

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

Farm Name: Edward Gower 6H

Operator Well No.: 832033

LOCATION Elevation: 1612'
District: Warren
Latitude: 10670 ft South of 39° 02' 30"
Longitude: 6620 ft West of 80° 12' 30"

Quadrangle: Century
County: Upshur

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill-Up Cu.Ft.
20"	40'	40'	Driven
13 3/8"	536'	536'	582 CF
9 5/8"	2094'	2094'	899 CF
5 1/2"	13,589'	13,589'	1897 CF

Agent: Eric Gillespie
Inspector: Bill Hatfield
Date Permit Issued: **10/15/2009**
Date Well work commenced: 3/3/2010
Date Well Work completed: 9/28/2010
Verbal Plugging Permission
Granted on / /
Rotary Cable Rig
Total Depth (ft): 13,589' TVD (ft): 7685'
Fresh Water Depth (ft): 425'
Salt Water Depth (ft.): NA
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 _____

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Open Flow Data

1st Producing Formation Pay Zone Depth 7,962 ft to 13,444 ft

Gas: Initial Open Flow	2,271 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	3,465 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.

APPROVED

NAME: Jackie Thornton

DATE: 3/30/2016

04/01/2016

97.03728

Chesapeake Energy
Well No.: 832033

Perforated Intervals

1 st Stage	Marcellus	50	holes from	13,122 ft	to	13,444 ft
2 nd Stage	Marcellus	50	holes from	12,722 ft	to	13,044 ft
3 rd Stage	Marcellus	50	holes from	12,322 ft	to	12,644 ft
4 th Stage	Marcellus	50	holes from	11,922 ft	to	12,244 ft
5 th Stage	Marcellus	50	holes from	11,522 ft	to	11,842 ft
6 th Stage	Marcellus	50	holes from	11,122 ft	to	11,444 ft
7 th Stage	Marcellus	50	holes from	10,722 ft	to	11,042 ft
8 th Stage	Marcellus	50	holes from	10,322 ft	to	10,644 ft
9 th Stage	Marcellus	50	holes from	9,922 ft	to	10,244 ft
10 th Stage	Marcellus	50	holes from	9,522 ft	to	9,844 ft
11 th Stage	Marcellus	50	holes from	9,119 ft	to	9,446 ft
12 th Stage	Marcellus	50	holes from	8,722 ft	to	9,044 ft
13 th Stage	Marcellus	50	holes from	8,322 ft	to	8,644 ft
14 th Stage	Marcellus	50	holes from	7,962 ft	to	8,254 ft

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Fracturing / Stimulation

1 st Stage	Type of Treatment Slickwater		
	Total Acid 5,000 Gal of 15% HCl		Breakdown Pressure 6,995 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,250 psi MTP 9,140 psi
	Total Fluid 11,792 bbl	Total Nitrogen 0 scf	Total Sand 124,365 lb of 100 mesh
			Total Sand 249,205 lb of 30/50
	ISIP 4,700 psi	5 min 3,920 psi	
2 nd Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,530 psi
	Average Rate 87 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,202 psi MTP 10,500 psi
	Total Fluid 9,584 bbl	Total Nitrogen 0 scf	Total Sand 120,431 lb of 100 mesh
			Total Sand 234,819 lb of 30/50
	ISIP 7,950 psi	5 min 6,299 psi	
3 rd Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,280 psi
	Average Rate 69 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,657 psi MTP 9,180 psi
	Total Fluid 12,589 bbl	Total Nitrogen 0 scf	Total Sand 121,200 lb of 100 mesh
			Total Sand 278,105 lb of 30/50
	ISIP 0 psi	5 min 4,750 psi	
4 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,941 psi
	Average Rate 88 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,359 psi MTP 8,796 psi
	Total Fluid 9,010 bbl	Total Nitrogen 0 scf	Total Sand 121,500 lb of 100 mesh
			Total Sand 283,000 lb of 30/50
	ISIP 4,337 psi	5 min 3,864 psi	
5 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,675 psi
	Average Rate 88 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 7,029 psi MTP 8,091 psi
	Total Fluid 8,891 bbl	Total Nitrogen 0 scf	Total Sand 122,000 lb of 100 mesh
			Total Sand 281,049 lb of 30/50
	ISIP 4,990 psi	5 min 4,051 psi	
6 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,155 psi
	Average Rate 88 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,230 psi MTP 8,971 psi
	Total Fluid 8,866 bbl	Total Nitrogen 0 scf	Total Sand 126,800 lb of 100 mesh
			Total Sand 279,800 lb of 30/50
	ISIP 5,247 psi	5 min 4,793 psi	

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7 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,344 psi	
	Average Rate 83 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,987 psi MTP 9,243 psi	
	Total Fluid 8,733 bbl	Total Nitrogen 0 scf	Total Sand 122,800 lb of 100 mesh
			Total Sand 163,600 lb of 40/70
	ISIP 5,884 psi	5 min 5,280 psi	
8 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 6,008 psi	
	Average Rate 86 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,628 psi MTP 8,911 psi	
	Total Fluid 8,705 bbl	Total Nitrogen 0 scf	Total Sand 120,500 lb of 100 mesh
			Total Sand 269,150 lb of 30/50
	ISIP 5,003 psi	5 min 4,560 psi	
9 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 6,472 psi	
	Average Rate 83 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,375 psi MTP 7,876 psi	
	Total Fluid 8,908 bbl	Total Nitrogen 0 scf	Total Sand 117,600 lb of 100 mesh
			Total Sand 286,900 lb of 30/50
	ISIP 5,283 psi	5 min 4,846 psi	
10 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,227 psi	
	Average Rate 72 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,237 psi MTP 8,945 psi	
	Total Fluid 9,333 bbl	Total Nitrogen 0 scf	Total Sand 122,000 lb of 100 mesh
			Total Sand 276,269 lb of 30/50
	ISIP 5,415 psi	5 min 4,620 psi	
11 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,515 psi	
	Average Rate 83 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,686 psi MTP 8,883 psi	
	Total Fluid 9,999 bbl	Total Nitrogen 0 scf	Total Sand 119,300 lb of 100 mesh
			Total Sand 287,300 lb of 30/50
	ISIP 5,119 psi	5 min 4,700 psi	
12 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,368 psi	
	Average Rate 70 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 8,567 psi MTP 9,360 psi	
	Total Fluid 10,533 bbl	Total Nitrogen 0 scf	Total Sand 131,600 lb of 100 mesh
			Total Sand 275,200 lb of 30/50
	ISIP 5,416 psi	5 min 4,794 psi	
13 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,071 psi	
	Average Rate 86 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,666 psi MTP 8,681 psi	
	Total Fluid 8,950 bbl	Total Nitrogen 0 scf	Total Sand 121,000 lb of 100 mesh
			Total Sand 282,800 lb of 30/50
	ISIP 5,564 psi	5 min 4,783 psi	
14 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 8,137 psi	
	Average Rate 63 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 8,353 psi MTP 9,083 psi	
	Total Fluid 23,795 bbl	Total Nitrogen 0 scf	Total Sand 169,500 lb of 100 mesh
			Total Sand 278,284 lb of 30/50
	ISIP 6,158 psi	5 min 5,529 psi	

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