

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: 6/26/2013
API #: 47-1706114

Farm name: Robert Brannon, Et Al Operator Well No.: 513174

LOCATION: Elevation: 1,220 Quadrangle: Oxford

District: Southwest County: Doddridge, WV
Latitude: 9.757 Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 2.138 Feet West of 80 Deg. 47 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	40	40	45
Agent: Cecil Ray	13 3/8	669	669	624
Inspector: Davide Scrange	9 5/8	3,061	3,061	1,603
Date Permit Issued: 7/31/2012	5 1/2	12,815	12,815	2,470
Date Well Work Commenced: 8/30/2012				
Date Well Work Completed: 4/6/2013				
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): 6,663				
Total Measured Depth (ft): 12,834				
Fresh Water Depth (ft.): 28,200,212,224,227,250,259,355,465,575				
Salt Water Depth (ft.): No show of salt water				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): No show of coal				
Void(s) encountered (N/Y) Depth(s) N				

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

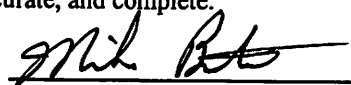
Producing formation Marcellus Pay zone depth (ft) 6,583
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 12,528 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1,946 psig (surface pressure) after 71.5 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

Received

JUL 23 2013

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

6-26-2013
Date

Office of Oil and Gas
WV Dept. of Environmental Protection

09/27/2013

17-06114

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

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

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

Sand/Shale / 0 / 1727 / 1727 -- Maxton / 1727 / 1906 / 179 -- Big Lime / 1906 / 1998 / 92 --
Big Injun / 1998 / 2202 / 204 -- Weir / 2202 / 2407 / 205 -- Gantz / 2407 / 2476 / 69 --
Fifty Foot / 2476 / 2612 / 139 -- Thirty Foot / 2612 / 2665 / 53 -- Gordon / 2665 / 2767 / 102 --
Forth Sand / 2767 / 2944 / 177 -- Bayard / 2944 / 2986 / 42 -- Warren / 2986 / 3259 / 273 --
Speechley / 3259 / 3308 / 49 -- Balltown A / 3308 / 3837 / 520 -- Riley / 3837 / 4859 / 1022 --
Alexander / 4859 / 5103 / 244 -- Sonyea / 5103 / 6251 / 1148 -- Middlesex / 6251 / 6399 / 148 --
Genesee / 6399 / 6451 / 52 -- Geneseo / 6451 / 6521 / 70 -- Tully / 6521 / 6564 / 43 --
Hamilton / 6564 / 6583 / 19 -- Marcellus / 6583 / 6595 / 12 -- Purcell / 6595 / 6655 / 60 --

Received

JUL 23 2013

17-06114

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage 1	Formation MARCELLUS	Frac Type Slickwater			
Date 3/26/2013	From / To 12666 - 12758	# of perfs	BD Press 5,800.00	ATP Psi 8,070.00	SIP Detail 5 Min: 3454 10 Min: 3060 15 Min:
Avg Rate 93.10	Max Press PSI 8,788.00	ISIP 5,024.00	Frac Gradient 1.19		
Sand Proppant 197,427.00	Water-bbl 5,567.00	SCF N2	Acid-Gal 750.00		
Stage 2	Formation MARCELLUS	Frac Type Slickwater			
Date 3/26/2013	From / To 12516 - 12638	# of perfs	BD Press 5,328.00	ATP Psi 8,162.00	SIP Detail 5 Min: 10 Min: 15 Min:
Avg Rate 97.40	Max Press PSI 8,756.00	ISIP 4,520.00	Frac Gradient 1.15		
Sand Proppant 199,182.00	Water-bbl 5,512.00	SCF N2	Acid-Gal 750.00		
Stage 3	Formation MARCELLUS	Frac Type Slickwater			
Date 3/26/2013	From / To 12366 - 12488	# of perfs	BD Press 5,390.00	ATP Psi 8,036.00	SIP Detail 5 Min: 10 Min: 15 Min:
Avg Rate 100.20	Max Press PSI 8,338.00	ISIP 4,717.00	Frac Gradient 1.18		
Sand Proppant 198,667.00	Water-bbl 5,336.00	SCF N2	Acid-Gal 750.00		
Stage 4	Formation MARCELLUS	Frac Type Slickwater			
Date 3/26/2013	From / To 12216 - 12338	# of perfs	BD Press 5,401.00	ATP Psi 8,191.00	SIP Detail 5 Min: 3386 10 Min: 2886 15 Min:
Avg Rate 100.30	Max Press PSI 8,480.00	ISIP 4,762.00	Frac Gradient 1.19		
Sand Proppant 192,734.00	Water-bbl 5,316.00	SCF N2	Acid-Gal 750.00		

