

JR

WR-35
Rev. 8/23/13

Page ___ of ___

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

Received
Office of Oil & Gas

NOV 21 2014

API 47-085-10031 County Ritche District Clay
Quad Pennsboro Pad Name PENS 1HS Field/Pool Name _____
Farm name CNX Gas Company LLC Well Number PENS 1FHS
Operator (as registered with the OOG) Noble Energy, Inc.
Address 333 Technology Drive Suite 110 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 4353949.29 Easting 500612.85
Landing Point of Curve Northing 4353790.01 Easting 500212.21
Bottom Hole Northing 4355811.44 Easting 498459.71

Elevation (ft) 1111.62 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 4/18/2013 Date drilling commenced 5/21/2013 Date drilling ceased 12/19/2013
Date completion activities began 4/11/2014 Date completion activities ceased 9/4/2014
Verbal plugging (Y/N) N Date permission granted 4/18/2013 Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 130' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1525', 1805' Void(s) encountered (Y/N), depths N
Coal depth(s) ft _____ Cavern(s) encountered (Y/N), depths N
Is coal being mined in area (Y/N) N

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NOV 21 2014

Reviewed by:

12/05/2014

API 47-085-10031 Farm name CNX Gas Company LLC Well number PENS 1FHS

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	24	20	40	N	J-55 106.50#		
Surface	17-1/2	13-3/8	633.8	N	J-55 54.50#		Y
Coal							
Intermediate 1	12-1/4	9-5/8	5463.0	N	HCK-55 36#		Y
Intermediate 2							
Intermediate 3							
Production	8-3/4	5-1/2	15849.0	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	Class H	551	15.6	1.19	119	0	8
Coal							
Intermediate 1	Class A	Lead-1018 Tail-278	Lead-12.0 Tail-15.6	Lead-1.81 Tail-1.19	Lead-328 Tail-54	0	8
Intermediate 2							
Intermediate 3							
Production	Class A	Lead-430 Tail-1870	Lead-13 Tail-14.8	Lead-1.62 Tail-1.41	Lead-124 Tail-469.6	3650	8
Tubing							

Drillers TD (ft) 15860 Loggers TD (ft) _____

Deepest formation penetrated Marcellus Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) 5485

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 _____

7 Centralizers on Surface (1 every 3rd joint) 88 Centralizers on Intermediate (1 every 3rd joint) 278 Centralizers on Production (1 every 3rd to Curve, then 1 every joint to TD)

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

NOV 21 2014

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED Spectra Chem

12/05/2014

API 47- 085 - 10031 Farm name CNX Gas Company LLC Well number PENS 1FHS

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

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Office of Oil & Gas

Please insert additional pages as applicable.

NOV 21 2014

12/05/2014

PERFORATION RECORD

API: 47-085-10031

Farm name: CNX Gas Company LLC

Well Name: PEN 1FHS

Stage No.	Perf Date	Top Perf	Bottom Perf	# of Perfs	Formation
Toe Sleeve	3/8/2014	15,719	15,721	NA	Marcellus
1	4/9/2014	15,522	15,709	48	Marcellus
2	4/11/2014	15,223	15,477	40	Marcellus
3	4/15/2014	14,923	15,177	40	Marcellus
4	4/28/2014	14,620	14,877	40	Marcellus
5	5/4/2014	14,317	14,577	40	Marcellus
6	5/4/2014	14,023	14,277	40	Marcellus
7	5/5/2014	13,723	13,977	40	Marcellus
8	5/6/2014	13,423	13,677	40	Marcellus
9	5/8/2014	13,123	13,377	40	Marcellus
10	5/9/2014	12,823	13,077	40	Marcellus
11	5/9/2014	12,523	12,777	40	Marcellus
12	5/10/2014	12,223	12,477	40	Marcellus
13	5/10/2014	11,923	12,177	40	Marcellus
14	5/10/2014	11,623	11,877	40	Marcellus
15	5/11/2014	11,323	11,577	40	Marcellus
15 Reperf	5/12/2014	11,344	11,404	24	Marcellus
16	5/12/2014	11,023	11,277	40	Marcellus
16B & 16B2	5/13/2014	11,013	11,120	24	Marcellus
16C	5/14/2014	10,723	10,977	40	Marcellus
17	5/14/2014	10,423	10,677	40	Marcellus
17B	5/15/2014	10,444	10,530	32	Marcellus
18	5/15/2014	10,123	10,377	40	Marcellus
19	5/16/2014	9,823	10,077	40	Marcellus
20	5/16/2014	9,523	9,777	40	Marcellus
21	5/16/2014	9,223	9,477	40	Marcellus
22	5/16/2014	8,918	9,177	40	Marcellus
23	5/17/2014	8,623	8,877	40	Marcellus
24	5/17/2014	8,323	8,573	40	Marcellus
25	5/18/2014	8023	8277	40	Marcellus
26	5/18/2014	7720	7977	40	Marcellus
27A	5/18/2014	7425	7677	40	Marcellus
27B	5/19/2014	7413	7452	16	Marcellus
28	5/19/2014	7125	7377	40	Marcellus

