

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 #: 47-051-01486

Farm name: Hall Operator Well No.: 2H

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

District: Franklin County: Marshall
Latitude: 14,395 Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 10,385 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.
<u>229 West Main Street, Suite 301</u> <u>Clarksburg, WV 26301</u>	<u>20"</u>		<u>40'</u>	<u>Sanded</u>
Agent: <u>Michael McCown</u>	<u>13 - 3/8"</u>		<u>1,058'</u>	<u>957 ft^3</u>
Inspector: <u>Bill Hendershot</u>	<u>9 - 5/8"</u>		<u>2,529'</u>	<u>945 ft^3</u>
Date Permit Issued: <u>8/22/2011</u>	<u>5 - 1/2"</u>		<u>11,422'</u>	<u>3,618 ft^3</u>
Date Well Work Commenced: <u>10/16/2011</u>	<u>2 - 3/8"</u>		<u>6,225'</u>	
Date Well Work Completed: <u>1/9/2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>6,770'</u>				
Total Measured Depth (ft): <u>11,440'</u>				
Fresh Water Depth (ft.): <u>60'</u>				
Salt Water Depth (ft.): <u>1,600'</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>912-932: 1073-1083</u>				
Void(s) encountered (N/Y) Depth(s) <u>No</u>				

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 2760 MCF/d Oil: Initial open flow 31 Bbl/d
Final open flow 3801 MCF/d Final open flow 51 Bbl/d
Time of open flow between initial and final tests 96 Hours
Static rock Pressure 1,400 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 document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

[Signature] 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 XWere cuttings caught during drilling? Yes _____ No XWere 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>Surface:</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	

51-01486

Fluid & Sand Volume Summary - Hall #2H

<u>Date</u>	<u>Stage</u>	<u>Perforated Interval</u>		<u>Fluid Type</u>	<u>Frac Fluid</u>	<u>Pump</u>	<u>100 mesh</u>	<u>40/70 M</u>	<u>Total Sand</u>	<u>Avg Inj</u>
		<u>From</u>	<u>To</u>		<u>bbls</u>	<u>bbls</u>	<u>lbs</u>	<u>lbs</u>	<u>lbs</u>	<u>BPM</u>
		<u>ft</u>	<u>ft</u>							
12/6/2011	1	11098	11308	slk wtr	10136	0	87094	287579	374673	82
12/8/2011	2	10798	11008	slk wtr	9042	319	88414	286429	374843	82
12/10/2011	3	10498	10708	slk wtr	9947	217	87963	286683	374646	79
12/11/2011	4	10198	10408	slk wtr	9379	190	88863	289221	378084	82
12/12/2011	5	9898	10108	slk wtr	9766	373	91866	284404	376270	81
12/14/2011	6	9598	9808	slk wtr	8105	158	88053	209441	297494	81
12/15/2011	7	9298	9508	slk wtr	8665	146	88186	289931	378117	80
12/16/2011	8	8998	9208	slk wtr	8876	127	88435	288913	377348	80
12/18/2011	9	8698	8908	slk wtr	8598	99	88095	259966	348061	81
12/19/2011	10	8398	8608	slk wtr	8809	85	88268	289835	378103	80
12/21/2011	11	8098	8308	slk wtr	8742	76	88909	287688	376597	81
12/23/2011	12	7798	8008	slk wtr	8712	89	88781	277728	366509	80
12/28/2011	13	7498	7708	slk wtr	8639	75	90127	285192	375319	81
12/28/2011	14	7278	7408	slk wtr	8474	56	88871	222136	311007	81

Totals

125890

2010

1241925

3845146

5087071

Water to Recover

127900 bbls