	12,473	12,473	1,825
Date Well Work Commenced: 2/25/2013				
Date Well Work Completed: 7/4/2013				
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 7,716'				
Total Measured Depth (ft): 12,473'				
Fresh Water Depth (ft.): 552', 783'				
Salt Water Depth (ft.): 2,240'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 737, 807, 922, 1012, 1244				
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) 7,636
Gas: Initial open flow 1,872 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 8,946 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 88 Hours
Static rock Pressure 3,164 psig (surface pressure) after 99 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 9/8/2014 Date

01/23/2015

103-02819

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 MWD, Gamma, and 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): Pumped solid cement plug from 1,766' to 904'

Formations Encountered: Top Depth / Bottom Depth

Surface:

SAND / SHALE / 0 / 737 / 737 --

COAL / 737 / 738 / 1 -- SAND / SHALE / 738 / 807 / 69 --

COAL / 807 / 817 / 10 -- SAND / SHALE / 817 / 922 / 105 --

COAL / 922 / 927 / 5 -- SAND / SHALE / 927 / 1,012 / 85 --

COAL / 1,012 / 1,022 / 10 -- SAND / SHALE / 1,022 / 1,244 / 222 --

COAL / 1,244 / 1,246 / 2 -- SAND / SHALE / 1,246 / 2,475 / 1,229 --

BIG LIME / 2,475 / 3,957 / 1,482 -- WARREN / 3,957 / 4,107 / 151 --

SPEECHLEY / 4,107 / 4996 / 889 -- RILEY / 4996 / 5,631 / 635 --

BENSON / 5,631 / 5,958 / 327 -- ALEXANDER / 5,958 / 7,170 / 1,212 --

RHINESTREET / 7,170 / 7,176 / 6 -- Sonyea / 7,176 / 7,320 / 144 --

Middlesex / 7,320 / 7,364 / 44 -- Genesee / 7,364 / 7,433 / 69 --

Geneseo / 7,433 / 7,525 / 92 -- Tully / 7,525 / 7,557 / 32 --

Hamilton / 7,557 / 7,636 / 79 -- Marcellus / 7,636 / 7716 / 80 --

513534 - Perforations

Zone/Stage	Date	Top Plug Depth (ftKB)	Bottom Plug Depth (ftKB)	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Shots/ft
Toe Pop	3/26/14 14:10	12,310.00	NA	12,445.00	12,448.00	NA
1	3/26/14 19:45	12,310.00	NA	12,324.00	12,416.00	4
2	3/27/14 0:28	12,160.00	12,310.00	12,174.00	12,296.00	4
3	3/27/14 5:45	12,010.00	12,160.00	12,024.00	12,146.00	4
4	3/27/14 10:20	11,860.00	12,010.00	11,874.00	11,996.00	4
5	3/27/14 15:59	11,710.00	11,860.00	11,724.00	11,846.00	4
6	3/27/14 18:17	11,560.00	11,710.00	11,574.00	11,696.00	4
7	3/27/14 22:39	11,410.00	11,560.00	11,424.00	11,546.00	4
8	3/28/14 2:52	11,260.00	11,410.00	11,274.00	11,396.00	4
9	3/28/14 8:11	11,110.00	11,260.00	11,124.00	11,246.00	4
10	3/28/14 11:37	10,960.00	11,110.00	10,974.00	11,096.00	4
11	3/28/14 16:49	10,810.00	10,960.00	10,824.00	10,946.00	4
12	3/28/14 21:24	10,660.00	10,810.00	10,674.00	10,796.00	4
13	3/29/14 0:55	10,510.00	10,660.00	10,524.00	10,646.00	4
14	3/29/14 13:30	10,360.00	10,510.00	10,374.00	10,496.00	4
15	3/29/14 17:27	10,210.00	10,360.00	10,224.00	10,346.00	4
16	3/29/14 22:26	10,060.00	10,210.00	10,074.00	10,196.00	4
17	3/30/14 2:49	9,910.00	10,060.00	9,924.00	10,046.00	4
18	3/30/14 10:49	9,760.00	9,910.00	9,774.00	9,896.00	4
19	3/30/14 18:48	9,610.00	9,760.00	9,624.00	9,746.00	4
20	3/30/14 23:38	9,460.00	9,610.00	9,474.00	9,596.00	4
21	3/31/14 9:02	9,310.00	9,460.00	9,324.00	9,446.00	4
22	3/31/14 17:37	9,160.00	9,310.00	9,174.00	9,296.00	4
23	3/31/14 21:45	9,010.00	9,160.00	9,024.00	9,146.00	4
24	4/1/14 1:08	8,860.00	9,010.00	8,874.00	8,996.00	4
25	4/1/14 5:09	8,710.00	8,860.00	8,724.00	8,844.00	4
26	4/1/14 12:51	8,560.00	8,710.00	8,574.00	8,696.00	4
27	4/1/14 16:43	8,410.00	8,560.00	8,424.00	8,544.00	4
28	4/1/14 20:54	8,260.00	8,410.00	8,274.00	8,396.00	4
29	4/2/14 0:50	8,110.00	8,260.00	8,124.00	8,246.00	4
30	4/2/14 4:10	NA	8,110.00	7,974.00	8,096.00	4

