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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

June 25, 2015

**WELL WORK PERMIT**

**Horizontal 6A Well**

This permit, API Well Number: 47-9502245, issued to NOBLE ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: SHR 08 L  
Farm Name: ASH, JAMES E.  
**API Well Number: 47-9502245**  
**Permit Type: Horizontal 6A Well**  
Date Issued: 06/25/2015

**Promoting a healthy environment.**

**06/26/2015**

## PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

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### CONDITIONS

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1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to [DEPOOGNotify@wv.gov](mailto:DEPOOGNotify@wv.gov) within 30 days of commencement of drilling.

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

1) Well Operator: Noble Energy, Inc.

<u>494501907</u>	<u>095- Tyler</u>	<u>Centerville</u>	<u>West Union</u>
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Operator ID County District Quadrangle

2) Operator's Well Number: SHR 08 L Well Pad Name: SHR 08 / 81

3) Farm Name/Surface Owner: James E. Ash, et al Public Road Access: County Rt. 58/2

4) Elevation, current ground: 1018.72 Elevation, proposed post-construction: 1006.28'

5) Well Type (a) Gas  Oil  Underground Storage   
Other

(b) If Gas Shallow  Deep   
Horizontal

*Michael Doff*  
*3/4/2015*

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):  
Marcellus 6610 - 6674' / 64' Thick / 4405 psi

8) Proposed Total Vertical Depth: 6,664

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 17,275'

11) Proposed Horizontal Leg Length: 9,811'

12) Approximate Fresh Water Strata Depths: 552'

13) Method to Determine Fresh Water Depths: nearest offset well

14) Approximate Saltwater Depths: 1847'

15) Approximate Coal Seam Depths: None

16) Approximate Depth to Possible Void (coal mine, karst, other): None

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes  No

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

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18)

**CASING AND TUBING PROGRAM**

<b>TYPE</b>	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	20"	New	LS	94	40' minimum or to next competent formation, but no deeper than 1st freshwater	40' minimum or to next competent formation, but no deeper than 1st freshwater	CTS
Fresh Water	13 3/8"	New	J-55	54.5	602' or to next competent formation no deeper than elevation	602' or to next competent formation no deeper than elevation	CTS 30% excess Yield = 1.18
Coal							
Intermediate	9 5/8"	New	J-55	36.0	2469' or 250' below the fifth sand	2469' or 250' below the fifth sand	CTS 30% excess Yield = 1.18
Production	5 1/2"	New	P-110	20.0	17,275'	17,275'	10% excess Yield = 1.27 TOC=200' above 9.625" shoe
Tubing							
Liners							

<b>TYPE</b>	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Max. Associated Surface Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	20"	26"	0.438	2730		Type III	CTS
Fresh Water	13 3/8"	17.5"	0.380	2730	1200	Class A	30% excess Yield = 1.18
Coal							
Intermediate	9 5/8"	12.38	0.325	3520		Class A	30% excess Yield = 1.18 to surface
Production	5 1/2"	8.75"-8.5"	0.361	12,640		Class A	10% excess Yield = 1.27 TOC=200' above 9.625" shoe
Tubing							
Liners							

MDC  
3/11/2015

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill the vertical depth to the Marcellus at an estimated total vertical depth of approximately 6664 feet. Drill Horizontal leg - stimulate and produce the Marcellus Formation. Should we encounter formation issues, set the 13 3/8 into next competent formation but not deeper than elevation. Should we encounter a unanticipated void we will install a minimum of 20' of casing below the void but not more than 100' below the void, set a basket and grout to surface.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

The stimulation will be multiple stages divided over the lateral length of the well. Stage spacing is dependent upon engineering design. Slickwater fracturing technique will be utilized on each stage using sand, water, and chemicals. our maximum pressure is not to exceed 10,000 lbs. Please refer to attached list.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 27.77

22) Area to be disturbed for well pad only, less access road (acres): 25.64

23) Describe centralizer placement for each casing string:

Conductor - No centralizers used. Fresh Water/Surface - Bow spring centralizers on first two joints then every third joint to 100' from surface. Intermediate - Bow Springs centralizers every third joint to 100' from Surface. Production - Rigid bow springs every third joint from KOP to TOC, rigid bow springs every joint to KOP.

24) Describe all cement additives associated with each cement type:

See attached sheet - Conductor - Type III CTS. Fresh Water - 15.6 ppg Class A (CA-100), 0.25 lbs/sk Lost Circ 30% excess Yield = 1.18 to surface. (CLC-CPF), Intermediate- 15.6 ppg Class A +0.25% bwoc cellophane flakes (CLC-CPF) 30% Excess Yield = 1.18 to surface. Production - 14.6 ppg 65/35 Class A/POZ +/- 0.4% fluid loss additive, +/- 0.3% retarder, +/- 0.6% dispersant, +/- 0.2% antifoam, +/- 0.1% antisetting 10% Excess Yield= 1.27 TOC >= 200' above 9.625" shoe.

25) Proposed borehole conditioning procedures:

Conductor - The hole is drilled w/ air and casing is run in air. Apart from insuring the hole is clean via air circulation at TD, there are no other conditioning procedures. Fresh Water/Surface -The hole is drilled w/air and casing is run in air. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement. Intermediate - Once surface casing is set and cemented Intermediate hole is drilled either on air or SOBM and filled w/ KCl water once filled w/ KCl water once drilled to TD. The well is conditioned with KCl circulation prior to running casing. Once casing is at setting depth, the well is circulated a minimum of one hole volume prior to pumping cement. Production - The hole is drilled with synthetic oil base mud and once at TD the hole is circulated at maximum allowable drilling pump rate for at least 6X bottoms up. Once on bottom with casing, circulate a minimum of one hole volume prior to pumping cement.

\*Note: Attach additional sheets as needed.

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Fresh Water Protection String:		Cement Additives	
Allied Material Name	Additive (Material) Type	Additive (Material) Description	CAS #
CCAC (Class A Common)	Base Cement	Grey powder	65997-15-1
CA-100	Accelerator	White, flake	10043-52-4 7447-40-7 7732-18-5
CLC-CPF (Cellophane Flakes)	Lost Circulation Aid	White and colored flake	7647-14-5 Non-Hazardous

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**DRILLING WELL PLAN**  
**SHR-08L HS**  
**Marcellus Shale Horizontal**  
**Tyler County, WV**

Ground Elevation		SHR-08L SHL		320142.95N 1622422.2E					
Azim		SHR-08L LP		319663.627N 1621117.508E					
WELLBORE DIAGRAM		SHR-08L BHL		310443.173N 1624470.152E					
HOLE	CASING	GEOLOGY	TOP	BASE	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
26	20" 94#	Conductor	40	40	AIR	Type III Surface to TD	N/A	Ensure the hole is clean at TD.	Conductor casing = 0.438" wall thickness
17 1/2	13-3/8" 54.5# J-55 BTC	FW Shows	552	552	Air or Fresh Water Based Mud	15.6 ppg Class A, 0.25 lb/sk Lost Circ 30% Excess Yield = 1.18 To Surface	Bow Spring on first 2 joints then every third joint to 100' form surface	Fill with <3% KCl water once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Surface casing = 0.380" wall thickness Burst=2730 psi
12 3/8	9-5/8" 36# J-55 LTC	Surface Casing Big Lime Big Injun Price Formation Weir Int. Casing	602	602	Air or 8.0 SOB	15.6ppg Class A +0.25% bwoc cellophane flakes 30% Excess Yield=1.18 To Surface	Bow spring centralizers every third joint to 100' feet from surface.	Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.352" wall thickness Burst=3520 psi
8.75" Vertical	5-1/2" 20# HCP-110 TXP BTC	Gordon Warren Sand Lower Huron Benson Alexander Cashaqua Middlesex West River Burkett Tully Limestone Hamilton Marcellus	3039 3532 3930 5100 5344 6343 6454 6488 6556 6590 6593 6610 6674	3058 3578 3930 5144 5402 6454 6488 6556 6590 6593 6610 6674	Air or 8.0 SOB	14.6ppg 65/35 Class A/Poz +1/0.4% fluid Loss additive, +1/0.3% retarder, +1/0.6% dispersant, +1/0.2% antifloam, +1/0.1% amitsetting Yield=1.27 TOC >= 200' above 9.625" shoe	Rigid Bow Spring every third joint from KOP to TOC	Once at TD, circulate at max allowable pump rate for at least 6x bottoms up. Once on bottom with casing, circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.361" wall thickness Burst=12640 psi Note:Actual centralizer schedules may be changed due to hole conditions
8.75" Curve	8.75" Curve	Target	6659	6669	12.0ppg-12.5ppg SOB		Rigid Bow Spring every joint to KOP		
8.75" -8.5" Lateral	8.75" -8.5" Lateral	Onondaga	6674	6681	12.0ppg-12.5ppg SOB				

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LP @ 6664' TVD / 7464' MD  
8.75 / 8.5 Hole - Cemented Long String  
5-1/2" 20# HCP-110 TXP BTC  
+/-9811' ft Lateral  
TD @ +/-6664' TVD +/-17275' MD  
X=centralizers



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Noble Energy, Inc. OP Code 494501907

Watershed (HUC 10) huc-10 Middle Island Creek Quadrangle West Union

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number See attached sheet )
- Reuse (at API Number at next anticipated well )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

*MDC  
3/24/2015*

Will closed loop system be used? If so, describe: yes

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air/water based mud through coal string then SOBm

-If oil based, what type? Synthetic, petroleum, etc. Synthetic

Additives to be used in drilling medium? Calcium Chloride Powder, Carbo Tec, Carbo Gel2, Carbo Tec S, Ecco-Block, Lime, MIL-Carb TM, Mil-Clean, Mil-Seal, Next base eC, Next Drill, Next Hold, Next Mul, Omni Cote, Mil Bar, Next Mul HT, Soda Ash, Potassium Chloride

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. See attached sheet

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) \_\_\_\_\_

-Landfill or offsite name/permit number? See attached sheet

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature Dee Swiger

Company Official (Typed Name) Dee Swiger

Company Official Title Regulatory Analyst III

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Subscribed and sworn before me this 9th day of march, 20 15

Regina Logue

Notary Public

My commission expires 07/07/2018

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Regina Logue, Notary Public  
New Sewickley Twp, Beaver County  
My Commission Expires July 7, 2018  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

**Noble Energy, Inc.**

Proposed Revegetation Treatment: Acres Disturbed 27.77 Prevegetation pH 6.0

Lime 2-3 Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type 10-20-20 or equal

Fertilizer amount 500 lbs/acre

Mulch Hay or Straw at 2 Tons/acre

**Seed Mixtures**

<b>Temporary</b>		<b>Permanent</b>	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

\*\*alternative seed mixtures are shown on the Site Design.

Attach:  
Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Michael Hoff

Comments: Pre seed and mulch all cut area, maintain all E & S during operation.

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Title: Oil and Gas Inspector

Date: 3/4/2015

Field Reviewed? (  ) Yes (  ) No

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# Cuttings Disposal/Site Water

## Cuttings –Haul off Company:

Eap Industries, Inc. DOT # 0876278  
1575 Smith Two State Rd. Atlasburg, PA 15004  
1-888-294-5227

Waste Management  
200 Rangos Lane  
Washington, PA 15301  
724-222-3272

Environmental Coordination Services & Recycling (ECS&R)  
3237 US Highway 19  
Cochranon, PA 16314  
814-425-7773

## Disposal Locations:

Apex Environnemental, LLC Permit # 06-08438  
11 County Road 78  
Amsterdam, OH 43903  
740-543-4389

Westmoreland Waste, LLC Permit # 100277  
111 Conner Lane  
Belle Vernon, PA 15012  
724-929-7694

Sycamore Landfill Inc. Permit #R30-079001 05-2010  
4301 Sycamore Ridge Road  
Hurricane, WV 25526  
304-562-2611

Max Environnemental Technologies, Inc. facility Permit # PAD004835146 / 301071  
233 Max Lane  
Yukon, PA 25968  
724-722-3500

Max Environnemental Technologies, Inc. Facility Permit # PAD05087072 / 301359  
200 Max Drive  
Bulger, PA 15019  
724-796-1571

Waste Management Kelly Run Permit # 100663  
1901 Park Side Drive  
Elizabeth, PA 15037

Waste Management South Hills (Arnoni) Permit # 100592  
3100 Hill Road  
Library, PA 15129 724-348-7013

Waste Management Arden Permit # 100172  
200 Rangos Lane  
Washington, PA 15301  
724-222-3272

Waste Management Meadowfill Permit # 1032  
1488 Dawson Drive  
Bridgeport, WV 26330

Brooke County Landfill Permit # SWF-103-97 / WV 0109029  
Rd 2 Box 410  
Colliers, WV 26035  
304-748-0014

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Wetzel County Landfill Permit # SWF-1021-97 / WV 0109185  
Rt 1 Box 156A  
New Martinsville, WV 26035  
304-455-3800

Energy Solutions, LLC Permit # UT 2300249  
423 West 300 South  
Suite 200  
Salt Lake City, UT 84101

Energy Solutions Services, Inc. Permit # R-73006-L24  
1560 Bear Creek Road  
Oak Ridge, TN 37830

**Water Haul off Companies:**

Dynamic Structures, Clear Creek DOT # 720485  
3790 State Route 7  
New Waterford, OH 44445  
330-892-0164

**Disposal Locations:**

Solidification  
Waste Management, Arden Landfill Permit # 100172  
200 Rangos Lane  
Washington, PA 15301  
724-225-1589

Solidification/Incineration  
Soil Remediation, Inc. Permit # 02-20753  
6065 Arrel-Smith Road  
Lowelville, OH 44436  
330-536-6825

Adams #1  
Permit # 34-031-2-7177  
23986 Airport Road  
Coshocton, OH 43812  
740-575-4484

Adams #2  
Permit # 34-031-2-7178  
740-575-4484

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# Site Safety Plan

Noble Energy, Inc.

SHR 8 Well Pad *L*

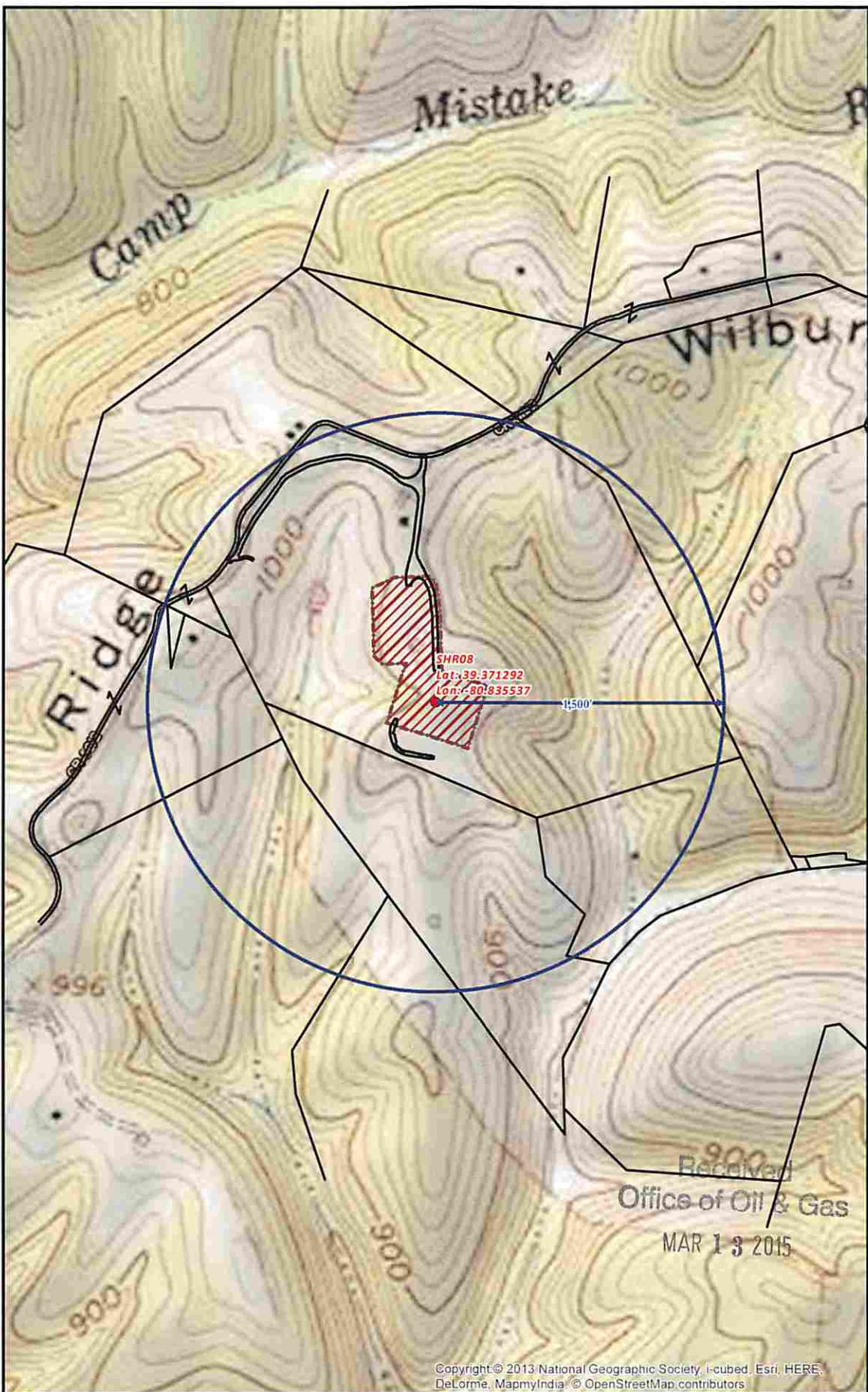
February 2015: Version 1

For Submission to  
West Virginia Department of Environmental Protection,  
Office of Oil and Gas

Noble Energy, Inc.  
Appalachia Offices  
1000 Noble Energy Drive  
Canonsburg, PA 15317-9504

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<b>SHR 08 SITE SAFETY PLAN</b>	
<b>- WATER WELL PURVEYORS -</b>	
Well Pad	Access Road
Cation	Surveyed Property Lines
Water Well	Well Pad Boundary
Intersection	1500' Water Wells Buffer

<p>0 300 600 1,200 Feet</p> <p>1 Inch = 600 Feet</p>	<p>Projection: NAD 1927 StatePlane West Virginia North FIPS 4701 Units: Foot US</p> <p><b>**Disclaimer: All data is licensed for use by Noble Energy Inc. use only.**</b></p>
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Date: 3/3/2015
Author: Christopher Glover
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06/26/2015



**SURFACE HOLE LOCATION (SHL)**

UTM 17 - NAD83  
 N: 4358000.647  
 E: 514174.042  
 NAD27, WV NORTH  
 N: 320142.950  
 E: 1622422.200  
 LAT/LON DATUM-NAD83  
 LAT: 39.37135655  
 LON: -80.83544830

**APPROX. LANDING POINT**

UTM 17 - NAD83  
 N: 4357836.439  
 E: 513783.418  
 NAD27, WV NORTH  
 N: 319625.525  
 E: 1621131.365  
 LAT/LON DATUM-NAD83  
 LAT: 39.36988324  
 LON: -80.83998656

**BOTTOM HOLE LOCATION**

UTM 17 - NAD83  
 N: 4356258.303  
 E: 514387.252  
 NAD27, WV NORTH  
 N: 314413.733  
 E: 1623026.445  
 LAT/LON DATUM-NAD83  
 LAT: 39.35565320  
 LON: -80.83301046

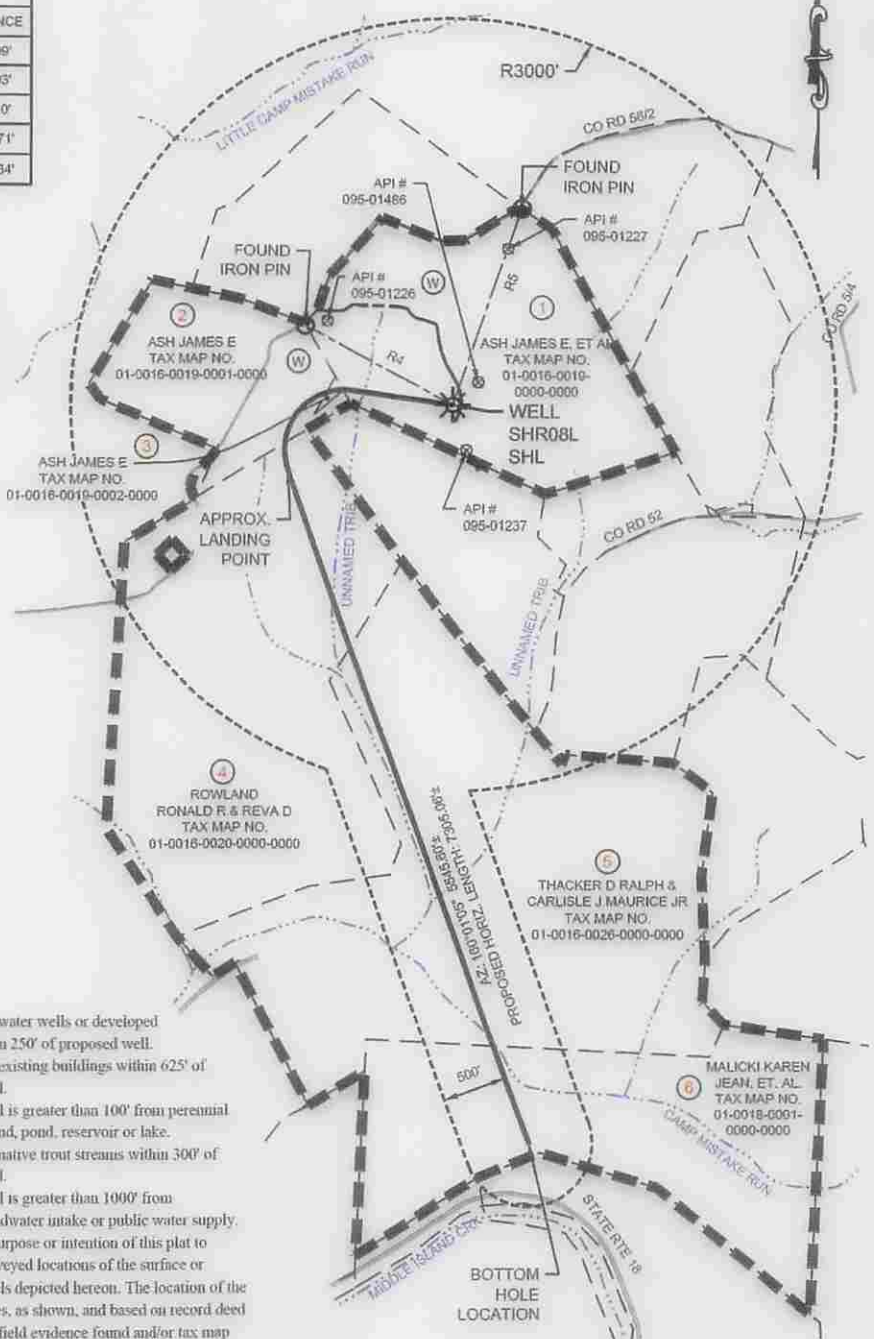
LINE	BEARING	DISTANCE
R1	S17°07'23"E	347.09'
R2	S47°42'32"W	266.93'
R3	N03°18'36"W	192.10'
R4	S62°15'04"E	1311.71'
R5	S19°02'45"W	1623.64'



Well is located on topo map 1328 feet south of Latitude: 39° 22' 30"

Well is located on topo map 601

feet west of Longitude: 80° 50' 00"



**LEGEND**

	TOPO MAP POINT
	PROPOSED WELL
	WATER SOURCE
	LEASED NUMBER BASED ON ATTACHED WWS&T
	ALL ARE POINTS UNLESS OTHERWISE NOTED
	MINERAL TRACT BOUNDARY
	PARCEL LINES
	PROPOSED HORIZONTAL WELL
	WELL REFERENCE
	STREAM/WATERWAY
	ROAD
	EXISTING GAS WELL

**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 herein. The location of the boundary lines, as shown, and based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

**PVE Sheffler**  
 Engineering • Surveying • Design  
 Waterfront Corporate Park III, Suite 101  
 2000 Georgetowne Drive  
 Sewickley, PA 15143-8992  
 Phone: 724-444-1100

FILE #: SHR08L  
 DRAWING #: SHR08L  
 SCALE: 1"=1500'  
 MINIMUM DEGREE OF ACCURACY: 1/2500  
 PROVEN SOURCE OF ELEVATION: USGS MONUMENT G 142: 736.51'

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.: 18766 L.L.S.: P.S. NO. \_\_\_\_\_



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



DATE: FEBRUARY 9, 2015, REV: FEBRUARY 11, 2015  
 OPERATOR'S WELL #: SHR08L  
 API WELL # 47 095 02245  
 STATE COUNTY PERMIT

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

WATERSHED: HEADWATERS MIDDLE ISLAND CREEK ELEVATION: 1018.72'  
 COUNTY/DISTRICT: TYLER / CENTERVILLE QUADRANGLE: WEST UNION, WV  
 SURFACE OWNER: JAMES E. ASH, ET AL ACREAGE: 90.41 AC.  
 OIL & GAS ROYALTY OWNER: RALPH E PHILLIPS, ET AL. ACREAGE: 90.41 AC.

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

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,664 ± TMD: 17,275  
 WELL OPERATOR: NOBLE ENERGY, INC. DESIGNATED AGENT: STEVEN M. GREEN  
 Address: 1000 NOBLE ENERGY DRIVE Address: 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 590  
 City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6A, Section 5(a)(5)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
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**SEE EXHIBIT "A"**

**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: NOBLE ENERGY, INC.  
 By: *[Signature]*  
 Its: OPERATIONS LANDMAN

Plat #	Parcel #	Lessor/Grantor	Lessee/Grantee	Royalty	Book/Page
<b>1</b>	<b>p/o 1-16-19</b>				
	<b>Lease</b>	<b>Verna O. Ash, et al</b>	<b>Drilling Appalachian Corporation</b>	<b>Not less than 1/8th</b>	<b>DB 269-571</b>
	<b>Lease</b>	<b>Ralph E. Phillips, et ux</b>	<b>Drilling Appalachian Corporation</b>	<b>Not less than 1/8th</b>	<b>DB 271-103</b>
	<b>Assignment</b>	<b>Drilling Appalachian Corporation</b>	<b>Reilly Industries, Inc. et al</b>		<b>DB 324-439</b>
	<b>Assignment</b>	<b>Reilly Industries, Inc. et al</b>	<b>Dominion Appalachian Development, Inc.</b>		<b>DB 324-338</b>
	<b>Clarification of Assignment</b>	<b>Drilling Appalachian Corporation</b>	<b>Dominion Exploration &amp; Production, Inc.</b>		<b>DB 372-413</b>
	<b>Assignment</b>	<b>CNX Gas Company LLC</b>	<b>Drilling Appalachian Corporation</b>		<b>DB 401-343</b>
	<b>Assignment</b>	<b>Drilling Appalachian Corporation</b>	<b>Dominion Appalachian Development Properties, LLC</b>		<b>DB 322-190</b>
	<b>Assignment</b>	<b>Dominion Transmissions, Inc.</b>	<b>CONSOL Energy Holdings LLC XVI</b>		<b>DB 374-187</b>
	<b>Affidavit</b>	<b>CNX Gas Company LLC</b>	<b>Affidavit of Name Changes and Mergers</b>		<b>DB 384-191</b>
	<b>Assignment</b>	<b>CNX Gas Company LLC</b>	<b>Noble Energy, Inc.</b>		<b>DB 388-286</b>
	<b>Assignment</b>	<b>Drilling Appalachian Corporation</b>	<b>Noble Energy, Inc.</b>		<b>TO BE RECORDED</b>
	<b>2, 3</b>	<b>1-16-19.1, 1-16-19.2</b>			
<b>Lease</b>		<b>Gale V. Davisson, et al</b>	<b>Drilling Appalachian Corporation</b>	<b>Not less than 1/8th</b>	<b>DB 271-726</b>
<b>Lease</b>		<b>Eleanor L. Roth, POA for the J. D. and Ruth Foley Heirs</b>	<b>Drilling Appalachian Corporation</b>	<b>Not less than 1/8th</b>	<b>DB 271-728</b>
<b>Lease</b>		<b>Rosemary Eagle</b>	<b>Drilling Appalachian Corporation</b>	<b>Not less than 1/8th</b>	<b>DB 272-297</b>
<b>Assignment</b>		<b>Drilling Appalachian Corporation</b>	<b>Reilly Industries, Inc. et al</b>		<b>DB 324-439</b>
<b>Assignment</b>		<b>Reilly Industries, Inc. et al</b>	<b>Dominion Appalachian Development, Inc.</b>		<b>DB 324-338</b>
<b>Assignment</b>		<b>Drilling Appalachian Corporation</b>	<b>Dominion Appalachian Development Properties, LLC</b>		<b>DB 322-190</b>
<b>Assignment</b>		<b>Drilling Appalachian Corporation</b>	<b>Dominion Exploration &amp; Production, Inc.</b>		<b>DB 372-413</b>

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Affidavit	CNX Gas Company LLC	Affidavit of Name Changes and Mergers		DB 384-191
Assignment Lease	CNX Gas Company LLC Richard A. Glover, et ux	Noble Energy, Inc. Noble Energy, Inc.	Not less than 1/8th	DB 388-286 TO BE RECORDED

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**4 1-16-20**

Lease	Jacob L. Dillon, et ux	Royal Resources Corporation	Not less than 1/8th	DB 196-302
Assignment	Royal Resources Corporation	Columbia Gas Transmission Corporation		DB196-166
Farmout Agreement	Columbia Gas Transmission Corporation	L&M Exploration, Inc.		(Unrecorded)
Consolidation Agreement	L&M Associates, Inc.			DB 230-323
Assignment	L&M Associates, Inc.	Anvil Oil Co., Inc.		DB 258-90
Assignment	Anvil Oil Co., Inc	Excel Energy, Inc.		DB 263-635
Assignment	Excel Energy, Inc.	Anvil Oil Co., Inc		DB 269-143
Assignment and Sublease	Columbia Gas Transmission Corporation	Anvil Oil Company, Inc.		DB 265-107
Assignment	Justin L. Henderson, individually and d/b/a Anvil Oil and Gas Company, et al	Dominion Appalachian Development, Inc.		DB 323-383
Affidavit	CNX Gas Company LLC	Affidavit of Name Changes and Mergers		DB 384-191
Assignment	CNX Gas Company LLC	Noble Energy, Inc.		DB 388-286

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**5 1-16-26**

Lease	Betty L. Conklin	J&J Enterprises, Inc.	Not less than 1/8th	DB 259-582
Lease	George B. Conklin, et ux	J&J Enterprises, Inc.	Not less than 1/8th	DB259-584
Lease	John A. Conklin, et ux	J&J Enterprises, Inc.	Not less than 1/8th	DB 259-586
Lease	Charles W. Henderson, et ux and as POA for A.I. Doak Heirs	J&J Enterprises, Inc.	Not less than 1/8th	DB259-588
Assignment	J&J Enterprises, Inc.	Eastern American Energy Corporation		DB 282-296
Lease	William Lartz, et ux	Eastern American Energy Corporation	Not less than 1/8th	DB 282-83

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Lease	Robert Lee Reed	Eastern American Energy Corporation	Not less than 1/8th	DB 282-87
Lease	William Crabill, et ux	Eastern American Energy Corporation	Not less than 1/8th	DB 282-95
Lease	Robert Bartholomew, et ux	Eastern American Energy Corporation	Not less than 1/8th	DB 282-71 and DB 396-502
Lease	Melissa Coll	Eastern American Energy Corporation	Not less than 1/8th	DB 282-75
Lease	Betty L. Melivin	Eastern American Energy Corporation	Not less than 1/8th	DB 282-79
Lease	Phillip Melvin	Eastern American Energy Corporation	Not less than 1/8th	DB 396-498
Lease	Ralph O'Rear, et ux	Eastern American Energy Corporation	Not less than 1/8th	DB 282-67
Lease	Gerald Greenman and Joanne Greenman	Eastern American Energy Corporation	Not less than 1/8th	DB 282-99
Lease	Lewis H. Reed and Carol J. Reed	Eastern American Energy Corporation	Not less than 1/8th	DB 282-103
Lease	Kathy Pranger	Eastern American Energy Corporation	Not less than 1/8th	DB 282-91
Lease	Robert H. Melivin	Eastern American Energy Corporation	Not less than 1/8th	DB 282-399
Assignment	Eastern American Energy Corporation	Energy Corporation of America		DB 371-528
Assignments	Energy Corporation of America	Antero Resources Appalachian Corporation		DB 398-416, DB 398-433, DB 398-440, DB 420-301, DB 420-316
Assignment	Antero Resources Corporation	Noble Energy, Inc.		DB 427-564

**6 1-18-1, 1-18-1.1**

Lease	Paul W. Hylbert, et ux	Kepeco, Inc.	Not less than 1/8th	DB 242-513
Merger and Stipulation of Interest	Kepeco, Inc.	Equitable Resources Energy Company		DB308-119
Assignment	Equitable Resources Energy Company	Ener Vest East Limited Partnership		DB 313-145
Assignment	Ener Vest East Limited Partnership	The Houston Exploration Company		DB 342-160
Assignment	The Houston Exploration Company	Seneca-Upshur Petroleum, Inc.		DB 344-158
Assignment	Seneca-Upshur Petroleum, Inc.	Seneca-Upshur Petroleum, LLC		DB 381-540

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Assignment	Seneca-Upshur Petroleum, LLC	Antero Resources Appalachian Corporation	DB 402-132
Assignment	Antero Resources Corporation	Noble Energy, Inc. and CNX Gas Company, LLC	DB 427-564

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MEMORANDUM OF  
PARTIAL ASSIGNMENT OF OIL AND GAS LEASES

STATE OF WEST VIRGINIA    §  
  §                    KNOW ALL MEN BY THESE PRESENTS:  
COUNTY OF TYLER           §

A PARTIAL ASSIGNMENT OF OIL AND GAS LEASES (hereinafter, "Assignment") has been executed by and DRILLING APPALACHIAN CORPORATION, a West Virginia Corporation, having a mailing address of P.O. Box 99, Alma, West Virginia 26320-0099, (whether one or more, "Assignor"), and NOBLE ENERGY, INC., a Delaware corporation having a mailing address of 1000 Noble Energy Drive, Canonsburg, PA 15317 (hereinafter, together with its employees, affiliates, partners, joint venture partners, successors, assigns, contractors and representatives, "Assignee"). This Memorandum of Partial Assignment of Oil and Gas Leases is executed for the purpose of providing notice to third parties of the execution of said Assignment.

In the Assignment, dated effective as of the 21<sup>st</sup> day of February, 2015 (hereinafter, the "Effective Date"), in consideration of the sum of Ten Dollars (\$10.00) and the mutual covenants and agreements set forth therein, and other good and valuable consideration, the receipt and sufficiency of which having been acknowledged by Assignor and Assignee, Assignor **GRANTS, BARGAINS, SELLS, TRANSFERS, CONVEYS AND DELIVERS** unto Assignee all of Assignor's right, title and interest in, to and under the oil and gas leases set forth on **Exhibit "A"** attached hereto and made a part hereof (collectively, as any one or more of the same may have been modified or amended of record, the "Leases"), being an undivided one hundred percent (100%) of 8/8ths working interest, **INSOFAR AND ONLY INSOFAR** as said Leases cover those certain subsurface strata described as all of the following subsurface depths:

From the stratigraphic equivalent of the top of the Burkett formation in the DEPI #14815 (API 47 47-001-02850) at 7350' MD through to the stratigraphic equivalent of the top of the Onondaga formation at 7710' MD, as said depths and formations may be adjusted to conform to the depths and formations at the geographic location(s) of the Leases subject to this Assignment.

(the "Assigned Depths"), which includes, without limitation, all oil, gas, casinghead gas, condensate, distillate, liquid hydrocarbons, gaseous hydrocarbons, and all other products refined or extracted therefrom, and all minerals produced in association therewith in and thereunder, together with all right, title, and interest of Assignor appurtenant thereunto as expressly set forth in and/or implied by said Leases, including, but not limited to, such surface rights, easements, and any and all other rights and privileges set forth in or associated with the Leases that are necessary or convenient for access to the lands covered thereby or otherwise for the ownership, development, operation, and/or maintenance of the Assigned Depths, **EXCEPTING AND RESERVING** unto Assignor:

(a) any and all existing oil and/or gas wells currently upon the lands covered by the Leases, together with any future well(s) drilled thereupon to produce the Retained Formations (as that term is defined below);

(b) all rights under the Leases insofar and only insofar as such rights cover depths and formations other than the Assigned Depths (the "Retained Formations");

(c) all rights granted under the Leases to the extent relating to, or necessary in connection with, the ownership and operation of the Retained Formations;

(d) the concurrent right to use the surface of the lands under any Lease for the operation and enjoyment of any other Retained Right, provided that such concurrent right does not interfere with the rights granted to Assignee hereunder;

(e) any other rights, properties, or interests relating to, or necessary in connection with, the ownership of the Retained Formations;

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(f) the express right to drill through and penetrate the Assigned Depths in order to develop and produce Hydrocarbons, all minerals and any other substances from the Retained Formations, provided that Assignor shall not produce any Hydrocarbons or other substances from the Assigned Depths; and

(g) an overriding royalty interest equal to the difference between the existing Lease burdens (on an individual Lease basis) and Eighteen percent (18%), delivering a net revenue interest of Eighty-Two percent (82%) (of 8/8ths) to Assignee in and to the Assigned Depths, and any extension, renewal or new lease of the Leases prior to or within one (1) year after the expiration date of such Leases.

The Assignment is effective as of the Effective Date.

The Assignment contains various other terms, provisions and conditions, all of which are incorporated herein by reference, and made a part hereof in all respects as though the same were fully set forth herein.

IN WITNESS WHEREOF, Assignor and Assignee have caused their names to be hereunto placed and witness the following signature(s), effective as of the date first herein appearing above.

WITNESS:

By: Janet Kimball  
Printed Name: Janet Kimball

ASSIGNOR:

DRILLING APPALACHIAN CORPORATION

By: Kenneth R. Mason  
Printed Name: Kenneth R. Mason  
Title: President

WITNESS:

By: \_\_\_\_\_  
Printed Name:

ASSIGNEE:

NOBLE ENERGY, INC.

By: Mark A. Acree  
Printed Name: Mark A. Acree  
Title: Attorney-in-Fact

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ASSIGNOR ACKNOWLEDGMENT

STATE OF WEST VIRGINIA           §  
  Tyler           §  
COUNTY OF WASHINGTON           §

On this the 24<sup>th</sup> day of February, 2015, before me, the undersigned authority, personally appeared **Kenneth R. Mason**, who acknowledged himself to be the President of **DRILLING APPALACHIAN CORPORATION**, a West Virginia Corporation, and that he as such President, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as President.

IN WITNESS WHEREOF, I hereto set my hand and official seal.

MY COMMISSION EXPIRES: 2-16-2016

Jamut Kimball  
Notary Public

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ASSIGNEE ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA §

COUNTY OF WASHINGTON §  
§

On this the \_\_\_\_\_ day of \_\_\_\_\_, 2015, before me, \_\_\_\_\_ the undersigned authority, personally appeared Mark A. Acree, who acknowledged himself to be the Attorney-in-Fact of NOBLE ENERGY, INC., a Delaware corporation, and that he as such Attorney-in-Fact, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as Attorney-in-Fact.

IN WITNESS WHEREOF, I hereto set my hand and official seal.

MY COMMISSION EXPIRES:

\_\_\_\_\_  
Notary Public

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EXHIBIT "A"

to

Memorandum of Partial Assignment of Oil and Gas Leases dated February 26<sup>th</sup>, 2015

Leases

Original Lessor	Original Lessee	Instrument Date	County	District	Map/Parcel	Gross Acreage	Book/Page
Verna O. Ash, <i>et al</i>	Drilling Appalachian Corporation	8/15/1987	Tyler	Centerville	16-19	111	269/571
Ralph E. Phillips, <i>et ux</i>	Drilling Appalachian Corporation	1/21/1988	Tyler	Centerville	16-19	111	271/103

PREPARED BY/RETURN TO:  
NOBLE ENERGY, INC.  
ATTENTION: LAND DEPARTMENT  
1000 Noble Energy Drive  
Canonsburg, PA 15317

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PARTIAL ASSIGNMENT OF OIL AND GAS LEASES

THIS PARTIAL ASSIGNMENT OF OIL AND GAS LEASES (this "Assignment") is entered into this 21<sup>st</sup> day of FEBRUARY, 2015 (the "Effective Date"), by and between DRILLING APPALACHIAN CORPORATION, a West Virginia Corporation, having an address of P.O. Box 99, Alma, West Virginia 26320-0099 ("Assignor"), and NOBLE ENERGY, INC., a Delaware corporation, having an address of 333 Technology Drive, Suite 116, Canonsburg, PA 15317 ("Assignee"). Assignor and Assignee are sometimes hereinafter individually referred to as a "Party," and collectively as the "Parties."

WITNESSETH:

WHEREAS, Assignor, directly or through one or more assignments, is the lessee of record under those certain oil and gas leases set forth on Exhibit "A" attached hereto and made a part hereof (collectively, as any one or more of the same may have been modified or amended of record, the "Leases"); and

WHEREAS, Assignor desires to assign certain of Assignor's rights and obligations under the Leases to Assignee, and Assignee desires to assume such rights and obligations, all upon the terms, and subject to the conditions, set forth in this Assignment.

NOW, THEREFORE, in consideration of the sum of TEN DOLLARS (\$10.00) and the mutual covenants and agreements herein set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto, intending to be legally bound hereby, agree as follows:

**Section 1. Assignment.** Assignor does hereby GRANT, BARGAIN, SELL, TRANSFER, ASSIGN, CONVEY AND DELIVER unto Assignee, all of Assignor's right, title and interest in, to and under the Leases, being an undivided one hundred percent (100%) of 8/8ths working interest, INSO FAR AND ONLY INSO FAR as said Leases cover the Assigned Depths (as that term is defined in Section 2 of this Assignment), which includes, without limitation, all oil, gas, casinghead gas, condensate, distillate, liquid hydrocarbons, gaseous hydrocarbons, and all other products refined or extracted therefrom, and all minerals produced in association therewith (collectively, "Hydrocarbons") in and under the Assigned Depths, together with all right, title, and interest of Assignor appurtenant thereunto as expressly set forth in and/or implied by said Leases, including, but not limited to, such surface rights, easements, and any and all other rights and privileges set forth in or associated with the Leases that are necessary or convenient for access to the lands covered thereby or otherwise for the ownership, development, operation, and/or maintenance of the Assigned Depths, EXCEPTING AND RESERVING unto Assignor only the Retained Rights (as that term is defined in Section 3 of this Assignment) and the Overriding Royalty Interest set forth in Section 10 of this Assignment.

It is the express intent of the Parties that all of Assignor's right, title, and interest in and to the Assigned Depths be assigned to Assignee regardless of whether such right, title, and interest are properly described unless the same are Retained Rights, and regardless of whether the lands covered thereby or the recording references are accurately recited herein.

Notwithstanding the foregoing paragraph to the contrary, Assignor hereby grants to Assignee the perpetual right and easement through and to penetrate, but not perforate or stimulate, formations from the surface of the earth to the top of the Assigned Depths.

TO HAVE AND TO HOLD the same unto Assignee, its successors and assigns, forever, subject only to the matters set forth herein. **Section 2. Assigned Depths.** For purposes of this Assignment, the term "Assigned Depths" shall mean the oil and gas interests under the Leases in those certain subsurface strata described as all of the following subsurface depths:

From the stratigraphic equivalent of the top of the Burkett formation in the DEPI #14815 (API 47-001-02850) at 7350' MD through to the stratigraphic equivalent of the top of the Onondaga formation at 7710' MD.

**Section 3. Retained Rights.** The following rights are hereby expressly retained by Assignor (collectively, the "Retained Rights");

(a) any and all existing oil and/or gas wells currently upon the lands covered by the Leases, together with any future well(s) drilled thereupon to produce the Retained Formations (as that term is defined below);

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(b) all rights under the Leases insofar and only insofar as such rights cover depths and formations other than the Assigned Depths (the "**Retained Formations**");

(c) all rights granted under the Leases to the extent relating to, or necessary in connection with, the ownership and operation of the Retained Formations;

(d) the concurrent right to use the surface of the lands under any Lease for the operation and enjoyment of any other Retained Right, provided that such concurrent right does not interfere with the rights granted to Assignee hereunder; and

(e) any other rights, properties, or interests relating to, or necessary in connection with, the ownership of the Retained Formations; and

(f) the express right to drill through and penetrate the Assigned Depths in order to develop and produce Hydrocarbons, all minerals and any other substances from the Retained Formations, provided that Assignor shall not produce any Hydrocarbons or other substances from the Assigned Depths.

Notwithstanding any language in this Assignment to the contrary, Assignor shall not penetrate the Assigned Depths for any purpose without first providing Assignee with proposed drilling locations and obtaining Assignee's written approval prior to actual drilling, which consent shall not be unreasonably withheld. Assignee may withhold consent to Assignor's proposed drilling locations only if Assignee, reasonably determines that such proposed drilling locations could penetrate, encroach upon, or otherwise interfere with, any existing or proposed wells of Assignee lying, or proposed to lie, within the Assigned Depths.

#### **Section 4. Indemnification.**

(a) Neither Party shall have any control over the drilling, testing, completing, or other operations of the other Party upon the Leases and each Party shall be responsible for all costs and expenses incurred by such Party in connection with such Party's operations including, without limitation, the proper payment of royalties. Each Party (an "**Indemnifying Party**") shall defend, indemnify and hold the other Party (and each of it the other Party's equity holders, officers, directors, managers, employees, agents, contractors, subcontractors, affiliates, and joint venture partners) (collectively, the "**Indemnified Parties**"), harmless against and from any and all claims, losses, damages, expenses, causes of action, or lawsuits of every kind and nature, arising out of or caused by such Indemnifying Party's, and/or those of its agents, contractors, and/or subcontractors, operations related in any way to the Leases.

(b) Each Indemnifying Party shall additionally assume all liability for and defend, indemnify, and hold each Indemnified Party harmless against and from any penalty, loss, injury, or damage caused from pollution, contamination, or environmental damage of any kind, or as a result of any other statutory or regulatory obligation relating to the production of Hydrocarbons under any Lease, including, but not limited to, abandoned well plugging liability, which arises out of or results from such Indemnifying Party's and/or its contractors' or subcontractors' operations, and such Indemnifying Party shall control and remove such pollution or contamination and/or plug any abandoned wells, and, as necessary, remediate the lands affected thereby, in any such event in accordance with all applicable laws, rules and regulations.

(c) The indemnification rights and obligations set forth in this Section 4 shall survive indefinitely the termination of this Assignment.

#### **Section 5. Representations, Warranties and Covenants of Assignor.**

(a) In addition to any other representations and/or warranties set forth in this Assignment, Assignor hereby represents and warrants to Assignee that: (i) each of the Leases is in full force and effect and Assignor has received no notice alleging any default under any of the terms of any of the Leases; (ii) Assignor is not aware of any breach of or default under the Leases; (iii) no third party right of first refusal or consent obligations burden any Lease; (iv) Assignor has the valid right and authority to sell and assign the interests and rights assigned to Assignee hereunder, and that the same are free and clear of all liens, claims, clouds and encumbrances created by, through and under Assignor; and (v) Assignor has not entered into any other agreement to sell, assign, transfer or convey the Assigned Depths to any third party.

(b) Assignor covenants and agrees to maintain each Lease in its secondary term by performance of one (1) or more of the following actions, in each event in the manner as expressly required and/or permitted by each individual Lease: (i) maintenance of production to the extent that production actively exists in paying quantities at the time of this Assignment; (ii) payment of rents, royalties, and/or shut-in payments; and/or (iii) compliance with any other action which would reasonably maintain the secondary term of any such Lease in full force and effect without any further development or drilling operations.

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**Section 6. Obligations of Assignor Under the Leases.** Assignor covenants and agrees to discharge all obligations of the lessee under any Lease, regardless of whether such obligations relate to Retained Rights or otherwise, unless and until Assignee commences operations on such Lease, or any lease(s) (which may include one or more Leases) pooled or unitized therewith, whereupon the obligations and/or burdens of the lessee under each said Lease shall apply to Assignee with respect to, and only with respect to, Assignee's operations on any said Lease, or any lease(s) (which may include one or more Leases) pooled or unitized therewith.

**Section 7. Notices.** All notices and communications required or permitted to be given hereunder shall be sufficient in all respects if given in writing and delivered personally, or sent by a national overnight courier, or mailed by U.S. Express Mail or by Certified or Registered U.S. Mail, in each such instances with all postage and shipping charges fully prepaid, or sent by facsimile or email transmission (provided any such transmission is confirmed either orally or by written confirmation), as follows:

If to Assignee:

NOBLE ENERGY, INC.

NOBLE ENERGY, INC.  
333 Technology Drive, Suite 116  
Canonsburg, Pennsylvania 15317  
Attention: Senior Land Manager  
Telephone: 724.820.3000  
Facsimile: 724.820.3098  
Email: macree@nobleenergyinc.com

With a copy to:

NOBLE ENERGY, INC.  
333 Technology Drive  
Canonsburg, Pennsylvania 15317  
Attention: Legal Department  
Telephone: 724.820.3000  
Facsimile: 724.820.3098  
Email: jalsop@nobleenergy.com

If to Assignor:

DRILLING APPALACHIAN CORPORATION  
P.O. Box 99  
Alma, West Virginia 26320-0099  
Attention: Kenneth R. Mason  
Telephone: 304.758.4638  
Facsimile: 304.758.2433  
Email: kenneth.mason@dacenergy.com

**Section 8. Miscellaneous.**

(a) **Recording.** Assignor and Assignee acknowledge and agree that this Assignment, or a memorandum hereof, may be filed in the recorder's office of the county(ies) in which the lands under the Leases are located in order to establish of record the respective rights and obligations thereof. If a memorandum hereof is requested by Assignee to be filed in lieu of this Assignment, Assignor agrees to execute such memorandum contemporaneously upon its execution of this Assignment. The cost and expense of recording this Assignment or memorandum hereof, and the obligation to present said Assignment or memorandum hereof to the applicable recording office located in the county(ies) in which the lands are located, shall be the sole responsibility of Assignee.

(b) **Additional Assurances.** Assignor and Assignee will execute and deliver all such other additional instruments, notices, releases, and/or other documents, and will do such other acts and things as may be necessary to assign to Assignee or its successors or assigns all of the respective rights, titles, and interests herein and hereby granted or intended to be granted and to comply with any of the provisions hereof.

