

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

DATE: _____
API #: 47-103-02638

Well Operator's Report of Well Work
DALLISON LUMBER, INC LSHOYT

Farm name: LSHOYT Operator Well No.: 401-4H

LOCATION: Elevation: 1375' Quadrangle: PINE GROVE 7.5'

District: GRANT County: WETZEL
Latitude: 8258' Feet South of 39 Deg. 37 Min. 30 Sec.
Longitude 5101 Feet West of 80 Deg. 37 Min. 30 Sec.

Company: HG ENERGY, LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Ct. Ft.
<u>5260 DUPONT ROAD PARKERSBURG, WY 26101</u>	<u>20" CASING</u>	<u>40'</u>	<u>40'</u>	<u>N/A</u>
Agent: <u>MIKE KIRSCH</u>	<u>44" J-55</u>			<u>DRILLED IN</u>
Inspector: <u>DEREK HAUGHT</u>				
Date Permit Issued: <u>7/18/2011</u>	<u>13 3/8" CASING</u>	<u>477'</u>	<u>477'</u>	<u>Cement to SURFACE</u>
Date Well Work Commenced: <u>12/13/2011</u>	<u>54.5" J-55</u>			<u>475 sks</u>
Date Well Work Completed: <u>4/12/2013</u>				
Verbal Plugging:	<u>978" CASING</u>	<u>3366'</u>	<u>3366'</u>	<u>CEMENT TO SURFACE</u>
Date Permission granted on:	<u>40" J-55</u>			<u>1175 sks</u>
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>7,457'</u>	<u>5 1/2" CASING</u>	<u>13,458'</u>	<u>13,458'</u>	<u>Cement to SURFACE</u>
Total Measured Depth (ft): <u>13523</u>	<u>20" P-110</u>			<u>2139 sks</u>
Fresh Water Depth (ft.): <u>115', 415'</u>				
Salt Water Depth (ft.): <u>1915'</u>	<u>2 1/8" TUBING</u>			
Is coal being mined in area (N/Y)? <u>NO</u>	<u>47" L-80</u>	<u>N/A</u>	<u>7694.11</u>	<u>N/A</u>
Coal Depths (ft.): <u>900', 1005', 1144</u>				
Void(s) encountered (N/Y) Depth(s) <u>N, N/A</u>				

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

Producing formation Marcellus Shale Pay zone depth (ft) 7457' TVD
Gas: Initial open flow 9.5M MCF/d Oil: Initial open flow 50 Bbl/d
Final open flow 8.4M MCF/d Final open flow 35 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 2,500 psig (surface pressure) after 24 Hours

Second producing formation N/A 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, that the information is true, accurate, and complete.

DCW for Josh Hinton
Signature

Date

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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 MUD LOGS AND REAL TIME MUD GAMMA RAY LOGS WHILE WE DRILLED THE CURVES AND LATERAL PORTIONS OF THE WELL.

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 SHEETS

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

Formations Encountered: _____ Top Depth _____ Bottom Depth _____
Surface: _____

Formations Encountered:	Top Depth	Bottom Depth
?		
	<u>TVD TOPS</u>	<u>BOTTOM</u>
<u>BIG LIME</u>	<u>2367</u>	<u>2437</u>
<u>BIG IN JUN</u>	<u>2437</u>	<u>2659</u>
<u>GORDON STRAY</u>	<u>3223</u>	<u>3254</u>
<u>GORDON</u>	<u>3254</u>	<u>3275</u>
<u>TULLY</u>	<u>7580</u>	<u>7629</u>
<u>HAMILTON</u>	<u>7629</u>	<u>7848</u>
<u>MARCELLUS</u>	<u>7848</u>	<u>TD</u>

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L S Hoyt 401 4H 47-103-02638 - Perforation Detail