Received
Office of Oil & Gas
NOV 21 2014

12/05/2014

STIMULATION INFORMATION PER STAGE

API: 47-085-10031

CNX Gas
Farm name: Company LLC

Well Name: PEN 1FHS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other
1	4/11/2014	66.0	8567	5814	4300	319,020	13,690	
2	4/12/2014	59.0	7,741	8804	4538	505,320	18,622	
3	4/27/2014	81.0	7,995	5,382	4739	392,020	12,374	
3B	4/28/2014	67.0	8,416	8,066	5012	117,420	5,506	
4	5/4/2014	77.2	8,316	5,408	5091	489,520	15,643	
5	5/4/2014	85.1	8,001	5,138	2972	498,280	11,728	
6	5/4/2014	79.0	8,261	5,540	3157	504,440	15,185	
7	5/5/2014	85.2	8,248	6,864	3096	498,140	11,809	
8	5/8/2014	83.1	8,250	5,698	3020	500,380	15,164	
9	5/9/2014	82.2	8,109	5,955	3009	494,920	14,433	
10	5/9/2014	83.1	8,137	6,658	3868	495,480	14,170	
11	5/9/2014	89.5	8,071	6,633	3199	488,100	11,511	
12	5/10/2014	83.3	7,941	6,256	3598	494,180	13,199	
13	5/10/2014	82.1	8,055	6,521	4393	488,740	14,656	
14	5/10/2014	87.0	7,830	6,002	2636	498,700	11,951	
15	5/10/2014	36.0	8,061	5,584	4331	5,000	3,395	
15 Reperf	5/12/2014	69.8	8,352	7,523	3310	497,840	17,961	
16	5/12/2014	26.0	8,619	5,796	4256	2,960	2,957	
16B & 16B2	5/13/2014	55.0	9,223	6,395	5618	5,000	8,685	
16C	5/14/2014	43.9	9,003	7,415	6389	3,000	3,424	
16C1	5/14/2014	81.0	7,925	5944	2478	580,440	16,530	
17	5/14/2014	79.0	7,967	5,215	4340	396,920	12,966	
17B	5/15/2014	82.0	8,077	6,034	4646	113,180	6,210	
18	5/15/2014	89.0	7,858	5,138	3144	499,180	13,462	
19	5/16/2014	89.5	7,825	5,129	4264	501,740	13,643	
20	5/16/2014	84.6	8,075	5,193	4939	498,000	13,442	
21	5/16/2014	86.4	8,125	5,476	3965	502,980	13,260	
22	5/17/2014	90.2	7,426	5,326	3597	497,000	12,578	
23	5/17/2014	83.7	7,693	5,530	4035	479,480	14,819	
24	5/17/2014	87.2	8,010	5,357	5028	491,860	14,534	
25	5/18/2014	87.7	7,897	5,186	4144	498,000	15,038	
26	5/18/2014	90.3	8022	5330	5258	496,720	10781.57	
27A	5/19/2014	89.1	7844	5452	5153	249,860	8605.13	
27B	5/19/2014	77.6	8271	6155	4131	296,820	10273.57	
28	5/19/2014	88.2	7522	5874	3176	501,240	11812.57	

Received
Office of Oil & Gas

NOV 21 2014

12/05/2014

API 47- 085 - 10031 Farm name CNX Gas Company LLC Well number PENS 1FHS

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6355.3'</u> TVD	<u>15,860'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Received
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NOV 21 2014

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 2258 mcfpd Oil 42 bpd NGL 413 bpd Water 494 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

Please insert additional pages as applicable.