(c) **Entire Agreement.** This Assignment constitutes the entire agreement between the parties hereto regarding the subject matter hereof, and supersedes all prior verbal and/or written agreements, understandings, negotiations and discussions between the parties hereto regarding the subject matter hereof.

(d) **Severability.** If any term or provision of this Assignment is declared invalid, void or unenforceable by any rule of applicable law or public policy, all other terms and provisions of this Assignment shall nevertheless remain valid, binding and enforceable.

(e) **Governing Law.** This Assignment shall be governed, construed and enforced in accordance with the laws of the State of West Virginia without regard to the conflicts of law provisions thereof.

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(f) Binding Agreement. This Assignment shall be binding upon, and shall inure to the benefit of, each of the parties hereto and each of their respective affiliates, heirs, devisees, executors, administrators, representatives, successors, and/or assigns.

(g) Amendment. This Assignment may only be amended or modified by an instrument in writing executed by all of the parties hereto and expressly identified as an amendment or modification hereof.

(h) Counterpart Execution. This Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original and all of which, when taken together, shall constitute one and the same instrument.

(i) Captions. Captions, titles and headings appearing at the beginning of any sections, subsections, paragraphs or other subdivisions of this Assignment are inserted for convenience of reference only, do not constitute any part of this Assignment, and shall be disregarded in construing the language hereof.

(j) Assignment. Assignor shall not assign this Assignment without the express written consent of Assignee, which consent may be granted or denied in the sole discretion of Assignee.

**Section 9. Bonus.** In exchange for Assignor delivering to Assignee no less than an Eighty-Two percent (82%) net revenue interest (of 8/8ths) in the Assigned Depths and other appurtenances thereto as expressly provided for herein, Assignee shall pay to Assignor upon Assignor's execution and delivery of this Assignment to Assignee, the sum of Three Thousand Five Hundred Dollars (\$3,500) per net mineral acre of Assigned Depths assigned.

**Section 10. Overriding Royalty Interest.** Assignor excepts and reserves unto Assignor an overriding royalty interest equal to the difference between the existing Lease burdens (on an individual Lease basis) and Eighteen percent (18%), delivering a net revenue interest of Eighty-Two percent (82%) (of 8/8ths) to Assignee in and to the Assigned Depths, and any extension, renewal or new lease of the Leases prior to or within one (1) year after the expiration date of such Leases.

IN WITNESS WHEREOF, and intending to be legally bound hereby, Assignors and Assignee have caused this Assignment to be duly executed on the dates specified in the acknowledgement forms below, but effective for all purposes as of the Effective Date first above written.


**ASSIGNOR:**

DRILLING APPALACHIAN CORPORATION

By:   
Name: Kenneth R. Mason  
Title: President

**ASSIGNEE:**

NOBLE ENERGY, INC.

By:   
Name: Mark A. Acree  
Title: Attorney-in-Fact

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CORPORATE ACKNOWLEDGEMENT

STATE/Commonwealth of West Virginia )  
COUNTY OF Tyler )

On this the 26<sup>th</sup> day of February, 2015, before me, the undersigned authority, personally appeared **Kenneth R. Mason**, who acknowledged himself to be the President of **DRILLING APPALACHIAN CORPORATION**, a West Virginia Corporation, and that he as such President, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as President.

IN WITNESS WHEREOF, I hereto set my hand and official seal.

MY COMMISSION EXPIRES: 2-16-2016

Janet Kimball  
Notary Public

CORPORATE ACKNOWLEDGEMENT

STATE/Commonwealth of Pennsylvania )  
COUNTY OF WASHINGTON )

On this the \_\_\_\_ day of \_\_\_\_\_, 2015, before me, \_\_\_\_\_ the undersigned authority, personally appeared **Mark A. Acree**, who acknowledged himself to be the Attorney-in-Fact of **NOBLE ENERGY, INC.**, a Delaware corporation, and that he as such Attorney-in-Fact, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as Attorney-in-Fact.

IN WITNESS WHEREOF, I hereto set my hand and official seal.

MY COMMISSION EXPIRES:

\_\_\_\_\_  
Notary Public

PREPARED BY AND RETURN TO AFTER RECORDATION:  
NOBLE ENERGY, INC.  
333 Technology Drive, Suite 116  
Canonsburg, PA 15317

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**EXHIBIT "A"**  
to  
**Partial Assignment of Oil and Gas Leases**  
Leases

Original Lessor	Original Lessee	Instrument Date	County	District	Map/Parcel	Gross Acreage	Book/Page
Verma O Ash, <i>et al.</i>	Drilling Appalachian Corporation	8/13/1987	Tyler	Centerville	16-19	111	269/571
Ralph E Phillips, <i>et ux.</i>	Drilling Appalachian Corporation	1/21/1988	Tyler	Centerville	16-19	111	271/103

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MEMORANDUM OF LEASE

This MEMORANDUM OF LEASE, dated this 6<sup>th</sup> day of November, 2014, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Richard A. Glover, a/k/a Richard Alan Glover, a married man dealing in his sole and separate property, whose mailing address is: 844 Valley View Drive, Brookfield, OH 44403 (hereinafter, "Lessor" whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is at 333 Technology Drive, Suite 116, Canonsburg, Pennsylvania 15317. (hereinafter, "Lessee").

Lessor did LEASE, LET, GRANT, and DEMISE exclusively unto Lessee, its successors and/or assigns, the rights to explore, develop, produce, and market oil and/or gas and all constituent products, including methane gas present in or associated with any coal seam, from the premises described below, subject to the provisions contained in the Lease including, but not limited to the following:

1. PRIMARY TERM: The primary term of the Lease is for a period of five (5) years commencing on the date immediately set forth above, and for so long thereafter as oil, gas, or other substances covered by the Lease are capable of being produced in paying quantities from the Leased Premises or from lands pooled therewith, or the Lease is otherwise maintained or prolonged pursuant to the provisions contained in the Lease, including an extension of term contained therein. Lessee may extend the primary term of the Lease for an additional five (5) years after the end of the primary term, thereby continuing the term of the Lease to the end of the "extended" primary term.

2. DESCRIPTION / LEASED PREMISES: All those certain tracts of land situate in the District of Centerville, County of Tyler, State of West Virginia, generally bounded now or formerly as follows:

- On the North by: Diana Boger
On the East by: Verna O. Ash; John R. Anders, II
On the South by: Ronald R. and Reva D. Rowland
On the West by: Mary J. Kahler

and being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in Deed Book 42, Page 110, said land being identified for tax purposes as p/o 01-16-19.1; 01-16-19.2 on this date, and stipulated to contain, for the purpose of calculating payments, 13.00 (thirteen) acres, more or less ("Leased Premises").

This Memorandum of Lease has been executed for the purpose of providing notice of the existence of the Lease and shall not be considered in any way a modification or alteration of the Lease.

WITNESS:

Signature of witness: Laurence S. Sainpala

Printed Name: LAURENCE S. SAINPALA

LESSOR:

Signature of Lessor: Richard A. Glover

Printed Name: Richard A. Glover, a/k/a Richard Alan Glover

Address: 844 VALLEY VIEW DRIVE, BROOKFIELD, OH 44403

WITNESS:

Signature line for witness

Printed Name line for witness

LESSEE:

NOBLE ENERGY, INC.

Signature of Lessee: Mark A. Acree

By: MARK A. ACREE, Its: Attorney-In-Fact

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INDIVIDUAL ACKNOWLEDGMENT

STATE / COMMONWEALTH OF PA §  
COUNTY OF Mercer §

The foregoing instrument was acknowledged before me, this 6 day of November, 2014, by Richard A. Glover, a/k/a Richard Alon Glover, a married man dealing in his sole and separate property.

MY COMMISSION EXPIRES:

Pamela J. O'Neill  
Signature  
PAMELA J. O'NEILL  
Printed Name  
Notary Public

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Pamela J. O'Neill, Notary Public  
City of Sharon, Mercer County  
My Commission Expires Sept. 27, 2017  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

CORPORATE ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA §  
COUNTY OF WASHINGTON §

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned officer, personally appeared MARK A. ACREE, as Attorney-in-Fact for NOBLE ENERGY, INC., a Delaware corporation, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same for the purposes therein contained and on behalf of said corporation.

In witness thereof, I hereunto set my hand and affixed my seal.

MY COMMISSION EXPIRES:

\_\_\_\_\_  
Signature  
\_\_\_\_\_  
Printed Name  
Notary Public

PREPARED BY / UPON RECORDATION, RETURN TO:  
Land Department  
NOBLE ENERGY, INC.  
333 Technology Drive, Suite 116  
Cunionsburg, PA 15317

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PAID-UP OIL AND GAS LEASE

This PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") is made and entered into this 6<sup>th</sup> day of NOVEMBER, 2014, (hereinafter, "Effective Date") between Richard A. Glover, a/k/a Richard Alan Glover, a married man dealing in his sole and separate property, whose mailing address is: 844 Valley View Drive, Brookfield, OH 44103 (hereinafter, "Lessor," whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is 333 Technology Drive, Suite 116, Canonsburg, Pennsylvania 15317, (hereinafter, "Lessee"), with Lessor and Lessee being sometimes hereinafter referred to as "Parties".

1. LEASE: In consideration of ONE DOLLAR (\$1.00) and other good and valuable consideration, including the bonus consideration paid, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the covenants and agreements herein contained, Lessor does hereby LEASE, LET, GRANT and DEMISE exclusively unto Lessee, its successors and/or assigns, the lands and interests hereafter described for the purpose of exploring for, developing, producing and marketing oil, gas and/or other related substances produced in association therewith, including methane gas present in or associated with any coal seam, by any methods now or hereafter known or discovered, in and under the Leased Premises (defined below).

2. DESCRIPTION / LEASED PREMISES: All those certain tracts of land situate in the District of Centerville, County of Tyler, State of West Virginia, generally bounded now or formerly:

- On the North by: Diana Boger
On the East by: Verno O. Ash; John R. Anders, II
On the South by: Ronald R. and Reva D. Rowland
On the West by: Mary J. Kahler

being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in Deed Book 42, Page 110 said land being identified for tax purposes as p/a 01-16-19.1; 01-16-19.2 on this date and stipulated to contain for the purpose of calculating all payments required hereunder 13.00 (thirteen) acres, more or less, hereinafter, "Leased Premises." The Leased Premises shall be deemed to include all accreted or submerged lands contiguous to the Leased Premises claimed or owned by Lessor as well as all strips or parcels of land or interests therein now owned or hereafter acquired by Lessor which adjoin the lands described above.

3. TERM: Subject to the other provisions contained herein, this Lease shall be in force for a primary term of five (5) years (hereinafter, "Primary Term") and for so long thereafter as oil, gas or other substances covered hereby are capable of being produced in paying quantities from the Leased Premises, or from lands pooled or unitized therewith, or this Lease is otherwise maintained pursuant to the provisions hereof. It is understood that so long as this Lease is extended beyond the Primary Term by any provision of this Lease, Lessee may commence, resume, or continue the exercise of any of the rights, privileges, or purposes hereof during such extension.

4. EXTENSION OF TERM: At Lessee's option, Lessee may extend the Primary Term of this Lease for an additional period equal to the Primary Term hereof by paying or tendering to Lessor an extension payment equal to one hundred percent (100%) of the initial bonus consideration payable at any time prior to the expiration of the Primary Term. If Lessee exercises this option, the Primary Term shall be considered to be continuous commencing on the date hereof, and continuing to the end of the Primary Term so extended.

5. ROYALTY PAYMENT: For oil and gas, along with all hydrocarbon and non-hydrocarbon substances produced in association therewith (except storage gas), Lessee shall deliver to Lessor, as royalty, twelve and one-half percent (12.50%) of the net amount realized by Lessee computed at the wellhead. As used in this Lease, the term "net amount realized by Lessee computed at the wellhead" shall mean the gross proceeds received by the Lessee from the sale of oil and gas minus the post-production costs incurred by Lessee between the wellhead and the point of sale. As used in this Lease, the term "post-production costs" shall mean all costs and expenses related to: (a) treatment and processing of oil and gas; (b) separating liquids from gas; (c) transporting oil and gas from wellhead to production or treatment facilities and/or point of sale; (d) compression or dehydration; (e) any and all other reasonable costs and expenses of any kind or nature incurred involving the handling of oil and/or gas from the wellhead to the point of sale. Lessee may pay all taxes and fees levied upon the oil and gas as produced including, but not limited to, gross production, privilege, surveillance, and/or severance taxes or fees, if any imposed now or during the life of this Lease, and deduct a proportionate share of the amount so paid from any amounts payable to Lessor hereunder.

6. LESSOR'S INTEREST: If Lessor owns an interest in the Leased Premises less than the entire and undivided estate herein leased then all payments herein provided shall be paid by Lessee only in the proportion to which Lessor's interest bears to the whole and undivided estate. If Lessee receives written notice of adverse claim(s) to the Leased Premises, Lessee, may, in its sole discretion, withhold payment(s), without obligation to pay interest or penalty thereon, until such time as Lessor's ownership is determined, either by compromise or final decree of any court of competent jurisdiction. If the Leased Premises shall hereafter be subdivided, the Leased Premises shall nevertheless be developed and operated as one lease. Lessee shall not be bound by any change in the ownership of the Leased Premises or any change of the address of Lessor, or any heirs, representatives, successors, and/or assigns until Lessee shall have been furnished with written documentation from Lessor as Lessee may reasonably require.

7. DIRECTION OF PAYMENT: All payments required to be paid to Lessor herein shall be directed to the Lessor or deposited to Lessor's credit or to the credit of Lessor's respective heirs or assigns by check payable to the order and address as set forth above (or any changed address as may be provided to Lessee in the manner required under this Lease). Lessee shall not be obligated to alter payments as directed above until Lessee receives written notice from Lessor, or Lessor's representatives, heirs, successors, and/or assigns directing Lessee otherwise. Lessee shall not be obligated to make payments until such payments exceed the sum of TWENTY-FIVE DOLLARS (\$25.00), but, in any case, payments shall be made at least once each calendar year.

8. CONTINUING OPERATIONS: If at the end of the Primary Term or any subsequent extension thereof this Lease is not being maintained by any other provision hereof but Lessee has commenced operations for drilling, completing, reworking, equipping, or any other operations to obtain production on the Leased Premises or lands pooled or unitized therewith, this Lease shall remain in full force and effect as long as such operations are conducted in a reasonably prudent manner. At any time after the expiration of the Primary Term, if this Lease is not being maintained by any other provision hereof, the Lease shall nevertheless be extended one (1) year beyond the completion of plugging operations of the last well on Leased Premises to permit Lessee to deepen, rework, or recomplete any well on the Leased Premises or lands pooled or unitized therewith, or to commence operations for the drilling of another well on the Leased Premises or lands pooled or unitized therewith, and if such operations result in the production of any substance covered hereby, this Lease will be extended as long thereafter as production continues in paying quantities.

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9. **POOLING AND UNITIZATION:** Lessee is hereby granted the right to pool or unitize the Leased Premises, or any part thereof, with any other lands for the production of any substance covered hereby, so as to create one (1) or more drilling or production units. Furthermore, Lessee shall in no event be required to drill more than one (1) well on such unit. Said drilling or production unit(s) shall conform to the rules and regulations of any governmental authority claiming jurisdiction. In the event this Lease is so pooled or unitized, the Lessor agrees to accept, in lieu of the royalty herein recited, such proportion of the royalty above described as the acreage contributed by this Lease bears to the total acreage comprising any unit or units.

Lessee shall create the unit by executing an instrument identifying and describing the pooled acreage and shall mail a copy thereof to the Lessor's last known address. Within the parameters of governmental regulations, Lessee shall have the recurring and unrestricted right to enlarge, diminish, or otherwise revise any unit formed hereunder either before or after commencement of production. At any time a pool or unit is not being operated as aforesaid, Lessee may revise or surrender all or any part of any such pool or unit, which modification or cancellation document shall be placed of record in the appropriate county(ies). Any cancellation or surrender of a Declaration of Pooling or unit order shall neither cause nor be deemed a surrender or cancellation of this Lease. Lessee will provide a copy of any documents to Lessor's last known address, and the proportion of unit production on which royalties are payable hereunder shall thereafter be adjusted accordingly. Commencement of operations for drilling, completing, reworking, equipping, or any other operations to obtain production, or production anywhere on a unit which includes all or any part of the Leased Premises shall, except for the payment of royalties, be treated as if it were commencement of operations for drilling, completing, reworking, equipping, or any other operations to obtain production, or production on the Leased Premises.

10. **GAS STORAGE:** Lessee shall have the exclusive right to use any formation underlying the Leased Premises for the storage of gas and shall have all rights necessary or incidental to store and produce such stored gas. At the time of exercising the rights to store gas hereunder, Lessee shall pay, in accordance with the royalty herein recited, Lessor's proportionate share of the estimated recoverable gas remaining in the relevant well located on the Leased Premises using methods of calculating gas reserves as are generally accepted by the oil and gas industry. Lessee agrees to pay Lessor an annual rental of FIVE AND NO/100 DOLLARS (\$5.00) per acre for all Leased Premises which Lessee wishes to use for the storage of gas payable in advance while the Leased Premises are so used, and so long as such storage payment is made all provisions of this Lease shall remain in full effect as to the entire Leased Premises.

