WR -35

Date: January 27, 2011
API # 47-103-02458

103-02458

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

Farm Name: Hohman HBP S 1H **Operator Well No.:** 627376

LOCATION **Elevation:** 1494' **Quadrangle:** Wileyville
District: Proctor **County:** Wetzel
Latitude: 11320 ft South of 39° 42' 30"
Longitude: 9990 ft West of 80° 40' 00"

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

Agent: Eric Gillespie
Inspector: David Scranage
Date Permit Issued: 1/25/2010
Date Well work commenced: 2/17/2010
Date Well Work completed: 3/21/2010
Verbal Plugging Permission
Granted on / /
Rotary ☒ Cable ☐ Rig
Total Depth (ft): 12,153' TVD (ft): 7115'
Fresh Water Depth (ft): 438'
Salt Water Depth (ft.):NA
Is coal being mined in area (Yes ☐ No ☒)
Coal Depths (ft): 230' & 1280'
Was this well logged and plugged back?
Yes____ No_X__ if yes –
depth cement plug set _____'

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill-Up Cu.Ft.
20"	58'	58'	Driven
13 3/8"	1442'	1442'	1546 Cu. Ft.
9 5/8"	2785'	2785'	805 Cu. Ft.
5 1/2"	12,153	12,153	2760 Cu. Ft.

Open Flow Data

1st Producing Formation — Pay Zone Depth 7,685 ft to 12,007 ft
Gas: Initial Open Flow 2,195 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 4,625 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.

02/22/2013

Chesapeake Energy
Well No.:627376

103.02458

Perforated Intervals

1st Stage	Marcellus	50	holes from	11,685 ft	to	12,007 ft
2nd Stage	Marcellus	50	holes from	11,285 ft	to	11,607 ft
3rd Stage	Marcellus	50	holes from	10,885 ft	to	11,207 ft
4th Stage	Marcellus	50	holes from	10,485 ft	to	10,807 ft
5th Stage	Marcellus	50	holes from	10,085 ft	to	10,407 ft
6th Stage	Marcellus	50	holes from	9,685 ft	to	10,007 ft
7th Stage	Marcellus	50	holes from	9,285 ft	to	9,607 ft
8th Stage	Marcellus	50	holes from	8,885 ft	to	9,207 ft
9th Stage	Marcellus	50	holes from	8,485 ft	to	8,807 ft
10th Stage	Marcellus	50	holes from	8,085 ft	to	8,407 ft
11th Stage	Marcellus	50	holes from	7,685 ft	to	8,007 ft

Fracturing / Stimulation

1st Stage	Type of Treatment Slickwater		
	Total Acid 5,000 Gal of 15% HCl		Breakdown Pressure 5,493 psi
	Average Rate 79 scf/min ☐ or bpm ☒		ATP 7,203 psi MTP 8,627 psi
	Total Fluid 12,233 bbl	Total Nitrogen 0 scf	Total Sand 149,000 lb of 100 mesh
			Total Sand 345,000 lb of 40/70
	ISIP 3,915 psi	5 min 3,197 psi	
2nd Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,404 psi
	Average Rate 86 scf/min ☐ or bpm ☒		ATP 6,251 psi MTP 8,906 psi
	Total Fluid 10,484 bbl	Total Nitrogen 0 scf	Total Sand 140,627 lb of 100 mesh
			Total Sand 342,132 lb of 40/70
	ISIP 4,506 psi	5 min 3,619 psi	
3rd Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,700 psi
	Average Rate 88 scf/min ☐ or bpm ☒		ATP 6,780 psi MTP 8,906 psi
	Total Fluid 10,706 bbl	Total Nitrogen 0 scf	Total Sand 139,710 lb of 100 mesh
			Total Sand 345,590 lb of 40/70
	ISIP 4,328 psi	5 min 3,547 psi	
4th Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 4,794 psi
	Average Rate 87 scf/min ☐ or bpm ☒		ATP 6,602 psi MTP 8,479 psi
	Total Fluid 10,885 bbl	Total Nitrogen 0 scf	Total Sand 146,150 lb of 100 mesh
			Total Sand 347,594 lb of 40/70
	ISIP 4,743 psi	5 min 3,830 psi	
5th Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 6,040 psi
	Average Rate 88 scf/min ☐ or bpm ☒		ATP 6,721 psi MTP 9,172 psi
	Total Fluid 10,453 bbl	Total Nitrogen 0 scf	Total Sand 143,074 lb of 100 mesh
			Total Sand 346,204 lb of 40/70
	ISIP 4,294 psi	5 min 3,510 psi	
6th Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,576 psi
	Average Rate 83 scf/min ☐ or bpm ☒		ATP 7,000 psi MTP 8,042 psi
	Total Fluid 10,107 bbl	Total Nitrogen 0 scf	Total Sand 141,561 lb of 100 mesh
			Total Sand 347,729 lb of 40/70
	ISIP 4,388 psi	5 min 3,994 psi	
7th Stage		Type of Treatment Slickwater	
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,268 psi
	Average Rate 85 scf/min ☐ or bpm ☒		ATP 6,603 psi MTP 8,223 psi
	Total Fluid 10,232 bbl	Total Nitrogen 0 scf	Total Sand 143,157 lb of 100 mesh
			Total Sand 343,786 lb of 40/70
	ISIP 4,318 psi	5 min 3,680 psi	