Received

JUL 23 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

09/27/2013

17-06114

Stage 5	Formation MARCELLUS	Frac Type Slickwater				
Date 3/26/2013	From / To 12066 - 12188	# of perfs	BD Press 5,307.00	ATP Psi 7,962.00	SIP Detail 5 Min: 3857 10 Min: 3254 15 Min:	
Avg Rate 99.40	Max Press PSI 8,596.00	ISIP 5,240.00	Frac Gradient 1.27			
Sand Proppant 203,638.00	Water-bbl 5,287.00	SCF N2	Acid-Gal 750.00			

Stage 6	Formation MARCELLUS	Frac Type Slickwater				
Date 3/27/2013	From / To 11916 - 12038	# of perfs	BD Press 5,256.00	ATP Psi 8,007.00	SIP Detail 5 Min: 3906 10 Min: 3381 15 Min:	
Avg Rate 98.80	Max Press PSI 8,786.00	ISIP 5,208.00	Frac Gradient 1.22			
Sand Proppant 199,704.00	Water-bbl 5,531.00	SCF N2	Acid-Gal 750.00			

Stage 7	Formation MARCELLUS	Frac Type Slickwater				
Date 3/27/2013	From / To 11766 - 11888	# of perfs	BD Press 5,530.00	ATP Psi 7,997.00	SIP Detail 5 Min: 3483 10 Min: 2997 15 Min:	
Avg Rate 99.00	Max Press PSI 8,675.00	ISIP 5,015.00	Frac Gradient 1.19			
Sand Proppant 202,195.00	Water-bbl 5,394.00	SCF N2	Acid-Gal 750.00			

Stage 8	Formation MARCELLUS	Frac Type Slickwater				
Date 3/27/2013	From / To 11616 - 11738	# of perfs	BD Press 5,314.00	ATP Psi 7,955.00	SIP Detail 5 Min: 3911 10 Min: 3395 15 Min: 3092	
Avg Rate 99.50	Max Press PSI 8,839.00	ISIP 5,485.00	Frac Gradient 1.31			
Sand Proppant 200,272.00	Water-bbl 5,361.00	SCF N2	Acid-Gal 750.00			

Received

JUL 23 2013

Office of Oil and Gas
WV Dept. of Environmental Protection 09/27/2013

17-06114

Stage 9	Formation MARCELLUS	Frac Type Slickwater				
Date 3/27/2013	From / To 11466 - 11588	# of perfs	BD Press 5,366.00	ATP Psi 7,976.00	SIP Detail 5 Min: 3005 10 Min: 2722 15 Min: 2612	
Avg Rate 100.30	Max Press PSI 8,312.00	ISIP 4,685.00	Frac Gradient 1.18			
Sand Proppant 202,461.00	Water-bbl 5,239.00	SCF N2	Acid-Gal 750.00			
Stage 10	Formation MARCELLUS	Frac Type Slickwater				
Date 3/27/2013	From / To 11316 - 11438	# of perfs	BD Press 5,730.00	ATP Psi 8,285.00	SIP Detail 5 Min: 3125 10 Min: 2756 15 Min: 2613	
Avg Rate 94.90	Max Press PSI 8,687.00	ISIP 4,091.00	Frac Gradient 1.08			
Sand Proppant 196,697.00	Water-bbl 5,316.00	SCF N2	Acid-Gal 500.00			
Stage 11	Formation MARCELLUS	Frac Type Slickwater				
Date 3/27/2013	From / To 11166 - 11288	# of perfs	BD Press 5,359.00	ATP Psi 8,041.00	SIP Detail 5 Min: 3052 10 Min: 2801 15 Min:	
Avg Rate 98.70	Max Press PSI 8,412.00	ISIP 4,641.00	Frac Gradient 1.13			
Sand Proppant 206,089.00	Water-bbl 5,474.00	SCF N2	Acid-Gal 500.00			
Stage 12	Formation MARCELLUS	Frac Type Slickwater				
Date 3/28/2013	From / To 11016 - 11138	# of perfs	BD Press 5,449.00	ATP Psi 8,154.00	SIP Detail 5 Min: 3466 10 Min: 3046 15 Min:	
Avg Rate 98.40	Max Press PSI 9,034.00	ISIP 5,423.00	Frac Gradient 1.25			
Sand Proppant 204,821.00	Water-bbl 5,347.00	SCF N2	Acid-Gal 500.00			