Drilling Contractor Nomac 78
Address 40 Lamoka Road City Sayre State PA Zip 18840

Logging Company _____
Address _____ City _____ State _____ Zip _____

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

Stimulating Company CUDD Energy Services
Address 2897 Route 414 City Canton State PA Zip 17724

Please insert additional pages as applicable.

Completed by Regina A. Logue Telephone 724-820-3559
Signature Regina A. Logue Title Regulatory Analyst Date 11/18/2014

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

12/05/2014

PEN 1F
47-085-10031

Formations	Top TVD	Base TVD	Top MD	Base MD	Fluid
Shale and Sandstone	0	1365	0	1365	
Sandstone	1365	1489	1365	1479	
Shale and Sandstone	1479	1649	1479	1650	
Sandstone	1649	1691	1650	1692	
Shale and Sandstone	1691	1793	1692	1794	
Maxton Sand	1793	1876	1794	1877	
Shale and Sandstone	1876	1999	1877	2000	
Big Lime	1999	2054	2000	2055	
Big Injun	2054	2189	2055	2190	
Price	2189	2461	2190	2462	
Weir	2461	2500	2462	2978	
Shale	2500	2780	2501	2781	
Gordon	2780	2797	2781	2798	
Shale and Sandstone	2797	2977	2798	2978	
5th Sand	2977	2989	2978	2990	
Shale	2989	3132	2990	3133	
Sandstone	3132	3146	3133	3147	
Shale	3146	3554	3147	3555	
Warren	3554	3616	3555	3617	
Shale	3616	3950	3617	3952	
Sandstone	3950	3987	3952	3989	
Shale and Sandstone	3987	4981	3989	5025	
Benson	4981	5043	5025	5095	
Shale	5043	5203	5095	5281	
Alexander	5203	5271	5281	5361	
Shale	5271	5781	5361	6002	
Rheinstreet	5781	6107	6002	6439	
Cashaqua	6107	6199	6439	6582	
Middlesex	6199	6228	6582	6634	
West River	6228	6272	6634	6728	
Burkett	6272	6315	6728	6846	
Tully Limestone	6315	6316	6846	6849	
Hamilton	6316	6317	6849	6852	
Marcellus	6317	6376	6852	not encountered	Gas
Onondaga	6376	6393	not encountered	not encountered	
Huntersville	6393	not encountered	not encountered	not encountered	

Received
Office of Oil & Gas
NOV 21 2014

12/05/2014

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/11/2014
Job End Date:	5/19/2014
State:	West Virginia
County:	Ritchie
API Number:	47-085-10011-00-00
Operator Name:	Noble Energy, Inc.
Well Name and Number:	PENS1F
Longitude:	-80.99275700
Latitude:	39.33503100
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,352
Total Base Water Volume (gal):	17,808,387
Total Base Non Water Volume:	766,743



85-10031

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	Base Carrier Fluid					
			Water	7732-18-5	100.00000	91.09506	
Sand	Operator	Proppants					
			Silicon Dioxide	14808-60-7	100.00000	8.52664	
28% Hydrochloric Acid	Reagent	Scale Dissolver					
			Water	7732-18-5	64.79000	0.12407	
			Hydrogen Chloride	7647-01-0	36.93000	0.07072	
FR900	Nalco	Friction Reducers					
			Proprietary	Proprietary	100.00000	0.09745	
Plexgel 907L-EB	Chemplex, L.C.	Gelling Agents					
			Propylene Pentamer	15220-87-8	60.00000	0.02083	
			Distillate, petroleum, hydrotreated light	64742-47-8	60.00000	0.02083	
			C11 n-alkanes, mixed	1120-21-4	20.00000	0.00694	
			C14 n-alkanes, mixed	629-59-4	20.00000	0.00694	
			C12 n-alkanes, mixed	112-40-3	20.00000	0.00694	
			C13 n-alkanes, mixed	629-50-5	20.00000	0.00694	
BIO-CLEAR 2000	Clearwater International, LLC	Iron Controller / Reducers					
			Polyethylene Glycol Mixture	25322-68-3	60.00000	0.02303	

