

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

pm

DATE: 9/3/2013
API #: 47-017-06136

HGX

Farm name: Sue Ann Spiker Operator Well No.: 514414

LOCATION: Elevation: 1,254' Quadrangle: Smithburg

District: New Milton County: Doddridge, WV
Latitude: 10.578 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 8.413 Feet West of 80 Deg. 42 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	72	72	81
Agent: Cecil Ray	13 3/8	669	669	990
Inspector: Sam Ward	9 5/8	5,547	5,547	2,110
Date Permit Issued: 10/25/2012	5 1/2	11,912	11,912	1,824
Date Well Work Commenced: 10/25/2012				
Date Well Work Completed: 3/6/2013				
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): 6,839				
Total Measured Depth (ft): 11,925'				
Fresh Water Depth (ft.): 106', 576'				
Salt Water Depth (ft.): 2,000'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 48', 281', 557', 628', 1,207', 1,376'				
Void(s) encountered (N/Y) Depth(s) No				

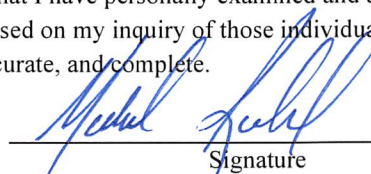
OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,769
Gas: Initial open flow 2,638 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 11,040 MCF/d Final open flow 12 Bbl/d
Time of open flow between initial and final tests 113 Hours
Static rock Pressure 1,700 psig (surface pressure) after 113.5 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

RECEIVED
Office of Oil and Gas

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

11/18/2014
WV Department of
Environmental Protection
7/17/2014
Date

08/12/2022

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, 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

Re-perforated stg 5 (5A) due to high treating pressures

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

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

SAND / SHALE / 0 / 48 / 48 -- COAL / 48 / 53 / 5 -- SAND / SHALE / 53 / 281 / 228 --

COAL / 281 / 285 / 4 -- SAND / SHALE / 285 / 557 / 272 --

COAL / 557 / 560 / 3 -- SAND / SHALE / 560 / 628 / 68 --

COAL / 628 / 633 / 5 -- SAND / SHALE / 633 / 1,207 / 574 --

COAL / 1,207 / 1,210 / 3 -- SAND / SHALE / 1,210 / 1,376 / 166 --

COAL / 1,376 / 1,381 / 5 -- SAND / SHALE / 1,381 / 2,657 / 1,276 --

GORDON / 2,657 / 3,257 / 600 -- WARREN / 3,257 / 3,336 / 79 --

SPEECHLEY / 3,336 / 3998 / 662 -- BALLTOWN B / 3998 / 4206 / 207 -- BRADFORD / 4206 / 4498 / 292

RILEY / 4498 / 4864 / 366 -- BENSON / 4864 / 5062 / 198 -- ALEXANDER / 5062 / 5932 / 870

RHINESTREET / 5932 / 5950 / 18 -- SONYEA / 5950 / 6534 / 601

MIDDLESEX / 6534 / 6591 / 57 -- GENESSEE / 6591 / 6665 / 74 -- GENESEO / 6665 / 6706 / 40

TULLY / 6706 / 6734 / 28 -- HAMILTON / 6734 / 6769 / 35 -- Marcellus blk shale / 6769 / 6839 / 70 --

08/12/2022

514414 - Perforations

Zone/Stage	Date	Top Plug Depth (ftKB)	Bottom Plug Depth (ftKB)	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Shots/ft
Toe Pop	1/6/14 7:53	11,750.00	NA	11,885.00	11,888.00	NA
1	1/6/14 10:00	11,750.00	NA	11,764.00	11,856.00	4
2	1/8/14 13:00	11,600.00	11,750.00	11,614.00	11,736.00	4
3	1/8/14 22:50	11,450.00	11,600.00	11,464.00	11,586.00	4
4	1/9/14 3:00	11,300.00	11,450.00	11,314.00	11,436.00	4
5	1/12/14 10:20	11,150.00	11,300.00	11,164.00	11,286.00	4
5.1	1/12/14 17:30	11,150.00	11,300.00	11,180.00	11,257.00	4
6	1/12/14 22:30	11,000.00	11,150.00	11,014.00	11,136.00	4
7	1/14/14 11:12	10,850.00	11,000.00	10,864.00	10,984.00	4
8	1/15/14 6:48	10,700.00	10,850.00	10,714.00	10,834.00	4
9	1/15/14 16:28	10,550.00	10,700.00	10,564.00	10,687.00	4
10	1/16/14 1:30	10,400.00	10,547.00	10,531.00	10,414.00	4
11	1/16/14 12:52	10,250.00	10,400.00	10,264.00	10,386.00	4
12	1/16/14 19:58	10,100.00	10,250.00	10,114.00	10,236.00	4
13	1/17/14 3:05	9,950.00	10,100.00	9,964.00	10,086.00	4
14	1/17/14 15:26	9,800.00	9,950.00	9,814.00	9,936.00	4
15	1/18/14 0:10	9,650.00	9,800.00	9,664.00	9,784.00	4
16	1/18/14 23:00	9,500.00	9,650.00	9,514.00	9,634.00	4
17	1/19/14 12:04	9,350.00	9,500.00	9,364.00	9,486.00	4
18	1/19/14 16:29	9,200.00	9,350.00	9,214.00	9,352.00	4
19	1/19/14 22:23	9,050.00	9,200.00	9,062.00	9,184.00	4
20	1/20/14 3:00	8,900.00	9,050.00	8,914.00	9,034.00	4
21	1/20/14 6:17	8,750.00	8,900.00	8,767.00	8,884.00	4
22	1/20/14 18:00	8,600.00	8,750.00	8,614.00	8,734.00	4
23	1/21/14 4:38	8,450.00	8,600.00	8,464.00	8,584.00	4
24	1/21/14 8:40	8,300.00	8,450.00	8,314.00	8,436.00	4
25	1/21/14 12:42	8,150.00	8,300.00	8,164.00	8,286.00	4
26	1/21/14 20:57	8,000.00	8,149.00	8,014.00	8,134.00	4
27	1/22/14 1:27	7,850.00	8,000.00	7,864.00	7,984.00	4
28	1/22/14 6:40	7,700.00	7,850.00	7,714.00	7,836.00	4
29	1/24/14 5:16	NA	7,700.00	7,564.00	7,686.00	4

