

JZ

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

API 47 - 085 - 10012 County Ritche District Clay
Quad Pennsboro Pad Name PENS 1HS Field/Pool Name _____
Farm name CNX Gas Company LLC Well Number PEN 1BHS
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 4353961.62 Easting 500626.97
Landing Point of Curve Northing 4353982.45 Easting 500981.88
Bottom Hole Northing 4352403.91 Easting 502354.32

Elevation (ft) 1112 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 1/31/2013 Date drilling commenced 5/13/2013 Date drilling ceased 11/9/2013
Date completion activities began 6/24/2014 Date completion activities ceased 8/28/2014
Verbal plugging (Y/N) N Date permission granted 1/31/2013 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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Reviewed by: _____

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API 47-085-10012 Farm name CNX Gas Company LLC Well number PEN 1BHS

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			
Surface	17-1/2	13-3/8	663	N	J-55 54.5#		Y
Coal							
Intermediate 1	12-1/4	9-5/8	5342	N	K-55 36#		Y
Intermediate 2							
Intermediate 3							
Production	8-3/4	5-1/2	14060	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 A	530	15.6	1.19	101	0	8
Coal							
Intermediate 1	Class A	Lead- 968 Tail- 278	Lead- 12 Tail- 15.6	Lead- 1.82 Tail- 1.19	Lead- 313 Tail- 59	0	8
Intermediate 2							
Intermediate 3							
Production	Class A	Lead- 192 Tail- 1440	Lead- 13 Tail- 14.8	Lead- 1.61 Tail- 1.39	Lead- 55 Tail- 354	2898	8
Tubing							

Drillers TD (ft) 14074 Loggers TD (ft) _____
 Deepest formation penetrated Marcellus Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 5362

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 _____
6 Centralizers on Surface (1 every 3rd joint) 59 Centralizers on Intermediate (1 every 3rd joint) 228 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 Spectra Chem

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PERFORATION RECORD

API: 47-085-10012

Farm name: CNX Gas Company LLC

Well Name: PEN 1BHS

Stage No.	Perf Date	Top Perf	Bottom Perf	# of Perfs	Formation
Toe Sleeve	3/8/2014	13,928	13,930	NA	Marcellus
1	6/24/2014	13,826	13,918	48	Marcellus
2	6/29/2014	13,623	13,777	40	Marcellus
3	6/30/2014	13,423	13,577	40	Marcellus
4	7/1/2014	13,223	13,377	40	Marcellus
5	7/1/2014	13,023	13,180	40	Marcellus
05B	7/2/2014	13,006	13,089	24	Marcellus
6	7/7/2014	12,823	12,977	40	Marcellus
7	7/8/2014	12,623	12,777	40	Marcellus
8	7/25/2014	12,423	12,577	40	Marcellus
08B	7/26/2014	12,423	12,439	16	Marcellus
9	7/26/2014	12,223	12,377	40	Marcellus
10	7/27/2014	12,023	12,177	40	Marcellus
11	7/27/2014	11,823	11,977	40	Marcellus
12	7/27/2014	11,623	11,777	40	Marcellus
12B	7/27/2014	11,644	11,686	24	Marcellus
12B2	7/28/2014	11,612	11,711	32	Marcellus
12C	7/29/2014	11,423	11,577	40	Marcellus
13	7/29/2014	11,223	11,377	40	Marcellus
14	7/29/2014	11,023	11,177	40	Marcellus
15	7/30/2014	10,823	10,977	40	Marcellus
15B	7/30/2014	10,835	10,867	24	Marcellus
16	7/30/2014	10,623	10,777	40	Marcellus
16B	7/30/2014	10,642	10,714	24	Marcellus
17	7/31/2014	10,423	10,577	40	Marcellus
17B	8/1/2014	10,415	10,519	48	Marcellus
18	8/1/2014	10,223	10,377	50	Marcellus
18B	8/1/2014	10,203	10,215	24	Marcellus
18B2	8/7/2014	10,242	10,358	48	Marcellus
19	8/7/2014	10,025	10,177	60	Marcellus
20	8/8/2014	9,823	9,977	60	Marcellus
21	8/8/2014	9623	9777	60	Marcellus
22	8/8/2014	9423	9577	60	Marcellus
23	8/9/2014	9223	9377	60	Marcellus
24	8/9/2014	9023	9177	57	Marcellus
25	8/9/2014	8823	8977	60	Marcellus
26	8/9/2014	8623	8777	60	Marcellus
27	8/10/2014	8423	8577	60	Marcellus
28	8/10/2014	8223	8377	60	Marcellus
29	8/11/2014	8023	8177	60	Marcellus

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STIMULATION INFORMATION PER STAGE

API: 47-085-10012

CNX Gas
Farm name: Company LLC

Well Name: PEN 1BHS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other
1 Inj Test	6/24/2014	11.7	8001			-	592	
1	6/28/2014	45.9	7,837		8533	397,984	12,521	
1 Inj Test II	6/28/2014	6.6	7,396		8333	-	1,035	
1 Inj Test III	6/29/2014	12.7	7,884		7321	-	1,958	
2	6/29/2014	69.6	6,979	5,706	3309	599,991	15,820	
3	7/1/2014	70.2	6,674	6,269	3430	500,475	11,730	
4	7/1/2014	69.6	6,666	6,063	3835	500,002	11,034	
5	7/1/2014	36.6	8,324	6,359	6849	6,383	3,832	
5 Reperf	7/7/2014	67.7	7,346		4010	500,806	12,693	
6	7/8/2014	69.3	6,847	6,939	3876	480,508	10,721	
7	7/9/2014	68.7	6,718	6,781	9457	425,385	10,381	
7 Inj Test	7/11/2014	3.4	6,725		8561	-	398	
7 Inj Test II	7/14/2014	1.9	8,654		8098	-	382	
7 Inj Test III	7/24/2014	17.0	5,902		5358	-		
8	7/26/2014	29.1	8,279	6,526	6967	4,530	3,867	
8 Reperf	7/26/2014	65.9	6,982	6,410	3735	497,506	11,719	
9	7/26/2014	68.1	6,433	5,653	3980	501,615	11,206	
10	7/27/2014	69.4	6,456	6,201	3846	503,712	11,203	
11	7/27/2014	69.9	6,529	6,170	3637	502,289	11,260	
12	7/27/2014	23.9	8,042	336	4710	7,043	3,582	
12B (Reperf)	7/28/2014	39.9	7,668	7090		17,431	2,776	
12B Inj Test	7/28/2014	26.7	6,522	3,561	4588	397	2,276	
12B.2 (Reperf 2)	7/29/2014	60.6	7,504	5,792	5280	332,552	12,392	
12C (Commingle)	7/29/2014	70.4	6,292		3721	500,578	11,068	
13	7/29/2014	69.2	6,432	5,019	3723	500,418	12,378	
14	7/29/2014	70.7	6,962	6,854	3934	412,254	9,993	
15	7/30/2014	47.1	7,767	5,948	5790	3,205	4,865	
15B (Reperf)	7/30/2014	63.2	7,787	6,632	3490	602,064		
16	7/30/2014	53.2	8,007	6,303	5592	3,430	2,805	
16B (Reperf)	7/31/2014	66.8	7,228	6,150	3607	501,467	14,458	
17	7/31/2014	48.4	7,979	6,308	7130	110,086	6,704	
17 Inj Test	8/1/2014	16.2	5366		6038	-	289.71	
17 B (Reperf)	8/1/2014	67.6	7393		3423	389,966	12119.24	
18	8/1/2014	51.4	7657	5636	6351	295,651	9551.97	
18B (Reperf)	8/2/2014	24.4	8584		8688	5,382	1914.45	
18B Inj Test 1	8/4/2014	1.0	6510		9146	-		
18B Inj Test 2	8/5/2014	2.8	4724		8466	-		
18B.2 (Reperf)	8/7/2014	66.9	7205		5473	530,220		
19	8/7/2014	62.7	7393	5450	4944	499,625	15569.22	
20	8/8/2014	67.6	6569	5564	4635	499,256	12501.23	