			2,2-Dibromo-3-Nitrilopropionamide	10222-01-2	20.00000	0.00768
MSI-7	National Petrochem	Scale Inhibitors				
			Hydrogen Chloride	7647-01-0	100.00000	0.00956
Plexgel Breaker 10L	Chemplex, L.C.	Gel Breakers/Delayed Breakers				
			No Hazardous Ingredients	Proprietary	100.00000	0.00295
FE-4	Chemplex, L.C.	Iron Controller / Reducers				
			Citric Acid Anhydrous	77-92-9	55.00000	0.00130
			Water	7732-18-5	55.00000	0.00130
-22	Nalco	Acid Corrosion Inhibitors				
			Formic Acid	64-18-6	60.00000	0.00048
			Aromatic aldehyde	Proprietary	30.00000	0.00024
			Quaternary ammonium compound	Proprietary	30.00000	0.00024
			Oxyalkylated Fatty Acid Derivative	Proprietary	30.00000	0.00024
			Isopropanol	67-63-0	10.00000	0.00008
			2-Mercaptoethyl Alcohol	60-24-2	5.00000	0.00004
			Cyclic alkanes	Proprietary	5.00000	0.00004
			Quaternary ammonium compound	Proprietary	5.00000	0.00004
			Methanol	67-56-1	5.00000	0.00004
MNE-N34	CESI	Emulsifiers / Viscosifiers				
			Petroleum Distillates	64741-68-0	75.00000	0.00044
			Isopropanol	67-63-0	25.00000	0.00015
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.						

85-10031

* 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)

Received
 Office of Oil & Gas
 NOV 21 2014

Well is located on topo map 14,612' feet south of Latitude: 39° 22' 30"

NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. 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.

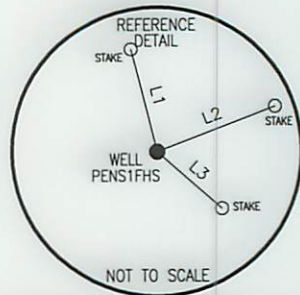


LEGEND

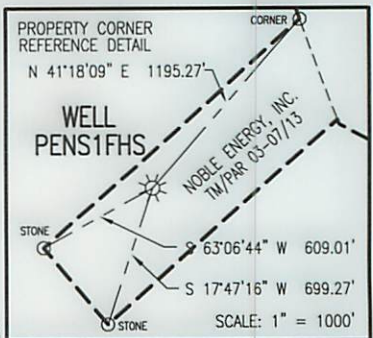
- TOPO MAP POINT
- PROPOSED GAS WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- WATER SOURCE
- LEASE NUMBER
- - - - - SURFACE BOUNDARY
- - - - - PARCEL LINES
- - - - - WELL REFERENCE
- - - - - PROPOSED HORIZONTAL WELL
- - - - - ROAD
- - - - - STREAM CENTER LINE
- - - - - AS DRILLED

WELLS WITHIN 3000'

- EXISTING WELLS
- PLUGGED WELLS



LINE	BEARING	DISTANCE
L1	N 14°14'26" W	217.46'
L2	N 69°23'15" E	261.56'
L3	S 48°39'04" E	177.91'



BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
N:4355810.62
E:498458.86
NAD27, WV NORTH
N:313818.55
E:1570732.24

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
N:4355811.44
E:498459.71
NAD27, WV NORTH
N:313821.208
E:1570735.068

APPROX. LANDING POINT
UTM 17-NAD83
N:4353806.32
E:500198.06
NAD27, WV NORTH
N:307146.00
E:1576329.67

TRACT	LESSORS
1	JOSEPH F. & JOYCE A. SCHMIDLE
2	ELIZABETH SMITH BARBER ET AL
3	ELIZABETH SMITH BARBER ET AL
4	MARY LEE & PERRY LILLY ET AL
5	MARY LEE & PERRY LILLY ET AL
6	DAVID T. MIHLBAUER ET AL
7	TERRY & HELEN KIESSLING ET AL
8	TERRY & HELEN KIESSLING ET AL
9	BLAUSER ASSET MANAGEMENT ET AL
10	CINDA L. & DAVID M. FLEMING ET AL
11	CINDA L. & DAVID M. FLEMING ET AL
12	JOHN A. & EDITH SMITH ET AL
13	JOHN A. & EDITH SMITH ET AL

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4353949.073
E:500612.699
NAD27, WV NORTH
N:307591.67
E:1577698.16

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4353949.29
E:500612.85
NAD27, WV NORTH
N:307592.380
E:1577698.670

Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

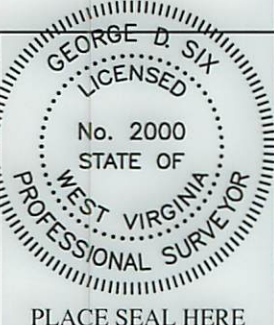
Well is located on topo map 9,829' feet west of Longitude: 80° 57' 30"

FILE #: PENS1FHS-AS DRILLED
 DRAWING #: PENS1FHS-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:

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: AUGUST 26, 2014
 OPERATOR'S WELL #: PENS1FHS-AS DRILLED
 API WELL #: 47 85 MOD10031H6A
 STATE COUNTY PERMIT

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

WATERSHED: BONDS CREEK ELEVATION: 1116.40'

COUNTY/DISTRICT: RITCHIE / CLAY QUADRANGLE: PENNSBORO, WV 7.5'

SURFACE OWNER: NOBLE ENERGY, INC. ACREAGE: 19.759±

OIL & GAS ROYALTY OWNER: SEE TABLE ABOVE ACREAGE: 612.769±

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: 6,359'± TMD: 15,810'±

WELL OPERATOR NOBLE ENERGY, INC. DESIGNATED AGENT STEVEN M. GREEN
 Address 333 TECHNOLOGY DRIVE, SUITE 110 Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 1001
 City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301

12/05/2014

Well is located on topo map 14,612' feet south of Latitude: 39° 22' 30"

Well is located on topo map 9,829' feet west of Longitude: 80° 57' 30"

NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. 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.

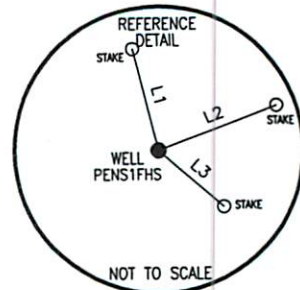


LEGEND

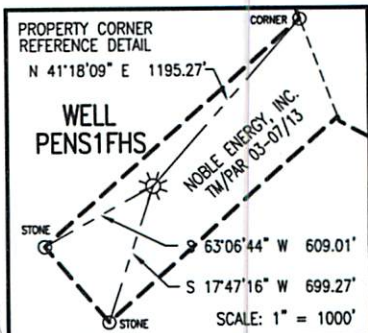
- ⊕ - TOPO MAP POINT
- ☀ - PROPOSED GAS WELL
- - ALL ARE POINTS UNLESS OTHERWISE NOTED.
- ⊙ - WATER SOURCE
- ⊙ - LEASE NUMBER
- - - SURFACE BOUNDARY
- - - PARCEL LINES
- - - WELL REFERENCE
- - - PROPOSED HORIZONTAL WELL
- - - ROAD
- - - STREAM CENTER LINE
- - - AS DRILLED

WELLS WITHIN 3000'

- - EXISTING WELLS
- ⊙ - PLUGGED WELLS



LINE	BEARING	DISTANCE
L1	N 14°14'26" W	217.46'
L2	N 69°23'15" E	261.56'
L3	S 48°39'04" E	177.91'

