

JK

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

API 47-051-01662 County Marshall District Webster
Quad Majorsville Pad Name _____ Field/Pool Name NA
Farm name Lucille Hartley Well Number WEB13 AHS
Operator (as registered with the OOG) Noble Energy, Inc.
Address 333 Technology Drive, Suite 116 City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4422752.27 Easting 538458.14
Landing Point of Curve Northing 4422558.78 Easting 538128.96
Bottom Hole Northing 4421164.44 Easting 539212.65

Elevation (ft) 1266 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

Date permit issued 8/14/2013 Date drilling commenced 11/18/2013 Date drilling ceased 2/12/2014
Date completion activities began 7/6/2014 Date completion activities ceased 10/4/2014
Verbal plugging (Y/N) N 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 128', 200', 300' Open mine(s) (Y/N) depths N
Salt water depth(s) ft None noted for Offsets Void(s) encountered (Y/N) depths None noted for Offsets
Coal depth(s) ft 703' - Pittsburgh Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) _____

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Reviewed by: _____

API 47-051 - 01662

Farm name Lucille Hartley

Well number WEB13 AHS

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	36	30	40	N			
Surface	24	20	422	N	J-55 94#		Y
Coal	17 1/2	13 3/8	1175	N	J-55 54.5#		Y
Intermediate 1	12 3/8	9 5/8	3149	N	J-55 36#		Y
Intermediate 2							
Intermediate 3							
Production	8 3/4	5 1/2	13200	N	P-110 20#		Y
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							
Surface	Type I	611	15.6	1.19	132	0	8
Coal	Type I	1018	15.8	1.16	210	0	8
Intermediate 1	Class A	1150	16.2	1.09	232	0	8
Intermediate 2							
Intermediate 3							
Production	Class A	Lead -580 Tail-1407	Lead - 14.2 Tail - 14.8	Lead - 1.57 Tail - 1.40	Lead - 163 Tail 353		8
Tubing							

Drillers TD (ft) 13219 ft Loggers TD (ft) 13194 ft

Deepest formation penetrated Marcellus Plug back to (ft) Not a Pilot Hole

Plug back procedure Not a Pilot Hole

Kick off depth (ft) 6184 ft

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 _____

4 Centralizers on Surface (1 every 3rd joint) 10 Centralizers on Coal String (1 every 3rd joint) 58 Centralizers on Intermediate 1 (1 every 3rd Joint)
199 Centralizers on Production (1 every 3rd to Curve, then 1 every joint to TD)

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

API: 47-051-01662

Farm name:
Hartley, Lucille

Well Name: WEB-13 A-HS

Stage No.	Stim Date	Top Perf	Bottom Perf	# of Perfs	Formation
Toe Sleeve	6/13/2014	13,075	13,078		
1	7/6/2014	12,895	13,052	60	Marcellus
1 Reperf	7/6/2014	12,885	12,904	24	Marcellus
2	7/7/2014	12,698	12,852	50	Marcellus
3	7/7/2014	12,498	12,652	50	Marcellus
4	7/7/2014	12,298	12,452	50	Marcellus
5	7/7/2014	12,098	12,252	50	Marcellus
6	7/8/2014	11,898	12,052	50	Marcellus
6 Reperf	7/8/2014	11,885	11,892	24	Marcellus
6C	7/8/2014	11,898	12,052	50	Marcellus
7	7/8/2014	11,698	11,852	50	Marcellus
8	7/8/2014	11,498	11,652	50	Marcellus
9	7/9/2014	11,298	11,452	50	Marcellus
10	7/9/2014	11,098	11,252	50	Marcellus
11	7/9/2014	10,898	11,052	50	Marcellus
12	7/9/2014	10,698	10,852	50	Marcellus
12 Reperf	7/10/2014	10,679	10,691	24	Marcellus
13 Inj Test	7/10/2014	10,498	10,652	-	Marcellus
13 Inj Test II	7/11/2014	10,498	10,652	-	Marcellus
13	7/13/2014	10,498	10,652	50	Marcellus
14	7/13/2014	10,298	10,452	50	Marcellus
15	7/13/2014	10,098	10,252	50	Marcellus
15 Reperf	7/14/2014	10,088	10,134	48	Marcellus
15C (Comingled)	7/15/2014	9,898	10,052	40	Marcellus
16	7/15/2014	9,698	9,852	40	Marcellus
17	7/15/2014	9,498	9,652	40	Marcellus
18	7/16/2014	9,298	9,452	40	Marcellus
18B	7/16/2014	9,286	9,352	36	Marcellus
18C (Comingled)	7/16/2014	9,194	9,256	36	Marcellus
19	7/17/2014	9,029	9,151	40	Marcellus
20	7/18/2014	8,864	8,986	40	Marcellus
21	7/18/2014	8,699	8,821	40	Marcellus
21 Reperf	7/18/2014	8,689	8,746	36	Marcellus
22	7/19/2014	8,498	8,652	40	Marcellus
23	7/19/2014	8,298	8,452	40	Marcellus
23 Reperf	7/19/2014	8,288	8,358	36	Marcellus
23C	7/19/2014	8,220	8,270	40	Marcellus
24	7/20/2014	8,098	8,182	40	Marcellus
25	7/20/2014	7,898	8,052	40	Marcellus

