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

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Office of Oil and Gas
AUG 18 2014

WV Department of
Environmental Protection

API 47-103-02745 County Wetzel District Grant
Quad Pine Grove 7.5' Pad Name L S Hoyt Unit 403 Field/Pool Name Wileyville
Farm name Dallison Lumber, Inc Well Number L S Hoyt 403 N-3H
Operator (as registered with the OOG) HG Energy, LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,382,694 Easting 529,411
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,383,932 Easting 527,788

Elevation (ft) 1250 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Water based salt polymer mud

Date permit issued 04/03/2012 Date drilling commenced 1/13/2013 Date drilling ceased 6/13/2013
Date completion activities began 9/26/2013 Date completion activities ceased 10/29/2013
Verbal plugging (Y/N) n/a Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 310', 1050' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1550' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 820', 910', 1050' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

10/03/2014

API 47- 103 - 02745 Farm name Dallison Lumber, Inc Well number L S Hoyt 403 N-3H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	20"	20"	80'	New	H-40/ 40' /94#	n/a	N/A - Drilled in
Surface	17-1/2"	13-3/8"	12,211'	New	AT-50/54.5/1221'	n/a	Cement to surface
Coal							
Intermediate 1	12-1/4"	9-5/8"	3301'	New	J-55/40/3301'	n/a	Cement to surface
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	13,463'	New	P-110/20/13,483'	n/a	Cement to surface
Tubing		2-3/8"		New	L-80/4.7/7380.42'	n/a	Cement to surface
Packer type and depth set		n/a					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Drilled in						
Surface	Gas Block	1105	15.6	1.21	1333	Surface	12
Coal							
Intermediate 1	Type 1	1279	1 - 15.0	1.29	1688	Surface	12
Intermediate 2			t - 14.8	1.33			
Intermediate 3							
Production	PNE-1	2609	1 - 14.7	1.49	3537	Surface	12
Tubing			t - 14.3	1.23			

Drillers TD (ft) 13,526' Loggers TD (ft) 13,526'
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) N/A

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING Sur - 11
Int - 12
Prod - 80

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	9/26/2013	13394		n/a	Marcellus
2	9/26/2013	13094	13295	50	Marcellus
3	9/27/2013	12794	12995	50	Marcellus
4	9/30/2013	12494	12695	50	Marcellus
5	10/1/2013	12194	12395	50	Marcellus
6	10/2/2013	11894	12095	50	Marcellus
7	10/3/2013	11594	11795	50	Marcellus
8	10/4/2013	11294	11495	50	Marcellus
9	10/7/2013	10994	11195	50	Marcellus
10	10/8/2013	10694	10895	50	Marcellus
11	10/11/2013	10394	10595	50	Marcellus
12	10/14/2013	10095	10295	50	Marcellus
13	10/15/2013	9794	9995	50	Marcellus
14	10/16/2013	9494	9695	50	Marcellus
15	10/17/2013	9194	9395	50	Marcellus
	See	Page	4		

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	9/26/13	70.5	7423	n/a	3736	378500	7941	n/a
2	9/26/13	73.8	7543	5182	4350	312200	7423	n/a
3	9/27/13	65.9	7199	5375	5651	351400	9768	n/a
4	9/30/13	79.7	7770	4996	n/a	420000	10389	n/a
5	10/1/13	81	7649	n/a	5614	420000	8948	n/a
6	10/2/13	79.2	7592	4994	4625	355500	8939	n/a
7	10/3/13	77.6	7546	5095	5218	412000	9769	n/a
8	10/4/13	78.2	7473	5231	5005	426000	8706	n/a
9	10/7/13	80.2	7385	n/a	5059	426000	9676	n/a
10	10/8/13	74.6	7255	5397	4957	426000	7954	n/a
11	10/11/13	70.6	7023	5342	n/a	417300	9155	n/a
12	10/14/13	81.4	7059	5330	4440	409000	8621	n/a
13	10/15/13	74.6	6770	5073	5030	413000	8730	n/a
14	10/16/13	73	6936	5133	5048	430000	8523	n/a
15	10/17/13	73.2	6456	5140	4824	441500	8914	n/a
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Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>
Marcellus (LP - TD)	7236' - 7250' TVD 7540' - 13526' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3500 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 11808 mcfpd Oil 0 bpd NGL 131 bpd Water 310 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	0	0	0	
Pittsburgh Coal	n/a	n/a	n/a	n/a	
Sand/Shale	0	2242'	0	2242'	
Big Lime	2242'	2312'	2242'	2312'	
Big Injun	2312'	2534'	2312'	2534'	
Shale	2534'	3098'	2534'	3098'	
Fifty Foot					
Shale					
Sand					
Shale					
Fifth Sand	3098'	3150'	3098'	3150'	
Shale	3150'	7250'	3150'	13,526'	
TD	7250'		13,526'		

Please insert additional pages as applicable.

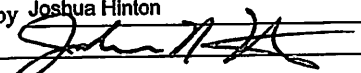
Drilling Contractor Dallas-Morris
Address 103 South Kendall City Bradford State PA Zip 16701

Logging Company Emprica Surface Logging
Address 85 Karago Ave, Suite 12 City Youngstown State OH Zip 44512

Cementing Company Baker Hughes
Address PO Box 301057 City Dallas State TX Zip 75303-1057

Stimulating Company Producers Service Corporation
Address PO Box 2277 City Zanesville State OH Zip 43702-2277

Please insert additional pages as applicable.

Completed by Joshua Hinton Telephone 304-420-1103
Signature  Title Operations Manager Date 8-15-14

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry