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: 2-26-2015
API #: 47-103-02839

Farm name: Robert Baxter WTZ 10H Operator Well No.: 831169

LOCATION: Elevation: 1,320' Quadrangle: Wileyville

District: Proctor County: Wetzel
Latitude: 5,400' Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 13,290 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	118'	118'	222 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	1,069'	1,069'	1,156 Cu. Ft.
Inspector: Derek Haught	9 5/8"	2,632'	2,632'	1,139 Cu. Ft.
Date Permit Issued: 1-16-2013	5 1/2"	12,302'	12,302'	2,784 Cu. Ft.
Date Well Work Commenced: 5-2-2013				
Date Well Work Completed: 12-6-2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7,033'				
Total Measured Depth (ft): 12,305'				
Fresh Water Depth (ft.): 511'				
Salt Water Depth (ft.): 1,159'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 962'				
Void(s) encountered (N/Y) Depth(s) N				

Received
Office of Oil & Gas
JUL 30 2015

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,189-12,141
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 2,717* MCF/d Final open flow 182 Bbl/d
Time of open flow between initial and final tests 72 Hours *Calculated
Static rock Pressure 4,571* psig (surface pressure) after 72 Hours

RECEIVED
Office of Oil and Gas
FEB 27 2015
WV Department of
Environmental Protection

Second producing 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 Date 2/26/15

~~Received~~
~~Att. 5/5/15~~

04/08/2016

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 None taken.

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 attached

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

Formations Encountered: Top Depth / Bottom Depth

Surface:

See attached

PERFORATION RECORD ATTACHMENT

Well Name and Number: Robert Baxter WTZ 10H **API No. 47-103-02839**

Stage	PERFORATION RECORD				STIMULATION RECORD							
	Date	Interval Perforated		Total Number Of Shots				Fluid		Propping Agent		Average Injection Rate
		From	To		Date	Interval Treated		Type	Amount	Type	Amount	
1	10/16/2013	12022	12141	40	10/16/2013	12022	12141	SLK Wtr	3112	Sand	247160	73
2	10/16/2013	11856	11974	32	10/16/2013	11856	11974	SLK Wtr	3682	Sand	247440	77
3	10/17/2013	11689	11807	32	10/17/2013	11689	11807	SLK Wtr	3577	Sand	247860	78
4	10/17/2013	11522	11641	32	10/17/2013	11522	11641	SLK Wtr	3577	Sand	247520	78
5	10/17/2013	11356	11474	32	10/17/2013	11356	11474	SLK Wtr	3555	Sand	242480	77
6	10/17/2013	11189	11307	32	10/17/2013	11189	11307	SLK Wtr	3944	Sand	250520	79
7	10/17/2013	11022	11141	32	10/17/2013	11022	11141	SLK Wtr	3579	Sand	246800	80
8	10/17/2013	10856	10974	32	10/17/2013	10856	10974	SLK Wtr	3614	Sand	247460	79
9	10/17/2013	10689	10807	32	10/17/2013	10689	10807	SLK Wtr	3578	Sand	254460	77
10	10/18/2013	10522	10641	32	10/18/2013	10522	10641	SLK Wtr	3701	Sand	255920	77
11	10/18/2013	10356	10474	32	10/18/2013	10356	10474	SLK Wtr	3709	Sand	251300	79
12	10/18/2013	10189	10307	32	10/18/2013	10189	10307	SLK Wtr	3622	Sand	249960	80
13	10/18/2013	10018	10141	32	10/18/2013	10018	10141	SLK Wtr	3677	Sand	246820	78
14	10/18/2013	9856	9974	32	10/18/2013	9856	9974	SLK Wtr	4140	Sand	247600	78
15	10/19/2013	9689	9807	32	10/19/2013	9689	9807	SLK Wtr	4223	Sand	249860	79
16	10/19/2013	9522	9641	32	10/19/2013	9522	9641	SLK Wtr	3587	Sand	251540	80
17	10/19/2013	9356	9474	32	10/19/2013	9356	9474	SLK Wtr	3657	Sand	248620	80
18	10/20/2013	9189	9307	32	10/20/2013	9189	9307	SLK Wtr	3524	Sand	249800	78
19	10/20/2013	9022	9141	32	10/20/2013	9022	9141	SLK Wtr	3711	Sand	244060	80
20	10/21/2013	8856	8974	32	10/21/2013	8856	8974	SLK Wtr	3716	Sand	248460	79
21	10/21/2013	8689	8807	32	10/21/2013	8689	8807	SLK Wtr	3545	Sand	253940	80
22	10/21/2013	8520	8641	32	10/21/2013	8520	8641	SLK Wtr	3535	Sand	254220	80
23	10/21/2013	8356	8474	32	10/21/2013	8356	8474	SLK Wtr	3614	Sand	247800	78
24	10/21/2013	8189	8307	32	10/21/2013	8189	8307	SLK Wtr	4024	Sand	246140	78
25	10/21/2013	8022	8141	32	10/21/2013	8022	8141	SLK Wtr	4635	Sand	224060	77.5
26	11/6/2013	7856	7974	32	11/6/2013	7856	7974	SLK Wtr	3418	Sand	248100	80
27	11/6/2013	7687	7807	32	11/6/2013	7687	7807	SLK Wtr	3395	Sand	248480	78
28	11/6/2013	7522	7641	32	11/6/2013	7522	7641	SLK Wtr	3441	Sand	248820	76
29	11/6/2013	7356	7474	32	11/6/2013	7356	7474	SLK Wtr	3486	Sand	251300	76