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Perforation Record

API: 47-051-01662

Farm name:
Hartley, Lucille

Well Name: WEB-13 A-HS

Stage No.	Stim Date	Top Perf	Bottom Perf	# of Perfs	Formation
26	7/20/2014	7,698	7,852	40	Marcellus
27	7/20/2014	7,498	7,652	40	Marcellus
28	7/20/2014	7,298	7,452	40	Marcellus
29	7/21/2014	7,252	7,358	40	Marcellus

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STIMULATION INFORMATION PER STAGE

API: 47-051-01662

Farm name
Hartley, Lucille

Well Name: WEB-13 A-HS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other (units)
1	7/6/2014	73	7,400	-	4,865	314,165	8,960	
1 Reperf	7/6/2014	79	8,020	-	4,538	109,575	5,393	
2	7/7/2014	87	7,703	5,847	7,737	400,988	7,778	
3	7/7/2014	79	7,837	5,947	4,647	401,186	10,719	
4	7/7/2014	82	7,702	6,286	4,614	400,006	8,857	
5	7/7/2014	88	7,569	6,493	4,760	404,769	9,998	
6	7/8/2014	63	7,864	6,118	5,580	276,995	9,655	
6 Reperf	7/8/2014	57	8,212	-	5,470	674	2,507	
6C	7/8/2014	63	7,688	-	5,057	123,101	7,582	
7	7/8/2014	72	6,626	6,493	5,463	400,240	10,543	
8	7/8/2014	74	7,624	6,527	4,689	403,908	10,949	
9	7/9/2014	87	7,484	5,895	4,957	407,373	7,860	
10	7/9/2014	79	7,507	5,892	4,896	401,241	9,731	
11	7/9/2014	83	7,536	6,226	4,374	397,056	11,531	
12	7/9/2014	62	7,468	6,148	5,244	273,597	7,815	
12 Reperf	7/10/2014	59	8,213	-	6,825	90,031	3,628	
13 Inj Test	7/10/2014	2	-	-	-	-	297	
13 Inj Test II	7/11/2014	-	-	-	-	-	460	
13	7/13/2014	89	6,977	5,776	4,727	404,213	9,441	
14	7/13/2014	90	7,419	6,569	4,594	401,274	10,461	
15	7/13/2014	69	8,424	5,884	-	7,203	3,182	
15 Reperf	7/14/2014	38	7,626	-	5,056	3,599	2,017	
15C (Comingled)	7/15/2014	89	6,907	-	4,483	600,219	12,973	
16	7/15/2014	85	7,138	6,646	4,727	403,112	7,912	
17	7/15/2014	85	7,299	6,083	4,965	401,261	8,026	
18	7/16/2014	62	8,070	6,161	4,777	9,159	1,896	
18B	7/16/2014	33	8,122	-	4,700	8,106	3,118	
18C (Comingled)	7/16/2014	90	7,309	-	7,223	600,890	13,052	
19	7/17/2014	79	7,927	5,977	4,776	400,216	22,087	
20	7/18/2014	87	7,289	5,832	4,668	400,664	11,407	
21	7/18/2014	44	8,620	5,927	4,730	1,596	1,772	
21 Reperf	7/18/2014	78	7,701	-	4,486	400,045	26,356	
22	7/19/2014	85	7,028	5,992	4,665	399,829	10,361	
23	7/19/2014	61	7,843	6,105	4,788	97,869	17,019	
23 Reperf	7/19/2014	57	8,423	-	4,951	25,562	8,448	
23C	7/19/2014	89	7,132	-	5,195	306,028	9,287	
24	7/20/2014	89	6,899	5,716	5,286	400,088	8,560	
25	7/20/2014	80	6,817	6,428	4,750	400,110	13,862	
26	7/20/2014	89	6,692	6,149	4,777	399,712	9,699	

