

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: _____
API #: 47-103-02636

Farm name: DALLISON LUMBER, INC
LS Hoyt Operator Well No.: 401-2H LS Hoyt 4012H

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

District: GRANT County: WETZEL
Latitude: 8255 Feet South of 39 Deg. 37 Min. 30 Sec.
Longitude 5087 Feet West of 28 Deg. 37 Min. 30 Sec.

Company: HG ENERGY, LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>5260 DUPONT ROAD</u> <u>PARKERSBURG, WV 26101</u>	<u>20" casing</u>	<u>20'</u>	<u>20'</u>	<u>N/A</u>
Agent: <u>MIKE KIRSCH</u>	<u>4 1/2" H-40</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>485.25'</u>	<u>485.25'</u>	<u>Cement to surface</u>
Date Well Work Commenced: <u>12/14/2011</u>	<u>5 1/2" J-55</u>			<u>450 sks</u>
Date Well Work Completed: <u>5/18/2013</u>				
Verbal Plugging:	<u>9 5/8" casing</u>	<u>3362'</u>	<u>3362'</u>	<u>Cement to surface</u>
Date Permission granted on:	<u>40" I-55</u>			<u>1033 sks</u>
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>7341.43'</u>	<u>5 1/2" casing</u>	<u>14.227'</u>	<u>14.227'</u>	<u>Cement to surface</u>
Total Measured Depth (ft): <u>14,360'</u>	<u>20" P110</u>			<u>2412 sks</u>
Fresh Water Depth (ft.): <u>115' 415'</u>				
Salt Water Depth (ft.): <u>1915'</u>	<u>2 3/8" tubing</u>	<u>N/A</u>	<u>7596.72</u>	<u>N/A</u>
Is coal being mined in area (N/Y)? <u>NO</u>	<u>4 1/2" L-80</u>			
Coal Depths (ft.): <u>910' 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) 7341.43
Gas: Initial open flow 6.4 M MCF/d Oil: Initial open flow 50 Bbl/d
Final open flow 6.4 M MCF/d Final open flow 50 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 3,300 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 I believe that the information is true, accurate, and complete.

DCW for Jordan Hinton
Signature

_____ Date

RECEIVED
Office of Oil and Gas

FEB 23 2016

WV Department of
Environmental Protection

APPROVED

NAME: Jaquelin Hinton
DATE: 3/28/2016

04/01/2016

LS Hoyt 401 2H 47-103-02636 - Perforating Detail

Stage 1						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
14208	13815-16	13740-41	13665-66	13590-91	13515-16	PD
Stage 2						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
13465	13415-16	13340-41	13265-66	13190-91	13115-16	PD
Stage 3						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
13065	13015-16	12940-41	12865-66	12790-91	12715-16	PD
Stage 4						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
12675	12615-16	12540-41	12465-66	12390-91	12315-16	PD
Stage 5						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
12265	12215-16	12140-41	12065-66	11990-91	11915-16	PD
Stage 6						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
11865	11815-16	11740-41	11665-66	11590-91	11515-16	PD
Stage 7						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
11465	11415-16	11340-41	11265-66	11190-91	11115-16	PD
Stage 8						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
11065	11015-16	10940-41	10865-66	10790-91	10715-16	PD
Stage 9						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
10665	10615-16	10540-41	10465-66	10390-91	10315-16	PD
Stage 10						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
10265	10215-16	10140-41	10065-66	9990-91	9915-16	PD
Stage 11						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
9865	9815-16	9740-41	9665-66	9590-91	9515-16	PD
Stage 12						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
9465	9415-16	9340-41	9265-66	9190-91	9115-16	PD
Stage 13						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
9065	9015-16	8940-41	8865-66	8790-91	8715-16	PD
Stage 14						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
8660	8615-16	8540-41	8465-66	8390-91	8315-16	PD
Stage 15						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
8265	8215-16	8140-41	8065-66	7990-91	7915-16	PD
Stage 16						
Plug Setting Depth	1st Cluster	2nd Cluster	3rd Cluster	4th Cluster	5th Cluster	Perf Method
7885	7855-56	7825-26	7795-96	7765-66	7735-36	PD

RECEIVED
Office of Oil and Gas

FEB 23 2016

WV Department of Environmental Protection
04/01/2016

LS Hoyt 401 02H Frac Summary API # 47-103-02636

Stage	# of Perfs	Total Acid (gal)	Total Water (bbl)	Total Sand (bbl)	Total Slurry (bbl)	Prod Vol (bbl)	100 Mesh (Dm)	40/70 Mesh (Dm)	60/80 Mesh (Dm)	ROP (psi)	ISIP (psi)	1 Min SIP (psi)	2 Min SIP (psi)	5 Min SIP (psi)	ATP (psi)	Avg Rate (bbl/min)	PUMP DOWN (bbl)
1	60	1,000	7,972	348,200	8,977	747	120,200	150,200	85,800	N/A	8,934	8,934	3,450	8,257	6,753	66	500
2	60	1,000	7,947	420,800	8,949	690	120,200	149,900	150,700	N/A	8,664	3,282	3,177	8,071	6,076	66	842
3	60	1,000	7,831	414,700	8,839	683	120,200	149,800	148,600	N/A	8,916	3,588	3,432	3,262	5,882	71	984
4	60	1,000	7,833	379,100	8,837	1,018	120,200	149,900	103,000	5,067	N/A	N/A	N/A	N/A	6,437	63	275
5	60	1,000	7,719	378,400	8,781	758	120,200	149,900	108,300	5,071	3,719	3,815	3,344	3,107	6,235	57	223
6	60	1,000	8,143	420,800	9,830	884	120,200	149,900	150,700	3,150	3,729	8,435	3,346	3,214	7,077	70	250
7	60	1,000	7,813	433,800	8,816	641	120,000	149,900	150,700	5,278	3,258	4,741	4,461	4,021	5,258	71	229
8	60	1,000	7,656	401,200	8,295	621	144,000	149,900	107,300	5,112	3,483	3,837	3,194	3,040	6,382	71	182
9	60	1,000	5,977	283,800	6,478	677	144,000	149,900	-	4,831	N/A	N/A	N/A	N/A	5,883	66	180
20	60	1,000	7,720	419,800	8,411	683	121,400	149,900	151,000	N/A	4,180	3,483	3,275	3,309	6,058	64	145
21	60	1,000	8,114	311,500	8,729	662	153,000	149,900	32,000	5,286	3,675	3,206	3,194	3,099	5,954	62	129
22	60	1,000	8,608	402,800	9,843	685	145,000	149,900	157,700	N/A	3,995	3,570	3,421	3,248	6,404	57	104
23	60	1,000	7,878	304,500	8,239	703	121,400	149,900	22,800	N/A	3,632	3,276	3,158	3,027	5,078	66	84
24	60	1,000	8,885	420,800	9,833	678	120,200	153,700	141,900	N/A	3,821	3,485	3,350	3,172	5,787	66	71
25	60	1,000	7,845	421,300	8,678	687	120,200	175,600	125,800	N/A	3,799	3,357	3,220	3,124	5,937	66	62
26	60	1,000	8,132	454,300	9,905	782	120,200	150,200	181,700	5,503	4,684	4,220	3,949	3,548	6,344	78	43
TOTAL/AVG	960	16,000	127,817	6,341,220	187,684	11,568	2,082,600	2,428,200	1,749,100	5,182	4,057	3,567	3,422	3,240	6,449	66	2,023

103.02636

RECEIVED
Office of Oil and Gas
FEB 23 2016
WV Department of
Environmental Protection