

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: June 7, 2013
API #: 47-051-01485

Farm name: Hall Operator Well No.: 1H

LOCATION: Elevation: 1320' Quadrangle: Glen Easton 7.5'

District: Franklin County: Marshall
Latitude: 14,415 Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 10,360 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
229 West Main Street, Suite 301 Clarksburg, WV 26301	20"		40'	Sanded
Agent: Michael McCown	13 - 3/8"		1,057'	630 ft ³
Inspector: Bill Hendershot	9 - 5/8"		2,514'	989 ft ³
Date Permit Issued: 7/21/2011	5 - 1/2"		11,446'	3,051 ft ³
Date Well Work Commenced: 8/27/2011	2 - 3/8"		6,498'	
Date Well Work Completed: 1/9/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): 6,770'				
Total Measured Depth (ft): 11,450'				
Fresh Water Depth (ft): 60'				
Salt Water Depth (ft): 1,600'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): <u>912-932: 1073-1083</u>				
Void(s) encountered (N/Y) Depth(s) No				

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

Producing formation Marcellus Pay zone depth (ft) 6,770'

Gas: Initial open flow 2823 MCF/d Oil: Initial open flow 36 Bbl/d

Final open flow 3540 MCF/d Final open flow 44 Bbl/d

Time of open flow between initial and final tests 96 Hours

Static rock Pressure 1,500 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

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this report and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information that the information is true, accurate, and complete.

Diane Palmer 6-7-13

Received
AUG - 2 2013
Office of Oil and Gas
WV Dept. of Environmental Protection

11/22/2013

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 Gamma Ray Log

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 sheet:

Plug Back Details Including Plug Type and Depth(s): n/a

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
Sewickley Coal	912 - 932	Geneseo 6541 - 6563
Pittsburgh Coal	1073 - 1083	Tully 6563 - 6610
Maxton	2073 - 2123	Hamilton 6610 - 6740
Big Lime	2124 - 2140	Marcellus 6740 - 6770
Big Injun	2144	
Base of Big Injun	2307	
Weir	2445 - 2625	
Berea	2645 - 2885	
Gordon	2905 - 2935	
Benson	3622 - 3632	
Java	5244 - 5564	
Rhinestreet	6097 - 6449	
Cashaqua	6449 - 6570	
Middlesex	6570 - 6591	
West River	6591 - 6651	

Fluid & Sand Volume Summary - Hall #1H

Date	Stage	Perforated Interval		Fluid Type	Frac Fluid	Pump Down	100 mesh	40/70 M	Total Sand	Avg Inj
		From ft	To ft							
12/7/2011	1	11122	11332	slk wtr	bbls 9255	bbls 0	lbs 90428	lbs 284350	lbs 374778	BPM 82
12/9/2011	2	10822	11032	slk wtr	9098	235	87325	288257	375582	83
12/10/2011	3	10522	10732	slk wtr	8610	193	88425	224026	312451	81
12/11/2011	4	10222	10432	slk wtr	9525	193	88642	286047	374689	83
12/13/2011	5	9922	10132	slk wtr	8684	180	86774	277066	363840	80
12/14/2011	6	9622	9832	slk wtr	9222	193	88141	285132	373273	80
12/15/2011	7	9322	9532	slk wtr	9047	141	88232	286372	374604	80
12/16/2011	8	9022	9232	slk wtr	8764	125	88109	289232	377341	80
12/17/2011	9	8722	8932	slk wtr	8796	105	88032	289750	377782	81
12/19/2011	10	8422	8632	slk wtr	8759	98	88184	277004	365188	81
12/20/2011	11	8122	8332	slk wtr	8758	78	88684	285969	374653	81
12/21/2011	12	7822	8032	slk wtr	8970	75	89739	285247	374986	80
12/22/2011	13	7522	7732	slk wtr	8670	72	88986	288766	377752	82
12/27/2011	14	7222	7432	slk wtr	9207	42	89213	288260	377473	83
12/27/2011	15	6922	7132	slk wtr	8897	40	88932	286805	375737	82

Totals 134262 1770 1327846 4222283 5550129

Water to Recover 136032 bbls