513534 - 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	8,260.00	10.8	NA	NA	NA	2,600	3/26/2014 14:52	3/26/2014 18:50	NA
1	6,850.00	8,627.00	93.5	4,148.00	0.97	3,519.00	5,346	3/26/2014 22:19	3/26/2014 23:44	203,500
2	6,707.00	8,564.00	97.0	4,504.00	1.02	3,761.00	4,832	3/27/2014 2:48	3/27/2014 4:00	197,700
3	6,692.00	8,549.00	95.7	5,282.00	1.12	4,020.00	5,203	3/27/2014 7:16	3/27/2014 8:28	201,800
4	6,434.00	8,675.00	95.5	5,471.00	1.14	4,292.00	5,102	3/27/2014 11:49	3/27/2014 13:03	201,500
5	7,348.00	8,600.00	90.0	5,169.00	1.1	4,114.00	5,007	3/27/2014 16:18	3/27/2014 17:34	199,400
6	6,841.00	8,588.00	89.3	5,380.00	1.13	4,252.00	4,639	3/27/2014 20:45	3/27/2014 21:56	201,900
7	6,989.00	8,706.00	93.8	5,206.00	1.11	4,298.00	4,655	3/28/2014 1:03	3/28/2014 2:10	200,700
8	6,701.00	8,504.00	95.6	5,432.00	1.14	4,421.00	5,493	3/28/2014 5:00	3/28/2014 6:23	201,300
9	6,111.00	8,746.00	91.5	5,459.00	1.14	4,296.00	5,175	3/28/2014 9:32	3/28/2014 10:45	200,300
10	6,325.00	8,660.00	92.9	5,117.00	1.1	4,214.00	5,161	3/28/2014 14:40	3/28/2014 15:54	200,700
11	6,641.00	8,588.00	99.5	5,404.00	1.13	4,239.00	4,616	3/28/2014 19:39	3/28/2014 20:43	200,200
12	6,417.00	8,483.00	100.3	5,574.00	1.16	4,401.00	4,589	3/28/2014 23:14	3/29/2014 0:17	197,900
13	7,332.00	8,220.00	100.0	5,452.00	1.14	4,358.00	4,683	3/29/2014 4:35	3/29/2014 5:38	199,400
14	6,343.00	8,535.00	99.7	5,330.00	1.12	4,361.00	4,854	3/29/2014 14:42	3/29/2014 15:49	199,000
15	6,122.00	8,539.00	100.3	5,642.00	1.16	4,485.00	4,910	3/29/2014 19:37	3/29/2014 20:46	199,900
16	6,900.00	8,353.00	99.4	5,613.00	1.16	4,325.00	5,524	3/30/2014 0:21	3/30/2014 2:00	200,200
17	6,208.00	8,048.00	100.7	5,276.00	1.12	4,191.00	5,177	3/30/2014 8:01	3/30/2014 9:10	200,700
18	6,681.00	8,195.00	100.5	5,544.00	1.15	4,460.00	4,719	3/30/2014 16:14	3/30/2014 17:17	200,400
19	6,287.00	8,309.00	100.3	5,693.00	1.17	4,639.00	4,687	3/30/2014 21:58	3/30/2014 22:53	204,000
20	6,756.00	8,277.00	100.4	5,402.00	1.13	4,217.00	5,051	3/31/2014 6:19	3/31/2014 7:29	202,400
21	7,288.00	8,328.00	98.7	5,285.00	1.12	4,141.00	4,820	3/31/2014 14:59	3/31/2014 16:07	200,500
22	6,362.00	8,319.00	99.9	5,274.00	1.12	4,077.00	4,585	3/31/2014 20:02	3/31/2014 21:01	200,100
23	6,106.00	8,382.00	96.1	5,148.00	1.1	4,008.00	4,597	3/31/2014 23:18	4/1/2014 0:23	200,500
24	6,247.00	8,426.00	99.8	5,290.00	1.12	4,050.00	4,609	4/1/2014 3:09	4/1/2014 4:10	199,700
25	6,568.00	8,447.00	100.3	5,269.00	1.12	4,240.00	4,937	4/1/2014 10:59	4/1/2014 12:05	200,500
26	6,506.00	8,254.00	98.9	5,019.00	1.09	3,912.00	4,810	4/1/2014 14:50	4/1/2014 15:55	199,200
27	6,557.00	8,417.00	96.7	5,128.00	1.1	3,981.00	4,795	4/1/2014 18:36	4/1/2014 19:40	201,500
28	6,558.00	8,201.00	99.8	5,321.00	1.12	4,217.00	4,820	4/1/2014 22:27	4/1/2014 23:30	199,900
29	6,659.00	8,306.00	98.0	5,231.00	1.11	4,103.00	4,826	4/2/2014 1:43	4/2/2014 2:46	198,700
30	6,622.00	8,046.00	99.0	5,317.00	1.13	4,249.00	4,643	4/2/2014 5:14	4/2/2014 6:14	199,900

