

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

API 47-103-02889 County Wetzel District Grant
Quad Pine Grove 7.5' Pad Name Long Field/Pool Name Wileyville
Farm name Francis D. & Freeda M. Brown Well Number 408 S-3H
Operator (as registered with the OOG) Ascent Resources - Marcellus, LLC
Address PO Box 13678 City Oklahoma City State OK Zip 73116

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,381,585 Easting 527,793
Landing Point of Curve Northing 4,381,626.9 Easting 527,736.8
Bottom Hole Northing 4,380,158 Easting 529,000

Elevation (ft) 1340' 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)
Synthetic Oil Based Mud

Date permit issued 07/02/2013 Date drilling commenced 9/11/2013 Date drilling ceased 05/24/2014
Date completion activities began 08/11/2014 Date completion activities ceased 09/11/2014
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 470' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2000' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1180' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

APPROVED

NAME: Jackie Shonita
DATE: 7/5/16

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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"	100'	New	H40/94	n/a	No cement - drilled in
Surface	17-1/2"	13-3/8"	1308'	New	J-55/54.5	n/a	Cement to Surface
Coal							
Intermediate 1	12-1/4"	9-5/8"	3473'	New	J-55/40	n/a	Cement to Surface
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	13004'	New	P110/20	n/a	Cement to Surface
Tubing							
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	Class A	238 lead/832 tail	14.6/15.6	1.37/1.18	995	Surface	12
Coal							
Intermediate 1	Type 1+	369 lead/694 tail	15.0	1.29/1.3	1373	Surface	12
Intermediate 2							
Intermediate 3							
Production	50/50 PNE1/ASC	737 lead/1902 tail	14.3/14.7	1.23/1.5	3614	Surface	12
Tubing							

Drillers TD (ft) 13,038' Loggers TD (ft) 13,037'
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 4,400' MD

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 _____
Surface - Ran 18 (1 every 2 joints)
Intermediate - Ran 20 (1 every 4 joints)
Productions - Ran 101 (1 every 3 joints)

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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Well number 408 S-3H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		Please see	attached.		

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)
			Please see	attached.				

Please insert additional pages as applicable.

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PRODUCING FORMATION(S) DEPTHS
 Marcellus 7.333' TVD 13,038' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
 2175 mcfpd 22 bpd bpd 34 bpd Estimated Orifice Pilot

LITHOLOGY: FORMATION	TOP		BOTTOM		DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
Sand/Shale	0	2305'	0	2305'	
Big Lime	2305'	2392'	2305'	2392'	
Big Injun	2392'	2590'	2392'	2590'	
Shale	2590'	3160'	2590'	3160'	
Gordon Sand	3160'	3204'	3160'	3204'	
Dev Shale	3204'	7193'	3204'	8444'	
Tully Lime	7155'		7617'		
Marcellus Shale	7255'		7841'	13038'	

Please insert additional pages as applicable.

Drilling Contractor HAD Drilling Contractors
 Address 9797 Benner Rd City Rittman State OH Zip 44270

Logging Company ALS Empirca Surface Logging
 Address 6360 W. Sam Houston Pkwy N, Suite 100 City Houston State TX Zip 77401

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

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

Please insert additional pages as applicable.

