

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

Farm name: Burch Ridge North Operator Well No.: 2H

LOCATION: Elevation: 1328' Quadrangle: Powhatan Point 7.5'

District: Franklin County: Marshall  
Latitude: 13,575 Feet South of 39 Deg. 47 Min. 30 Sec.  
Longitude 3,150 Feet West of 80 Deg. 47 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 St, Suite 301 Clarksburg, WV 26301	20"		40'	Sanded
Agent: Michael McCown	13 3/8"		1145'	855 ft^3
Inspector: Bill Hendershot	9 5/8"		2533'	773 ft^3
Date Permit Issued: 9-30-2011	5 1/2"		12,345'	3276 ft^3
Date Well Work Commenced: 10-15-2011	2 3/8"		6481'	
Date Well Work Completed: 7-31-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): 6611'				
Total Measured Depth (ft): 12,348'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): Refer to page 2				
Void(s) encountered (N/Y) Depth(s) No				

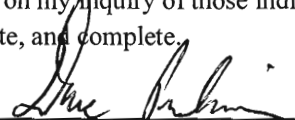
OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) <sup>6946' to 12,266'</sup>  
Gas: Initial open flow 1348 MCF/d Oil: Initial open flow 12 Bbl/d  
Final open flow 3264 MCF/d Final open flow 210 Bbl/d  
Time of open flow between initial and final tests 96 Hours  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ 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

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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

6-25-13  
Date

01/17/2014

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 No

**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	890 - 910	Geneseo	6496 - 6522
Pittsburgh Coal	1031 - 1041	Tully	6522 - 6553
Maxton	2009 - 2059	Hamilton	6553 - 6574
Big Lime	2082- 2112	Marcellus	6574 - 6611
Big Injun	2122		
Base of Big Injun	2256		
Weir	2441 - 2611		
Berea	2629 - 2869		
Gordon	2964 - 2994		
Benson	3668 - 3678		
Java	5291 - 5611		
Rhonestreet	5919 - 6283		
Cashaqua	6283 - 6411		
Middlesex	6411 - 6430		
West River	6430 - 6496		

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Fluid & Sand Volume Summary - Burch Ridge #2H

Date	Stage	Perforated interval		Fluid Type	Frac Fluid	Pump Down	100 mesh			40/70 M			Total Sand		Avg Inj BPM
		From ft	To ft				lbs	lbs	lbs	lbs	lbs	lbs			
6/17/2012	1	12176	12266	slk wtr	4177	0	46980	147541	194521	82					82
6/18/2012	2	11881	12111	slk wtr	6856	348	94037	245296	339333	82					82
6/18/2012	3	11581	11811	slk wtr	6408	329	93955	202448	296403	81					81
6/18/2012	4	11281	11511	slk wtr	6757	317	93978	257809	351787	82					82
6/19/2012	5	10981	11211	slk wtr	7558	310	93433	220971	314404	82					82
6/19/2012	6	10681	10911	slk wtr	7096	273	94457	254456	348913	81					81
6/19/2012	7	10381	10611	slk wtr	7140	250	95023	299080	394103	83					83
6/20/2012	8	10081	10311	slk wtr	6952	234	94498	298636	393134	81					81
6/20/2012	9	9781	10011	slk wtr	6795	209	94318	256767	351085	83					83
6/20/2012	10	9481	9711	slk wtr	6701	184	92757	268916	361673	82					82
6/23/2012	11	9181	9411	slk wtr	6436	158	94076	250795	344871	83					83
6/23/2012	12	8881	9111	slk wtr	6818	160	93797	299476	393273	83					83
6/23/2012	13	8581	8811	slk wtr	6605	130	94153	268411	362564	84					84
6/24/2012	14	8281	8511	slk wtr	6904	116	94055	298910	392965	82					82
6/24/2012	15	7981	8211	slk wtr	6536	96	94943	298097	393040	83					83
6/24/2012	16	7681	7911	slk wtr	6723	81	94011	297511	391522	84					84
6/25/2012	17	7381	7611	slk wtr	6828	56	94751	298699	393450	84					84
6/25/2012	18	6946	7296	slk wtr	6667	38	94139	298600	392739	83					83

**Totals**

**119957      3289      1647361      4762419      6409780**

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Water to Recover  
**123246 bbls**

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