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/26/2014
Job End Date:	4/2/2014
State:	West Virginia
County:	Wetzel
API Number:	47-103-02819-00-00
Operator Name:	EQT Production
Well Name and Number:	BIG192 - 513534
Longitude:	-80.58285100
Latitude:	39.52759900
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	7,716
Total Base Water Volume (gal):	6,435,684
Total Base Non Water Volume:	138,976

FracFocus Chemical Disclosure Registry

GROUNDWATER PROTECTION COUNCIL

Interstate Oil & Gas

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Halliburton	Carrier					
			Water	7732-18-5	100.00000	89.47444	
Sand	Halliburton	Proppant					
			Crystalline Silica	14808-60-7	100.00000	10.03643	
MX-5	Halliburton	Biocide					
			Sodium Nitrate	7631-99-4	60.00000	0.05631	
Hydrochloric Acid 15%	Halliburton	Acidizing					
			Hydrochloric Acid	7647-01-0	15.00000	0.04232	
FR-66	Halliburton	Friction Reducer					
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02236	
MX-8	Halliburton	Biocide					
			Bacteria Culture	N/A	100.00000	0.00957	
LP-65	Halliburton	Scale Inhibitor					
			Ammonium Chloride	12125-02-9	10.00000	0.00259	
WG-36	Halliburton	Gelling Agent					
			Guar Gum	9000-30-0	100.00000	0.00229	
HAI-OS	Halliburton	Protects casing					
			Methanol	67-56-1	60.00000	0.00026	
			Propargyl Alcohol	107-19-7	10.00000	0.00004	

BA-40L	Halliburton	Buffer					
			Potassium carbonate	584-08-7	60.00000	0.00022	
SP Breaker	Halliburton	Oxidizing Breaker					
			Sodium Persulfate	7775-27-1	100.00000	0.00006	

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

* Total Water Volume sources may include fresh water, produced water, and/or recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

01/23/2015