WR -35

Date: 10/6/2010
API # 47-097-03689

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm Name: Dale Winfree 3H Operator Well No.: 831580

LOCATION Elevation: 1961' Quadrangle: Rock Cave
District: Banks County: Upshur
Latitude: 6350 ft South of 38° 50' 00"
Longitude: 5600 ft West of 80° 17' 30"

Company: Chesapeake Appalachia, L.L.C.
P.O. Box 18496
OKC, OK 73154-0496

Agent: Eric Gillespie
Inspector: Bill Hatfield
Date Permit Issued: 11/12/2009
Date Well work commenced: 1/15/2010
Date Well Work completed: 9/23/2010
Verbal Plugging Permission
Granted on / /
Rotary ☒ Cable ☐ Rig
Total Depth (ft):11,446' TVD (ft): 7214'
Fresh Water Depth (ft): 475'
Salt Water Depth (ft.): 1,161'
Is coal being mined in area (Yes ☐ No ☒)
Coal Depths (ft): None
Was this well logged and plugged back?
Yes____ No____ if yes –
depth cement plug set _____'

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill-Up Cu.Ft.
20'	70'	70'	Driven
13 3/8"	602'	602'	670 CF
9 5/8"	1853'	1853'	814 CF
7"	7550'	7550'	632 CF
4 ½' liner	11,446'	11,446'	483 CF

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Office of Oil & Gas
JAN 17 2013
WV Department of
Environmental Protection

Open Flow Data

1st Producing Formation Pay Zone Depth 7,483 ft to 11,325 ft
Gas: Initial Open Flow 2,276 Mcf/day Oil: Initial Open Flow ____ bbl/day
Final Open Flow N/A Mcf/day Final Open Flow ____ bbl/day
Time of Open Flow between Initial and Final Tests In Line ____ hours
Static Rock Pressure 3,246 psig after N/A ____ hours

2nd Producing Formation Pay Zone Depth ____ ft to ____ ft
Gas: Initial Open Flow N/A Mcf/day Oil: Initial Open Flow ____ bbl/day
Final Open Flow N/A Mcf/day Final Open Flow ____ bbl/day
Time of Open Flow between Initial and Final Tests ____ hours
Static Rock Pressure N/A psig after ____ hours

3rd Producing Formation Pay Zone Depth ____ ft to ____ ft
Gas: Initial Open Flow N/A Mcf/day Oil: Initial Open Flow ____ bbl/day
Final Open Flow N/A Mcf/day Final Open Flow ____ bbl/day
Time of Open Flow between Initial and Final Tests ____ hours
Static Rock Pressure N/A psig after ____ hours

NOTE: ON BACK OF THIS FORM 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 ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

02/08/2013

Chesapeake Energy
Well No.: 831580

Perforated Intervals

1st Stage	Marcellus	50	holes from	11,083 ft	to	11,325 ft
2nd Stage	Marcellus	50	holes from	10,783 ft	to	11,025 ft
3rd Stage	Marcellus	50	holes from	10,478 ft	to	10,725 ft
4th Stage	Marcellus	50	holes from	10,178 ft	to	10,425 ft
5th Stage	Marcellus	50	holes from	9,878 ft	to	10,125 ft
6th Stage	Marcellus	50	holes from	9,588 ft	to	9,825 ft
7th Stage	Marcellus	50	holes from	9,288 ft	to	9,525 ft
8th Stage	Marcellus	50	holes from	8,983 ft	to	9,225 ft
9th Stage	Marcellus	50	holes from	8,683 ft	to	8,925 ft
10th Stage	Marcellus	50	holes from	8,383 ft	to	8,625 ft
11th Stage	Marcellus	50	holes from	8,083 ft	to	8,325 ft
12th Stage	Marcellus	50	holes from	7,783 ft	to	8,025 ft
13th Stage	Marcellus	50	holes from	7,483 ft	to	7,725 ft

Fracturing / Stimulation

1st Stage	Type of Treatment Slickwater		
	Total Acid 5,000 Gal of 15% HCl		Breakdown Pressure 6,941 psi
	Average Rate 80 scf/min ☐ or bpm ☒		ATP 6,653 psi | MTP 8,990 psi
	Total Fluid 7,104 bbl	Total Nitrogen 0 scf	Total Sand 82,023 lb of 100 mesh
			Total Sand 269,435 lb of 40/70
	ISIP 2,220 psi	5 min 0 psi	
2nd Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,584 psi
	Average Rate 87 scf/min ☐ or bpm ☒		ATP 7,635 psi | MTP 9,005 psi
	Total Fluid 8,961 bbl	Total Nitrogen 0 scf	Total Sand 80,481 lb of 100 mesh
			Total Sand 322,715 lb of 40/70
	ISIP 3,734 psi	5 min 2,908 psi	
3rd Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,674 psi
	Average Rate 87 scf/min ☐ or bpm ☒		ATP 7,636 psi | MTP 8,640 psi
	Total Fluid 9,218 bbl	Total Nitrogen 0 scf	Total Sand 80,306 lb of 100 mesh
			Total Sand 317,033 lb of 40/70
	ISIP 0 psi	5 min 2,932 psi	
4th Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 8,019 psi
	Average Rate 83 scf/min ☐ or bpm ☒		ATP 7,634 psi | MTP 9,120 psi
	Total Fluid 9,634 bbl	Total Nitrogen 0 scf	Total Sand 81,000 lb of 100 mesh
			Total Sand 322,136 lb of 40/70
	ISIP 3,526 psi	5 min 2,987 psi	
5th Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 7,401 psi
	Average Rate 86 scf/min ☐ or bpm ☒		ATP 7,252 psi | MTP 8,647 psi
	Total Fluid 8,724 bbl	Total Nitrogen 0 scf	Total Sand 80,718 lb of 100 mesh
			Total Sand 321,655 lb of 40/70
	ISIP 3,743 psi	5 min 3,138 psi	
6th Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 7,383 psi
	Average Rate 90 scf/min ☐ or bpm ☒		ATP 7,560 psi | MTP 8,874 psi
	Total Fluid 8,725 bbl	Total Nitrogen 0 scf	Total Sand 80,307 lb of 100 mesh
			Total Sand 321,175 lb of 40/70
	ISIP 3,840 psi	5 min 3,173 psi	

02/08/2013

Lake Winfree 3H

HORIZONTAL WELL (No pilot hole associated with this pad)				
Maximum TVD of wellbore:	7214 ft TVD @ 11446 ft MD			
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS and SH	0	0	530	530
SS and SH	530	530	1556	1556
Big Lime	1556	1556	1600	1600
SS and SILTSTN	1600	1600	1767	1767
Big Injun	1767	1767	1810	1810
SS and SILTSTN	1810	1810	2590	2590
SILTSTN	2590	2590	3750	3750
SILTSTN and SS	3750	3750	5250	5250
SS and SH	5250	5250	5475	5475
SILTSTN and SH	5475	5475	6700	6670
SH and LS	6700	6670	7090	7052
Geneseo	7090	7052	7136	7085
Tully	7136	7085	7173	7109
Hamilton	7173	7109	7346	7193
Marcellus	7346	7193	7475	7230
Purcell	7475	7230		
End of Well			11446	7214

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