

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

DATE: 9/23/2013
API #: 47-10302820

PM

Farm name: Richard Dallison ET AL Operator Well No.: 513538

LOCATION: Elevation: 1452 Quadrangle: Big Run 7.5'

District: Grant County: Wetzel
Latitude: 5134 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 11558 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	20"	40	40	44.84
Agent: Rex C. Ray	13-3/8"	1004	1004	1014.8
Inspector: Derek Haught	9-5/8"	3703	3703	1939.7
Date Permit Issued: 10/29/12	5-1/2"	12753	12753	1976.48
Date Well Work Commenced: 2/25/2013				
Date Well Work Completed: 9/18/2013				
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): 7669				
Total Measured Depth (ft): 12752				
Fresh Water Depth (ft.): 783				
Salt Water Depth (ft.): 2260, 2373				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 737, 807, 922, 1012, 1244				
Void(s) encountered (N/Y) Depth(s) N				

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

Producing formation Marcellus Pay zone depth (ft) _____

Gas: Initial open flow 1,762 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 6,870 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 69 Hours

Static rock Pressure 2,655 psig (surface pressure) after 75.5 Hours

Second producing formation No Second Formation Pay zone depth (ft) _____

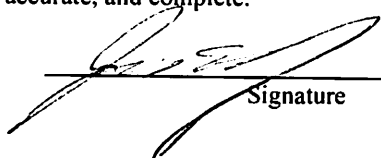
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

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

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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 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:

Amended Report with Flow Back Data

Re-perforated stage 10 (10.1)

Performed 2 additional injection tests prior to stage 10

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

Formations Encountered:	Top Depth	/	Bottom Depth
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Sand/Shale 0/737/737	Benson	5633.8/5953.1/319.3
Coal 737/738/1	Alexander	5953.1/6872.2/919.1
Sand/Shale 738/807/69	Rhinestreet	6872.2/6877.7/5.5
Coal 807/ 817/10	Sonyea	6877.7/7001.9/124.2
Sand/Shale 817/922/105	Middlesex	7001.9/7043.7/41.8
Coal 922/927/5	Genessee	7043.7/7113.3/69.6
Sand/Shale 927/1012/85	Geneseo	7113.3/7134.8/21.5
Coal 1012/1022/10	Tully	7134.8/7151.3/16.5
Sand/Shale 1022/1244/222	Hamilton	7151.3/7223.5/72.2
Coal 1244/1446/202	Marcellus	7223.5/7669/445.5
Sand/Shale 1446/2481.1/1035.1		
Big Lime 2481.1/3958.4/1477.1		
Warren 3958.4/4109.7/151.3		
Speechley 4109.7/4999/889.3		
Riley 4999/5633.8/634.9		

513538 - Perforations

Zone/Stage	Date	Top Plug Depth (ftKB)	Bottom Plug Depth (ftKB)	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Shots/ft
Initiation Sleeve	4/7/14 0:39	12,457.00	NA	12,727.00	12,729.00	NA
1	4/7/14 5:08	12,457.00	NA	12,486.00	12,666.00	4
2	4/7/14 14:11	12,157.00	12,457.00	12,186.00	12,426.00	4
3	4/7/14 22:25	11,857.00	12,157.00	11,886.00	12,126.00	4
4	4/8/14 23:30	11,557.00	11,857.00	11,586.00	11,826.00	4
5	4/9/14 12:33	11,257.00	11,557.00	11,286.00	11,526.00	4
6	4/9/14 23:20	10,957.00	11,257.00	10,986.00	11,226.00	4
7	4/10/14 10:25	10,657.00	10,957.00	10,686.00	10,926.00	4
8	4/11/14 3:16	10,357.00	10,657.00	10,386.00	10,626.00	4
9	4/12/14 0:25	10,057.00	10,357.00	10,090.00	10,326.00	4
10	4/13/14 6:32	9,757.00	10,057.00	9,786.00	10,026.00	4
10.1 (Re-Perf)	4/13/14 11:15	9,757.00	10,057.00	9,788.00	9,890.00	4
11	4/13/14 16:33	9,457.00	9,757.00	9,486.00	9,726.00	4
12	4/13/14 22:12	9,157.00	9,457.00	9,186.00	9,430.00	4
13	4/14/14 8:22	8,852.00	9,157.00	8,886.00	9,126.00	4
14	4/14/14 22:14	8,557.00	8,852.00	8,586.00	8,826.00	4
15	4/15/14 4:22	NA	8,557.00	8,286.00	8,526.00	4

