

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: April 11, 2013  
API #: 47-051-01480 - Revised

Farm name: Hendrickson - North Operator Well No.: 4H

LOCATION: Elevation: 1228' Quadrangle: Wileyville 7.5'

District: Franklin County: Marshall  
Latitude: 1760 Feet South of 39 Deg. 45 Min. 00 Sec.  
Longitude 11150 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

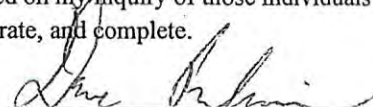
Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
229 West Main Street, Suite 301 Clarksburg, WV 26301	20"		40'	CTS
Agent: Michael McCown	13-3/8"		1040'	958
Inspector: Bill Hendershot	9-5/8"		2514'	958
Date Permit Issued: 6/27/2011	5-1/2"		12389'	3303
Date Well Work Commenced: 7/22/2011	2-3/8"		6112'	
Date Well Work Completed: 3/31/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6,692'				
Total Measured Depth (ft): 12,395'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 832-852; 987-997				
Void(s) encountered (N/Y) Depth(s) N				

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

Producing formation Marcellus Pay zone depth (ft) 6692'  
Gas: Initial open flow 3060 MCF/d Oil: Initial open flow 111 Bbl/d  
Final open flow 3063 MCF/d Final open flow 177 Bbl/d  
Time of open flow between initial and final tests 240 Hours  
Static rock Pressure 1778 psig (surface pressure) after 240 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

4-11-13  
Date

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>
<u>Surface:</u>		
Sewickley Coal	832 - 852	Geneseo 6443 - 6573
Pittsburgh Coal	987 - 997	Tully 6573 - 6510
Maxton	2029 - 2069	Hamilton 6510 - 6641
Big Lime	2060 - 2090	Marcellus 6641 - 6692
Big Injun	2100	
Base of Big Injun	2290	
Weir	2420 - 2590	
Berea	2599 - 2823	
Gordon	2826 - 2857	
Benson	3535 - 3545	
Java	5126 - 5445	
Rhinestreet	5900 - 6240	
Cashaqua	6240 - 6363	
Middlesex	6363 - 6386	
West River	6386 - 6443	

51-01480

**Fluid & Sand Volume Summary - Hendrickson #4H**

<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> ft	<u>To</u> ft							
2/26/2012	1	12218	12328	slk wtr	5128	0	46108	157082	203190	83
2/27/2012	2	11968	12178	slk wtr	8252	758	90369	288759	379128	81
2/27/2012	3	11668	11878	slk wtr	8549	786	89101	305598	394699	82
2/28/2012	4	11368	11578	slk wtr	8148	419	90573	304450	395023	81
2/28/2012	5	11068	11278	slk wtr	8315	327	89397	302502	391899	82
2/29/2012	6	10768	10978	slk wtr	8429	293	88697	303389	392086	82
2/29/2012	7	10468	10678	slk wtr	8416	276	87734	309056	396790	82
3/1/2012	8	10168	10378	slk wtr	8279	230	91213	302068	393281	82
3/1/2013	9	9868	10078	slk wtr	8271	224	89257	303590	392847	82
3/2/2012	10	9568	9778	slk wtr	3523	256	520	0	520	78
3/2/2012	11	9268	9478	slk wtr	8467	162	89985	304269	394254	80
3/3/2012	12	8968	9178	slk wtr	8318	182	90242	303251	393493	83
3/3/2012	13	8668	8878	slk wtr	8236	162	90480	304123	394603	81
3/3/2012	14	8368	8578	slk wtr	8157	130	89090	305384	394474	82
3/4/2012	15	8068	8278	slk wtr	8085	118	90384	302247	392631	81
3/4/2012	16	7768	7978	slk wtr	8183	91	89898	304625	394523	82
3/4/2012	17	7468	7678	slk wtr	8130	91	90958	292516	383474	82

**Totals**

132886      4505      1394006      4692909      6086915

Water to Recover      137391 bbls