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STIMULATION INFORMATION PER STAGE

API: 47-051-01662

Farm name
Hartley, Lucille

Well Name: WEB-13 A-HS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other (units)
27	7/20/2014	88	6,621	5,477	4,815	400,079	9,517	
28	7/20/2014	88	6,651	5,954	4,896	400,848	8,481	
29	7/21/2014	90	6,401	5,488	4,406	310,864	7,119	

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API 47- 051 - 01662 Farm name Lucille Hartley Well number WEB13 AHS

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6728</u>	<u>TVD</u>	<u>13219 ft</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____

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 _____ hrs

OPEN FLOW Gas 1152 mcfpd Oil 36 bpd NGL 273 bpd Water 1296 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	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	
	<u>0</u>		<u>0</u>		
	PI PASE SEE ATTACHED FORMATION SHEET				

Please insert additional pages as applicable.

Drilling Contractor NOMAC
Address 171 Locust Avenue Ext City Mt. Morris State PA Zip 15349

Logging Company Baker Hughes
Address 400 Technology Drive #120 City Canonsburg State PA Zip 15317

Cementing Company Schlumberger
Address 4600 J Barry Court, Suite 200 City Canonsburg State PA Zip 15317

Stimulating Company FTS International
Address 6000 Town Center Boulevard, Suite 120 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Regina A. Logue Telephone 724-820-3559
Signature Regina A. Logue Title Regulatory Analyst Date 12/16/14

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

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47-051-01662

Formations	Top TVD	Base TVD	Top MD	Base MD	Fluid
Shale	0	729	0	729	
Pittsburgh Coal	729	739	729	739	
Shale and Sandstone	739	1355	739	1355	
Gas Sand	1355	1418	1355	1418	
Shale	1418	1490	1418	1490	
1st Salt Sand	1490	1514	1490	1514	
Shale	1514	1640	1514	3181	
Maxton Sand	1640	1756	1640	3201	
Shale	1756	1786	1756	4282	
Big Lime	1786	1861	1786	4287	
Big Injun	1861	2010	1861	4960	
Price	2010	2361	2010	5068	
Murrysville	2361	2374	2361	5170	
Shale	2374	2834	2374	5824	
Fifth Sand	2834	2871	2834	6299	
Shale	2871	3181	2871	6429	
Speechley Sand	3181	3201	3181	3201	
Shale	3201	4272	3201	4282	
Warren Sand	4272	4277	4282	4287	
Shale	4277	4943	4287	4960	
Java Shale	4943	5050	4960	5068	
Pipe Creek Shale	5050	5151	5068	5170	
Angola Shale	5151	5798	5170	5824	
Rhinestreet	5798	6258	5824	6299	
Cashaqua	6258	6366	6299	6429	
Middlesex	6366	6397	6429	6471	
West River	6397	6468	6471	6584	
Burkett	6468	6487	6584	6620	
Tully Limestone	6487	6517	6620	6686	
Hamilton	6517	6634	6686	7145	Gas
Marcellus	6634	6685	7145	not encountered	
Onondaga	6685	6693	not encountered	not encountered	
Huntersville	6693		not encountered	not encountered	