Stage 1						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
N/A	13359	N/A	N/A	N/A	N/A	RDV
Stage 2						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
13285	13235-36	13175-76	13115-16	13055-56	12995-96	PD
Stage 3						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
12945	12895-96	12835-36	12775-76	12715-16	12655-56	PD
Stage 4						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
12610	12555-56	12495-96	12435-36	12375-76	12315-16	PD
Stage 5						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
12272	12215-16	12155-56	12095-96	12035-36	11975-76	PD
Stage 6						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
11921	11875-76	11815-16	11755-56	11695-96	11635-36	PD
Stage 7						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
11585	11535-36	11475-76	11415-16	11355-56	11295-96	PD
Stage 8						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
11245	11195-96	11135-36	11075-76	11015-16	10955-56	PD
Stage 9						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
10905	10855-56	10795-96	10735-36	10675-76	10615-16	PD
Stage 10						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
10565	10515-16	10455-56	10395-96	10335-36	10275-76	PD
Stage 11						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
10225	10175-76	10115-16	10055-56	9995-96	9935-36	PD
Stage 12						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
9890	9835-36	9775-76	9715-16	9655-56	9595-96	PD
Stage 13						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
9555	9495-96	9435-36	9375-76	9315-16	9255-56	PD
Stage 14						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
9205	9155-56	9095-96	9035-36	8975-76	8915-16	PD
Stage 15						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
8865	8815-16	8755-56	8695-96	8635-36	8575-76	PD
Stage 16						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
8525	8516-17	8415-16	8355-56	8295-96	8235-36	PD
Stage 17						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
8185	8135-36	8075-76	8015-16	7955-56	7895-96	PD

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L.S. Hoyt #01.4H Frac Summary API #47-103-02638

Stage	# of Ports	Total Acid (gal)	Total Water (bbl)	Total Sand (lb)	Total Slurry (bbl)	Prod Vol (bbl)	100 Mesh (lb)	40/70 Mesh (lb)	50/50 Mesh RCS	ROP (psi)	ISIP (psi)	1 Min SP (psi)	2 Min SP (psi)	5 Min SP (psi)	ATP (psi)	Avg Rate (bbl/min)	PUMP DOWN (bbl)
1	N/A	1,000	7,284	324,400	7,374	578	120,200	149,900	58,200	N/A	4,445	3,413	3,622	3,388	6,845	60	-
2	60	1,000	7,591	409,300	8,687	574	145,000	149,900	114,200	574	4,218	3,677	3,488	3,294	6,479	58	367
3	60	1,000	7,493	387,200	8,184	594	120,200	149,900	97,100	4,886	4,049	3,674	3,538	3,385	6,632	66	295
4	60	1,000	8,131	421,100	8,769	654	120,200	150,200	150,700	5,188	4,481	3,897	3,719	3,564	6,907	79	200
5	60	1,000	8,151	421,100	8,728	626	120,200	150,200	150,700	4,778	4,606	3,658	3,791	3,596	6,772	78	253
6	60	1,000	8,258	401,100	8,003	627	110,500	180,400	150,200	NA	4,853	4,270	4,061	3,760	6,611	78	223
7	60	1,000	8,125	421,100	8,678	650	120,200	150,200	150,700	N/A	4,620	4,018	3,816	3,559	6,690	85	228
8	60	1,000	5,946	267,000	4,746	648	120,200	146,200	-	N/A	N/A	N/A	N/A	N/A	7,322	86	196
9	60	1,000	7,750	396,200	6,566	687	135,000	180,200	111,000	N/A	4,882	4,072	3,854	3,583	6,406	64	180
10	50	1,000	8,064	421,100	8,898	680	120,200	150,200	150,700	5,982	4,106	3,709	3,574	3,412	6,625	66	162
11	50	1,000	8,301	383,200	7,513	705	120,200	121,900	141,400	N/A	4,520	4,055	3,833	3,623	6,698	65	141
12	50	1,000	9,680	391,900	7,500	726	91,000	150,300	150,700	5,802	4,433	4,029	3,854	3,620	6,945	64	135
13	50	1,000	9,693	421,100	10,325	713	120,200	150,200	150,700	5,159	3,775	3,502	3,484	3,375	7,231	59	112
14	50	1,000	7,963	421,100	7,227	302	120,200	150,200	150,700	5,211	4,069	3,659	3,551	3,437	6,304	62	109
15	50	1,000	8,384	397,400	7,907	330	120,200	150,200	127,000	5,705	4,412	3,867	3,606	3,456	6,737	59	76
16	50	1,000	8,114	419,100	8,619	326	120,200	148,200	150,700	N/A	4,987	4,385	4,283	4,116	6,497	61	170
17	50	1,000	7,231	376,900	7,687	346	130,100	122,100	124,700	5,578	4,046	3,781	3,656	3,494	6,513	66	57
TOTAL / AVG	880	17,000	135,853	6,704,400	134,264	9,771	2,054,000	2,520,900	2,128,500	4,889	4,526	4,085	3,864	3,645	6,714	88	2,376

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