Received

JUL 23 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

09/27/2013

17-06114

Stage 13	Formation MARCELLUS	Frac Type Slickwater				
Date 3/28/2013	From / To 10866 - 10988	# of perfs	BD Press 5,242.00	ATP Psi 7,905.00	SIP Detail 5 Min: 3333 10 Min: 2954 15 Min: 2802	
Avg Rate 97.80	Max Press PSI 8,529.00	ISIP 5,173.00	Frac Gradient 1.1			
Sand Proppant 197,751.00	Water-bbl 5,337.00	SCF N2	Acid-Gal 500.00			
Stage 14	Formation MARCELLUS	Frac Type Slickwater				
Date 3/28/2013	From / To 10716 - 10838	# of perfs	BD Press 5,562.00	ATP Psi 7,756.00	SIP Detail 5 Min: 3538 10 Min: 3090 15 Min: 2880	
Avg Rate 100.40	Max Press PSI 8,411.00	ISIP 5,166.00	Frac Gradient 1.26			
Sand Proppant 198,701.00	Water-bbl 5,122.00	SCF N2	Acid-Gal 500.00			
Stage 15	Formation MARCELLUS	Frac Type Slickwater				
Date 3/28/2013	From / To 10566 - 10688	# of perfs	BD Press 5,685.00	ATP Psi 7,904.00	SIP Detail 5 Min: 3502 10 Min: 3005 15 Min: 2785	
Avg Rate 100.40	Max Press PSI 8,655.00	ISIP 5,212.00	Frac Gradient 1.26			
Sand Proppant 197,887.00	Water-bbl 5,165.00	SCF N2	Acid-Gal 500.00			
Stage 16	Formation MARCELLUS	Frac Type Slickwater				
Date 3/28/2013	From / To 10416 - 10538	# of perfs	BD Press 5,870.00	ATP Psi 7,450.00	SIP Detail 5 Min: 3637 10 Min: 3111 15 Min:	
Avg Rate 100.30	Max Press PSI 7,935.00	ISIP 5,082.00	Frac Gradient 1.24			
Sand Proppant 200,405.00	Water-bbl 5,291.00	SCF N2	Acid-Gal 500.00			

Received

JUL 23 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

09/27/2013

17-06114

Stage 17	Formation MARCELLUS	Frac Type Slickwater				
Date 3/29/2013	From / To 10266 - 10388	# of perfs	BD Press 5,051.00	ATP Psi 7,592.00	SIP Detail 5 Min: 3499 10 Min: 3093 15 Min:	
Avg Rate 100.20	Max Press PSI 7,832.00	ISIP 4,995.00	Frac Gradient 1.18			
Sand Proppant 202,013.00	Water-bbl 5,334.00	SCF N2	Acid-Gal 500.00			
Stage 18	Formation MARCELLUS	Frac Type Slickwater				
Date 3/29/2013	From / To 10116 - 10238	# of perfs	BD Press 5,538.00	ATP Psi 7,650.00	SIP Detail 5 Min: 3610 10 Min: 3183 15 Min:	
Avg Rate 100.50	Max Press PSI 7,971.00	ISIP 5,096.00	Frac Gradient 1.2			
Sand Proppant 198,681.00	Water-bbl 5,310.00	SCF N2	Acid-Gal 500.00			
Stage 19	Formation MARCELLUS	Frac Type Slickwater				
Date 4/1/2013	From / To 9966 - 10088	# of perfs	BD Press 5,632.00	ATP Psi 8,077.00	SIP Detail 5 Min: 2982 10 Min: 2797 15 Min:	
Avg Rate 95.50	Max Press PSI 8,551.00	ISIP 4,166.00	Frac Gradient 1.1			
Sand Proppant 196,972.00	Water-bbl 5,098.00	SCF N2	Acid-Gal 500.00			
Stage 20	Formation MARCELLUS	Frac Type Slickwater				
Date 4/1/2013	From / To 9816 - 9938	# of perfs	BD Press 5,407.00	ATP Psi 8,132.00	SIP Detail 5 Min: 3451 10 Min: 3434 15 Min:	
Avg Rate 98.90	Max Press PSI 9,113.00	ISIP 4,988.00	Frac Gradient 1.23			
Sand Proppant 201,348.00	Water-bbl 5,155.00	SCF N2	Acid-Gal 500.00			