Completed by Ariel Bravo Telephone 405-252-7642
 Signature [Signature] Title Regulatory Analyst Date 2/22/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry
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Well Name	API	Property Number	Well Status	State	County	Well Spud Date	RR Date	Comp Date
LONG 408 S-3H	47103028890000	1470003	PRODUCTION	WEST VIRGINIA	WETZEL	10/10/2013	6/4/2014	
Well Treatment Summary								
Stage #	Start Date	Slurry Rate Avg (bbbl/min)	P Treat Avg (psi)	P Breakdown (psi)	ISIP (psi)	Prop Placed (lb)	Vol Slurry Total (bbl)	
1	8/11/2014	73	7,171	8,565	4,318	224,900	0.00	
2	8/12/2014	72	7,105	5,983	4,984	224,800	0.00	
3	8/13/2014	80	7,197	5,651	4,399	224,900	0.00	
4	8/14/2014	80	6,950	5,762	5,064	224,900	0.00	
5	8/15/2014	73	7,187	5,764	5,301	224,900	0.00	
6	8/18/2014	78	7,087	5,413	4,846	224,900	0.00	
7	8/19/2014	80	7,250	5,512	4,387	224,900	0.00	
8	8/20/2014	75	7,310	6,056	5,593	224,900	0.00	
9	8/21/2014	80	7,210	5,230	5,114	224,900	0.00	
10	8/22/2014	80	7,335	5,875	5,174	224,900	0.00	
11	8/23/2014	80	7,185	5,383	4,881	224,900	0.00	
12	8/25/2014	80	7,150	5,550	4,624	224,900	0.00	
13	8/26/2014	80	7,265	5,566	4,353	224,900	0.00	
14	8/27/2014	79	7,190	5,570	4,931	224,900	0.00	
15	8/28/2014	78	7,275	5,287	4,643	224,900	0.00	
16	8/28/2014	80	7,361	6,013	4,483	224,900	0.00	
17	8/29/2014	78	7,195	5,705	4,398	224,900	0.00	
18	8/29/2014	80	7,035	5,979	5,022	224,900	0.00	
19	9/1/2014	80	7,073	6,453	5,437	224,900	0.00	
20	9/1/2014	80	6,950	5,495	4,815	224,900	0.00	
21	9/2/2014	79	7,005	5,173	5,543	224,900	0.00	
22	9/2/2014	77	7,482	5,605	5,112	224,900	0.00	
23	9/3/2014	78	7,450	5,550	4,579	224,900	0.00	
24	9/3/2014	79	7,005	5,879	4,574	224,900	0.00	
25	9/4/2014	80	6,875	5,645	5,372	224,900	0.00	
26	9/4/2014	82	6,905	5,708	5,555	224,900	0.00	
27	9/5/2014	80	6,912	6,050	5,612	224,900	0.00	
28	9/5/2014	77	6,789	5,345	5,631	224,900	0.00	
29	9/8/2014	83	6,875	5,432	5,081	224,900	0.00	
30	9/9/2014	82	6,950	6,240	5,463	224,900	0.00	
31	9/9/2014	81	6,855	5,369	4,756	224,900	0.00	
32	8/10/2014	81	6,875	6,042	5,112	224,900	0.00	
33	9/10/2014	76	7,110	6,304	4,321	187,400	0.00	
34	9/10/2014	81	6,785	5,534	4,174	224,900	0.00	