30	11/6/2013	7189	7307	32	11/6/2013	7189	7307	SLK Wtr	3348	Sand	243320	79

Received
Office of Oil & Gas
JUL 30 2015

RECEIVED
Office of Oil and Gas
FEB 27 2015
WV Department of
Environmental Protection

HORIZONTAL WELL (No pilot hole associated with this pad)				
Maximum TVD of wellbore:	7033 ft TVD @ 12305 ft MD			
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS and SILTSTN	0	0	936	936
LS and SS	936	936	1150	1150
Pittsburgh Coal	1150	1150	1162	1162
SH and SS	1162	1162	1716	1716
SILTSTN and SS	1716	1716	2150	2150
Big Lime	2150	2150	2236	2236
SILTSTN and SS	2236	2236	2311	2306
Big Injun	2311	2306	2465	2459
SH and SILTSTN	2465	2459	6821	6771
Geneseo	6821	6771	6853	6791
Tully	6853	6791	6904	6819
Hamilton	6904	6819	7088	6895
Marcellus	7088	6895	7098	6898
Purcell	7098	6898		
End of Well			12305	7033

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	10/16/2013
State:	WEST VIRGINIA
County:	WETZEL
API Number:	4710302839
Operator Name:	CHESAPEAKE APPALACHIA LLC
Well Name and Number:	ROBERT BAXTER WTZ 10H
Longitude:	-80.727687
Latitude:	39.713532
Long/Lat Projection:	NAD27
Production Type:	GAS
True Vertical Depth (TVD):	7,038
Total Water Volume (gal)*:	6,236,958

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
Fresh Water	CHESAPEAKE ENERGY	Carrier/Base Fluid	Water	007732-18-5	100.00%	80.43343%	
Recycled Produced Water	CHESAPEAKE ENERGY	Carrier/Base Fluid	Water	007732-18-5	100.00%	6.87569%	
EC6110A	NALCO	Anti-Bacterial Agent	Ethanol	000064-17-5	5.00%	0.00100%	
			Glutaraldehyde (Pentanediol)	000111-30-8	60.00%	0.01199%	
			Quaternary Ammonium Compounds	NA	10.00%	0.00200%	
EC6629A	NALCO	Scale Inhibitor	No Hazardous Components	NONE		0.00000%	
A264, J218, J580, J609, L058, U028, Acid, Hydrochloric 15pct, Northern White Sand, 100 Mesh Sand	SCHLUMBERGER	Breaker, Corrosion Inhibitor, Friction Reducer, Gelling Agent, Iron Control Agent, Acid, Proppant - Natural	Crystalline silica	14808-60-7	97.46841%	12.36959%	
			Hydrogen chloride	7647-01-0	1.87327%	0.23773%	
			Guar gum	9000-30-0	0.30831%	0.03913%	
			Acrylamide, 2-acrylamido-2-	38193-60-1	0.08876%	0.01126%	
			Ammonium sulfate	7783-20-2	0.08389%	0.01065%	
			Sodium hydroxide	1310-73-2	0.07565%	0.00960%	

			Sodium sulfate	7757-82-6	0.03626%	0.00460%	
			Diammonium peroxidisulphate	7727-54-0	0.02146%	0.00272%	
			Polymer of 2-acrylamido-2-	136793-29-8	0.00951%	0.00121%	
			Sodium erythorbate	6381-77-7	0.00720%	0.00091%	
			Methanol	67-56-1	0.00619%	0.00079%	
			Urea	57-13-6	0.00584%	0.00074%	
			Fatty acids, tall-oil	61790-12-3	0.00454%	0.00058%	
			Thiourea, polymer with	68527-49-1	0.00374%	0.00047%	
			Alcohols, C14-15, ethoxylated	68951-67-7	0.00174%	0.00022%	
			Non-crystalline silica	7631-86-9	0.00169%	0.00021%	
			Prop-2-yn-1-ol	107-19-7	0.00116%	0.00015%	
			Alkenes, C>10 a-	64743-02-8	0.00077%	0.00010%	
			Tetrasodium	64-02-8	0.00018%	0.00002%	
			Dimethyl siloxanes and silicones	63148-62-9	0.00008%	0.00001%	
			Siloxanes and Silicones, di-Me,	67762-90-7	0.00001%	< 0.00001%	
			Octamethylcyclotetrasiloxane	556-67-2	0.00001%	< 0.00001%	
			Decamethyl cyclopentasiloxane	541-02-6	0.00001%	< 0.00001%	
			Dodecamethylcyclohexasiloxane	540-97-6	< 0.00001%	< 0.00001%	

Additional Ingredients Not Listed on MSDS							
EC6110A, EC6629A	NALCO	Anti-Bacterial Agent, Scale Inhibitor	Methanol (Methyl Alcohol)	000067-56-1		0.00617%	
			Proprietary Acrylate Polymer	TRADE SECRET		0.00617%	
			Proprietary Quaternary Ammonium Salt	TRADE SECRET		0.00617%	
			Water	007732-18-5		0.02074%	

* 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%

"Additional Ingredients Not Listed on MSDS" component information were obtained directly from the supplier. As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of this information should be directed to the supplier who provided it.