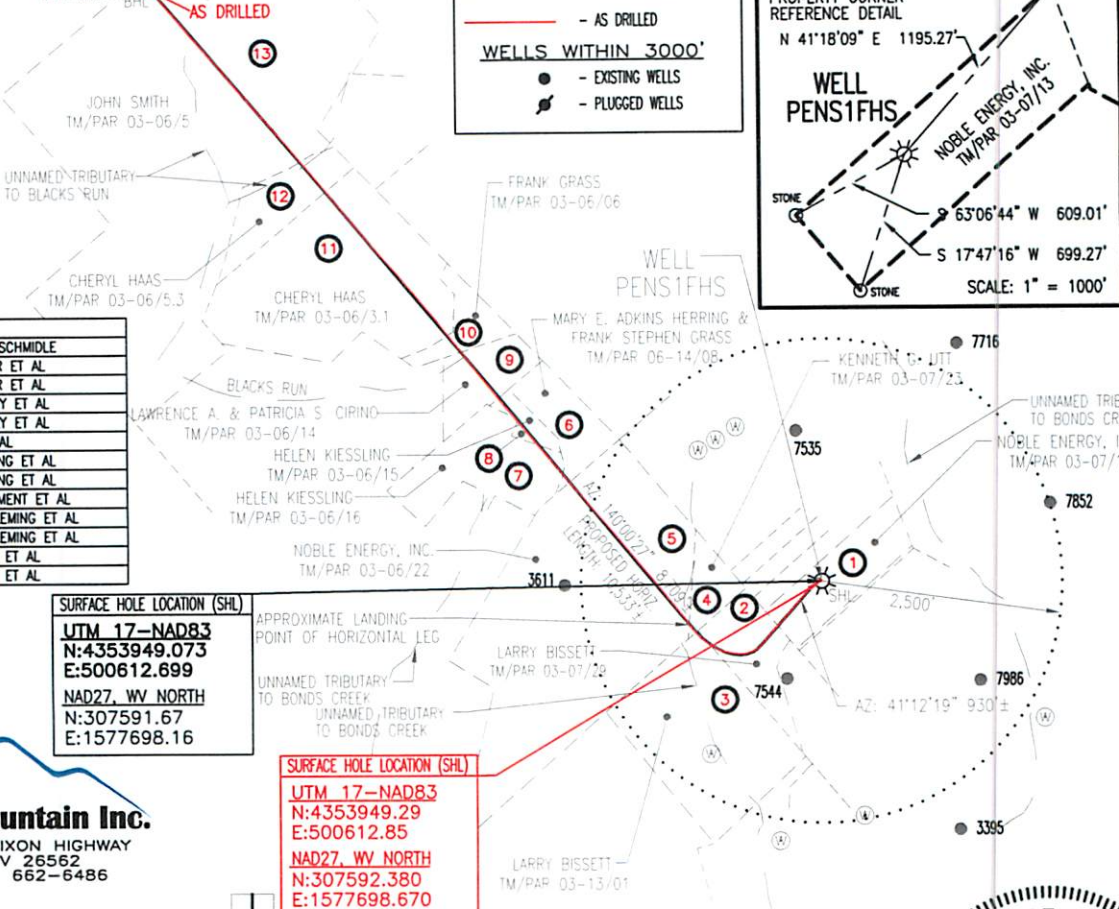


BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
N:4355810.62
E:498458.86
NAD27, WV NORTH
N:313818.55
E:1570732.24

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
N:4355811.44
E:498459.71
NAD27, WV NORTH
N:313821.208
E:1570735.068

APPROX. LANDING POINT
UTM 17-NAD83
N:4355806.32
E:500198.06
NAD27, WV NORTH
N:307146.00
E:1576329.67

TRACT	LESSORS
1	JOSEPH F. & JOYCE A. SCHMIDLE
2	ELIZABETH SMITH BARBER ET AL
3	ELIZABETH SMITH BARBER ET AL
4	MARY LEE & PERRY LILLY ET AL
5	MARY LEE & PERRY LILLY ET AL
6	DAVID T. MIHLBAUER ET AL
7	TERRY & HELEN KIESSLING ET AL
8	TERRY & HELEN KIESSLING ET AL
9	BLAUSER ASSET MANAGEMENT ET AL
10	CINDA L. & DAVID M. FLEMING ET AL
11	CINDA L. & DAVID M. FLEMING ET AL
12	JOHN A. & EDITH SMITH ET AL
13	JOHN A. & EDITH SMITH ET AL



SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4353949.073
E:500612.699
NAD27, WV NORTH
N:307591.67
E:1577698.16

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4353949.29
E:500612.85
NAD27, WV NORTH
N:307592.380
E:1577698.670

Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

FILE #: PENS1FHS-AS DRILLED
 DRAWING #: PENS1FHS-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 D. Six*
 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: AUGUST 26, 2014
 OPERATOR'S WELL #: PENS1FHS-AS DRILLED
 API WELL #: 47 85 MOD10031H6A
 STATE COUNTY PERMIT

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

WATERSHED: BONDS CREEK ELEVATION: 1116.40'

COUNTY/DISTRICT: RITCHIE / CLAY QUADRANGLE: PENNSBORO, WV 7.5'

SURFACE OWNER: NOBLE ENERGY, INC. ACREAGE: 19.759±

OIL & GAS ROYALTY OWNER: SEE TABLE ABOVE ACREAGE: 612.769±

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: 6,359± TMD: 15,810±

WELL OPERATOR NOBLE ENERGY, INC. DESIGNATED AGENT STEVEN M. GREEN
 Address 333 TECHNOLOGY DRIVE, SUITE 110 Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 1001
 City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301