

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 #: 47-051-01551 *Revised*

Farm name: Lily - South Operator Well No.: 1H

LOCATION: Elevation: 1272' Quadrangle: New Martinsville 7.5'

District: Franklin County: Marshall
Latitude: 4620 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 4165 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

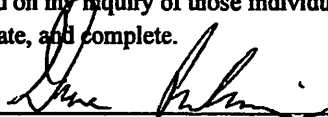
Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
229 West Main Street, Suite 301 Clarksburg, WV 26301	20"		110'	CTS
Agent: Michael McCown	13-3/8"		1177'	1128
Inspector: Bill Hendershot	9-5/8"		2513'	1038
Date Permit Issued: 6/1/2012	5-1/2"		12484'	3552
Date Well Work Commenced: 9/22/2012	2-3/8"		6554'	
Date Well Work Completed: 12/17/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6,508'				
Total Measured Depth (ft): 12,519'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 898-918; 1077-1087				
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) 6508'
Gas: Initial open flow 1680 MCF/d Oil: Initial open flow 98 Bbl/d
Final open flow 2256 MCF/d Final open flow 128 Bbl/d
Time of open flow between initial and final tests 264 Hours
Static rock Pressure 1669 psig (surface pressure) after 264 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 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

4-11-13
Date

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 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

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		
Sewickley Coal	898 - 918	Geneseo 6385 - 6407
Pittsburgh Coal	1077 - 1087	Tully 6407 - 6439
Maxton	1971 - 2039	Hamilton 6439 - 6470
Big Lime	2040 - 2070	Marcellus 6470 - 6508
Big Injun	2079	
Base of Big Injun	2180	
Weir	2418 - 2588	
Berea	2597 - 2837	
Gordon	2903 - 2933	
Benson	3600 - 3610	
Java	5200 - 5520	
Rhinestreet	5887 - 6200	
Cashaqua	6200 - 6300	
Middlesex	6300 - 6325	
West River	6325 - 6385	

51-01551

Fluid & Sand Volume Summary - Livy #1H

Date	Stage	Perforated Interval		Fluid Type	Frac Fluid	Pump Down	100 mesh	40/70 M	Total Sand	Avg Inj
		From ft	To ft							
11/10/2012	1	12338	12362	slk wtr	3603	424	26649	85794	112443	BPM
11/11/2012	2	12193	12283	slk wtr	6882	393	77855	13625	91480	79
11/12/2012	3	11908	12158	slk wtr	6986	371	78563	282522	361085	80
11/13/2012	4	11608	11858	slk wtr	7044	372	77526	262679	340205	80
11/14/2012	5	11308	11558	slk wtr	6976	321	77645	282542	360187	80
11/15/2012	6	11008	11258	slk wtr	7984	310	78612	283424	362036	80
11/16/2012	7	10708	10958	slk wtr	6920	303	77573	281063	358636	80
11/17/2012	8	10408	10658	slk wtr	7526	241	77611	281634	359245	81
11/18/2012	9	10108	10358	slk wtr	6565	252	77629	260019	337648	80
11/19/2012	10	9808	10058	slk wtr	7071	222	77477	285268	362745	80
11/20/2012	11	9508	9758	slk wtr	6820	213	77495	287942	365437	80
11/24/2012	12	9208	9458	slk wtr	6105	178	77774	144128	221902	81
11/25/2012	13	8908	9158	slk wtr	6920	172	77502	281516	359018	80
11/26/2012	14	8608	8858	slk wtr	7020	198	77492	280089	357581	80
11/28/2012	15	8308	8558	slk wtr	6921	144	77524	283940	361464	80
11/29/2012	16	8008	8258	slk wtr	6528	155	77568	218758	296326	80
11/30/2012	17	7708	7958	slk wtr	6614	134	77535	251189	328724	80
12/1/2012	18	7408	7658	slk wtr	6922	94	77514	283064	360578	80
12/2/2012	19	7148	7358	slk wtr	6921	64	77521	285105	362626	80
Totals					128328	4561	1425065	4634301	6059366	

Water to Recover

132889 bbls