

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

Farm Name: Mike Ross 10H

Operator Well No.: 627503

LOCATION Elevation: 1436'
District: Buckhan

Quadrangle: Adrian
County: Upshur

Latitude: 2500ft South of 39° 00' 00"
Longitude: 5000ft West of 80° 15' 00"

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'	
13 3/8"	500'	500'	CTS
9 5/8"	1826'	1826'	CTS
5 1/2"	13047'	13047'	As needed

Agent: Eric Gillespie
Inspector: Bill Hatfield
Date Permit Issued: 09/09/2009
Date Well work commenced: 12/23/2009
Date Well Work completed: 01/28/2010
Verbal Plugging Permission
Granted on / /
Rotary Cable Rig
Total Depth (ft): 13047' TVD (ft):7381'
Fresh Water Depth (ft):375'
Salt Water Depth (ft.):NA
Is coal being mined in area (Yes No
Coal Depths (ft): 360'
Was this well logged and plugged back?
Yes No x if yes -
depth cement plug set '

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Open Flow Data

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1st Producing Formation Pay Zone Depth 7,649 ft to 12,910 ft

Gas: Initial Open Flow	1,552 Mcf/day	Oil: Initial Open Flow	bbl/day
Final Open Flow	Mcf/day	Final Open Flow	bbl/day
Time of Open Flow between Initial and Final Tests	In hours		
	Line		
Static Rock Pressure	3,321 psig after	hours	

2nd Producing Formation Pay Zone Depth ft to ft

Gas: Initial Open Flow	Mcf/day	Oil: Initial Open Flow	bbl/day
Final Open Flow	Mcf/day	Final Open Flow	bbl/day
Time of Open Flow between Initial and Final Tests	hours		
Static Rock Pressure	psig after	hours	

3rd Producing Formation Pay Zone Depth ft to ft

Gas: Initial Open Flow	Mcf/day	Oil: Initial Open Flow	bbl/day
Final Open Flow	Mcf/day	Final Open Flow	bbl/day
Time of Open Flow between Initial and Final Tests	hours		
Static Rock Pressure	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.

Chesapeake Energy

Well No.: 627503

Perforated Intervals

1 st Stage	Marcellus	10	holes from	12,588 ft to 12,910 ft
2 nd Stage	Marcellus	10	holes from	12,188 ft to 12,510 ft
3 rd Stage	Marcellus	10	holes from	11,788 ft to 12,110 ft
4 th Stage	Marcellus	10	holes from	11,388 ft to 11,710 ft
5 th Stage	Marcellus	10	holes from	10,988 ft to 11,310 ft
6 th Stage	Marcellus	10	holes from	10,588 ft to 10,749 ft
7 th Stage	Marcellus	10	holes from	10,188 ft to 10,510 ft
8 th Stage	Marcellus	10	holes from	9,788 ft to 10,110 ft
9 th Stage	Marcellus	10	holes from	9,276 ft to 9,598 ft
10 th Stage	Marcellus	10	holes from	8,874 ft to 9,196 ft
11 th Stage	Marcellus	10	holes from	8,474 ft to 8,796 ft
12 th Stage	Marcellus	10	holes from	8,074 ft to 8,396 ft
13 th Stage	Marcellus	10	holes from	7,649 ft to 7,971 ft