02/22/2013

8th Stage		Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 4,920 psi	
	Average Rate 82 scf/min ☐ or bpm ☒		ATP 6,392 psi	MTP 7,843 psi
	Total Fluid 9,858 bbl	Total Nitrogen 0 scf	Total Sand 141,612 lb of 100 mesh	
			Total Sand 344,051 lb of 40/70	
	ISIP 4,409 psi	5 min 3,549 psi		
9th Stage		Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,928 psi	
	Average Rate 69 scf/min ☐ or bpm ☒		ATP 7,322 psi	MTP 9,450 psi
	Total Fluid 18,503 bbl	Total Nitrogen 0 scf	Total Sand 143,549 lb of 100 mesh	
			Total Sand 340,423 lb of 40/70	
	ISIP 4,271 psi	5 min 3,279 psi		
10th Stage		Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,325 psi	
	Average Rate 86 scf/min ☐ or bpm ☒		ATP 6,545 psi	MTP 9,985 psi
	Total Fluid 10,069 bbl	Total Nitrogen 0 scf	Total Sand 140,527 lb of 100 mesh	
			Total Sand 344,344 lb of 40/70	
	ISIP 5,378 psi	5 min 3,684 psi		
11th Stage		Type of Treatment Slickwater		
	Total Acid 2,500 Gal of 15% HCl		Breakdown Pressure 5,337 psi	
	Average Rate 90 scf/min ☐ or bpm ☒		ATP 6,462 psi	MTP 7,909 psi
	Total Fluid 9,676 bbl	Total Nitrogen 0 scf	Total Sand 139,678 lb of 100 mesh	
			Total Sand 344,047 lb of 40/70	
	ISIP 4,684 psi	5 min 3,642 psi		

103.02458

02/22/2013

Well Log

Formation Name	Top	Bottom	Comments
SH/SS	0	560	Mud logger
SH/SILT	560	620	Mud logger
SH/SS	620	680	Mud logger
SH	680	730	Mud logger
SH/SS	730	860	Mud logger
SHALE	860	950	Mud logger
SH/SS	950	980	Mud logger
SH/SILT/SS	980	1040	Mud logger
SHALE	1040	1100	Mud logger
SH/SILT	1100	1130	Mud logger
SH/SILT/LS	1130	1160	Mud logger
SH/LS	1160	1220	Mud logger
SH/SILT/LS	1220	1250	Mud logger
SH/SILT	1250	1291	Mud logger
Pittsburgh Coal	1291	1301	Mud logger
SH/SILT	1301	1370	Mud logger
SH/SS	1370	1430	Mud logger
SH	1430	1530	Mud logger
SH/LIME	1530	1590	Mud logger
SH	1590	1680	Mud logger
SH/SS	1680	1770	Mud logger
SH/SS/COAL	1770	1800	Mud logger
SH/SS	1800	1830	Mud logger
SS/trace shale	1830	1890	Mud logger
SH/SS	1890	1995	Mud logger
Salt Sands	1995	2203	Mud logger
Maxton	2203	2378	Mud logger
Big Lime	2378	2408	Mud logger
Big Injun	2408	2681	Mud logger
Geneseo	7038	7053	MWD GR
Tully	7053	7086	MWD GR
Hamilton	7086	7425	MWD GR
Marcellus	7425	12153'	MWD GR

Signed: Marlene Williams

CHESAPEAKE APPALACHIA, LLC

By: Marlene Williams – Regulatory Analyst II

Date: 2-13-2013

02/22/2013