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Perforations

Stage #	Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Com
34	9/10/2014	8,013.0	8,015.0	5.0	10	Stg 34
34	9/10/2014	8,043.0	8,045.0	5.0	10	Stg 34
34	9/10/2014	8,073.0	8,075.0	5.0	10	Stg 34
34	9/10/2014	8,103.0	8,105.0	5.0	10	Stg 34
34	9/10/2014	8,133.0	8,135.0	5.0	10	Stg 34
33	9/10/2014	8,163.0	8,165.0	5.0	10	Stg 33
33	9/10/2014	8,193.0	8,195.0	5.0	10	Stg 33
33	9/10/2014	8,223.0	8,225.0	5.0	10	Stg 33
33	9/10/2014	8,253.0	8,255.0	5.0	10	Stg 33
33	9/10/2014	8,283.0	8,285.0	5.0	10	Stg 33
32	9/9/2014	8,313.0	8,315.0	5.0	10	Stg 32
32	9/9/2014	8,343.0	8,345.0	5.0	10	Stg 32
32	9/9/2014	8,373.0	8,375.0	5.0	10	Stg 32
32	9/9/2014	8,403.0	8,405.0	5.0	10	Stg 32
32	9/9/2014	8,433.0	8,435.0	5.0	10	Stg 32
31	9/9/2014	8,463.0	8,465.0	5.0	10	Stg 31
31	9/9/2014	8,493.0	8,495.0	5.0	10	Stg 31
31	9/9/2014	8,523.0	8,525.0	5.0	10	Stg 31
31	9/9/2014	8,553.0	8,555.0	5.0	10	Stg 31
31	9/9/2014	8,583.0	8,585.0	5.0	10	Stg 31
30	9/8/2014	8,613.0	8,615.0	5.0	10	Stg 30
30	9/8/2014	8,643.0	8,645.0	5.0	10	Stg 30
30	9/8/2014	8,673.0	8,675.0	5.0	10	Stg 30
30	9/8/2014	8,703.0	8,705.0	5.0	10	Stg 30
30	9/8/2014	8,733.0	8,735.0	5.0	10	Stg 30
29	9/5/2014	8,763.0	8,765.0	5.0	10	Stg 29
29	9/5/2014	8,793.0	8,795.0	5.0	10	Stg 29
29	9/5/2014	8,823.0	8,825.0	5.0	10	Stg 29
29	9/5/2014	8,853.0	8,855.0	5.0	10	Stg 29
29	9/5/2014	8,883.0	8,885.0	5.0	10	Stg 29
28	9/5/2014	8,913.0	8,915.0	5.0	10	Stg 28
28	9/5/2014	8,943.0	8,945.0	5.0	10	Stg 28
28	9/5/2014	8,973.0	8,975.0	5.0	10	Stg 28
28	9/5/2014	9,003.0	9,005.0	5.0	10	Stg 28
28	9/5/2014	9,033.0	9,035.0	5.0	10	Stg 28
27	9/4/2014	9,063.0	9,065.0	5.0	10	Stg 27
27	9/4/2014	9,093.0	9,095.0	5.0	10	Stg 27
27	9/4/2014	9,123.0	9,125.0	5.0	10	Stg 27
27	9/4/2014	9,153.0	9,155.0	5.0	10	Stg 27
27	9/4/2014	9,183.0	9,185.0	5.0	10	Stg 27
26	9/4/2014	9,213.0	9,215.0	5.0	10	Stg 26
26	9/4/2014	9,243.0	9,245.0	5.0	10	Stg 26
26	9/4/2014	9,273.0	9,275.0	5.0	10	Stg 26
26	9/4/2014	9,303.0	9,305.0	5.0	10	Stg 26
26	9/4/2014	9,333.0	9,335.0	5.0	10	Stg 26
25	9/3/2014	9,363.0	9,365.0	5.0	10	Stg 25
25	9/3/2014	9,393.0	9,395.0	5.0	10	Stg 25
25	9/3/2014	9,423.0	9,425.0	5.0	10	Stg 25
25	9/3/2014	9,453.0	9,455.0	5.0	10	Stg 25
25	9/3/2014	9,483.0	9,485.0	5.0	10	Stg 25
24	9/3/2014	9,513.0	9,515.0	5.0	10	Stg 24
24	9/3/2014	9,543.0	9,545.0	5.0	10	Stg 24
24	9/3/2014	9,573.0	9,575.0	5.0	10	Stg 24
24	9/3/2014	9,603.0	9,605.0	5.0	10	Stg 24
24	9/3/2014	9,633.0	9,635.0	5.0	10	Stg 24
23	9/2/2014	9,663.0	9,665.0	5.0	10	Stg 23
23	9/2/2014	9,693.0	9,695.0	5.0	10	Stg 23
23	9/2/2014	9,723.0	9,725.0	5.0	10	Stg 23
23	9/2/2014	9,753.0	9,755.0	5.0	10	Stg 23
23	9/2/2014	9,783.0	9,785.0	5.0	10	Stg 23
22	9/2/2014	9,813.0	9,815.0	5.0	10	Stg 22
22	9/2/2014	9,843.0	9,845.0	5.0	10	Stg 22
22	9/2/2014	9,873.0	9,875.0	5.0	10	Stg 22