11. **ANCILLARY RIGHTS:** Lessor grants to Lessee the right of ingress, egress and regress over, under, and through said Leased Premises together with the exclusive right to conduct such operations on the Leased Premises as may be necessary for or incidental to the exploration and production of oil, gas or other related substances covered hereby, including but not limited to geophysical operations, the drilling of wells, and the construction and use of roads, production flowlines, gathering lines, pipelines, and/or gas transmission lines, tanks, water wells, disposal wells, injection wells, pits, water or other impoundments, electric and/or telephone lines, solar facilities, and/or other facilities necessary, useful, or convenient to produce, save, take care of, treat, process, store, and/or transport oil, gas, and/or other products, regardless of the source of such products, with the right to transport via flowlines, gathering lines, pipelines, transmission lines, and/or otherwise, oil, gas, water and/or their constituents from and across the Leased Premises and/or other lands, regardless of the source of such substances, and the exclusive rights to inject water, air, brine, gas, and/or other fluids into subsurface strata. Lessee shall also have the right of placing solar panels, electric, and/or telephone lines over the Leased Premises; the right to erect necessary buildings, tanks, towers, stations, or other structures thereon; and the rights to use, free from royalty, sufficient oil, gas, and/or water produced from the Leased Premises for all operations thereon (provided Lessor shall pay the reasonable and customary cost of any such water sources located on the Leased Premises). Lessor agrees that no part of the Leased Premises shall be leased, let, granted, or licensed by Lessor to any other party for the location, construction, or maintenance of structures, tanks, pits, reservoirs, equipment, and/or machinery for the purpose of exploring, developing, or operating adjacent lands for oil or gas during the term hereof.

Lessee at any time, and from time to time, may surrender this Lease as to all or any part thereof by recording an appropriate instrument of surrender in the proper county, and thereupon this Lease and the rights, rentals, and obligations of the Parties hereunder shall terminate as to the part so surrendered; provided however, that upon each surrender as to any part of the Lease, Lessee shall maintain all easement rights in, to, and/or under the surrendered portion of the Leased Premises described in this Lease.

When requested by Lessor in writing, Lessee shall bury its pipelines below plow depth in areas utilized for farming operations. Lessee shall pay for reasonable damage caused by its operations to growing crops and marketable timber thereon. Lessee shall have the right to remove its fixtures, equipment, and materials, including well casing, from the Leased Premises during the term of this Lease, and within a reasonable time thereafter; however, nothing in this Lease shall be construed as a mandate for Lessee to remove any underground fixtures, including, but in no way limited to, pipe, casing, pipelines, and/or flowlines, and Lessor specifically waives, on behalf of Lessor and any of Lessor's heirs, representatives, successors, and/or assigns, any all future claims of damage and/or trespass if Lessee elects to leave all underground fixtures and/or lines in place.

12. **SHUT-IN ROYALTY:** If, after the Primary Term of this Lease, all wells on the Leased Premises or within a unit that includes all or a part of the Leased Premises, are shut-in, suspended, or otherwise not producing for any reason whatsoever for a period of twelve (12) consecutive months, and there is no current production of oil and gas or operations on said Leased Premises sufficient to keep this Lease in force and this Lease is not otherwise kept in force by other provisions of this Lease, Lessee may maintain this Lease in effect by tendering to Lessor as shut-in royalty, a sum equal to FIVE DOLLARS (\$5.00) per acre. Said shut-in royalty shall be paid or tendered to Lessor on or before the next ensuing yearly anniversary of the date of this Lease, and thereafter, on or before each yearly anniversary of the date hereof while the wells are shut-in or production therefrom is not being marketed by Lessee. Upon payment of the shut-in royalty as provided herein, this Lease will continue in force during all of the time or times while all wells are shut-in, but failure to properly pay shut-in royalties shall render Lessee liable only for the amount due and shall not operate to terminate this Lease.

13. **TAXES:** Subject to the royalty provisions hereinabove regarding post-production costs, all taxes assessed or payable on the oil and gas produced from the Leased Premises or from leases, lands, and/or interests pooled or unitized therewith, including any ad valorem, production, severance, business, occupation, excise, privilege, surveillance, or other taxes of any nature whatsoever, or any increase in the real estate taxes, or taxes in lieu of real estate taxes imposed because of the oil and/or gas operations or production under this Lease shall be paid by the Parties hereto in proportion to their interest.

14. **LIENS:** Lessee may, at its option, pay and discharge any past due taxes, mortgages, judgments, and/or other liens and encumbrances on or against any land or interest included in the Leased Premises. Lessee shall be entitled to recover any such amounts paid from Lessor, with legal interest and costs, by deduction from any future payments due Lessor or by any other lawful means.

15. **FORCE MAJEURE:** Should Lessee be prevented from complying with any expressed or implied covenant of this Lease, from conducting drilling, completing, equipping, or reworking operations thereon, or from producing oil and gas or other substances by reason of scarcity of or inability to obtain or use equipment, men or material, or by operation of force majeure such as storm, flood, fire, tornado, hurricane, earthquake, seismic disturbance, or other acts of God, war, rebellion, insurrection, riot, strikes, differences with workmen, failure of carriers to transport or furnish facilities for transportation, as a result of a lawsuit or some law, order, or regulation of the government, as a result of shortage in material or equipment, or as a result of any other whatsoever beyond the reasonable control of the Lessee, then while so prevented, Lessee's obligation to comply with said covenant shall be suspended for so long as compliance is thus prevented, and for an additional twelve (12) months thereafter.

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16. **DEFAULT:** No default shall be declared against the Lessee for failure to make payment or perform any conditions provided for herein unless the Lessee shall refuse or neglect to pay or perform the same for ninety (90) days after having received written notice from Lessor.

17. **SUCCESSORS AND ASSIGNS:** All covenants and conditions between the Parties hereto shall extend to Lessor's heirs, executors, successors, representatives, and/or assigns, and Lessor hereby warrants and agrees to defend the title to the Leased Premises; however, no change or division in ownership of the Leased Premises shall operate to enlarge the obligations or diminish the rights of the Lessee.

18. **UNDERSTANDING OF PARTIES:** This Lease contains all of the agreements and understanding by and between Lessor and Lessee respecting the subject matter hereof, and no implied covenants, obligations, verbal representations, or promises have been made or relied upon by Lessor or Lessee supplementing or modifying this Lease, or as an inducement thereto. The failure of either party to enforce or exercise any provision of this Lease shall not constitute or be considered as a waiver of the provision in the future unless the same is expressed in writing and signed by the respective Parties.

19. **REPRESENTATION OF NON-PRODUCTION:** Lessor hereby represents that, to the best of Lessor's knowledge, information, and/or belief that: (a) no wells have been drilled on the Leased Premises or any lands purportedly pooled or unitized therewith that have not been plugged or abandoned prior to the date hereof; (b) there has been no oil and/or gas produced from the Leased Premises or any lands purportedly pooled or unitized therewith during the last five (5) years; (c) during the last two (2) years Lessor has not received, and is not now receiving, any bonus, delay rental, royalty, shut-in, or any other compensation under, or by virtue, or pursuant to the terms of a prior oil and gas lease, coal bed methane gas lease, or any other lease or contract for the exploration or development of the oil and/or gas in and under the Leased Premises; (d) the Leased Premises are not now subject to any valid, subsisting, or enforceable lease, option, and/or other contract affecting the oil, gas, and/or coal bed methane estate; and (e) there exists no contract or agreement, and/or no condition or event has occurred or is anticipated to occur, which would affect Lessee's use of the surface of the Leased Premises in the exercise of the rights granted hereunder.

20. **SEVERANCE:** If any provision of this Lease is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Lease shall remain in full force and effect.

21. **NOTICES:** All notices shall be deemed given when deposited with the United States Postal Service and forwarded via United States Certified Mail, Return Receipt Requested, postage prepaid. A facsimile or emailed message shall be deemed delivered only when if also delivered via the method set out above. All notices shall be delivered to the address shown on the face of this Lease for the Party to be notified, unless a change-of-address had been forwarded to the other Party hereto via the above-described method of notice.

22. **CAPTIONS:** Captions, titles and headings appearing at the beginning of any sections, paragraphs or other subdivisions of this Lease are inserted for convenience of reference only, do not constitute any part of this Lease, and shall be disregarded in construing or interpreting the language hereof.

\*\*\*SEE ADDENDUM ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF\*\*\*

EXECUTED on the dates set forth in the notary acknowledgements attached hereto, but effective for all purposes as of the Effective Date hereinabove specified. This document may be executed in multiple counterparts, any one of which shall be considered an original and binding upon the signatory parties for all purposes herein.

**WITNESS:**  
Lawrence S. Stiplica  
Signature  
LAWRENCE S. STIPICA  
Printed Name

**LESSOR:**  
Richard A. Glover  
Signature  
Printed Name: Richard A. Glover, a/k/a Richard Alan Glover  
Address: 844 VALLEY VIEW DRIVE  
BROOKFIELD, OH 44403

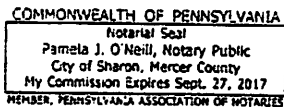
INDIVIDUAL ACKNOWLEDGMENT

STATE / COMMONWEALTH OF PA §  
COUNTY OF Merger §

The foregoing instrument was acknowledged before me, this 6 day of November, 2014, by Richard A. Glover, a/k/a Richard Alan Glover, a married man dealing in his sole and separate property.

MY COMMISSION EXPIRES:

Pamela J. O'Neill  
Signature  
PAMELA J. O'NEILL  
Printed Name  
Notary Public





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Office of Oil & Gas  
MAR 13 2015



**ADDENDUM TO OIL AND GAS LEASE DATED November 6, 2014**  
**FROM RICHARD A. GLOVER, A/K/A RICHARD ALAN GLOVER, A MARRIED MAN**  
**DEALING IN HIS SOLE AND SEARATE PROPERTY, AS LESSOR,**  
**IN FAVOR OF NOBLE ENERGY, INC., AS LESSEE**

1. **Conflict of Terms:** In the event of a conflict or inconsistency between the printed terms in the Lease to which this Addendum is attached, the terms of this Addendum shall control and be deemed to supersede the terms of said lease in all respects.
2. **Standard Lease to Remain Effective:** Except to the extent modified by this Addendum, the terms, covenants, conditions, rights, duties, and obligations of the Parties set forth in the Lease to which this Addendum is attached shall remain in full force and effect in accordance with the terms thereof. The holding of any part of said Lease and/or this Addendum to be ineffective or unenforceable shall not act to alter any other provisions hereof.
3. **ROYALTIES WITHOUT DEDUCTION:** Royalties shall be paid without deductions for the costs of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting, or otherwise making the oil, gas, and/or related products produced from the Leased Premises ready for sale or use. All oil and/or gas royalty shall be delivered free of cost into the tank or pipeline (for oil) and into the pipeline (for gas), with the exception of Lessor's prorated share of taxes, measured by volume, on the oil and/or gas royalty.
4. **Royalty Payment:** Section (5) of this Lease is hereby amended by striking only the words "twelve and one-half percent (12.50%)" and replacing with the following: "fifteen percent (15.00%)". All other provisions of Section (5) shall remain unchanged.
5. **INDEMNITY AND HOLD HARMLESS:** Lessee shall indemnify and hold Lessor harmless against and from any and all liability, liens, demands, judgments, suits, and claims of any kind or character arising solely out of, solely in connection with, or relating solely to Lessee's operations under the terms of this Lease, including, but not limited to, environmental issues, claims for injury to, or death of any persons, or damage, loss, or destruction of any property, real or personal (hereinafter, individually referred to as a "Claim", and collectively as "Claims"). Lessee further covenants and agrees to defend any suits brought against Lessor by virtue of any such Claims, and to pay any judgment against Lessor resulting from any Claim adversely decided against Lessor. Lessor, if it so elects, shall have the right to participate, at Lessor's own cost and expense, in its defense of any Claims, without relieving Lessee of the obligation to defend Lessor against any such Claim. It is the intention of Lessee and Lessor that Lessee shall not be liable to Lessor in respect of (and the foregoing indemnity shall not cover) any Claim(s) to the extent the same resulted from the gross negligence, willful misconduct, or bad faith of Lessor.

LESSOR IDENTIFICATION AND APPROVAL:	LESSEE IDENTIFICATION AND APPROVAL:
 Signature Printed Name : <u>Richard A. Glover, a/k/a Richard Alan Glover</u> Date: <u>NOVEMBER 6, 2014</u>	NOBLE ENERGY, INC.  Signature Printed Name : _____ Date: _____

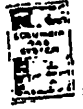
*APM*  
*AMPA*

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MAR 13 2015



Misc. Assign.  
4683

# COLUMBIA GAS TRANSMISSION CORPORATION



ADDRESS REPLY TO  
205<sup>th</sup> OFFICE BOX 1273  
CHARLESTON WEST VIRGINIA 25321

April 21, 1980

L & M Exploration, Inc.  
Box A. Station C  
Canton, OH 44708

Gentlemen:

## FARMOUT AGREEMENT

This letter sets forth the terms and conditions under which Columbia Gas Transmission Corporation (hereinafter called "Columbia") grants L & M Exploration, Inc. (hereinafter called "L & M") the right to earn a sub-lease of certain rights from the surface of the earth to the top of the Onondaga Formation in Columbia's interest in certain oil and gas leases containing a total of 8,836.5 acres, more or less, situate in Centerville, Ellsworth, Lincoln and Meade Districts, Tyler County, West Virginia, said leases being listed on Exhibit "A" attached hereto and made a part hereof.

Twenty (20) wells are to be drilled on the aforesaid leases, or on drilling units including parts of the subject leases, within one year from the date of this agreement, and twenty (20) wells are to be drilled on the subject acreage, or on such drilling units, each subsequent year until the acreage is fully developed. Each well, if productive of oil and/or gas shall earn L & M a sub-lease, which Columbia will make upon written request, of only those rights acquired by Columbia in and to the oil and gas down to the stratigraphic equivalent of total depth of the well in the lease or in parts of leases included in a drilling unit upon which the well is situate. Each productive well will operate one hundred and sixty (160) acres, or Columbia's acreage in the drilling unit, whichever is the lesser.

Failure to maintain the aforesaid drilling schedule will make this Farmout voidable as to the undeveloped acreage at the election of Columbia, which election shall be exercised by Columbia giving L & M written notice thereof, sent to L & M's last known mailing address.

Columbia reserves the right to purchase any and all gas produced by L & M from said leases or drilling units including parts of the herein described leases. In addition, L & M will dedicate to Columbia any and all gas produced from acreage now held in its own right or acreage acquired in its own right in the area of interest after the date of this agreement. All gas purchases will be at the rate or price prevailing in the field and on the terms of Columbia's standard gas purchase contract, a copy of which is attached hereto and made a part hereof as **Received**.

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4683  
Farmout No. 1210  
06/26/2015

Columbia excepts and reserves unto itself an overriding royalty of 1/16 of 7/8 of any oil produced and 1/32 of 7/8 of any gas produced from said leases, which overriding royalty shall be reduced to that proportionate part that Columbia's acreage contributed to a drilling unit bears to the total acreage in the drilling unit. The above overrides reserved unto Columbia will be reduced by the existing overriding royalties on the subject acreage. L & M will pay Columbia \$5.00 per acre for each acre earned and sublet to L & M.

All operations conducted by L & M upon said premises shall be subject to and in accordance with the terms and conditions of the aforesaid leases. L & M agrees to save harmless Columbia, its successors and assigns, from any and all claims, damages or liabilities of any kind whatsoever, including, but without limitation, an obligation to plug and abandon any well in compliance with then existing laws and regulations.

It is agreed that L & M will furnish the Chief Geologist of Columbia, at this address, with a plat showing the location and surface elevation of the well as staked. It is also agreed that L & M will furnish Columbia with a complete set of all logs, including but not limited to Gamma Ray, Neutron, Density and Resistivity Logs for all wells drilled.

L & M shall promptly notify Columbia, attention, Director, Lease and Land Rights, of the completion of any well capable of production on the aforesaid leases, furnishing a plat of the drilling unit and a copy of the unit designation, if applicable.

Rights granted under this Farmout Agreement shall not be assigned, sub-let, mortgaged or encumbered by L & M without the prior written consent of Columbia.

Columbia does not warrant title to the premises described in Exhibit "A" and represents that it will sublet only those rights held by Columbia in the aforesaid leases.

In the event of the development of acreage, L & M shall, before plugging and abandoning or otherwise terminating production or surrendering rights, notify Columbia in writing of its proposed action, and shall, if Columbia desires, execute and deliver to Columbia such surrenders or other documents as may be appropriate to evidence reinstatement of Columbia's full leasehold rights.