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/6/2014
Job End Date:	7/21/2014
State:	West Virginia
County:	Marshall
API Number:	47-051-01662-00-00
Operator Name:	Noble Energy, Inc.
Well Name and Number:	WEB-13 A
Longitude:	-80.54965000
Latitude:	39.95395600
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,728
Total Base Water Volume (gal):	15,552,787
Total Base Non Water Volume:	0

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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier					
			Water	7732-18-5	100.00000	90.43675	
40/70 White	FTSI	proppant					
			Silica, Quartz	14808-60-7	100.00000	6.58294	
100 Mesh Sand	FTSI	proppant					
			Silica, Quartz	14808-60-7	100.00000	1.77497	
Hydrochloric Acid (HCl)	FTSI	Acid					
			Water	7732-18-5	85.00000	0.85062	
			Hydrogen Chloride	7647-01-0	15.00000	0.15011	
FRW-600	FTSI	Friction Reducer					
			Acrylamide Polymer	Trade Secret	75.00000	0.06422	
			Hydrotreated light distillate	64742-47-8	20.00000	0.01713	
			Ammonium acetate	631-61-8	5.00000	0.00428	
CS-500 SI	FTSI	Scale inhibitor					
			Water	7732-18-5	55.00000	0.02755	
			Acrylic Polymer	Proprietary	24.00000	0.01202	
			Ethylene glycol	107-21-1	10.00000	0.00501	
			Sodium chloride	7647-14-5	6.00000	0.00301	
			Sodium Polyacrylate	9003-04-7	5.00000	0.00251	

CI-3240	FTSI	Biocide				
			Water	7732-18-5	53.00000	0.02138
			Dazomet (Tetrahydro-3, 5-dimethyl-2H-1, 3, 5-thiadiazine-2-thione.	533-74-4	24.00000	0.00968
			Sodium Hydroxide	1310-73-2	23.00000	0.00928
HVG-1	FTSI	Water Gelling Agent				
			Guar Gum	9000-30-0	35.00000	0.00765
			Petroleum Distillate	64742-47-8	30.00000	0.00656
			Raffinates (Petroleum), Sorption Process	64741-85-1	25.00000	0.00547
			Clay	1302-78-9	3.00000	0.00066
			Clay	14808-60-7	2.00000	0.00044
			Surfactant	Proprietary	2.00000	0.00044
			Surfactant	154518-36-2	1.00000	0.00022
			Surfactant	9043-30-5	1.00000	0.00022
			Surfactant	24938-91-8	1.00000	0.00022
FE-100L	FTSI	Iron control				
			Citric acid	77-92-9	55.00000	0.00173
			Water	7732-18-5	45.00000	0.00141
CI-150	FTSI	Acid Corrosion Inhibitor				
			Isopropanol	67-63-0	24.70000	0.00043
			Organic amine resin salt	Proprietary	24.00000	0.00042
			Ethylene Glycol	107-21-1	20.00000	0.00035
			Alkylene Oxide Block Polymer	Proprietary	10.00000	0.00018
			Quaternary ammonium compound	Proprietary	5.00000	0.00009
			Dimethylformamide	68-12-2	5.00000	0.00009
			Water	7732-18-5	5.00000	0.00009
			Aromatic aldehyde	Proprietary	5.00000	0.00009
			Diethylene glycol	111-46-6	1.00000	0.00002
			Fatty Acid	Proprietary	0.10000	0.00000
			Fatty Acid Salt	Proprietary	0.10000	0.00000
			Aliphatic alcohol	Proprietary	0.10000	0.00000
APB-1	FTSI	Gel breaker				
			Ammonium Persulfate	7727-54-0	100.00000	0.00092
NE-100	FTSI	Non-emulsifier				
			Water	7732-18-5	71.50000	0.00063
			2-Propanol	67-63-0	10.00000	0.00009
			2-Butoxyethanol	111-76-2	10.00000	0.00009
			Dodecylbenzenesulfonic acid	27176-87-0	5.00000	0.00004
			Unsulphonated Matter	Proprietary	1.00000	0.00001
			Sulfur Dioxide	7446-09-5	1.00000	0.00001
			Benzene, C10-16 Alkyl Derivatives	68648-87-3	1.00000	0.00001

