

Farm name: Robert Baxter Wtz 210H Operator Well No.: 836624

LOCATION: Elevation: 1,320' Quadrangle: Wileyville

District: Proctor County: Wetzel
Latitude: 5,410' Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 13,300' Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496 Oklahoma City, OK 73154-0496	20"	118'	118'	223 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	1,009'	1,009'	1,072 Cu. Ft.
Inspector: Derek Haught	9 5/8"	2,608'	2,608'	1,094 Cu. Ft.
Date Permit Issued: 1-16-2013	5 1/2"	13,080'	13,080'	3,037 Cu. Ft.
Date Well Work Commenced: 5-21-2013				
Date Well Work Completed: 10-15-2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7,024'				
Total Measured Depth (ft): 13,080'				
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				

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

Producing formation Marcellus Pay zone depth (ft) 8,149-12,921
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 4,052 MCF/d Final open flow 75 Bbl/d
Time of open flow between initial and final tests 96 Hours *Calculated
Static rock Pressure 4,566 psig (surface pressure) after 96 Hours

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

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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.

Marlene Williams
Signature

2/26/15
Date

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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 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

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HORIZONTAL WELL (No pilot hole associated with this pad)				
Maximum TVD of wellbore:	7024 ft TVD @ 13080 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	928	928
LS and SS	928	928	1160	1160
Pittsburgh Coal	1160	1160	1169	1169
SH and SS	1169	1169	1716	1716
SILTSTN and SS	1716	1716	2140	2140
Big Lime	2140	2140	2234	2234
SILTSTN and SS	2234	2234	2328	2328
Big Injun	2319	2314	2463	2458
SH and SILTSTN	2463	2458	7399	6773
Geneseo	7399	6773	7475	6792
Tully	7475	6792	7595	6825
Hamilton	7595	6825	7981	6898
Marcellus	7981	6898	7994	6901
Purcell	7994	6901		
End of Well			13080	7024

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	10/22/2013
State:	WEST VIRGINIA
County:	WETZEL
API Number:	4710302842
Operator Name:	CHESAPEAKE APPALACHIA LLC
Well Name and Number:	ROBERT BAXTER WTZ 210H
Longitude:	-80.727715
Latitude:	39.7135
Long/Lat Projection:	NAD27
Production Type:	GAS
True Vertical Depth (TVD):	7,035
Total Water Volume (gal)*:	7,302,582

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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%	78.94618%	
Recycled Produced Water	CHESAPEAKE ENERGY	Carrier/Base Fluid	Water	007732-18-5	100.00%	7.82254%	
EC6110A	NALCO	Anti-Bacterial Agent	Ethanol	000064-17-5	5.00%	0.00118%	
			Glutaraldehyde (Pentanediol)	000111-30-8	60.00%	0.01417%	
			Quaternary Ammonium Compounds	NA	10.00%	0.00236%	
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	98.24153%	12.99861%	
			Hydrogen chloride	7647-01-0	1.01374%	0.13413%	
			Guar gum	9000-30-0	0.42052%	0.05564%	
			Acrylamide, 2-acrylamido-2-	38193-60-1	0.08301%	0.01098%	
			Ammonium sulfate	7783-20-2	0.07846%	0.01038%	
			Sodium hydroxide	1310-73-2	0.06672%	0.00883%	

			Sodium sulfate	7757-82-6	0.03391%	0.00449%	
			Diammonium peroxodisulphate	7727-54-0	0.02164%	0.00286%	
			Calcium chloride	10043-52-4	0.00929%	0.00123%	
			Polymer of 2-acrylamido-2-	136793-29-8	0.00889%	0.00118%	
			Urea	57-13-6	0.00547%	0.00072%	
			Sodium erythorbate	6381-77-7	0.00380%	0.00050%	
			Methanol	67-56-1	0.00319%	0.00042%	
			Fatty acids, tall-oil	61790-12-3	0.00234%	0.00031%	
			Non-crystalline silica	7631-86-9	0.00194%	0.00026%	
			Thiourea, polymer with	68527-49-1	0.00193%	0.00025%	
			Alcohols, C14-15, ethoxylated	68951-67-7	0.00090%	0.00012%	
			Prop-2-yn-1-ol	107-19-7	0.00060%	0.00008%	
			Potassium chloride	7447-40-7	0.00055%	0.00007%	
			Alkenes, C>10 a-	64743-02-8	0.00040%	0.00005%	
			Tetrasodium	64-02-8	0.00017%	0.00002%	
			Sodium chloride	7647-14-5	0.00017%	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%	

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Additional Ingredients Not Listed on MSDS						
EC6110A, EC6629A	NALCO	Anti-Bacterial Agent, Scale Inhibitor	Methanol (Methyl Alcohol)	000067-56-1		0.00639%
			Proprietary Acrylate Polymer	TRADE SECRET		0.00639%
			Proprietary Quaternary Ammonium Salt	TRADE SECRET		0.00639%
			Water	007732-18-5		0.02380%

* 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.