L & M shall reimburse Columbia for all land and delay rentals and shut-in royalty payments attributable to the acreage subject to this Farmout Agreement falling due during the term of said agreement and will pay the landowner's royalty and any overriding royalty in respect to subject horizons. In the event L & M fails to pay all rentals, royalties, or other liabilities accruing by virtue hereof, Columbia shall have the right to reserve and deduct a sufficient sum or sums from any amount due L & M on account of the sale of gas from said premises by L & M to Columbia under and pursuant to the standard gas purchase contract made between L & M and Columbia.

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MAR 13 2015

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and Columbia. In the event production has not been established or gas purchase revenues are not sufficient to offset all rentals or shut-in royalty payments made by Columbia on the farmout acreage, L & M's failure to reimburse Columbia for any and all such payments within sixty (60) days after billing will make this farmout voidable as to the undeveloped acreage at the election of Columbia, which election shall be exercised by Columbia giving ten (10) days written notice thereof and sent by registered or certified mail or delivered to L & M's last known address.

In the drilling of any well or wells and otherwise complying with the terms and provisions of this agreement, L & M is acting independently of Columbia and not as a partner in any capacity, mining or otherwise. Columbia shall have no responsibility whatsoever in connection with the drilling of any well or wells and all drilling will be at L & M's sole cost, risk and expense.


The renewing and extending of undeveloped leases committed to this Farmout shall be handled by Columbia, and such renewals and extensions shall be held subject to said Farmout so long as it remains in force and effect as to such acreage.

All covenants and conditions between the parties hereto shall extend to their successors and assigns.

If this letter, which is submitted in duplicate, is satisfactory and you desire to proceed accordingly, please sign the acceptance provided below and return one (1) copy to this office, attention of R. Joe Johnson, Manager, Leases and Fee Lands, within ten (10) days.

COLUMBIA GAS TRANSMISSION CORPORATION

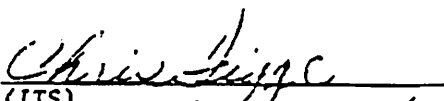
By

  
Vice President

ACCEPTED this the 21 day of  
April 1980.

L & M EXPLORATION, INC.

By

  
(ITS)  
Vice President

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MAR 13 2015

06/26/2015

EXHIBIT "A"  
 PROPOSED FARMOUT TO  
 I. & M EXPLORATION, INC.  
PETWANE & TYLER COUNTIES, WEST VIRGINIA

460-  
 I & M Exploration Inc  
 4-21-80  
 R/R 217

LEASE NO.	LESSOR	LESSEE	DATE	TERM	ACRES	DISTRICT	COUNTY	BOOK	PAGE	O.R.R.I.
34609	Arthur Eugene Jones, et ux	Royal Resources Corp.	4-02-71	10	252	Ellsworth	Tyler	188	465	None
34610	Arthur Eugena Jones, et ux	Royal Resources Corp.	4-02-71	10	220	Ellsworth	Tyler	188	467	None
34611	Grace Meredith	Royal Resources Corp.	4-09-71	10	200	Lincoln	Tyler	188	469	None
34613	Joseph Ben Thomas, et ux	Royal Resources Corp.	4-09-71	10	117	Meade	Tyler	188	473	None
34614	Goldie O. Cox, et con	Royal Resources Corp.	4-09-71	10	140	Meade	Tyler	188	475	None
34616	W. C. Stevens, et ux	Royal Resources Corp.	4-10-71	10	85	Ellsworth	Tyler	188	479	None
34617	O. E. Hadley, et ux	Royal Resources Corp.	4-10-71	10	162	Ellsworth Meade	Tyler	188	481	None
34619	H. W. Shepard, et ux	Royal Resources Corp.	4-21-71	10	45	Meade	Tyler	188	485	None
34622	A. B. Lowther, et ux	Royal Resources Corp.	2-21-71	10	280	Meade	Tyler	188	491	None
34623	C. B. Winland, et ux	Royal Resources Corp.	4-10-71	10	112	Ellsworth	Tyler	188	493	None
34624	C. B. Winland, et ux	Royal Resources Corp.	4-15-71	10	197	Ellsworth	Tyler	188	495	None
34641	Glenn Wells, et ux	Royal Resources Corp.	4-13-71	10	217	Ellsworth	Tyler	188	527	None
34642	Glenn Wells, et ux	Royal Resources Corp.	4-13-71	10	142	Lincoln	Tyler	188	529	None
40466	J. W. Mwhrough, Sr., et ux	Royal Resources Corp.	9-01-71	10	53	Ellsworth	Tyler	190	516	None
40467	Burl Baker, et ux	Royal Resources Corp.	9-01-71	10	72	Ellsworth	Tyler	190	614	None
40468	Burl Baker, et ux	Royal Resources Corp.	9-01-71	10	175	Ellsworth	Tyler	190	612	None
40469	Guy L. Rymer, et ux	Royal Resources Corp.	9-01-71	10	135	Ellsworth	Tyler	190	510	None
40470	Floyd Fox, et ux	Royal Resources Corp.	9-01-71	10	270	Ellsworth	Tyler	190	508	None
40472	Florence B. Folger, et con	Royal Resources Corp.	9-15-71	10	45	Ellsworth	Tyler	190	504	None
40474	Earl K. Stephen, et ux	Royal Resources Corp.	9-15-71	10	62	Ellsworth	Tyler	190	500	None
40475	Glen Amos, Sr., et ux	Royal Resources Corp.	9-15-71	10	33	Lincoln	Tyler	190	498	None
40482	Fredrick L. Dotson, et ux	Royal Resources Corp.	10-01-71	10	98	Ellsworth	Tyler	190	484	None
40484	O. E. FreeLand	Royal Resources Corp.	3-25-72	10	100	Meade	Tyler	190	480	None
40485	Charles Heiniczman, et ux	Royal Resources Corp.	6-14-71	10	111	Lincoln	Tyler	190	304	None
40486	Emerson Lawrence Moore, et ux	Royal Resources Corp.	10-01-71	10	168	Centerville	Tyler	190	478	None
40487	Ernest Virgil Mathews, et ux	Royal Resources Corp.	10-01-71	10	102	Ellsworth	Tyler	190	476	None
40488	Arza Folger, et ux	Royal Resources Corp.	10-01-71	10	130	Ellsworth	Tyler	190	474	None
40489	Arza Folger, et ux	Royal Resources Corp.	10-01-71	10	16	Ellsworth	Tyler	190	472	None
40490	A. B. Lowther, et ux	Royal Resources Corp.	9-01-71	10	95	Lincoln	Tyler	191	59	None
40491	A. B. Lowther, et ux	Royal Resources Corp.	9-01-71	10	140	Lincoln	Tyler	191	57	None
42768	Robert N. McCammon, et ux	Royal Resources Corp.	10-26-73	10	69	Ellsworth	Tyler	196	188	L/64 of 8/8

EXHIBIT "A"

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<u>LEASE NO.</u>	<u>LESSOR</u>	<u>LESSEE</u>	<u>DATE</u>	<u>TERM</u>	<u>ACRES</u>	<u>DISTRICT</u>	<u>COUNTY</u>	<u>BOOK</u>	<u>PAGE</u>	<u>O. R. I.</u>
42778	Howard Vost, et al	Royal Resources Corp.	2-12-73	10	41	Ellsworth	Tyler	196	256	1/64 of 8/8
42781	Mildred Hurst	Royal Resources Corp.	12-27-72	10	100	Centerville	Tyler	196	264	1/64 of 8/8
42783	Jacob Cotrill	Royal Resources Corp.	12-27-72	10	290	Centerville	Tyler	196	268	1/64 of 8/8
42786	Robert C. Ferguson, et ux	Royal Resources Corp.	12-05-72	10	21	Centerville	Tyler	196	274	1/64 of 8/8
42787	Emerson L. Moore, et ux	Royal Resources Corp.	12-27-72	10	13	Centerville	Tyler	196	276	1/64 of 8/8
42791	Jacob Cotrill, et al	Royal Resources Corp.	12-27-72	10	290	Ellsworth	Tyler			1/64 of 8/8
42792	Gladys S. Hamilton	Royal Resources Corp.	12-27-72	10	142	Ellsworth	Tyler	196	290	1/64 of 8/8
42799	Jacob L. Dillion, et ux	Royal Resources Corp.	12-12-72	10	45	Centerville	Tyler	196	298	1/64 of 8/8
42801	Jacob L. Dillion, et ux	Royal Resources Corp.	12-12-72	10	105	Centerville	Tyler	196	302	1/64 of 8/8
42804	Clarence Hadley, et ux	Royal Resources Corp.	10-20-72	10	177	Centerville	Tyler	197	295	1/64 of 8/8
42806	Clarence Hadley, et ux	Royal Resources Corp.	10-20-72	10	155	Ellsworth	Tyler	196	310	1/64 of 8/8
42807	Shirley E. Wells, et al	Royal Resources Corp.	12-20-72	10	60	Lincoln	Tyler	196	314	1/64 of 8/8
42808	Shirley E. Wells, et al	Royal Resources Corp.	12-25-72	10	98	Lincoln	Tyler	196	316	1/64 of 8/8
42809	Shirley E. Wells, et al	Royal Resources Corp.	12-25-72	10	40	Lincoln	Tyler	196	318	1/64 of 8/8
42817	L. B. Hyres	R. W. Keener	11-01-72	10	162	Ellsworth	Tyler	196	208	1/64 of 8/8
42819	Ernest C. McMullen, et ux	R. W. Keener	11-01-72	10	120	Ellsworth	Tyler	196	212	1/64 of 8/8
42820	Ernest C. McMullen, et ux	R. W. Keener	11-01-72	10	93	Ellsworth	Tyler	196	214	1/64 of 8/8
42824	Lonic Donk, et al	R. W. Keener	11-27-72	10	150	Centerville	Tyler	176	222	1/64 of 8/8
42825	Robert Skinner, et al	R. W. Keener	11-09-72	10	261	Ellsworth	Tyler	176	224	1/64 of 8/8
42829	O. W. Griffith, et al	R. W. Keener	12-08-72	10	56	Centerville	Tyler	197	299	1/64 of 8/8
42830	O. W. Griffith, et ux	R. W. Keener	12-08-72	10	340	Centerville	Tyler	196	232	1/64 of 8/8
42831	O. W. Griffith, et ux	R. W. Keener	12-08-72	10	220	Centerville	Tyler	196	234	1/64 of 8/8
42832	O. W. Griffith, et ux	R. W. Keener	12-08-72	10	24	Centerville	Tyler	196	236	1/64 of 8/8
42833	Violet Gregg, et al	R. W. Keener	11-30-72	10	114	Centerville	Tyler	196	238	1/64 of 8/8
42834	Violet Gregg, et al	R. W. Keener	11-30-72	10	40	Centerville	Tyler	196	240	1/64 of 8/8
42835	Violet Gregg, et al	R. W. Keener	11-30-72	10	8	Centerville	Tyler	196	242	1/64 of 8/8
42836	Violet Gregg, et al	R. W. Keener	11-30-72	10	90	Centerville	Tyler	196	244	1/64 of 8/8
42837	Violet Gregg, et al	R. W. Keener	11-30-72	10	32	Centerville	Tyler	196	246	1/64 of 8/8
42838	Violet Gregg, widow	R. W. Keener	11-30-72	10	75	Centerville	Tyler	196	235	1/64 of 8/8
42839	Mildred Gregg, widow	R. W. Keener	11-30-72	10	32	Centerville	Tyler	196	250	1/64 of 8/8
42840	E. J. Williamson, et al	R. W. Keener	2-12-73	10	95	Centerville	Tyler	196	260	1/64 of 8/8
42844	Ada Weekley	R. W. Keener	11-30-72	10	98	Ellsworth	Tyler	196	312	1/64 of 8/8
42845	Verna O. Ash	R. W. Keener	1-04-73	10	180	Centerville	Tyler	196	324	1/64 of 8/8
43198	E. Glenn Moore, et al	Royal Resources Corp.	1-16-73	10	255	Ellsworth	Tyler	197	267	1/64 of 8/8
43206	Harry M. Spencer, et ux	Opal K. Trach	2-05-73	10	225	Ellsworth	Tyler	197	293	1/64 of 8/8
43211	Charles G. Evans	Donley K. Shultz	2-15-73	10	69	Lincoln	Tyler	197	249	1/64 of 8/8
43213	Ola Froeland, et al	Donley K. Shultz	2-05-73	10	100	Ellsworth	Tyler	197	233	1/64 of 8/8
43216	Jennie Shinn	M. S. Lantz	2-05-73	10	70	Ellsworth	Tyler	197	275	1/64 of 8/8
43218	Fred Fairbee, et ux	M. S. Lantz	2-05-73	10	41	Ellsworth	Tyler	197	271	1/64 of 8/8
43219	Fred Fairbee, et ux	M. S. Lantz	2-05-73	10	25	Ellsworth	Tyler	197	269	1/64 of 8/8

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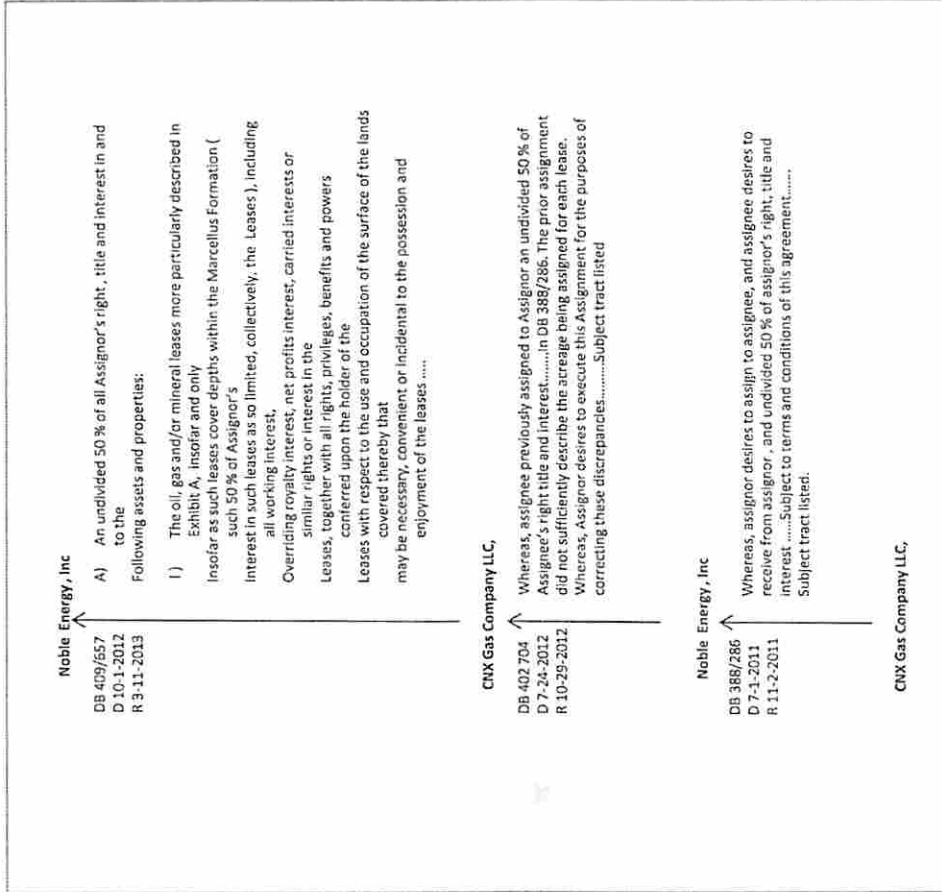
<u>LEASE NO.</u>	<u>LESSOR</u>	<u>LESSEE</u>	<u>DATE</u>	<u>TERM</u>	<u>ACRES</u>	<u>DISTRICT</u>	<u>COUNTY</u>	<u>BOOK</u>	<u>PAGE</u>	<u>D.R.R.I.</u>	
43223	Harry M. Spencer, et ux	M. S. Lantz	2-05-73	10	40	Ellsworth	Tyler	197	257	1/64 of 8/8	
*43227	Mary E. Doak	Royal Resources Corp.	3-06-73	10	66	Meade	Tyler	197	237	1/64 of 8/8	
170139	James R. Ash, et ux	Col. Gas Trans. Corp.	3-12-74	10	92	Centerville	Tyler	202	24	None	
170140	James R. Ash, et ux	Col. Gas Trans. Corp.	3-12-74	10	27	Centerville	Tyler	202	20	None	
170141	James R. Ash, et ux	Col. Gas Trans. Corp.	3-12-74	10	21.5	Centerville	Tyler	202	16	None	
170142	James R. Ash, et ux	Col. Gas Trans. Corp.	3-12-74	10	15	Centerville	Tyler	202	12	None	
					TOTAL:	8,836.5					

\*Not Mapped

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denotes copy attached hereto



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JUN 8, 2015

WV Department of  
Environmental Protection

**CNX Gas Company LLC.**

DB 384/191  
D 4-30-2010  
R 6-8-2010

**Affidavit of Name changes and mergers**

1. CNX is as of the date hereof, following the consummation of the transactions described in sections 2 through 7 below, the record owner of certain real property located in Tyler County WV.
2. A purchase and sale agreement, dated as of March 14, 2010 and was entered into by and among Dominion Resources Inc., ECT, and Consol Energy Holdings LLC. Purchaser agreed to purchase, certain oil and gas properties, rights and related assets ECT, Inc. The purchase and sale agreement closed on April 30, 2010.
7. On January 4, 2011 by several mergers was merged with and into CNX. Accordingly, the name of the record owner of the properties is now CNX Gas Company LLC.