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		Sulfuric Acid	7664-93-9	0.50000	0.00000
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Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided. Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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Well is located on topo map 1,625' feet south of Latitude: 39° 57' 30"

Well is located on topo map 2,271' feet west of Longitude: 80° 32' 30"

AS DRILLED PLAT

LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED
- LEASE NUMBER
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- AS DRILLED

WELLS WITHIN 3000'

- EXISTING WELLS
- PLUGGED WELLS

PERMITTED APPROX. LANDING POINT

UTM 17-NAD83
N:4422563.86
E:538126.14

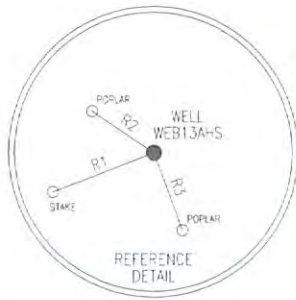
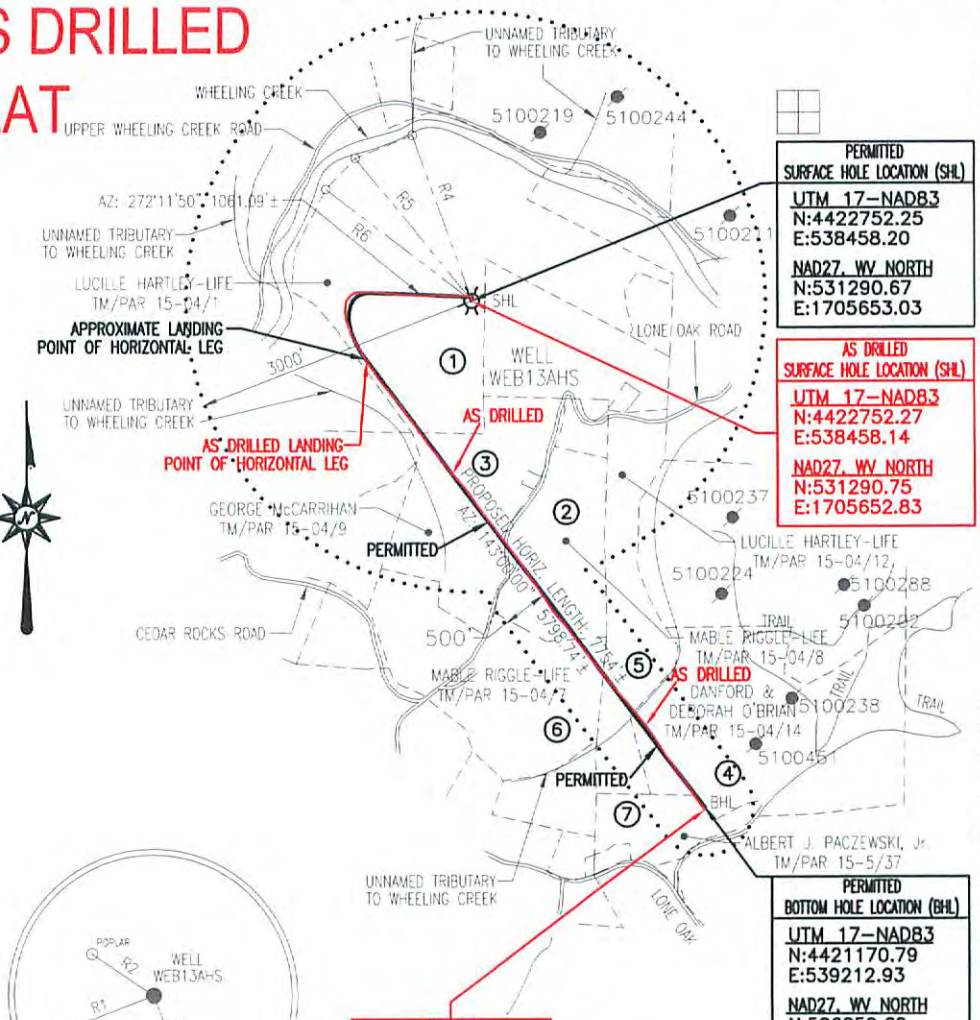
NAD27_WV NORTH
N:530690.70
E:1704553.08