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STIMULATION INFORMATION PER STAGE

API: 47-085-10012

CNX Gas
Farm name: Company LLC

Well Name: PEN 1BHS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other
21	8/8/2014	69.5	6289	5508	5076	498,527	12101.90	
22	8/8/2014	64.9	6995	5778	3518	496,854	13794.09	
23	8/9/2014	63.7	7220	5416	5345	499,975	16025.01	
24	8/9/2014	69.4	6623	5205	3406	499,113	11734.40	
25	8/9/2014	68.4	7155	6050	3594	500,588	14026.74	
26	8/10/2014	69.9	6310	6197	3472	504,970	11001.49	
27	8/10/2014	70.5	6218	5659	3632	501,434	10929.70	
28	8/11/2014	67.6	6642	5520	3315	502,183	11549.78	
29	8/11/2014	70.0	6220	5181	3654	506,801	11097.47	
30	8/11/2014	61.0	7524	5449	3570	501,108	16817.72	
31	8/12/2014	69.6	6393	5853	3503	500,676	12290.06	
32	8/12/2014	70.7	5676	92.5	3939	501,040	11571.86	
33	8/12/2014	69.6	5649	6281	4002	500,634	10284.71	
34	8/12/2014	70.7	5708	5810	3471	502,442	10138.76	
35	8/13/2014	70.8	5100	5430	3611	501,179	10527.88	

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PERFORATION RECORD

API: 47-085-10012

Farm name: CNX Gas Company LLC

Well Name: PEN 1BHS

Stage No.	Perf Date	Top Perf	Bottom Perf	# of Perfs	Formation
30	8/11/2014	7823	7977	60	Marcellus
31	8/12/2014	7623	7777	60	Marcellus
32	8/12/2014	7423	7577	60	Marcellus
33	8/12/2014	7223	7377	60	Marcellus
34	8/12/2014	7023	7177	60	Marcellus
35	8/13/2014	6823	6977	60	Marcellus

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API 47- 085 - 10012 Farm name CNX Gas Company LLC Well number PEN 1BHS

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6391.4'</u> TVD	<u>14074'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

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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 3040 mcfpd Oil 32 bpd NGL 37 bpd Water 702 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	0		0		

Please See Formations Page 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 Halliburton
Address 121 Champion Way, Suite 210 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Regina A. Logue Telephone 724-359-3559
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 1B

47-085-10012

Formations	Top TVD	Base TVD	Top MD	Base MD	Fluid
Shale and Sandstone	0	1365	0	1366	
Sandstone	1365	1489	1366	1480	
Shale and Sandstone	1479	1649	1480	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	2979	
Shale	2500	2780	2501	2782	
Gordon	2780	2797	2782	2799	
Shale and Sandstone	2797	2977	2799	2979	
5th Sand	2977	2989	2979	2991	
Shale	2989	3132	2991	3134	
Sandstone	3132	3146	3134	3148	
Shale	3146	3554	3148	3556	
Warren	3554	3616	3556	3618	
Shale	3616	3950	3618	3952	
Sandstone	3950	3987	3952	3989	
Shale and Sandstone	3987	4981	3989	4983	
Benson	4981	5043	4983	5045	
Shale	5043	5203	5045	5205	
Alexander	5203	5271	5205	5273	
Shale	5271	5781	5273	5807	
Rheinstreet	5781	6107	5807	6339	
Cashaqua	6107	6199	6339	6533	
Middlesex	6199	6228	6533	6601	
West River	6228	6272	6601	6709	
Burkett	6272	6315	6709	6833	
Tully Limestone	6315	6316	6833	6836	
Hamilton	6316	6317	6836	6839	
Marcellus	6317	6376	6839	not encountered	Gas
Onondaga	6376	6393	not encountered	not encountered	
Huntersville	6393	not encountered	not encountered	not encountered	