**Consol Energy Holdings LLC XVI**

DB 374/187  
D 4-30-2010  
R 5-4-2010

Assignment of oil and gas interests and assets  
Herby grants, bargains, sells, assigns and conveys unto Assignee, and assignee hereby accepts from assignor, all assignors right, title and interest in and to the following (collectively the Assets)  
Reserving, subject to section 1.1 (c) and (1) of this assignment, to assignor the right to operate, maintain, use and access for reasonable business purposes any part of the surface underlying the mineral interest, including, roads, easements and rights-of-ways on or related thereto, and to construct additional roads, pipelines and power lines and related equipment and facilities thereon, in each case in reasonable cooperation with assignee.

**Dominion Transmission, Inc**

DB 355/701  
D 5-31-2007  
R 6-15-2007

Release and termination agreement  
By and between USB Americas, Inc, and USB AG, a bank.  
Whereas, pursuant to the terms of the production payment purchase and sale agreement, USB AG entered into a natural gas sales contract with Dominion Exploration & production, Inc. covering all hydrocarbons that USB Americas Inc. is entitled to receive under the conveyance of term overriding royalty in relation to properties located in Utah and West Virginia, which were sold to USB AG pursuant to the USB forward sales contract (the Dominion purchase contract)

**USB Americas, USB AG**

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JUN 8 2015

WV Department of  
Environmental Protection

**Drilling Appalachian Corporation**

DB 377/413  
D 2-1-2010  
R 3-22-2010  
DAC and Dominion agree that the retained acreage, as defined in Paragraph 2 of the prior assignment shall henceforth mean the acreages, and, where applicable, Wells, not assigned unto assignees by the prior assignment, the same being set forth on exhibit A attached hereto and made a part hereof, said acreage being held by leases also described on the aforesaid exhibit A. The parties hereto intend that the said exhibit A supersede and replace exhibit A-2 to the prior assignment.  
Subject tract listed retained acreage 18.03.  
Lease acreage 45

**Dominion Exploration & Production, INC**

**Amendment and Clarification**

**Dominion Appalachian Development Properties, L.L.C.,**

DB 322/190  
D 12-30-1997  
R 1-5-1998  
Assignor hereby acknowledged, does hereby grant, bargain, sell, convey, set over, assign and transfer unto Assignee the interest.  
A) ARTI in Exhibits A-1 and A-2.....  
B) ARTI in working and revenue interest  
C) ARTI in contracts .....  
D) ARTI in personal property, fixtures .....

Drilling Appalachian Corporation

**Drilling Appalachian Corporation**

DB 401/343  
D 7-24-2012  
R 10-1-2012  
Whereas, Drilling Appalachian Corporation and Dominion Exploration & Production, INC, entered into that certain amendment.... DB 377/413 and Whereas, Assignee previously assigned to Assignor, or its predecessors.....DB 322/190.  
Whereas, Assignor desires to execute this Assignment for purposes of correcting these discrepancies.....Subject tract listed.

**Assignment**

**CNX**

**Dominion Appalachian Development Properties, L.L.C.,**

DB 322/190  
D 12-30-1997  
R 1-5-1998  
Assignor hereby acknowledged, does hereby grant, bargain, sell, convey, set over, assign and transfer unto Assignee the interest.  
A) ARTI in Exhibits A-1 and A-2.....  
B) ARTI in working and revenue interest  
C) ARTI in contracts .....  
D) ARTI in personal property, fixtures .....

Drilling Appalachian Corporation

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Environmental Protection



**USB America Inc.**

DB 345/589  
 D 3-2-2005  
 R 3-8-2005

Conveyance of term overriding royalty including assignment of interests in oil and gas wells and leases Assignor, for and in consideration of the sum of Ten dollars and other good and valuable consideration to assignor in hand paid by assignee, the receipt and sufficiency of which are hereby acknowledged, has sold, granted, conveyed, assigned, set over and delivered, and by these presents does hereby sell, grant, convey, assign, set over and deliver, unto assignee as a term overriding royalty, an undivided interest ( herein referred to as the Production Payment )

Drilling Appalachian Corporation,  
 DB 322/209  
 D: 11-1-1997  
 R: 1-6-1998

Doos hereby grant, bargain, sell, convey, release, assign, transfer, set over & deliver...  
 ..20833% working interest in that certain oil & gas well...  
 Ash #1  
 API # 47-095-1226

**Drilling Appalachian Corporation,**

DB 324/338  
 D 7-1-1998  
 R 9-11-1998

By these presents do hereby grant, bargain, sell, convey, assign, transfer, set over and deliver unto the grantee.  
 A) Except as specifically excluded hereinbelow, all of the grantors' right title and interest in, to and under the wells described in Exhibit A including, but not limited to, those net revenue interest and working interest indicated in Exhibit A attached hereto; all of the grantors' right title and interest in, to and under the oil, gas and/or mineral leases.....

( TREK ), Reilly Industries, Inc.,  
 North American Search Associates, Inc., ( NASA ) and  
 Edward B. Kime, ( Kime )

Reilly Industries, Inc., F/K/A Reilly Tar & Chemical Corporation ( Reilly ),  
 North American Search Associates, Inc., ( NASA ),  
 Edward B. Kime, ( Kime )  
 Park Place Partners, ( Park Place ) and  
 RECOFF, ( REOFF )

DB 324/439  
 D 7-25-1994  
 R 9-22-1998

- A. Assignor is the lessee under oil and gas leases for certain land in Tyler, Doddridge and Ritchie Counties, WV, (individually, a Lease and Collectively, the Leases) , with the wells located on such leases identified on Exhibit A-1 hereto (individually, a well and collectively, the wells).
- B. Assignor is the grantee under right-of-way agreements for certain land in Tyler, Doddridge and Ritchie Counties, WV, identified on Exhibit C, attached hereto and incorporated herein by reference ( individually, a right-of-way agreement and collectively, the right-of-way agreements ).
- C. Assignor has heretofore entered into separate assignments of working interest in each well with one or more of the assignees, whereby, inter alia, Assignor has assigned to the assignees certain percentages of Assignor's working interest in wells as lessee under the leases all summarized on Exhibit A-1 hereto ( the working interest assignments ). The percentage of working interest not assigned as listed on Exhibit A-1 is retained by Assignor.
- D. The working interest assignments cross-referenced on Exhibit A-1 in turn described and cross-reference the leases.
- E. The working interest assignments do not assign any interest in the leases, and the parties now desire to designate certain acreage surrounding each well for assignment to assignees, as indicated on Exhibit A-2 hereto, and as designated and shown on the surveyed plats for each well, attached hereto as Exhibit B (the plats).
- F. Assignor now desires to partially assign its rights as lessee under the leases, and other rights pertaining to leases to assignees.
- G. Assignor now desires to partially assign its rights as grantee under the right-of-way agreements to assignees.

Drilling Appalachian Corporation,

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Lease History page 4  
TM 01-016-0019  
Centerville District  
Tyler County, WV  
111 acres

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Charles A. Partato

DB 273/24  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
1.250% working  
interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

Robert J. Reger, Jr.

DB 273/16  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.41667%  
working interest ...  
Ash #1  
API# 47-095-1226  
111 acres

Marden Petroleum Exploration Company

Barda Corporation

DB 273/26  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey ...  
1.000% working  
interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

Pioneer Brook Investments Corp. N.V.

DB 273/29  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
1.041666%  
working interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

W. Haircourt Woods & Donna E. Simon ( jointly)

DB 273/22  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey ...  
1.250% working  
interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

Robert J. Reger, Jr.

DB 273/18  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.41667%  
working interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

J. Carter Glass & Margaret S. Glass ( jointly)

DB 273/21  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.41667%  
working interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

David R. Hardy

DB 273/19  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.41667%  
working interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

Clive D. Conley & Susan R. Conley ( jointly)

DB 273/27  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.208333%  
working interest ...  
Ash #2  
API# 47-095-1227  
111 acres

Marden Petroleum Exploration Company

W. Haircourt Woods & Donna E. Simon ( jointly)

DB 273/9  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
1.250% working  
interest ...  
Ash #1  
API# 47-095-1226  
111 acres

Marden Petroleum Exploration Company

J. Carter Glass & Margaret S. Glass ( jointly)

DB 273/10  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.41667%  
working interest ...  
Ash #1  
API# 47-095-1226  
111 acres

Marden Petroleum Exploration Company

Pioneer Brook Investments Corp. N.V.

DB 273/12  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
1.041666%  
working interest ...  
Ash #1  
API# 47-095-1226  
111 acres

Marden Petroleum Exploration Company

David R. Hardy

DB 273/13  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.41667%  
working interest ...  
Ash #1  
API# 47-095-1226  
111 acres

Marden Petroleum Exploration Company

Clive D. Conley & Susan R. Conley ( jointly)

DB 273/15  
D: 5-6-1988  
R: 5-31-1988  
Does transfer,  
assign & convey...  
0.208333%  
working interest ...  
Ash #1  
API# 47-095-1226  
111 acres

Marden Petroleum Exploration Company

Marden Petroleum Exploration Company

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey... 6%  
 working interest in a  
 certain oil & gas well  
 ... known as Ash #1  
 PR DB 269 & 271  
 page 571 & 103

Marden Petroleum Exploration Company

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey... 6%  
 working interest in a  
 certain oil & gas well  
 ... known as Ash #2  
 PR DB 269 & 271  
 page 571 & 103

Reilly Tar & Chemical Corporation

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey...  
 70% working interest  
 in a certain oil & gas  
 well ... known as Ash  
 #2  
 PR DB 269 & 271  
 page 571 & 103

Drilling Appalachian Corporation

North American Search Associates, Inc.

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey...  
 24% working interest  
 in a certain oil & gas  
 well ... known as Ash  
 #1  
 PR DB 269 & 271  
 page 571 & 103

Reilly Tar & Chemical Corporation

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey...  
 70% working interest  
 in a certain oil & gas  
 well ... known as Ash  
 #1  
 PR DB 269 & 271  
 page 571 & 103

Drilling Appalachian Corporation

North American Search Associates, Inc.

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey...  
 24% working interest  
 in a certain oil & gas  
 well ... known as Ash  
 #2  
 PR DB 269 & 271  
 page 571 & 103

Reilly Tar & Chemical Corporation

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey...  
 70% working interest  
 in a certain oil & gas  
 well ... known as Ash  
 #3  
 PR DB 269 & 271  
 page 571 & 103

North American Search Associates, Inc.

Does hereby bargain,  
 sell, set over,  
 transfer, assign,  
 grant & convey...  
 30% working interest  
 in a certain oil & gas  
 well ... known as Ash  
 #3  
 PR DB 269 & 271  
 page 571 & 103

Drilling Appalachian Corporation

Drilling Appalachian Corporation  
 DB 269/571  
 D: 8-13-1987  
 R: 9-30-1987

Verna O. Ash ; James E. Ash &  
 Thelma B. Ash ; Bessie Haught &  
 Harold Warner ; Ernest G.  
 Seckman & O. Joanne Seckman

111 acres +/-  
 2 year term from the date  
 hereof, and as much longer as  
 oil or gas is found in paying  
 quantities thereon...

Drilling Appalachian Corporation

Drilling Appalachian Corporation  
 DB 271/103  
 D: 1-21-1988  
 R: 1-21-1988

Ralph E. Phillips & Velinda  
 Phillips, his wife

111 acres +/-  
 2 year term from the date  
 hereof, and as much longer as  
 oil or gas is found in paying  
 quantities thereon...

Drilling Appalachian Corporation

Drilling Appalachian Corporation  
 DB 273/294  
 D: 6-20-1988  
 R: 6-22-1988

Drilling Appalachian Corporation

Drilling Appalachian Corporation  
 DB 273/469  
 D: 7-7-1988  
 R: 7-15-1988

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8. **FARMOUT AGREEMENTS**

None of record.

\*\*\*\*\*

**IV.**  
**ANALYSIS OF CURRENT OIL AND GAS LEASES, ASSIGNMENTS AND RELATED INSTRUMENTS**

1. **CURRENT OIL AND GAS LEASES**

A. Instrument: **Oil and Gas Lease (Exhibit 33)**  
("Current Oil and Gas Lease A")  
Dated: August 13, 1987  
Filed: September 30, 1987  
Recorded: Deed Record 269, Page 571  
Lessors: Verna O. Ash; James E. Ash and Thelma B. Ash;  
Bessie Haught and Harold Warner; and Ernest G.  
Seckman and O. Jo Anne Seckman  
Lessee: Drilling Appalachian Corporation  
Description: 111 acres, including the Subject Land  
Interest Covered: Oil and gas  
Primary Term: 2 years  
Royalty: 12.5%  
Delay Rentals: \$5.00 per acre per year  
Shut-In Royalty: Not stated in lease.  
Unitization/Pooling: Not stated in lease.  
Special Provisions: Free gas

**COMMENT NO. 10: Primary Term of Current Oil and Gas Leases Expired.** The primary terms of the Current Oil and Gas Leases described above and below in this Section IV(1) have expired. The Materials Examined contain several instruments pertaining to the Current Oil and Gas Leases dated and recorded after the expiration of the primary terms, and as recently as October 29, 2012, indicating that they are likely held by production and in their secondary terms.



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**REQUIREMENT NO. 10:** Prior to conducting operations on the Subject Land, we strongly recommend that you satisfy yourselves that the Current Oil and Gas Leases have been maintained by production and are in their secondary term. If you determine that the Current Oil and Gas Leases have terminated, you should obtain and record new oil and gas leases covering the Subject Land.

**COMMENT NO. 11: Current Oil and Gas Leases Do Not Allow Pooling or Unitization.** The Current Oil and Gas Leases do not allow for the lessee to pool the Subject Land with other tracts to create a drilling or production unit. Consequently, production from a unitized well affecting the Subject Land may give rise to a cause of action against the operator or result in the termination of the leases for failure to operate in accordance with the terms thereof. See W. Va. Code §§ 55-7-10, 37-7-2, and 37-7-4. See also *Bryan v. Big Two Mile Gas Co.*, 213 W. Va. 110, Syl. Pt. 8 (2001). We assess the risk posed by the foregoing to be high, and make the following curative recommendation.

**REQUIREMENT NO. 11:** Prior to obtaining an interest in the Current Oil and Gas Leases, you should conduct an additional search of the county records to verify whether the current or former owners of the Oil and Gas Estate have executed pooling amendments affecting the Current Oil and Gas Leases. If you cannot locate such amendments in the county records, you should obtain amendments and ratifications of the Current Oil and Gas Leases from the owners of the Oil and Gas Estate with language allowing for the lands covered by the Current Oil and Gas Leases to be pooled and unitized for the purpose of producing oil and gas.

B. Instrument: **Oil and Gas Lease (Exhibit 34)**  
("Current Oil and Gas Lease B")  
Dated: January 21, 1988  
Filed: January 21, 1988  
Recorded: Deed Record 271, Page 103  
Lessors: Ralph E. Phillips and Velinda Phillips, husband and wife



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Lessee: Drilling Appalachian Corporation  
Description: 111 acres, including the Subject Land  
Interest Covered: Oil and gas  
Primary Term: 2 years  
Royalty: 12.5%  
Delay Rentals: \$5.00 per acre per year  
Shut-In Royalty: Not stated in lease.  
Unitization/Pooling: Not stated in lease.  
Special Provisions: Free gas

See Comments and Requirements Nos. 10 and 11.

2. **ASSIGNMENTS AND RELATED INSTRUMENTS**

A. Instrument: **Partial Assignment of Oil and Gas Leases and Rights-of-Way (Exhibit 35)**  
Dated: July 25, 1994  
Filed: September 22, 1998  
Recorded: Deed Record 324, Page 439  
Assignor: Drilling Appalachian Corporation  
Assignees: Reilly Industries, Inc. (f/k/a Reilly Tar and Chemical Corporation), North American Search Associates, Inc., Edward B. Kime, Park Place Partners and REOFF  
Interests Assigned: An undivided 70% working interest relating to a 22 acre tract surrounding the Ash #1, #2 and #3 Wells to Reilly Industries, Inc.; along with an undivided 24% working interest relating to a 22 acre tract surrounding the Ash #1 and #2 Wells and an undivided 30% working interest relating to a 22 acre tract surrounding the Ash #3 Well to North American Search Associates, Inc.

**NOTE:** The purpose of the above Assignment was to assign a working interest in the Current Oil and Gas Leases as to certain land surrounding the Ash #1, #2 and #3 Wells.

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Amendment: By Amendment and Clarification of Retained Acreage Under Partial Assignment of Oil and Gas Lease and Rights-of-Way effective February 1, 2010, the Assignor and Dominion Exploration and Production, Inc. (successor in interest to the above Assignees) desired to clarify and amend the acreage assigned in the above assignment to now be 45 total acres surrounding the Ash Wells, with all remaining acreage in the Current Oil and Gas Leases to be retained by the Assignor (DR 372/413, Exhibit 36).