Fracturing / Stimulation

1 st Stage	Type of Treatment Slickwater		
	Total Acid 5,000 Gal of 15% HCl		Breakdown Pressure 7,792 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 7,533 psi MTP 9,005 psi
	Total Fluid 8,960 bbl	Total Nitrogen 0 scf	Total Sand 202,390 lb of 100 mesh
			Total Sand 200,369 lb of 40/70
	ISIP 5,444 psi	5 min 4,457 psi	
2 nd Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,746 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,225 psi MTP 9,014 psi
	Total Fluid 8,566 bbl	Total Nitrogen 0 scf	Total Sand 201,00 lb of 100 mesh
			Total Sand 273,000 lb of 40/70
	ISIP 5,508 psi	5 min 4,607 psi	
3 rd Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,876 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,274 psi MTP 9,087 psi
	Total Fluid 8,958 bbl	Total Nitrogen 0 scf	Total Sand 200,100 lb of 100 mesh
			Total Sand 201,000 lb of 40/70
	ISIP 5,548 psi	5 min 4,358 psi	
4 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 7,117 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,398 psi MTP 9,189 psi
	Total Fluid 10,659 bbl	Total Nitrogen 0 scf	Total Sand 188,000 lb of 100 mesh
			Total Sand 172,000 lb of 40/70
	ISIP 5,680 psi	5 min 4,587 psi	
5 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 7,337 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,651 psi MTP 8,793 psi
	Total Fluid 22,458 bbl	Total Nitrogen 0 scf	Total Sand 410,376 lb of 100 mesh
			Total Sand 199,000 lb of 40/70
	ISIP 6,678 psi	5 min 5,305 psi	
6 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,989 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 8,390 psi MTP 8,937 psi
	Total Fluid 22,545 bbl	Total Nitrogen 0 scf	Total Sand 404,120 lb of 100 mesh
			Total Sand 206,000 lb of 40/70
	ISIP 5,710 psi	5 min 5,206 psi	
7 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,906 psi
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>		ATP 7,957 psi MTP 9,129 psi
	Total Fluid 10,687 bbl	Total Nitrogen 0 scf	Total Sand 200,000 lb of 100 mesh
			Total Sand 198,000 lb of 40/70
	ISIP 9,110 psi	5 min -- psi	
8 th Stage	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,003 psi

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	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,735 psi	MTP 9,090 psi
	Total Fluid 9,586 bbl	Total Nitrogen 0 scf	Total Sand 78,000 lb of 100 mesh
			Total Sand 240,000 lb of 40/70
9 th Stage	ISIP 5,400 psi	5 min -- psi	
	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,581 psi	
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,735 psi	MTP 9,090 psi
	Total Fluid 9,295 bbl	Total Nitrogen 0 scf	Total Sand 162,462 lb of 100 mesh
			Total Sand 208,175 lb of 40/70
10 th Stage	ISIP 5,685 psi	5 min 4,866 psi	
	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 6,763 psi	
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 6,763 psi	MTP 9,001 psi
	Total Fluid 10,709 bbl	Total Nitrogen 0 scf	Total Sand 199,021 lb of 100 mesh
			Total Sand 198,848 lb of 40/70
11 th Stage	ISIP 6,113 psi	5 min 5,138 psi	
	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 8,975 psi	
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,970 psi	MTP 8,818 psi
	Total Fluid 9,633 bbl	Total Nitrogen 0 scf	Total Sand 199,021 lb of 100 mesh
			Total Sand 198,000 lb of 40/70
12 th Stage	ISIP 5,258 psi	5 min 4,303 psi	
	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,676 psi	
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 7,279 psi	MTP 8,258 psi
	Total Fluid 10,075 bbl	Total Nitrogen 0 scf	Total Sand 198,500 lb of 100 mesh
			Total Sand 204,955 lb of 40/70
13 th Stage	ISIP 5,142 psi	5 min 4,456 psi	
	Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl	Breakdown Pressure 7,541 psi	
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>	ATP 8,280 psi	MTP 9,024 psi
	Total Fluid 6,962 bbl	Total Nitrogen 0 scf	Total Sand 177,440 lb of 100 mesh
			Total Sand 184,293 lb of 40/70
	ISIP 6,130 psi	5 min 5,279 psi	

Well Log

Formation Name	Top	Bottom	Comments
MAXTON	860	1334	
LITTLE LIME	1334	1400	
BIG LIME	1400	1634	
BIG INJUN	1634	1665	
GANTZ	1704	1764	
GORDON	1777	1793	
FOURTH SAND	2142	2191	
FIFTH SAND	2222	2298	
BAYARD	2338	2361	
ELIZABETH	2444	2481	
WARREN	2587	2615	
SPEECHLEY	2907	2964	
BALLTOWN	3117	3141	
RILEY	3740	3851	
BENSON	4155	4216	
ALEXANDER	4320	4405	
ANGOLA	4497	4816	
RHINESTREET	4816	5686	
ELK	5686	5733	
SYCAMORE	6487	6509	
MIDDLESEX	7001	7236	
GENESEO	7236	7294	
TULLY	7294	7335	
HAMILTON	7335	7560	
MARCELLUS	7560	7660	

Signed: _____

CHESAPEAKE APPALACHIA, LLC

By: TAL ODEN MGR REGULATION DIV

Date: 9/9/2010

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