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Perforations

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22	9/2/2014	9,903.0	9,905.0	5.0	10	Stg 22
22	9/2/2014	9,933.0	9,935.0	5.0	10	Stg 22
21	9/1/2014	9,963.0	9,965.0	5.0	10	Stg 21
21	9/1/2014	9,993.0	9,995.0	5.0	10	Stg 21
21	9/1/2014	10,023.0	10,025.0	5.0	10	Stg 21
21	9/1/2014	10,053.0	10,055.0	5.0	10	Stg 21
21	9/1/2014	10,083.0	10,085.0	5.0	10	Stg 21
20	9/1/2014	10,113.0	10,115.0	5.0	10	Stg 20
20	9/1/2014	10,143.0	10,145.0	5.0	10	Stg 20
20	9/1/2014	10,173.0	10,175.0	5.0	10	Stg 20
20	9/1/2014	10,203.0	10,205.0	5.0	10	Stg 20
20	9/1/2014	10,233.0	10,235.0	5.0	10	Stg 20
19	8/29/2014	10,263.0	10,265.0	5.0	10	Stg 19
19	8/29/2014	10,293.0	10,295.0	5.0	10	Stg 19
19	8/29/2014	10,323.0	10,325.0	5.0	10	Stg 19
19	8/29/2014	10,353.0	10,355.0	5.0	10	Stg 19
19	8/29/2014	10,383.0	10,385.0	5.0	10	Stg 19
18	8/29/2014	10,413.0	10,415.0	5.0	10	Stg 18
18	8/29/2014	10,443.0	10,445.0	5.0	10	Stg 18
18	8/29/2014	10,473.0	10,475.0	5.0	10	Stg 18
18	8/29/2014	10,503.0	10,505.0	5.0	10	Stg 18
18	8/29/2014	10,533.0	10,535.0	5.0	10	Stg 18
17	8/28/2014	10,563.0	10,565.0	5.0	10	Stg 17
17	8/28/2014	10,593.0	10,595.0	5.0	10	Stg 17
17	8/28/2014	10,623.0	10,625.0	5.0	10	Stg 17
17	8/28/2014	10,653.0	10,655.0	5.0	10	Stg 17
17	8/28/2014	10,683.0	10,685.0	5.0	10	Stg 17
16	8/28/2014	10,713.0	10,715.0	5.0	10	Stg 16
16	8/28/2014	10,743.0	10,745.0	5.0	10	Stg 16
16	8/28/2014	10,773.0	10,775.0	5.0	10	Stg 16
16	8/28/2014	10,803.0	10,805.0	5.0	10	Stg 16
16	8/28/2014	10,833.0	10,835.0	5.0	10	Stg 16
15	8/27/2014	10,863.0	10,865.0	5.0	10	Stg 15
15	8/27/2014	10,893.0	10,895.0	5.0	10	Stg 15
15	8/27/2014	10,923.0	10,925.0	5.0	10	Stg 15
15	8/27/2014	10,953.0	10,955.0	5.0	10	Stg 15
15	8/27/2014	10,983.0	10,985.0	5.0	10	Stg 15
14	8/26/2014	11,013.0	11,015.0	5.0	10	Stg 14
14	8/26/2014	11,043.0	11,045.0	5.0	10	Stg 14
14	8/26/2014	11,073.0	11,075.0	5.0	10	Stg 14
14	8/26/2014	11,103.0	11,105.0	5.0	10	Stg 14
14	8/26/2014	11,133.0	11,135.0	5.0	10	Stg 14
13	8/25/2014	11,163.0	11,165.0	5.0	10	Stg 13
13	8/25/2014	11,193.0	11,195.0	5.0	10	Stg 13
13	8/25/2014	11,223.0	11,225.0	5.0	10	Stg 13
13	8/25/2014	11,253.0	11,255.0	5.0	10	Stg 13
13	8/25/2014	11,283.0	11,285.0	5.0	10	Stg 13
12	8/23/2014	11,313.0	11,315.0	5.0	10	Stg 12
12	8/23/2014	11,343.0	11,345.0	5.0	10	Stg 12
12	8/23/2014	11,373.0	11,375.0	5.0	10	Stg 12
12	8/23/2014	11,403.0	11,405.0	5.0	10	Stg 12
12	8/23/2014	11,433.0	11,435.0	5.0	10	Stg 12
11	8/22/2014	11,463.0	11,465.0	5.0	10	Stg 11
11	8/22/2014	11,493.0	11,495.0	5.0	10	Stg 11
11	8/22/2014	11,523.0	11,525.0	5.0	10	Stg 11
11	8/22/2014	11,553.0	11,555.0	5.0	10	Stg 11
11	8/22/2014	11,583.0	11,585.0	5.0	10	Stg 11
10	8/21/2014	11,613.0	11,615.0	5.0	10	Stg 10
10	8/21/2014	11,643.0	11,645.0	5.0	10	Stg 10
10	8/21/2014	11,673.0	11,675.0	5.0	10	Stg 10
10	8/21/2014	11,703.0	11,705.0	5.0	10	Stg 10
10	8/21/2014	11,733.0	11,735.0	5.0	10	Stg 10
9	8/20/2014	11,763.0	11,765.0	5.0	10	Stg 9

