

SK

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

API 47-051-01664 County Marshall District Webster
Quad Majorsville Pad Name WEB13 Field/Pool Name NA
Farm name Lucille Hartley Well Number WEB13 CHS
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 4422745.74 Easting 538475.30
Landing Point of Curve Northing 4422653.03 Easting 538636.54
Bottom Hole Northing 4421365.77 Easting 539642.59

Elevation (ft) 1265.72 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 8/15/2013 Date drilling commenced 12/5/2013 Date drilling ceased 4/9/2014
Date completion activities began 8/17/2014 Date completion activities ceased 9/26/2014
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 - 01664 Farm name Lucille Hartley Well number WEB13 CHS

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	413.2	N	J-55 94#		Y
Coal							
Intermediate 1	17 1/2	13 3/8	1177.0	N	J-55 54.5#		Y
Intermediate 2	12 3.8	9 5/8	3156.0	N	J-55 36#		Y
Intermediate 3							
Production	8 3/4	5 1/2	12429.0	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	609	15.6	1.19	129	0	8
Coal	Type I	1020	15.8	1.16	210	0	8
Intermediate 1	Type I	1067	15.8	1.15	247	0	8
Intermediate 2							
Intermediate 3							
Production	Class A	Lead - 420 Tail - 1520	Lead - 14.2 Tail - 14.8	Lead - 1.56 Tail - 1.39	Lead - 116 Tail - 376		8
Tubing							

Drillers TD (ft) 12440 Loggers TD (ft) 12413
 Deepest formation penetrated Marcellus Plug back to (ft) Not a Pilot Hole
 Plug back procedure Not a Pilot Hole

Kick off depth (ft) 6089

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 _____

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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API 47- 051 - 01664 Farm name Lucille Hartley Well number WEB13 CHS

PERFORATION RECORD

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

PLEASE SEE ATTACHED PERFORATION RECORD

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 STIMULATION INFO PER STAGE SHEET

Please insert additional pages as applicable.

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Perforation Record

API: 47-051-01664

Farm name
Hartley, Lucille

Well Name: WEB-13 C-HS

Stage No.	Stim Date	Top Perf	Bottom Perf	# of Perfs	Formation
Toe Sleeve	6/13/2014	12299	12303		
1	8/17/2014	12120	12279	60	Marcellus
2	8/17/2014	11923	12077	50	Marcellus
3	8/18/2014	11723	11877	50	Marcellus
4	8/18/2014	11523	11677	50	Marcellus
5	8/19/2014	11323	11477	50	Marcellus
6	8/19/2014	11123	11277	50	Marcellus
7	8/20/2014	10923	11077	50	Marcellus
8	8/20/2014	10723	10877	50	Marcellus
9	8/21/2014	10523	10677	50	Marcellus
10	8/21/2014	10323	10477	50	Marcellus
10 Reperf	8/21/2014	10342	10459	32	Marcellus
11	8/23/2014	10123	10277	50	Marcellus
12	8/27/2014	9923	10077	50	Marcellus
12 Reperf (1)	8/29/2014	9913	9979	36	Marcellus
12 Reperf (2)	8/30/2014	9823	9885	36	Marcellus
13	8/30/2014	9651	9781	50	Marcellus
14	8/31/2014	9487	9617	50	Marcellus
14 Reperf	9/1/2014	9503	9569	36	Marcellus
15	9/2/2014	9323	9453	50	Marcellus
16	9/2/2014	9123	9277	50	Marcellus
17	9/3/2014	8923	9077	50	Marcellus
18	9/7/2014	8723	8877	50	Marcellus
19	9/7/2014	8523	8677	50	Marcellus
19B	9/8/2014	8543	8642	48	Marcellus
20	9/8/2014	8323	8477	50	Marcellus
21	9/8/2014	8123	8277	50	Marcellus
22	9/8/2014	7923	8077	50	Marcellus
22 Reperf	9/9/2014	7913	7969	48	Marcellus
23	9/9/2014	7723	7877	50	Marcellus
24	9/9/2014	7523	7677	50	Marcellus
24 Reperf	9/10/2014	7541	7610	48	Marcellus
25	9/10/2014	7323	7477	50	Marcellus
25 Reperf	9/11/2014	7315	7377	36	Marcellus
26	9/13/2014	7122	7288	58	Marcellus
27	9/13/2014	6923	7089	58	Marcellus

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STIMULATION INFORMATION PER STAGE

API: 47-051-01664

Farm name
Hartley, Lucille

Well Name: WEB-13 C-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	8/17/2014	74	6,987	-	4,715	600,142	14,889.97	
2	8/17/2014	76	7,253	7,948	4,663	600,088	16,623.57	
3	8/18/2014	78	7,410	7,163	4,894	600,681	15,548.97	
4	8/18/2014	87	7,758	7,651	4,576	602,073	15,419.38	
5	8/19/2014	77	7,619	7,803	4,625	603,303	13,188.38	
6	8/19/2014	73	7,619	7,198	4,975	541,927	12,985.38	
7	8/20/2014	88	7,727	6,974	4,360	601,431	15,268.38	
8	8/20/2014	83	7,485	7,116	4,118	601,031	16,401.38	
9	8/21/2014	68	7,120	6,723	4,985	606,880	15,299.38	
10	8/21/2014	47	8,406	6,742	5,064	14,685	7,282.76	
10 Reperf	8/21/2014	88	7,290	5,324	4,354	596,238	16,243.38	
11	8/23/2014	70	7,274	7,307	5,080	609,544	18,968.86	
12	8/27/2014	59	8,772	6,670	5,080	2,709	7,563.76	
12 Reperf (1)	8/29/2014	71	8,379	7,621	5,041	196,976	21,173.96	
12 Reperf (2)	8/30/2014	80	7,972	-	5,174	405,768	16,065.98	
13	8/30/2014	79	8,043	7,450	3,837	607,227	17,858.38	
14	8/31/2014	58	8,358	7,078	4,714	142,759	15,124.76	
14 Reperf	9/1/2014	79	8,697	-	4,849	462,167	25,759.96	
15	9/2/2014	88	7,075	6,658	4,118	604,471	12,126.38	
16	9/2/2014	85	7,123	6,857	4,677	603,496	15,540.98	
17	9/3/2014	81	7,795	6,362	6,548	386,481	11,737.76	
18	9/7/2014	90	6,574	5,810	4,676	600,409	11,889.98	
19	9/7/2014	63	8,811	6,916	4,841	2,133	3,625.38	
19B	9/8/2014	75	6,738	-	4,396	610,993	14,494.38	
20	9/8/2014	88	6,980	7,149	5,029	600,018	12,839.98	
21	9/8/2014	90	6,519	6,142	4,842	600,406	11,425.38	
22	9/8/2014	78	8,030	7,202	4,460	433,924	12,172.98	
22 Reperf	9/9/2014	66	8,083	7,202	4,510	182,336	10,419.76	
23	9/9/2014	81	8,214	6,544	4,514	600,123	15,711.76	
24	9/9/2014	64	8,629	7,445	4,900	7,346	3,639.98	
24 Reperf	9/10/2014	71	7,402	7,445	4,715	611,714	16,972.76	
25	9/10/2014	77	8,651	7,051	4,137	8,374	3,621.04	
25 Reperf	9/11/2014	71	7,087	-	6,975	343,005	11,336.38	
26	9/13/2014	90	6,727	6,043	4,934	601,117	12,412.98	
27	9/13/2014	90	6,719	6,448	4,983	600,888	11,397.98	

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6726</u>	<u>TVD</u>	<u>12440</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 1589 mcfpd Oil 34 bpd NGL 258 bpd Water 867 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>		
	PLEASE 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