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513538 - 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)
Initiation Sleeve	NA	7,755.00	13.0	NA	NA	NA	557	4/7/2014 2:49	4/7/2014 3:31	NA
1	NA	8,475.00	90.3	4,266.00	0.99	3,367.00	11,636	4/7/2014 9:55	4/7/2014 12:30	504,000
2	6,734.00	8,572.00	91.3	7,928.00	1.46	3,421.00	11,291	4/7/2014 18:23	4/7/2014 20:49	500,000
3	6,725.00	8,579.00	96.7	5,000.00	1.08	3,797.00	11,269	4/8/2014 19:32	4/8/2014 21:51	503,500
4	6,269.00	9,018.00	92.5	5,582.00	1.16	4,264.00	11,171	4/9/2014 4:01	4/9/2014 6:24	494,700
5	6,211.00	8,464.00	97.9	4,737.00	1.05	3,905.00	11,401	4/9/2014 19:33	4/9/2014 21:51	500,000
6	6,696.00	8,319.00	96.7	4,674.00	1.04	3,663.00	12,275	4/10/2014 6:21	4/10/2014 8:49	506,800
7	6,075.00	8,655.00	97.0	4,125.00	0.97	3,442.00	11,321	4/10/2014 23:28	4/11/2014 1:45	505,100
8	5,803.00	8,469.00	97.1	5,329.00	1.13	4,113.00	11,022	4/11/2014 20:41	4/11/2014 22:53	502,100
9	6,100.00	8,522.00	93.3	7,428.00	1.4	NA	10,114	4/12/2014 10:47	4/12/2014 13:00	376,700
Inj Test	NA	4,701.00	3.6	7,055.00	1.35	NA	451	4/12/2014 15:14	4/12/2014 17:18	0
Inj Test	NA	4,422.00	10.0	5,667.00	1.17	NA	1,217	4/13/2014 3:16	4/13/2014 5:17	0
10	6,007.00	7,720.00	48.4	5,436.00	1.14	NA	2,927	4/13/2014 7:54	4/13/2014 8:59	1,000
10.1 (Re-Perf)	6,003.00	8,074.00	93.4	4,678.00	1.04	3,573.00	11,518	4/13/2014 13:30	4/13/2014 15:49	500,500
11	6,635.00	8,246.00	92.4	5,397.00	1.14	3,993.00	11,201	4/13/2014 18:25	4/13/2014 20:46	500,600
12	6,775.00	7,803.00	95.0	5,699.00	1.18	4,439.00	12,137	4/14/2014 3:43	4/14/2014 6:56	504,600
13	7,529.00	8,241.00	98.4	5,078.00	1.1	4,047.00	10,630	4/14/2014 18:35	4/14/2014 20:45	500,800
14	6,720.00	8,270.00	94.4	6,733.00	1.31	4,097.00	11,271	4/15/2014 0:19	4/15/2014 2:42	492,700
15	6,507.00	7,995.00	100.0	4,820.00	1.06	3,753.00	12,279	4/15/2014 10:58	4/15/2014 13:23	503,500

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Hydraulic Fracturing Fluid Product Component Information Disclosure

103-02820

Job Start Date:	4/7/2014
Job End Date:	4/15/2014
State:	West Virginia
County:	Wetzel
API Number:	47-103-02820-00-00
Operator Name:	EQT Production
Well Name and Number:	BIG192 - 513538
Longitude:	-80.58264200
Latitude:	39.52757100
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	7,685
Total Base Water Volume (gal):	7,507,368
Total Base Non Water Volume:	362,517



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	89.08132	
Sand	Halliburton	Proppant	Crystalline Silica	14808-60-7	100.00000	10.53639	
MX-5	Halliburton	Biocide	Sodium Nitrate	7631-99-4	60.00000	0.05673	
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02858	
Hydrochloric Acid 15%	Halliburton	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.02270	
MX-8	Halliburton	Biocide	Bacteria Culture	N/A	100.00000	0.00964	
WG-36	Halliburton	Gelling Agent	Guar Gum	9000-30-0	100.00000	0.00602	
LP-65	Halliburton	Scale Inhibitor	Ammonium Chloride	12125-02-9	10.00000	0.00250	
SP Breaker	Halliburton	Oxidizing Breaker	Sodium Persulfate	7775-27-1	100.00000	0.00017	
HAI-OS	Halliburton	Protects casing					