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/28/2014
Job End Date:	8/13/2014
State:	West Virginia
County:	Ritchie
API Number:	47-085-10033-00-00
Operator Name:	Noble Energy, Inc.
Well Name and Number:	Pen1 B
Longitude:	-80.99289400
Latitude:	39.33500000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,391
Total Base Water Volume (gal):	20,359,038
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
Fresh Water	Operator	Base Fluid	Fresh Water	7732-18-5	100.00000	89.66110	Density = 8.340
40/70 Premium White	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00000	5.60264	
100m Premium White	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00000	3.82781	
HYDROCHLORIC ACID 5-10%	Halliburton	Solvent	Hydrochloric acid	7647-01-0	10.00000	0.05968	
HYDROCHLORIC ACID 10-30%	Halliburton	Solvent	Hydrochloric acid	7647-01-0	30.00000	0.04872	
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02483	
LGC-36 UC	Halliburton	Liquid Gel Concentrate	Naphtha, hydrotreated heavy	64742-48-9	60.00000	0.00995	
			Guar gum	9000-30-0	60.00000	0.00995	
FE-1A ACIDIZING COMPOSITION	Halliburton	Additive	Acetic anhydride	108-24-7	100.00000	0.00472	

BE-9	Halliburton	Biocide	Acetic acid	64-19-7	60.00000	0.00283	
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10.00000	0.00412	
LoSurf-300D	Halliburton	Non-ionic Surfactant					
			Ethanol	64-17-5	60.00000	0.00095	
			Heavy aromatic petroleum naphtha	64742-94-5	30.00000	0.00048	
			Naphthalene	91-20-3	5.00000	0.00008	
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5.00000	0.00008	
			1,2,4 Trimethylbenzene	95-63-6	1.00000	0.00002	
LCA-1	Halliburton	Solvent					
			Paraffinic solvent	Confidential	100.00000	0.00124	Denise Tuck, Halliburton 3000 N. Sam Houston Pkwy E., Houston, TX 77032 281-871-6226
HAI-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor					
			Methanol	67-56-1	60.00000	0.00047	
			Propargyl alcohol	107-19-7	10.00000	0.00008	
SP BREAKER	Halliburton	Breaker					
			Sodium persulfate	7775-27-1	100.00000	0.00033	
LP-65 MC	Halliburton	Scale Inhibitor					
			Ammonium chloride	12125-02-9	100.00000	0.00000	Not Found in DB
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.							
		Other Ingredient(s)					
			Water	7732-18-5		0.85011	
		Other Ingredient(s)					
			Polyacrylamide copolymer	Confidential		0.02483	
		Other Ingredient(s)					
			Alcohols, C12-16, ethoxylated	68551-12-2		0.00414	
		Other Ingredient(s)					
			Sodium chloride	7647-14-5		0.00414	
		Other Ingredient(s)					
			Ammonium chloride	12125-02-9		0.00414	
		Other Ingredient(s)					
			Fatty acid tall oil amide	Confidential		0.00414	
		Other Ingredient(s)					
			Quaternary ammonium compounds, bis(hydrogenated tallow alkyl) dimethyl, salts with bentonite	68953-58-2		0.00083	
		Other Ingredient(s)					
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8		0.00083	
		Other Ingredient(s)					