Received

JUL 23 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

09/27/2013

17-06114

Stage 21	Formation MARCELLUS	Frac Type Slickwater				
Date 4/1/2013	From / To 9666 - 9788	# of perfs	BD Press 6,126.00	ATP Psi 8,018.00	SIP Detail 5 Min: 0 10 Min: 0 15 Min: 0	
Avg Rate 88.50	Max Press PSI 8,936.00	ISIP 4,687.00	Frac Gradient 1.18			
Sand Proppant 48,960.00	Water-bbl 5,218.00	SCF N2	Acid-Gal 500.00			

Stage 21A	Formation MARCELLUS	Frac Type Slickwater				
Date 4/2/2013	From / To 9592 - 9669	# of perfs	BD Press 5,853.00	ATP Psi 7,941.00	SIP Detail 5 Min: 3645 10 Min: 3091 15 Min:	
Avg Rate 98.00	Max Press PSI 8,592.00	ISIP 4,656.00	Frac Gradient 1.17			
Sand Proppant 199,367.00	Water-bbl 5,247.00	SCF N2	Acid-Gal 1,000.00			

Stage 22	Formation MARCELLUS	Frac Type Slickwater				
Date 4/2/2013	From / To 9442 - 9564	# of perfs	BD Press 5,835.00	ATP Psi 7,732.00	SIP Detail 5 Min: 3561 10 Min: 3139 15 Min:	
Avg Rate 98.70	Max Press PSI 9,151.00	ISIP 5,084.00	Frac Gradient 1.24			
Sand Proppant 200,070.00	Water-bbl 5,127.00	SCF N2	Acid-Gal 500.00			

Stage 23	Formation MARCELLUS	Frac Type Slickwater				
Date 4/2/2013	From / To 9292 - 9414	# of perfs	BD Press 5,406.00	ATP Psi 7,864.00	SIP Detail 5 Min: 3321 10 Min: 2951 15 Min:	
Avg Rate 96.00	Max Press PSI 8,982.00	ISIP 4,306.00	Frac Gradient 1.12			
Sand Proppant 205,182.00	Water-bbl 5,443.00	SCF N2	Acid-Gal 500.00			

Stage 24	Formation MARCELLUS	Frac Type Slickwater				
Date 4/2/2013	From / To 9142 - 9264	# of perfs	BD Press 6,193.00	ATP Psi 7,483.00	SIP Detail 5 Min: 3419 10 Min: 2855 15 Min: 2800	
Avg Rate 100.10	Max Press PSI 8,154.00	ISIP 5,232.00	Frac Gradient 1.27			
Sand Proppant 202,351.00	Water-bbl 6,901.00	SCF N2	Acid-Gal 500.00			

Received

JUL 23 2013

17-06114

Stage 30	Formation MARCELLUS	Frac Type Slickwater			
Date 4/3/2013	From / To 8192 - 8314	# of perfs	BD Press 5,406.00	ATP Psi 7,446.00	SIP Detail 5 Min: 3958 10 Min: 3392 15 Min: 3162
Avg Rate 100.10	Max Press PSI 8,268.00	ISIP 4,964.00	Frac Gradient 1.22		
Sand Proppant 202,298.00	Water-bbl 6,278.00	SCF N2	Acid-Gal 500.00		