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Perforations

Stage #	Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Com
9	8/20/2014	11,793.0	11,795.0	5.0	10	Stg 9
9	8/20/2014	11,823.0	11,825.0	5.0	10	Stg 9
9	8/20/2014	11,853.0	11,855.0	5.0	10	Stg 9
9	8/20/2014	11,883.0	11,885.0	5.0	10	Stg 9
8	8/19/2014	11,913.0	11,915.0	5.0	10	Stg 8
8	8/19/2014	11,943.0	11,945.0	5.0	10	Stg 8
8	8/19/2014	11,973.0	11,975.0	5.0	10	Stg 8
8	8/19/2014	12,003.0	12,005.0	5.0	10	Stg 8
8	8/19/2014	12,033.0	12,035.0	5.0	10	Stg 8
7	8/18/2014	12,063.0	12,065.0	5.0	10	Stg 7
7	8/18/2014	12,093.0	12,095.0	5.0	10	Stg 7
7	8/18/2014	12,123.0	12,125.0	5.0	10	Stg 7
7	8/18/2014	12,153.0	12,155.0	5.0	10	Stg 7
7	8/18/2014	12,183.0	12,185.0	5.0	10	Stg 7
6	8/15/2014	12,213.0	12,215.0	5.0	10	Stg 6
6	8/15/2014	12,243.0	12,245.0	5.0	10	Stg 6
6	8/15/2014	12,273.0	12,275.0	5.0	10	Stg 6
6	8/15/2014	12,303.0	12,305.0	5.0	10	Stg 6
6	8/15/2014	12,333.0	12,335.0	5.0	10	Stg 6
5	8/14/2014	12,363.0	12,365.0	5.0	10	Stg 5
5	8/14/2014	12,393.0	12,395.0	5.0	10	Stg 5
5	8/14/2014	12,423.0	12,425.0	5.0	10	Stg 5
5	8/14/2014	12,453.0	12,455.0	5.0	10	Stg 5
5	8/14/2014	12,483.0	12,485.0	5.0	10	Stg 5
4	8/13/2014	12,513.0	12,515.0	5.0	10	Stg 4
4	8/13/2014	12,543.0	12,545.0	5.0	10	Stg 4
4	8/13/2014	12,573.0	12,575.0	5.0	10	Stg 4
4	8/13/2014	12,603.0	12,605.0	5.0	10	Stg 4
4	8/13/2014	12,633.0	12,635.0	5.0	10	Stg 4
3	8/12/2014	12,663.0	12,665.0	5.0	10	Stg 3
3	8/12/2014	12,693.0	12,695.0	5.0	10	Stg 3
3	8/12/2014	12,723.0	12,725.0	5.0	10	Stg 3
3	8/12/2014	12,753.0	12,755.0	5.0	10	Stg 3
3	8/12/2014	12,783.0	12,785.0	5.0	10	Stg 3
2	8/11/2014	12,813.0	12,815.0	5.0	10	Stg 2
2	8/11/2014	12,843.0	12,845.0	5.0	10	Stg 2
2	8/11/2014	12,873.0	12,875.0	5.0	10	Stg 2
2	8/11/2014	12,903.0	12,905.0	5.0	10	Stg 2
2	8/11/2014	12,933.0	12,935.0	5.0	10	Stg 2
1	8/11/2014	12,963.0	12,967.0	1.0		SLB Rupture Disc Valve