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		Sorbitan monooleate polyoxyethylene derivative	9005-65-6		0.00083
		Other Ingredient(s)			
		Oxyalkylated phenolic resin	Confidential		0.00048
		Other Ingredient(s)			
		Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1		0.00023
		Other Ingredient(s)			
		Fatty acids, tall oil	Confidential		0.00023
		Other Ingredient(s)			
		Alcohols, C14-C15, ethoxylated	68951-67-7		0.00023
		Other Ingredient(s)			
		Fatty alcohol polyglycol ether surfactant	9043-30-5		0.00017
		Other Ingredient(s)			
		Oxyalkylated phenolic resin	Confidential		0.00016
		Other Ingredient(s)			
		Olefins	Confidential		0.00004
		Other Ingredient(s)			
		Olefins	Confidential		0.00004
		Other Ingredient(s)			
		Crystalline silica, quartz	14808-60-7		0.00002
		Other Ingredient(s)			
		Olefins	Confidential		0.00001
		Other Ingredient(s)			
		Olefins	Confidential		0.00001
		Other Ingredient(s)			
		Sodium sulfate	7757-82-6		0.00000

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* 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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Latitude: 39°22'30"

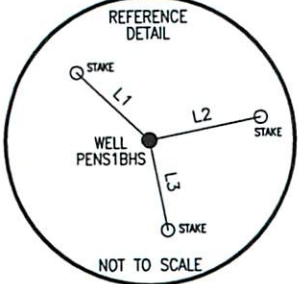
Longitude: 80°57'30"

LEGEND

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

WELLS WITHIN 3000'

