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 25, 2013
API #: 47-051-01508

Farm name: Burch Ridge South Operator Well No.: 4H

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

District: Franklin County: Marshall
Latitude: 13,595 Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 3,120 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc

Address: 229 West Main St, Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"		40'	Sanded
Agent: Michael McCown	13 3/8"		1145'	1014 ft^3
Inspector: Bill Hendershot	9 5/8"		2511'	1038 ft^3
Date Permit Issued: 9-30-2011	5 1/2"		12,541'	3327 ft^3
Date Well Work Commenced: 10-15-2011	2 3/8"		6506'	
Date Well Work Completed: 7-31-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 6596'				
Total Measured Depth (ft): 12,543'				
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) 6887' to 12,267'
Gas: Initial open flow 1264 MCF/d Oil: Initial open flow 14 Bbl/d
Final open flow 2736 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

Received
Office of Oil & Gas
JUL 2013

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

51-01508

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: Surface:	Top Depth / Bottom Depth	Formations Encountered:	Top Depth / Bottom Depth
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 - 6596
Big Injun	2122		
Base of Big Injun	2256		
Weir	2441 - 2611		
Berea	2629 - 2869		
Gordon	2964 - 2994		
Benson	3668 - 3678		
Java	5291 - 5611		
Rhinestreet	5919 - 6283		
Cashaqua	6283 - 6411		
Middlesex	6411 - 6430		
West River	6430 - 6496		

Fluid & Sand Volume Summary - Burch Ridge #4H

Date	Stage	Perforated interval From ft	Perforated interval To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
6/8/2012	1	12375	12462	slk wtr	4169	0	48012	151903	199915	81
6/9/2012	2	12077	12307	slk wtr	7579	451	94902	298333	393235	80
6/9/2012	3	11777	12007	slk wtr	7725	367	95171	298437	393608	80
6/10/2012	4	11477	11707	slk wtr	7557	300	94536	296980	391516	80
6/10/2012	5	11177	11407	slk wtr	7604	317	94652	299437	394089	80
6/11/2012	6	10877	11107	slk wtr	7553	274	94156	298118	392274	80
6/11/2012	7	10577	10807	slk wtr	7623	261	94803	299230	394033	81
6/11/2012	8	10277	10507	slk wtr	7593	258	94074	298379	392453	81
6/12/2012	9	9977	10207	slk wtr	7632	221	94553	297638	392191	80
6/12/2012	10	9677	9907	slk wtr	224	195	94911	296566	391477	81
6/13/2012	11	9377	9607	slk wtr	7542	192	94845	296598	391443	81
6/13/2012	12	9077	9307	slk wtr	7566	186	95221	295188	390409	82
6/13/2012	13	8777	9007	slk wtr	6344	139	94051	297626	391677	83
6/14/2012	14	8477	8707	slk wtr	6525	129	94212	297745	391957	80
6/14/2012	15	8177	8407	slk wtr	6446	126	94071	296088	390159	81
6/14/2012	16	7877	8107	slk wtr	6366	109	95012	295961	390973	80
6/15/2012	17	7577	7807	slk wtr	6386	105	94024	298875	392899	81
6/15/2012	18	7277	7507	slk wtr	6432	53	94092	299792	393884	81
6/15/2012	19	6980	7207	slk wtr	6407	38	94024	295384	389408	81
	Totals				**125273**	**3721**	**1749322**	**5508278**	**7257600**	

Water to Recover **128994** **bbls**