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WR-35
Rev. 8/23/13

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

RECEIVED
Office of Oil and Gas

AUG 18 2014

API 47-103-02746 County Wetzel District Grant
Quad Pine Grove 7.5' Pad Name L S Hoyt Unit 403 Field WV Department of Environmental Protection
Farm name Dallison Lumber, Inc Well Number L S Hoyt 403 S-4H
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 4,382,682 Easting 529,404
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,381,395 Easting 530,348

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 03/30/2012 Date drilling commenced 1/12/2013 Date drilling ceased 8/17/2013
Date completion activities began 11/1/2013 Date completion activities ceased 11/19/2013
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 - 02746 Farm name Dallison Lumber, Inc Well number L S Hoyt 403 S-4H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/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"	1238.78'	New	AT50/54.5/1238.78'	n/a	Cement to Surface
Coal							
Intermediate 1	12-1/4"	9-5/8"	3328'	New	J55/40/3328'	n/a	Cement to Surface
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	12407'	New	P-110/20/12,407'	n/a	Cement to Surface
Tubing		2-3/8"		New	L-80/4.77/507.94'	n/a	n/a
Packer type and depth set							

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	1250	15.6	1.21	1333	Surface	12
Coal							
Intermediate 1	Gas Block	1040	1 - 15.0	1.3	1333	Surface	12
Intermediate 2			t - 15.0	1.29			
Intermediate 3							
Production	Class A	2441	14.7	1.49	3238	Surface	12
Tubing			14.5	1.19			

Drillers TD (ft) 12,441' Loggers TD (ft) 12,441'
 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 Surf - 15
Int - 12*
Prod - 81

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 _____

API 47- 103 - 02746

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Well number L S Hoyt 403 S-4H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	11/1/2013	12314		n/a	Marcellus
2	11/1/2013	12014	12215	50	Marcellus
3	11/4/2013	11714	11915	50	Marcellus
4	11/5/2013	11414	11615	50	Marcellus
5	11/6/2013	11114	11315	50	Marcellus
6	11/8/2013	10814	11015	50	Marcellus
7	11/8/2013	10514	10715	50	Marcellus
8	11/11/2013	10214	10415	50	Marcellus
9	11/12/2013	9914	10115	50	Marcellus
10	11/13/2013	9614	9815	50	Marcellus
11	11/14/2013	9314	9515	50	Marcellus
12	11/14/2013	9014	9215	50	Marcellus
13	11/15/2013	8714	8915	50	Marcellus
14	11/15/2013	8414	8615	50	Marcellus
15	11/16/2013	8114	8315	50	Marcellus
16	11/18/2013	6555	6559	20	Marcellus

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	11/1/13	77.3	7062	n/a	4109	288800	7063	n/a
2	11/1/13	76.3	7184	n/a	4974	425500	8095	n/a
3	11/4/13	75	7157	5341	4994	369900	9057	n/a
4	11/5/13	73.4	7146	5331	3938	425500	9031	n/a
5	11/6/13	72	6880	5439	3988	353100	8680	n/a
6	11/8/13	74.7	6888	5265	4237	425500	8634	n/a
7	11/8/13	80.2	6894	5436	5030	425500	9203	n/a
8	11/11/13	80.7	7083	5169	4351	425500	9105	n/a
9	11/12/13	76	6733	5817	4828	425500	8881	n/a
10	11/13/13	77.9	6796	4336	4424	425500	9132	n/a
11	11/14/13	77.4	6559	4871	4783	425500	9182	n/a
12	11/14/13	79.3	6543	4982	4415	425500	8987	n/a
13	11/15/13	79.9	6721	5228	4561	425500	9129	n/a
14	11/15/13	73.4	6647	6647	3709	425500	9732	n/a
15	11/16/13	76.4	5908	5643	3428	425500	9424	n/a
16	11/18/13	46.5	4382	6460	2728	41900	1304	n/a

Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>
<u>Marcellus (LP - TD)</u>	<u>7230' - 7302' TVD 8375' - 12441' MD</u>
_____	_____
_____	_____
_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 4729 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 9456 mcfpd Oil 0 bpd NGL 147 bpd Water 465 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'	7301'	3150'	12441'	
TD	7301'	7302'	12441'		
	7302'				

Please insert additional pages as applicable.

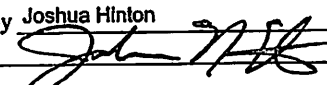
Drilling Contractor Dallas-Morris
Address 103 South Kendall City Bradford State PA Zip 16701

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