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: April 11, 2013
API #: 47-051-01553

Farm name: Lily - South Operator Well No.: 3H

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

District: Franklin County: Marshall
Latitude: 4590 Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 4195 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main Street, 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"		1177'	1071
Inspector: Bill Hendershot	9-5/8"		2528'	1079
Date Permit Issued: 6/1/2012	5-1/2"		12436'	3486
Date Well Work Commenced: 8/22/2012	2-3/8"		6616'	
Date Well Work Completed: 12/17/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,503'				
Total Measured Depth (ft): 12,461'				
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) 6503'
Gas: Initial open flow 1560 MCF/d Oil: Initial open flow 103 Bbl/d
Final open flow 2376 MCF/d Final open flow 128 Bbl/d
Time of open flow between initial and final tests 264 Hours
Static rock Pressure 1728 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

Received
Office of Oil & Gas
APR 12 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

4-11-13
Date

06/14/2013

51-01553

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, Mudlog, Acousti, Density, Induction, Mech. Prop.& XMAC

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 page:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

SEWICKLEY COAL: 898 - 918	GENESEO: 6702 - 6741
PITTSBURGH COAL: 1077 - 1087	TULLY: 6741 - 6806
MAXTON: 1971 - 2039	HAMILTON: 6806 - 6898
BIG LIME: 2040 - 2070	MARCELLUS: 6898 - 6951
BIG INJUN: 2079	ONONDAGA: 6951 - n/a (TD'd before base)
BASE OF BIG INJUN: 2180	
WEIR: 2418 - 2588	
BEREA: 2597 - 2837	
GORDON: 2903 - 2933	
BENSON: 3600 - 3610	
JAVA: 5200 - 5520	
RHINESTREET: 6124 - 6465	
CASHAQUA: 6465 - 6582	
MIDDLESEX: 6582 - 6615	
WEST RIVER: 6615 - 6702	

Received
Office of Oil & Gas
APR 12 2013

06/14/2013

51-015553

Fluid & Sand Volume Summary - Lily #3H

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
11/10/2012	1	12276	12300	slk wtr	3264	393	27510	93492	121002	81
11/11/2012	2	12147	12237	slk wtr	6428	380	78280	217995	296275	80
11/13/2012	3	11862	12112	slk wtr	7752	341	77535	163792	241327	80
11/14/2012	4	11562	11812	slk wtr	7069	305	77510	282187	359697	80
11/15/2012	5	11262	11512	slk wtr	7230	308	77701	282851	360552	81
11/16/2012	6	10962	11212	slk wtr	7178	296	77695	283661	361356	81
11/17/2012	7	10662	10912	slk wtr	6961	267	77619	285156	362775	82
11/18/2012	8	10362	10612	slk wtr	6620	243	78509	281902	360411	80
11/19/2012	9	10062	10312	slk wtr	7033	221	78124	285749	363873	81
11/20/2012	10	9762	10012	slk wtr	6945	196	77490	283975	361465	82
11/21/2012	11	9462	9712	slk wtr	7036	200	77664	282696	360360	81
11/24/2012	12	9162	9412	slk wtr	6946	160	79264	281606	360870	82
11/25/2012	13	8862	9112	slk wtr	6810	172	78142	281969	360111	81
11/26/2012	14	8562	8812	slk wtr	6766	207	78372	279473	357845	82
11/27/2012	15	8262	8512	slk wtr	6871	151	77626	278093	355719	80
11/28/2012	16	7962	8212	slk wtr	6760	142	77534	279768	357302	80
11/29/2012	17	7662	7912	slk wtr	6809	108	68529	257617	326146	80
11/20/2012	18	7362	7612	slk wtr	6802	90	75097	263713	338810	80
12/1/2012	19	7252	7322	slk wtr	6921	62	77535	269611	347146	80
	Totals				**128201**	**4242**	**1417736**	**4935306**	**6353042**	

Water to Recover **132443 bbls**