

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

Farm name: Shields Operator Well No.: 7H

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

District: Franklin County: Marshall
Latitude: 11,465 Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 10,745 Feet West of 80 Deg. 45 Min. 00 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"		110'	CTS
Agent: <u>Michael McCown</u>	13 3/8"		1149'	1058 ft^3
Inspector: <u>Bill Hendershot</u>	9 5/8"		2506'	1103 ft^3
Date Permit Issued: <u>3-29-2012</u>	5 1/2"		11449'	3217 ft^3
Date Well Work Commenced: <u>6-10-2012</u>	2 3/8"		6372'	
Date Well Work Completed: <u>5-31-2013</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>6488'</u>				
Total Measured Depth (ft): <u>11,480'</u>				
Fresh Water Depth (ft.): <u>60'</u>				
Salt Water Depth (ft.): <u>1600'</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>Refer to page 2</u>				
Void(s) encountered (N/Y) Depth(s) <u>No</u>				

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

Producing formation Marcellus Pay zone depth (ft) 6837' to 9371'
Gas: Initial open flow 624 MCF/d Oil: Initial open flow 32 Bbl/d
Final open flow 1200 MCF/d Final open flow 181 Bbl/d
Time of open flow between initial and final tests 72 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.

David Pulcini

6-27-13 01/17/2014

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 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

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		
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 - 6488
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	

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51-01539

Fluid & Sand Volume Summary - Shields #7H

<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>	<u>To</u>							
4/1/2013	1	11272	11296	slk wtr	4010	bbls	lbs	lbs	lbs	BPM
4/4/2013	2	11157	11247	slk wtr	4369	456	106835	71506	178341	80
4/5/2013	3	10872	11122	slk wtr	6333	350	121116	42843	163959	80
4/6/2013	4	10572	10822	slk wtr	6285	336	259149	90331	349480	80
4/7/2013	5	10272	10522	slk wtr	5583	334	259619	90571	350190	80
4/10/2013	6	9972	10222	slk wtr	6647	293	256157	37158	293315	80
4/12/2013	7	9672	9922	slk wtr	6045	264	261679	96877	358556	80
4/13/2013	8	9372	9622	slk wtr	6480	265	259330	92602	351932	80
4/15/2013	9	9072	9322	slk wtr	5401	240	259437	78695	338132	80
4/16/2013	10	8772	9022	slk wtr	5859	204	258431	93147	351578	81
4/17/2013	11	8472	8722	slk wtr	6037	191	259747	92984	352731	80
4/18/2013	12	8172	8422	slk wtr	5925	163	259607	80834	340441	80
4/19/2013	13	7872	8122	slk wtr	5775	151	259094	90546	349640	80
4/20/2013	14	7572	7822	slk wtr	5887	122	261641	79757	341398	81
4/21/2013	15	7272	7522	slk wtr	5784	107	258576	89253	347829	81
4/22/2013	16	6972	7222	slk wtr	5524	75	258188	92395	350583	80
Totals						3616	3856031	1286442	5142473	
						<u>Water to Recover</u>		<u>95560 bbls</u>		

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