514414 - 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	7,784.00	14.4	NA	NA	NA	840	1/6/2014 5:30	1/6/2014 9:30	NA
1	5,392.00	7,911.00	78.7	4,637.00	1.11	3,847.00	7,988	1/8/2014 9:00	1/8/2014 11:00	201,900
2	5,732.00	8,377.00	89.6	5,481.00	1.23	4,438.00	5,216	1/8/2014 19:24	1/8/2014 20:45	201,400
3	5,424.00	8,343.00	91.0	5,224.00	1.2	4,461.00	5,284	1/9/2014 0:50	1/9/2014 2:11	199,200
4	5,233.00	8,218.00	92.3	5,147.00	1.19	4,189.00	5,671	1/9/2014 5:33	1/9/2014 6:58	196,900
5	6,254.00	7,520.00	26.0	4,846.00	1.14	NA	2,916	1/12/2014 10:22	1/12/2014 12:14	2,200
5A	6,429.00	7,961.00	82.6	5,098.00	1.18	4,220.00	5,206	1/12/2014 18:22	1/12/2014 19:49	200,700
6	7,252.00	8,236.00	95.4	5,364.00	1.22	4,546.00	5,212	1/14/2014 8:48	1/14/2014 10:06	195,200
7	6,073.00	7,929.00	92.2	5,189.00	1.19	4,592.00	5,043	1/15/2014 3:56	1/15/2014 5:15	199,900
8	5,515.00	8,410.00	90.4	5,112.00	1.18	4,347.00	5,508	1/15/2014 13:29	1/15/2014 14:54	197,100
9	6,279.00	8,222.00	99.6	4,866.00	1.18	4,640.00	4,835	1/15/2014 21:15	1/15/2014 22:24	194,500
10	5,742.00	8,161.00	98.5	5,088.00	1.18	4,280.00	5,125	1/15/2014 10:16	1/15/2014 11:34	200,100
11	5,742.00	8,132.00	99.7	5,368.00	1.22	4,523.00	5,054	1/16/2014 16:36	1/16/2014 17:49	201,300
12	6,564.00	8,214.00	99.0	5,336.00	1.22	4,587.00	7,398	1/16/2014 23:01	1/17/2014 1:10	197,400
13	5,732.00	7,836.00	99.9	5,366.00	1.22	4,376.00	5,051	1/17/2014 11:11	1/17/2014 12:26	200,300
14	6,010.00	7,952.00	101.3	5,015.00	1.17	4,166.00	4,965	1/17/2014 19:41	1/17/2014 21:00	196,700
15	6,431.00	7,861.00	99.6	4,833.00	1.14	4,090.00	5,756	1/18/2014 17:29	1/18/2014 18:52	201,400
16	5,664.00	7,807.00	100.1	4,572.00	1.1	3,680.00	5,125	1/19/2014 9:53	1/19/2014 11:07	200,200
17	5,646.00	7,864.00	100.3	5,221.00	1.2	4,217.00	5,144	1/19/2014 14:26	1/19/2014 15:38	200,900
18	5,721.00	7,995.00	100.9	5,303.00	1.21	4,327.00	4,925	1/19/2014 19:56	1/19/2014 21:05	199,600
19	6,559.00	8,015.00	99.9	4,251.00	1.06	3,772.00	4,901	1/19/2014 23:45	1/20/2014 0:40	196,800
20	5,864.00	8,042.00	101.4	5,117.00	1.18	3,831.00	4,966	1/20/2014 4:30	1/20/2014 5:37	202,800
21	5,595.00	7,505.00	93.9	5,072.00	1.18	4,155.00	5,421	1/20/2014 14:49	1/20/2014 16:04	198,900
22	6,129.00	8,221.00	101.7	4,799.00	1.14	3,799.00	4,874	1/21/2014 1:44	1/21/2014 2:51	199,500
23	5,380.00	7,941.00	100.2	4,832.00	1.14	3,668.00	5,301	1/21/2014 6:39	1/21/2014 8:01	200,500
24	5,351.00	7,649.00	99.1	4,867.00	1.15	3,811.00	5,942	1/21/2014 10:39	1/21/2014 12:04	201,800
25	4,903.00	7,807.00	101.0	4,424.00	1.08	3,436.00	5,360	1/21/2014 17:27	1/21/2014 18:48	162,800
26	6,842.00	7,969.00	98.5	4,552.00	1.1	3,566.00	5,056	1/21/2014 22:38	1/21/2014 23:53	199,500
27	5,225.00	7,618.00	99.8	4,608.00	1.11	3,688.00	5,439	1/22/2014 3:56	1/22/2014 5:14	194,800
28	5,453.00	7,015.00	88.3	4,392.00	1.08	3,198.00	5,190	1/22/2014 10:18	1/22/2014 11:40	198,200
29	5,040.00	7,689.00	93.4	4,304.00	1.07	2,508.00	6,198	1/24/2014 12:08	1/24/2014 14:19	195,800