AS DRILLED APPROX. LANDING POINT

UTM 17-NAD83
N:4422558.78
E:538128.96

NAD27_WV NORTH
N:530673.90
E:1704562.05

PARCEL	LESSOR
1	LUCILLE HARTLEY, LIFE TENANT, ET AL.
2	MABEL L. RIGGLE, LIFE TENANT
3	GEORGE H. MCCARRIHAN ET AL.
4	ELLSWORTH SCHERICH ET UX., ET AL.
5	LUCILLE M. HARTLEY, LIFE TENANT
6	MABEL L. RIGGLE, LIFE TENANT
7	ALBERT J. PACZEWSKI, JR.



LINE	BEARING	DISTANCE
R1	S 68°43'21" W	233.31'
R2	N 55°48'43" W	160.22'
R3	S 20°14'01" E	179.05'
R4	N 20°34'18" W	1856.61'
R5	N 39°34'29" W	1953.11'
R6	N 52°46'13" W	1953.31'

PERMITTED SURFACE HOLE LOCATION (SHL)

UTM 17-NAD83
N:4422752.25
E:538458.20

NAD27_WV NORTH
N:531290.67
E:1705653.03

AS DRILLED SURFACE HOLE LOCATION (SHL)

UTM 17-NAD83
N:4422752.27
E:538458.14

NAD27_WV NORTH
N:531290.75
E:1705652.83

PERMITTED BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83
N:4421170.79
E:539212.93

NAD27_WV NORTH
N:526059.62
E:1708042.85

AS DRILLED BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83
N:4421164.44
E:539212.65

NAD27_WV NORTH
N:526038.79
E:1708041.58

- NOTES:**
- There are no water wells or developed springs within 250' of proposed well.
 - There are no existing buildings within 625' of proposed well.
 - Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
 - There are no native trout streams within 300' of proposed well.
 - Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
 - It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted herein. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

Blue Mountain Inc.
10125 MASON DIXON HIGHWAY
BURTON, WV 26562
PHONE: (304) 662-6486

FILE #: WEB13AHS-AS DRILLED
DRAWING #: WEB13AHS-AS DRILLED
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/2500
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *George W. Six*
R.P.E.: _____ L.L.S.: P.S. No. 2000

GEORGE W. SIX
LICENSED
No. 2000
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

DATE: DECEMBER 8, 2014
OPERATOR'S WELL #: WEB13AHS-AS DRILLED
API WELL #: 47 51 01662
STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: WHEELING CREEK ELEVATION: 1265.72'
COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MAJORVILLE, WV-PA 7.5'
SURFACE OWNER: LUCILLE HARTLEY-LIFE (BRADFORD W. HARTLEY) ACREAGE: 153.408±
OIL & GAS ROYALTY OWNER: LUCILLE HARTLEY, LIFE TENANT, ET AL. ACREAGE: 475.034±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,668'± TMD: 13,299'±
WELL OPERATOR NOBLE ENERGY, INC. DESIGNATED AGENT STEVEN M. GREEN
Address 333 TECHNOLOGY DRIVE, SUITE 116 Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 590
City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301