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: 6/27/2013
API #: 47-051-01534

Farm name: Shields Operator Well No.: 2H

LOCATION: Elevation: 1331' Quadrangle: Powhatan Point 7.5'

District: Franklin County: Marshall
Latitude: 11,600 Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 10,540 Feet West of 80 Deg. 45 Min. 00 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"		110'	CTS
Agent: Michael McCown	13 3/8"		1146'	1020 ft^3
Inspector: Bill Hendershot	9 5/8"		2527'	1058 ft^3
Date Permit Issued: 4-14-2012	5 1/2"		9864'	2765 ft^3
Date Well Work Commenced: 3-20-2012	2 3/8"		6425'	
Date Well Work Completed: 4-11-2013				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 6514'				
Total Measured Depth (ft): 9890'				
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 9,721'
Gas: Initial open flow 1560 MCF/d Oil: Initial open flow 97 Bbl/d
Final open flow 2280 MCF/d Final open flow 172 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 1 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.

6-27-13

01/17/2014

51-01534

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	766 - 786	Geneseo	6355 - 6375
Pittsburgh Coal	907 - 917	Tully	6375 - 6412
Maxton	1885 - 1935	Hamilton	6412 - 6452
Big Lime	1958 - 1988	Marcellus	6452 - 6514
Big Injun	1988		
Base of Big Injun	2132		
Weir	2317 - 2487		
Berea	2505 - 2745		
Gordon	2840 - 2870		
Benson	3544 - 3554		
Java	5167 - 5487		
Rhinestreet	5839 - 5981		
Cashaqua	5981 - 6270		
Middlesex	6270 - 6284		
West River	6284 - 6355		

Received
Office of Oil & Gas
JUL 1 2013

01/17/2014

Fluid & Sand Volume Summary - Shields #2H

Date	Stage	Perforated interval From	Perforated interval To	Fluid Type	Frac Fluid	Pump Down	100 mesh	40/70 M	Total Sand	Avg Inj
		ft	ft		bbls	bbls	lbs	lbs	lbs	BPM
12/12/2012	1	9687	9711	slk wtr	2747	318	22058	65646	87704	80
12/13/2012	2	9572	9662	slk wtr	3810	185	35927	146289	182216	81
12/14/2012	3	9287	9537	slk wtr	7046	222	40495	290483	330978	82
12/15/2012	4	8987	9237	slk wtr	7082	196	40964	288023	328987	81
12/16/2012	5	8687	8937	slk wtr	6979	181	38586	320140	358726	80
12/17/2012	6	8387	8637	slk wtr	6457	160	44897	261739	306636	80
12/17/2012	7	8087	8337	slk wtr	7320	157	39120	318884	358004	80
12/18/2012	8	7787	8037	slk wtr	7846	114	46942	311972	358914	80
12/19/2012	9	7487	7737	slk wtr	7295	279	39066	319838	358904	81
12/20/2012	10	7187	7437	slk wtr	6892	128	40457	318202	358659	80
12/21/2012	11	6887	7137	slk wtr	7198	87	39951	311376	351327	82
	Totals				**70672**	**2027**	**428463**	**2952592**	**3381055**	

Water to Recover **72699 bbls**

51-01534