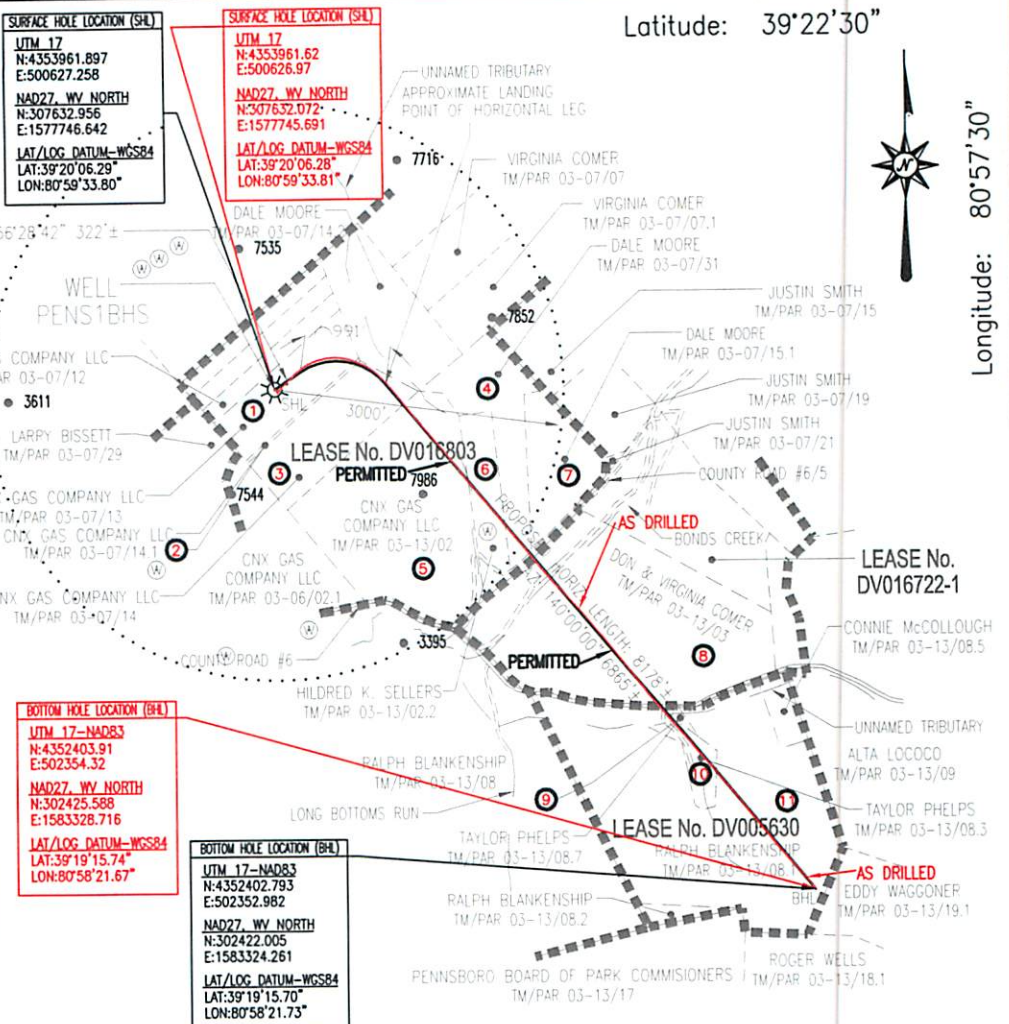
- EXISTING WELLS
- PLUGGED WELLS



LINE	BEARING	DISTANCE
L1	N 46°37'43" W	206.37'
L2	N 78°26'25" E	234.85'
L3	S 11°13'35" E	190.24'

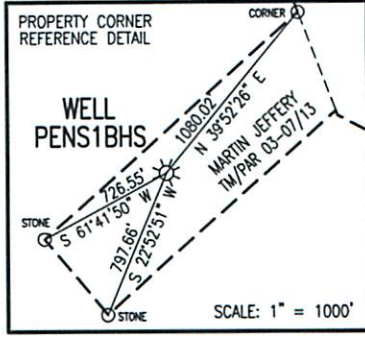
TRACT	LESSORS
1	JOSEPH F. & JOYCE A. SCHMIDLE
2	JOSEPH F. & JOYCE A. SCHMIDLE
3	JOSEPH F. & JOYCE A. SCHMIDLE
4	JOSEPH F. & JOYCE A. SCHMIDLE
5	JOSEPH F. & JOYCE A. SCHMIDLE
6	JOSEPH F. & JOYCE A. SCHMIDLE
7	JOSEPH F. & JOYCE A. SCHMIDLE
8	DON A. & VIRGINIA C. COMER
9	DAVID L. MAPLE ET AL
10	DAVID L. MAPLE ET AL
11	DAVID L. MAPLE ET AL

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



APPROX. LANDING POINT

UTM 17 - NAD83	N:4353982.463	E:500981.882
NAD27 - WV NORTH	N:307680.948	E:1578911.485
LAT/LOG DATUM-WGS84	LAT:39°20'06.95"	LONG:80°59'18.98"



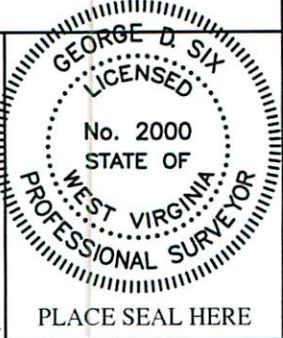
- NOTES:**
- There are no water wells or developed springs within 250' of proposed well.
 - There are no existing buildings within 625' of proposed well.
 - Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
 - There are no native trout streams within 300' of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

COORDINATES:
 9,734' WEST
 14,542' SOUTH

FILE #: PENS1BHS-AS DRILLED
 DRAWING #: PENS1BHS-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



(+) 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 #: PENS1BHS-AS DRILLED
 API WELL #: 47 85 10012H6A
 STATE COUNTY PERMIT

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

WATERSHED: UNNAMED TRIBUTARY TO BONDS CREEK ELEVATION: 1121.05'
 COUNTY/DISTRICT: RITCHIE / CLAY QUADRANGLE: PENNSBORO, WV 7.5'
 SURFACE OWNER: CNX GAS COMPANY LLC ACREAGE: 19.759±
 OIL & GAS ROYALTY OWNER: SEE TABLE ABOVE ACREAGE: 393.209±

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: 6,400'± TMD: 15,000'±
 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