WEB 13 CHS

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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:	8/17/2014
Job End Date:	9/13/2014
State:	West Virginia
County:	Marshall
API Number:	47-051-01664-00-00
Operator Name:	Noble Energy, Inc.
Well Name and Number:	WEB-13C
Longitude:	-80.54976400
Latitude:	39.95689600
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,726
Total Base Water Volume (gal):	19,867,364
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	90.69180	
40/70 White	FTSI	proppant					
			Silica, Quartz	14808-60-7	100.00000	6.70786	
100 Mesh Sand	FTSI	proppant					
			Silica, Quartz	14808-60-7	100.00000	1.93630	
Hydrochloric Acid (HCl)	FTSI	Acid					
			Water	7732-18-5	63.00000	0.31234	
			Hydrogen Chloride	7647-01-0	37.00000	0.18344	
FRW-600	FTSI	Friction Reducer					
			Acrylamide Polymer	Trade Secret	100.00000	0.05112	
			Hydrotreated light distillate	64742-47-8	30.00000	0.01533	
			Ammonium acetate	631-61-8	6.00000	0.00307	
CS-500 SI	FTSI	Scale inhibitor					
			Water	7732-18-5	55.00000	0.02752	
			Acrylic Polymer	Proprietary	24.00000	0.01201	
			Ethylene glycol	107-21-1	10.00000	0.00500	
			Sodium chloride	7647-14-5	6.00000	0.00300	
			Sodium Polyacrylate	9003-04-7	5.00000	0.00250	

CI-3240	FTSI	Biocide				
			Water	7732-18-5	55.00000	0.02215
			Dazomet (Tetrahydro-3, 5-dimethyl-2H-1, 3, 5-thiadiazine-2-thione.	533-74-4	24.00000	0.00967
			Sodium Hydroxide	1310-73-2	23.00000	0.00926
HVG-1	FTSI	Water Gelling Agent				
			Petroleum Distillate	64742-47-8	55.00000	0.01272
			Guar Gum	9000-30-0	55.00000	0.01272
			Raffinates (Petroleum), Sorption Process	64741-85-1	50.00000	0.01156
			Clay	1302-78-9	5.00000	0.00116
			Clay	14808-60-7	2.00000	0.00046
			Surfactant	Proprietary	2.00000	0.00046
			Surfactant	154518-36-2	1.00000	0.00023
			Surfactant	24938-91-8	1.00000	0.00023
			Surfactant	9043-30-5	1.00000	0.00023
FE-100L	FTSI	Iron control				
			Water	7732-18-5	60.00000	0.00094
			Citric acid	77-92-9	55.00000	0.00087
CI-150	FTSI	Acid Corrosion Inhibitor				
			Organic amine resin salt	Proprietary	30.00000	0.00026
			Isopropanol	67-63-0	30.00000	0.00026
			Ethylene Glycol	107-21-1	30.00000	0.00026
			Alkylene Oxide Block Polymer	Proprietary	10.00000	0.00009
			Dimethylformamide	68-12-2	10.00000	0.00009
			Aromatic aldehyde	Proprietary	10.00000	0.00009
			Quaternary ammonium compound	Proprietary	10.00000	0.00009
			Water	7732-18-5	5.00000	0.00004
			Diethylene glycol	111-46-6	1.00000	0.00001
			Aliphatic alcohol	Proprietary	0.10000	0.00000
			Fatty Acid Salt	Proprietary	0.10000	0.00000
			Fatty Acid	Proprietary	0.10000	0.00000
APB-1	FTSI	Gel breaker				
			Ammonium Persulfate	7727-54-0	100.00000	0.00082
NE-100	FTSI	Non-emulsifier				
			Water	7732-18-5	90.00000	0.00040
			2-Butoxyethanol	111-76-2	10.00000	0.00004
			2-Propanol	67-63-0	10.00000	0.00004
			Dodecylbenzenesulfonic acid	27176-87-0	5.00000	0.00002
			Benzene, C10-16 Alkyl Derivatives	68648-87-3	0.04000	0.00000
			Unsulphonated Matter	Proprietary	0.03000	0.00000
			Sulfuric Acid	7664-93-9	0.01000	0.00000

