

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 #: 47-051-01479 - Revised

Farm name: Hendrickson - North Operator Well No.: 2H

LOCATION: Elevation: 1228' Quadrangle: Wileyville 7.5'

District: Franklin County: Marshall
Latitude: 1775 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 11165 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"		1057'	965
Inspector: Bill Hendershot	9-5/8"		2508'	948
Date Permit Issued: 5/24/2011	5-1/2"		11924'	3172
Date Well Work Commenced: 7/3/2011	2-3/8"		6472'	
Date Well Work Completed: 3/31/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): 6,676'				
Total Measured Depth (ft): 11,924'				
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) 6676'
Gas: Initial open flow 2676 MCF/d Oil: Initial open flow 56 Bbl/d
Final open flow 3220 MCF/d Final open flow 76 Bbl/d
Time of open flow between initial and final tests 240 Hours
Static rock Pressure 1661 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 in 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]
Signature

4-11-13
Date

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

51-01479

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

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

Formations Encountered: _____ Top Depth _____ / _____ Bottom Depth
Surface:

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 - 6676

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

11/22/2013

51-01479

Fluid & Sand Volume Summary - Hendrickson #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> ft	<u>To</u> ft							
2/18/2012	1	11651	11861	slk wtr	8410	0	89826	298219	388045	81
2/18/2012	2	11351	11561	slk wtr	9862	347	89057	307000	396057	82
2/19/2012	3	11051	11261	slk wtr	9600	293	88987	302149	391136	82
2/19/2012	4	10751	10961	slk wtr	8502	273	88976	306486	395462	81
2/20/2012	5	10451	10661	slk wtr	8301	348	89832	301510	391342	83
2/20/2012	6	10151	10361	slk wtr	8273	214	89123	304820	393943	83
2/21/2012	7	9851	10061	slk wtr	8145	214	89141	302816	391957	82
2/21/2012	8	9551	9761	slk wtr	8410	176	89043	302159	391202	82
2/22/2012	9	9251	9461	slk wtr	8388	151	89121	296853	385974	84
2/22/2012	10	8951	9161	slk wtr	8376	158	89072	301384	390456	83
2/23/2012	11	8651	8861	slk wtr	8095	132	90329	302715	393044	82
2/23/2012	12	8351	8561	slk wtr	8300	94	89006	304076	393082	83
2/24/2012	13	8051	8261	slk wtr	8626	73	89038	308343	397381	81
2/24/2012	14	7751	7961	slk wtr	8409	77	89747	304567	394314	83
2/25/2012	15	7451	7661	slk wtr	8159	52	90754	282634	373388	83
2/25/2012	16	7151	7361	slk wtr	8362	37	90737	301708	392445	82
2/26/2012	17	6936	7066	slk wtr	8188	27	89532	304386	393918	82

Totals

144406 2666 1521321 5131825 6653146

Water to Recover

147072 bbls