Stage 25	Formation MARCELLUS	Frac Type Slickwater			
Date 4/3/2013	From / To 8992 - 9114	# of perfs	BD Press 7,165.00	ATP Psi 7,413.00	SIP Detail 5 Min: 3441 10 Min: 2893 15 Min: 2728
Avg Rate 100.30	Max Press PSI 8,504.00	ISIP 4,794.00	Frac Gradient 1.2		
Sand Proppant 199,448.00	Water-bbl 5,096.00	SCF N2	Acid-Gal 500.00		

Stage 26	Formation MARCELLUS	Frac Type Slickwater			
Date 4/3/2013	From / To 8842 - 8964	# of perfs	BD Press 5,857.00	ATP Psi 7,368.00	SIP Detail 5 Min: 3571 10 Min: 3243 15 Min:
Avg Rate 100.40	Max Press PSI 8,537.00	ISIP 4,672.00	Frac Gradient 1.18		
Sand Proppant 197,909.00	Water-bbl 5,010.00	SCF N2	Acid-Gal 500.00		

Stage 27	Formation MARCELLUS	Frac Type Slickwater			
Date 4/3/2013	From / To 8692 - 8814	# of perfs	BD Press 5,722.00	ATP Psi 7,546.00	SIP Detail 5 Min: 4241 10 Min: 3396 15 Min:
Avg Rate 100.10	Max Press PSI 8,870.00	ISIP 5,062.00	Frac Gradient 1.24		
Sand Proppant 200,593.00	Water-bbl 5,135.00	SCF N2	Acid-Gal 500.00		

Stage 28	Formation MARCELLUS	Frac Type Slickwater			
Date 4/3/2013	From / To 8542 - 8664	# of perfs	BD Press 5,810.00	ATP Psi 7,800.00	SIP Detail 5 Min: 10 Min: 0 15 Min:
Avg Rate 61.00	Max Press PSI 9,364.00	ISIP 5,089.00	Frac Gradient 1.24		
Sand Proppant 1,272.00	Water-bbl 2,610.00	SCF N2	Acid-Gal 1,250.00		

Received

JUL 23 2013

17-06114

Stage 28A	Formation MARCELLUS	Frac Type Slickwater			
Date 4/3/2013	From / To 8492 - 8599	# of perfs	BD Press 5,208.00	ATP Psi 8,413.00	SIP Detail 5 Min: 4177 10 Min: 3891 15 Min: 3726
Avg Rate 47.50	Max Press PSI 9,254.00	ISIP 4,918.00	Frac Gradient 1.22		
Sand Proppant 3,577.00	Water-bbl 2,209.00	SCF N2	Acid-Gal 1,000.00		

Stage 29	Formation MARCELLUS	Frac Type Slickwater			
Date 4/3/2013	From / To 8342 - 8664	# of perfs	BD Press 5,935.00	ATP Psi 7,483.00	SIP Detail 5 Min: 3846 10 Min: 3327 15 Min: 3060
Avg Rate 100.20	Max Press PSI 8,251.00	ISIP 5,142.00	Frac Gradient 1.25		
Sand Proppant 402,451.00	Water-bbl 9,665.00	SCF N2	Acid-Gal 750.00		

Stage 31	Formation MARCELLUS	Frac Type Slickwater			
Date 4/4/2013	From / To 8042 - 8164	# of perfs	BD Press 6,194.00	ATP Psi 7,895.00	SIP Detail 5 Min: 4292 10 Min: 3832 15 Min: 3551
Avg Rate 97.80	Max Press PSI 8,703.00	ISIP 4,704.00	Frac Gradient 1.18		
Sand Proppant 214,422.00	Water-bbl 5,025.00	SCF N2	Acid-Gal 500.00		

Stage 32	Formation MARCELLUS	Frac Type Slickwater			
Date 4/4/2013	From / To 7892 - 8014	# of perfs	BD Press 5,627.00	ATP Psi 6,944.00	SIP Detail 5 Min: 3466 10 Min: 2954 15 Min: 2738
Avg Rate 99.00	Max Press PSI 7,553.00	ISIP 4,630.00	Frac Gradient 1.17		
Sand Proppant 199,023.00	Water-bbl 4,991.00	SCF N2	Acid-Gal 500.00		