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		Sulfur Dioxide	7446-09-5	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 1,636' feet south of Latitude: 39° 57' 30"

AS DRILLED PLAT

Well is located on topo map 2,243' feet west of Longitude: 80° 32' 30"

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

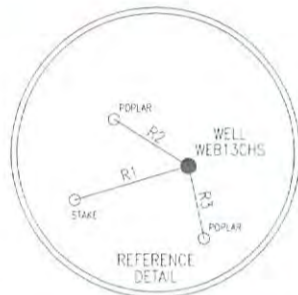
PERMITTED SURFACE HOLE LOCATION (SHL)
 UTM 17-NAD83
 N:4422745.69
 E:538475.27
 NAD27, WV NORTH
 N:531268.20
 E:1705708.66

AS DRILLED SURFACE HOLE LOCATION (SHL)
 UTM 17-NAD83
 N:4422745.74
 E:538475.30
 NAD27, WV NORTH
 N:531268.36
 E:1705708.78

PERMITTED APPROX. LANDING POINT
 UTM 17-NAD83
 N:4422687.01
 E:538610.33
 NAD27, WV NORTH
 N:531068.21
 E:1706148.64

AS DRILLED APPROX. LANDING POINT
 UTM 17-NAD83
 N:4422653.03
 E:538636.54
 NAD27, WV NORTH
 N:530955.29
 E:1706232.79

PARCEL	LESSOR
1	LUCILLE HARTLEY, LIFE TENANT, ET AL.
2	GEORGE MCCARRIHAN ET AL.
3	GEORGE MCCARRIHAN ET AL.
4	GEORGE MCCARRIHAN ET AL.
5	LUCILLE M. HARTLEY, LIFE TENANT
6	ELLSWORTH SCHERICH ET UX., ET AL.
7	ELLSWORTH SCHERICH ET UX., ET AL.



LINE	BEARING	DISTANCE
R1	S 73°19'50" W	255.98'
R2	N 57°43'34" W	189.65'
R3	S 12°16'30" E	160.43'
R4	N 21°14'43" W	1879.03'
R5	N 39°59'17" W	1979.55'
R6	N 52°59'53" W	1982.27'

PERMITTED BOTTOM HOLE LOCATION (BHL)
 UTM 17-NAD83
 N:4421369.38
 E:539638.27
 NAD27, WV NORTH
 N:526687.89
 E:1709449.45

AS DRILLED BOTTOM HOLE LOCATION (BHL)
 UTM 17-NAD83
 N:4421365.77
 E:539642.59
 NAD27, WV NORTH
 N:526675.81
 E:1709463.44

NOTES:

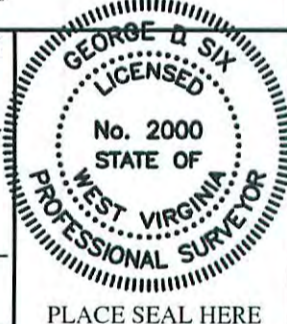
- There are no water wells or developed springs within 250' of proposed well.
- There are no existing buildings within 625' of proposed well.
- Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no native trout streams within 300' of proposed well.
- 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 hereon. 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

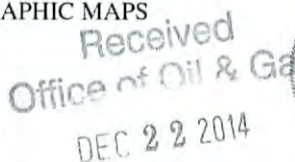
FILE #: WEB13CHS-AS DRILLED
 DRAWING #: WEB13CHS-AS DRILLED
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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: [Signature]
 R.P.E.: _____ L.L.S.: P.S. No. 2000



(+) 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 #: WEB13CHS-AS DRILLED
 API WELL #: 47 51 01664
 STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK ELEVATION: 1265.02'

COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MAJORSVILLE, 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: 453.58±

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: 12,520'±

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