Received
Office of Oil & Gas
JUL 05 2016

07/08/2016

(BOTTOM HOLE: 80°39'45.2")

LONG: -80°40'35.6"

2785'

LAT: 39°37'30"

LONG: 80°40'00"

1 - Well Test and Log (with one Lognote) were measured by GPS (Sub-meter Accuracy) using a 1" = 2000' Scale. Bearings are referenced to UTM Coordinate System (Zone 17 North, NAD 1983).

2 - Surface owners and adjacent landowners (where applicable) were notified in writing by the West Virginia County Assessor's Office records.

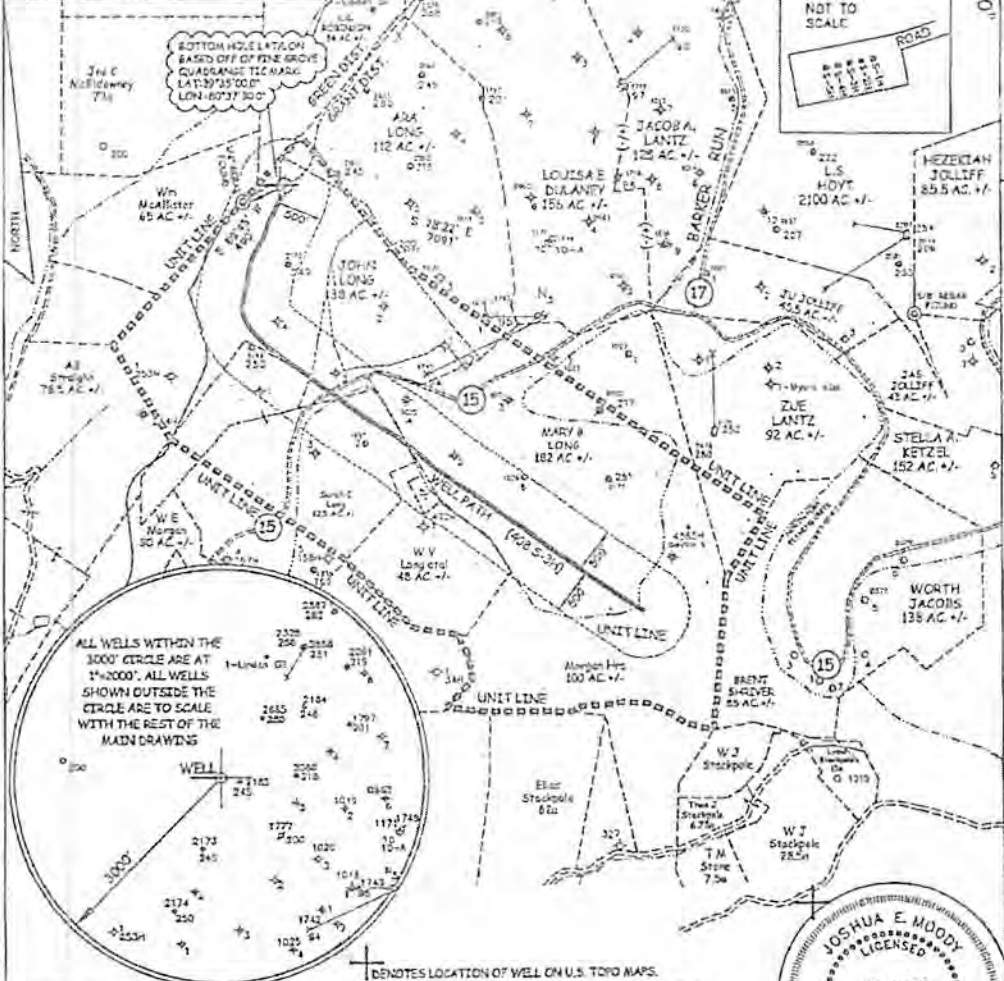
3 - No Title Opinion was provided to the Surveyor during this survey. The Surveyor is subject to the complete Title Opinion.