Stage 33	Formation MARCELLUS	Frac Type Slickwater			
Date 4/4/2013	From / To 7742 - 7864	# of perfs	BD Press 5,953.00	ATP Psi 7,239.00	SIP Detail 5 Min: 3590 10 Min: 3005 15 Min: 2706
Avg Rate 100.40	Max Press PSI 8,182.00	ISIP 4,084.00	Frac Gradient 1.08		
Sand Proppant 200,417.00	Water-bbl 4,960.00	SCF N2	Acid-Gal 500.00		

Received

JUL 23 2013

09/27/2013

17-06114

Stage 34	Formation MARCELLUS	Frac Type Slickwater				
Date 4/4/2013	From / To 7592 - 7714	# of perfs	BD Press 7,207.00	ATP Psi 7,153.00	SIP Detail 5 Min: 3913 10 Min: 3482 15 Min: 3287	
Avg Rate 100.40	Max Press PSI 8,092.00	ISIP 4,831.00	Frac Gradient 1.2			
Sand Proppant 202,087.00	Water-bbl 4,997.00	SCF N2	Acid-Gal 500.00			

Stage 35	Formation MARCELLUS	Frac Type Slickwater				
Date 4/4/2013	From / To 7442 - 7564	# of perfs	BD Press 5,861.00	ATP Psi 7,055.00	SIP Detail 5 Min: 3166 10 Min: 2853 15 Min: 2698	
Avg Rate 100.50	Max Press PSI 7,226.00	ISIP 4,329.00	Frac Gradient 1.12			
Sand Proppant 200,841.00	Water-bbl 4,986.00	SCF N2	Acid-Gal 500.00			

Stage 36	Formation MARCELLUS	Frac Type Slickwater				
Date 4/4/2013	From / To 7292 - 7414	# of perfs	BD Press 5,931.00	ATP Psi 7,409.00	SIP Detail 5 Min: 3625 10 Min: 2974 15 Min: 2706	
Avg Rate 100.40	Max Press PSI 8,127.00	ISIP 5,382.00	Frac Gradient 1.13			
Sand Proppant 199,285.00	Water-bbl 4,947.00	SCF N2	Acid-Gal 500.00			

Stage 37	Formation MARCELLUS	Frac Type Slickwater				
Date 4/5/2013	From / To 7142 - 7264	# of perfs	BD Press 5,443.00	ATP Psi 7,225.00	SIP Detail 5 Min: 4091 10 Min: 3516 15 Min: 3332	
Avg Rate 100.50	Max Press PSI 8,056.00	ISIP 5,264.00	Frac Gradient 1.27			
Sand Proppant 199,623.00	Water-bbl 4,827.00	SCF N2	Acid-Gal 500.00			

Stage 38	Formation MARCELLUS	Frac Type Slickwater				
Date 4/5/2013	From / To 6992 - 7114	# of perfs	BD Press 8,330.00	ATP Psi 7,532.00	SIP Detail 5 Min: 0 10 Min: 0 15 Min: 0	
Avg Rate 95.80	Max Press PSI 9,667.00	ISIP 0.00	Frac Gradient 0			
Sand Proppant 159,870.00	Water-bbl 5,517.00	SCF N2	Acid-Gal 1,000.00			

Received

JUL 23 2013

17-06114

Stage 39	Formation MARCELLUS	Frac Type Slickwater				
Date 4/6/2013	From / To 6842 - 6964	# of perfs	BD Press 5,211.00	ATP Psi 7,089.00	SIP Detail 5 Min: 2465 10 Min: 2330 15 Min: 2264	
Avg Rate 99.70	Max Press PSI 8,345.00	ISIP 3,052.00	Frac Gradient 0.92			
Sand Proppant 203,137.00	Water-bbl 4,839.00	SCF N2	Acid-Gal 500.00			

Received

JUL 23 2013

Office of Oil and Gas
WV Dept. of Environmental Protection 09/27/2013