UTM Coordinates (Zone 17N 40S 1983)	
Surface	N=4,381,565m. E=527,793m.
Bottom Hole	N=4,380,160m. E=529,001m.

LOCATION REFERENCES	
NAD 1983	NAD 1983
NAD 1983 E 208 5022	NAD 1983 E 145 5022

MAP OF H.G. ENERGY, LLC - LONG 408 UNIT-

PAD VIEW NOT TO SCALE



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
MOODY LAND SURVEYING, LLC
ST. MARYS, WV 26170

JOSHUA E. MOODY, P.S. 2020
DATE 12/08/14
OPERATOR'S WELL # 408 S-3H

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
JOSHUA E. MOODY, P.S. 2020
DATE 12/08/14
OPERATOR'S WELL # 408 S-3H

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL HORIZONTAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW API WELL # _____
 LOCATION: ELEVATION 1340' WATERSHED NORTH FOR, FISHING CREEK 47 - 103 -
 DISTRICT GRANT COUNTY WETZEL STATE COUNTY PERMIT
 QUADRANGLE PINE GROVE 7.5'

SURFACE OWNER FRANCIS D. & FREEDA M. BROWN (surface hole) ACREAGE 103 ACRES +/-
 OIL & GAS ROYALTY OWNER ROBERT B. MYERS ET AL LEASE ACREAGE 514.72 ACRES +/-
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED LOCATION
 PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD= 7,333.49' MD= 13038'
 WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT DIANE WHITE
 ADDRESS 5260 DUPONT ROAD ADDRESS 5260 DUPONT ROAD
 PARKERSBURG, WV 26101 PARKERSBURG, WV 26101



(BOTTOM HOLE: 80°39'45.2")

LON: -80°40'35.6"

2785'

LAT: 39°37'30"

LON: 80°40'00"

1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).

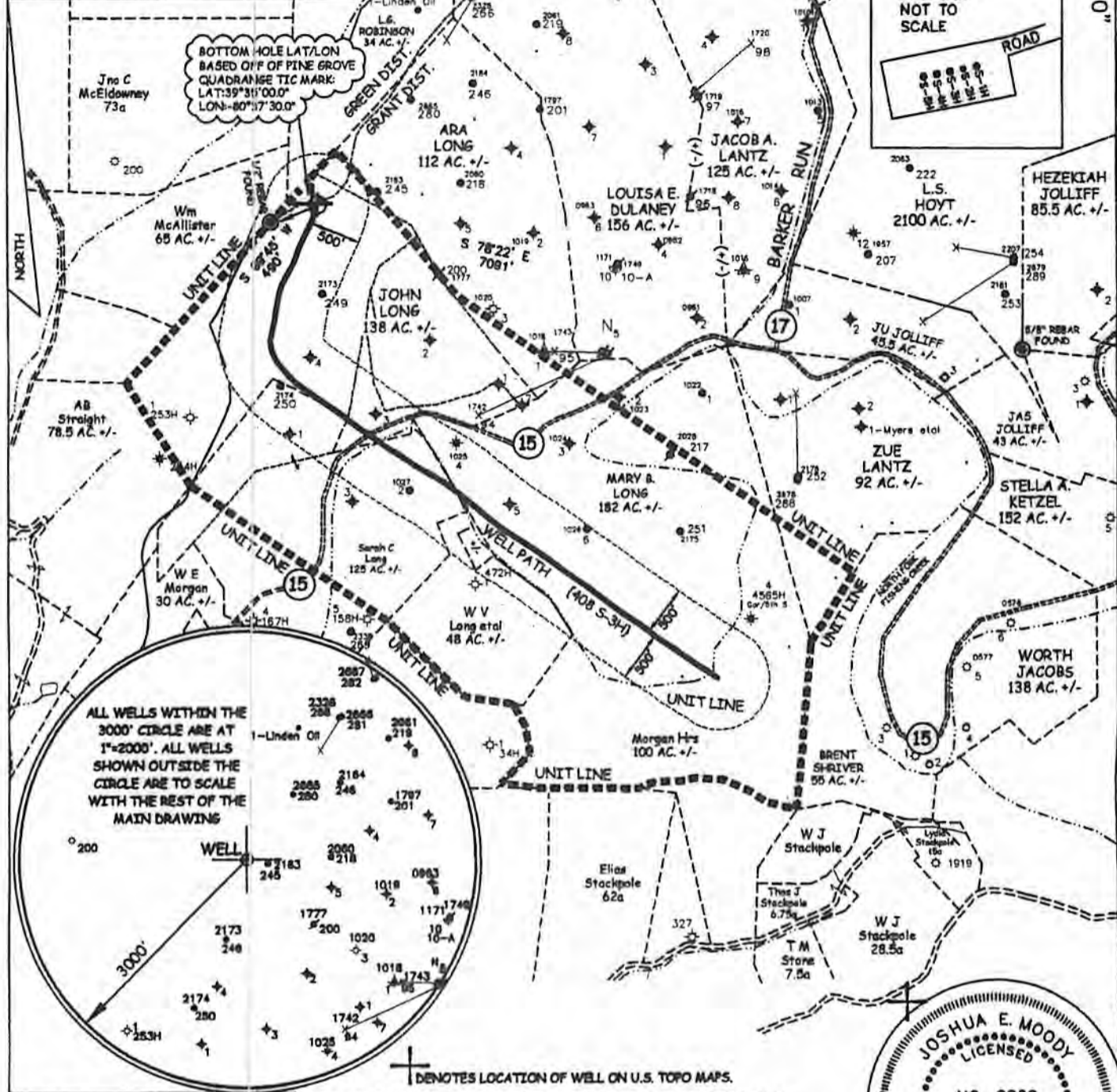
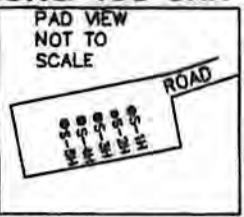
2 - Surface owners and adjacers information obtained from the Wetzel County Assessor's tax records.

3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete title Opinion.

UTM Coordinates (Zone 17N-NAD 1983)	
Surface	N-4,381,585m. E-527,793m.
Bottom Hole	N-4,380,160m. E-529,001m.

LOCATION REFERENCES	
NAD 1983	N 46°14' E 206' SPIKE S 83°09' E 148' SPIKE

MAP OF H.G. ENERGY, LLC LONG 408 UNIT-



⊕ DENOTES LOCATION OF WELL ON U.S. TOPO MAPS.

JOB # 12-025
DRAWING # 12HG409FOLDER
SCALE 1" = 1500'
MINIMUM DEGREE OF ACCURACY SUB-METER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
MOODY LAND SURVEYING, LLC
ST. MARYS, WV 26170



JOSHUA E. MOODY, P.S. 2020
DATE 12/08/14
OPERATOR'S WELL # 408 S-3H

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION ___ WASTE DISPOSAL ___ HORIZONTAL
(IF "GAS") PRODUCTION STORAGE ___ DEEP ___ SHALLOW API WELL #
LOCATION: ELEVATION 1340' WATERSHED NORTH FOR, FISHING CREEK 47 - 103 -
DISTRICT GRANT COUNTY WETZEL STATE COUNTY PERMIT
QUADRANGLE PINE GROVE 7.5'

SURFACE OWNER FRANCIS D. & FREEDA M. BROWN (surface hole) ACREAGE 103 ACRES +/-
OIL & GAS ROYALTY OWNER ROBERT B. MYERS ET AL LEASE ACREAGE 514.72 ACRES +/-
PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
STIMULATE PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED LOCATION
PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD= 7,333.49' MD= 13038'
WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT DIANE WHITE
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

07/08/2016

LEASE # 31950-50 et al

LAT: 39°35'00.4" (BOTTOM HOLE: 39°34'14.0")

COUNTY NAME PERMIT