Amendment: By Assignment effective July 24, 2012, the Assignor and CNX Gas Company, LLC (successor in interest to the above Assignees) desired to again clarify and amend the acreage assigned in the above assignment and amendment to clarify that the Assignor was to retain 45 acres, while CNX Gas Company, LLC was to have 66 acres out of the Current Oil and Gas Lease (DR 401/343, Exhibit 37).

B. Instrument: **Assignment** (Exhibit 38)  
Dated: December 30, 1997  
Filed: January 5, 1998  
Recorded: Deed Record 322, Page 190  
Assignor: Drilling Appalachian Corporation  
Assignee: Dominion Appalachian Development Properties, L. L. C.  
Interests Assigned: All of Assignor's right, title and interest in various leases, including Current Oil and Gas Lease A, along with operating rights and interests associated therewith in various wells, including the Ash #1, #2 and #3 Wells.

**NOTE:** This assignment is also located in Exhibit B, below, as it also pertains to the Ash #1, #2 and #3 Wells.

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**NOTE:** Current Oil and Gas Lease B was not included in the above assignment, however, because it is listed in subsequent assignments, we believe this was an inadvertent omission.

**NOTE:** The Materials Examined indicate that through a series of mergers and name changes Dominion Appalachian Development Properties, L.L.C. eventually became CNX Gas Company, LLC (DR 384/191, Exhibit 39).

C. Instrument: **Assignment** (Exhibit 40)  
Dated: April 30, 2010  
Filed: May 4, 2010  
Recorded: Deed Record 374, Page 187  
Assignor: Dominion Transmission, Inc.  
Assignee: CONSOL Energy Holdings LLC XVI  
Interests Assigned: All right, title and interest in various leases and wells, and certain surface rights connected to those properties listed as "Company Mineral Interests and Excluded DEPI Interests," including the Current Oil and Gas Leases.

**NOTE:** The Current Oil and Gas Leases are listed on Exhibit A-3 to the above assignment, containing "Company Mineral Interests and Excluded DEPI Interests." Therefore, the above Assignment conveys only the right to use the surface of the acreage covered by the Current Oil and Gas Leases, and does not assign any interests in the leases themselves or wells drilled pursuant to the leases.

**COMMENT NO. 12: Unrecorded Documents Potentially Affecting Leasehold Interests.** The respective percentages of oil and gas leasehold/net revenue interests set forth in Section II(6) of this Opinion are based on those instruments identified and described in Section IV, Analysis of Current Oil and Gas Leases, Assignments and Related Instruments. Such instruments internally reference agreements that exist between the parties thereto which are not of record.

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**REQUIREMENT NO. 12:** You should request all related agreements, including those listed below, and satisfy yourselves that the terms and conditions of such agreements do not alter or affect the respective interests of the oil and gas leasehold or net revenue interests of the above-named parties. You may provide such documentation and information to us for review in a supplemental opinion.

1. A Purchase and Sale Agreement dated March 14, 2010 between Dominion Transmission, Inc., Dominion Resources, Inc., Dominion Energy, Inc. and CONSOL Energy Holdings LLC XVI;
2. An Asset Acquisition Agreement dated August 17, 2011 between CNX Gas Company, LLC and Noble Energy, Inc.;
3. A Joint Venture Agreement between Drilling Appalachian Corporation and an unidentified party; and
4. A Purchase and Sale Agreement dated July 1, 1998 between Trek, Incorporated; Reilly Industries, Inc.; North American Search Associates, Inc.; Edward B. Kime; and Dominion Appalachian Development, Inc.

D. Instrument: **Assignment (Exhibit 41)**  
Dated: September 28, 2011; effective July 1, 2011  
Filed: November 2, 2011  
Recorded: Deed Record 388, Page 286  
Assignor: CNX Gas Company, LLC  
Assignee: Noble Energy, Inc.  
Interests Assigned: An undivided 50% interest in various leases, including the Current Oil and Gas Leases, but only as to the depths within the Marcellus Formation.

**NOTE:** The above Assignment defines the “Marcellus Formation” in West Virginia as being “from the stratigraphic equivalent of the top of the Burkett in DEPI #14815 (API 47-001-02850) at 7350’MD through the stratigraphic equivalent of the top of the Onondaga at 7710’MD.”



*Assignment O&G 272-421*      *Assignment O&G 313 Regal return 29*  
*Assignment O&G 302, pg. 190*      *Assignment O&G 345 pg. 587*  
269-571

OIL AND GAS LEASE

This Agreement, Made this 13th day of August, 1987, between Verna O. Ash; James E. Ash and Thelma B. Ash; Bessie Haught and Harold Warner; Ernest G. Seckman and O. Joanne Seckman, of Alma, West Virginia, County of Tyler, and State of West Virginia, Lessor, and DRILLING APPALACHIAN CORPORATION, of Box 99, Alma, West Virginia, 26320, State of West Virginia, Lessee.

Witnesseth That the Lessor in consideration of Five Dollars (\$5.00), the receipt of which is hereby acknowledged, and of other valuable consideration does hereby demise and grant unto the Lessee, its heirs or assigns, a lease on all the oil and gas in and under the following described tract of land, and also the said tract of land for the purpose and with the exclusive right of operating thereon for said oil and gas, together with the right-of-way, the right to lay pipes over, and to use water from said premises, and also the right to erect, or remove, at any time, all property placed there by the Lessee, which tract of land is situated in the District of Centerville, County of Tyler, and State of West Virginia, and bounded and described as follows, to-wit:

- North by lands of Dillon,
- East by lands of Pratt,
- South by lands of Doak/Andras Kanham
- West by Doak/Ash,

and containing 111 acres, more or less.

To have and to hold the same unto the Lessee, its heirs and assigns for the terms and period of two (2) years from the date hereof, and as much longer as oil or gas is found in paying quantities thereon, yielding and paying to the Lessor the 1/8 part or proportionate part of all the oil produced and saved from the premises, delivered free of expense into tanks or pipe lines to the Lessor's credit, and should any well produce gas in sufficient quantities to justify the marketing, the Lessor shall be paid at the rate of 1/8 Field Market Value or proportionate part, as long as the gas therefrom is sold.

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In case no well shall be commenced on the above described premises within two (2) years from the date hereof, this lease shall become null and void, and without any further effect whatever. The Lessee shall pay for the delay at the rate of \$5.00 per acre per year, payable quarterly in advance, until a well shall be commenced. Such payment may be made in hand or by check to Verna O Ash, Alma, West Virginia.

And it is Further Agreed that the Lessor, in consideration of the agreements of the Lessee herein contained, agree that the Lessee, its heirs or assigns, may at any time surrender up this lease, by delivering same back to the Lessor, his heirs or assigns, endorsed with a surrender thereof, signed by him, and be forever discharged and released from all moneys due or to become due and from all obligations accrued or to accrue under this lease, and thereupon this lease shall be and remain null and void, and of no further effect, and whatever moneys shall have been received by the Lessor herein shall be retained by him.

It is Further Agreed there shall be free gas from Lessee's gas well on said lands for use for light and heat in one dwelling house on said land, in the amount of 200,000 cubic feet per dwelling per year. Lessor further covenants and agrees that his taking and use of gas shall be wholly at his own risk, the Lessee not to be held liable for any accident or damage caused thereby nor shall Lessee be liable for any shortage or failure in the supply of gas for said domestic use.

In Witness Whereof, The said parties have hereunto set their hands and seals, the day and year first above written.

WITNESSES:

Kimmy Mason  
Kimmy Mason  
Kimmy Mason  
Kimmy Mason  
Kimmy Mason  
Kimmy Mason  
Kimmy Mason

Verna O. Ash (Seal)  
Louis E. Ash (Seal)  
William B. Ash (Seal)  
Bessie Haught (Seal)  
Harold Merwin (Seal)  
Ernest L. Johnson (Seal)  
Olive Joanne Seckman (Seal)

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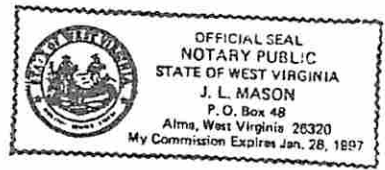
ACKNOWLEDGEMENT

STATE OF WEST VIRGINIA,  
COUNTY OF Tyler, to-wit:

I, J. L. Mason, a Notary Public  
in and for the County and State aforesaid, do hereby  
certify that Verna O Ash, James E. Ash, Thelma B. Ash, Bessie Haught,  
Harold Warner, Ernest G. Seckman, and O. Joanne Seckman

whose names are signed to the foregoing instrument bearing the  
date the 13<sup>th</sup> day of August, 19 87, have each this  
day acknowledged the same before me in my said county.

Given under my hand this 29<sup>th</sup> day of September, 1987.  
My commission expires: Jan. 28



J. L. Mason  
Notary Public

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This instrument prepared for Drilling Appalachian Corporation by:

J. L. Mason  
P. O. Box 99  
Alma, WV 26320-0099

STATE OF WEST VIRGINIA, COUNTY OF TYLER, TO-WIT:  
OFFICE OF THE CLERK OF THE COUNTY COMMISSION OF TYLER COUNTY.

The foregoing paper writing was this day Sept. 30, 19 87, at 3:52 PM  
presented for record in my office, and thereupon, together with the certificate thereto annexed, is admitted to record

Drilling Appalachian Corp.  
Box 99  
Alma, WV 26320

Teste: Alma R. [Signature]

Clerk.

County Commission of Tyler County

OIL AND GAS LEASE

Assigned 272-428  
272-427  
272-428  
Assignment DB 345 pgs. 589

101

271-103

31

This Agreement, Made this 21st day of January, 1988, between Ralph E. Phillips and Velinda Phillips, his wife, of New Martinsville, County of Wetzel, and State of West Virginia, Lessor, and DRILLING APPALACHIAN CORPORATION, of Box 99, Alma, West Virginia, 26320, State of West Virginia, Lessee.

Witnesseth That the Lessor in consideration of Five Dollars (\$5.00), the receipt of which is hereby acknowledged, and of other valuable consideration does hereby demise and grant unto the Lessee, its heirs or assigns, a lease on all the oil and gas in and under the following described tract of land, and also the said tract of land for the purpose and with the exclusive right of operating thereon for said oil and gas, together with the right-of-way, the right to lay pipes over, and to use water from said premises, and also the right to erect, or remove, at any time, all property placed there by the Lessee, which tract of land is situated in the District of Centerville, County of Tyler, and State of West Virginia, and bounded and described as follows, to wit:

- North by lands of Dillon,
- East by lands of Pratt,
- South by lands of Doak/Andras Kanham
- West by Doak/Ash,

and containing 111 acres, more or less.

To have and to hold the same unto the Lessee, its heirs and assigns for the terms and period of 2 ( ) years from the date hereof, and as much longer as oil or gas is found in paying quantities thereon, yielding and paying to the Lessor the 1/8 part or proportionate part of all the oil produced and saved from the premises, delivered free of expense into tanks or pipe lines to the Lessor's credit, and should any well produce gas in sufficient quantities to justify the marketing, the Lessor shall be paid at the rate of \$ \_\_\_\_\_ as the gas therefrom is sold.

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WV Department of Environmental Protection 06/26/2015

In case no well shall be commenced on the above described premises within 2 ( ) years from the date hereof, this lease shall become null and void, and without any further effect whatever. The Lessee shall pay for the delay at the rate of \$ 5 per acre per year, payable ~~quarterly~~ <sup>YEARLY</sup> in advance, until a well shall be commenced. Such payment may be made in hand or by check to Ralph E. Phillips and Velinda Phillips, West Virginia.

And it is Further Agreed that the Lessor, in consideration of the Agreements of the Lessee herein contained, agree that the Lessee, its heirs or assigns, may at any time surrender up this lease, by delivering same back to the Lessor, his heirs or assigns, endorsed with a surrender thereof, signed by him, and be forever discharged and released from all moneys due or to become due and from all obligations accrued or to accrue under this lease, and thereupon this lease shall be and remain null and void, and of no further effect, and whatever moneys shall have been received by the Lessor herein shall be retained by him.

It is Further Agreed there shall be free gas from Lessee's gas well on said lands for use for light and heat in one dwelling house on said land, in the amount of 200,000 cubic feet per dwelling per year. Lessor further covenants and agrees that his taking and use of gas shall be wholly at his own risk, the Lessee not to be held liable for any accident or damage caused thereby nor shall Lessee be liable for any shortage or failure in the supply of gas for said domestic use.

In Witness Whereof, The said parties have hereunto set their hands and seals, the day and year first above written.

WITNESSES:

*Kenneth Thomas*

*Ralph E. Phillips* (Seal)

*Kenneth Thomas*

*Velinda Phillips* (Seal)

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Environmental Protection

06/26/2015



ACKNOWLEDGMENT

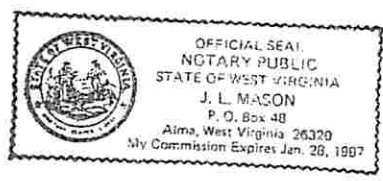
STATE OF WEST VIRGINIA,  
COUNTY OF Tyler, to-wit:

I, J. L. Mason, a Notary Public  
in and for the County and State aforesaid, do hereby  
certify that Ralph E. Phillips + Velinda Phillips

whose names are signed to the foregoing instrument bearing  
the date the 21st day of January, 1988, have each this  
day acknowledged the same before me in my said county.

Given under my hand this 21st day of January, 1988.

My commission expires: Jan. 28, 1997



J. L. Mason  
Notary Public

This instrument prepared for Drilling Appalachian Corporation by:

J. L. Mason  
P. O. Box 99  
Alma, WV 26320-0099

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WV Department of  
Environmental Protection

STATE OF WEST VIRGINIA, COUNTY OF TYLER, TO-WIT:  
OFFICE OF THE CLERK OF THE COUNTY COMMISSION OF TYLER COUNTY.

The foregoing paper writing was this day January 21 1988, at 3:38 PM  
presented for record in my office at

Drilling Appalachian Corp.  
Box 99  
Alma, WV 26320

Teste: Donna J. Thomas Clerk

County Commission of Tyler County



DB 372-413

AMENDMENT AND CLARIFICATION OF RETAINED ACREAGE UNDER  
PARTIAL ASSIGNMENT OF OIL AND GAS LEASES AND  
RIGHTS-OF-WAY

THIS AMENDMENT AND CLARIFICATION OF RETAINED ACREAGE UNDER PARTIAL ASSIGNMENT OF OIL AND GAS LEASES AND RIGHTS-OF-WAY is made and entered into effective as of the 1<sup>st</sup> day of February, 2010, by and between DRILLING APPALACHIAN CORPORATION, a West Virginia corporation (referred to hereinbelow as "DAC"), and DOMINION EXPLORATION & PRODUCTION, INC., a Delaware corporation (referred to hereinbelow as "Dominion").

DRILLING APPALACHIAN CORPORATION  
P.O. BOX 99  
ALPA, WV 26201-0099

RECITALS

WHEREAS, by that certain Partial Assignment of Oil and Gas Leases and Rights-of-Way (the "Prior Assignment") dated July 25, 1994, by and between DAC, as "Assignor" therein, and Reilly Industries, Inc., an Indiana corporation, North American Search Associates, Inc., a Delaware corporation, Edward B. Kime, Park Place Partners, an Indiana partnership, and Reoff, an Indiana Partnership, collectively referred to as "Assignee" or "Assignees" therein (hereinafter, the "Assignees"), DAC assigned unto the aforesaid Assignees certain Working Interests (as defined therein) in all of its right, title, and interest, as lessee or otherwise, in and to the acreage set forth on Exhibit A-2 thereto and depicted on Exhibit B thereto, surrounding the Wells drilled pursuant to the Leases (both as defined therein) (hereinafter referred to as the "Leases"), as set forth on Exhibit A-1 thereto, along with an undivided percentage interest commensurate with the assigned Working Interests in all of its right, title, and interest, as grantee or otherwise, in and to the Right-of-Way Agreements set forth on Exhibit C thereto;

WHEREAS, Paragraph No. 2 of the Prior Assignment states, in part, that "all acreage not assigned . . . to Assignees [thereunder] shall be retained by Assignor . . . (the "Retained Acreage")" (hereinafter, the "Retained Acreage");

WHEREAS, through various *mesne* conveyances and mergers, Dominion is the successor in interest to the Assignees in the Prior Assignment; and

WHEREAS, DAC and Dominion now desire to clarify, memorialize, and more specifically define the Retained Acreage not assigned unto the Assignees by the Prior Assignment, the leasehold interest in which Retained Acreage is now owned by DAC.

NOW THEREFORE, in consideration of such premises, the mutual covenants and agreements hereinafter contained, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. DAC and Dominion agree that the Retained Acreage, as defined in Paragraph No. 2 of the Prior Assignment, shall henceforth mean the acreages, and, where applicable, Wells, not assigned unto Assignees by the Prior Assignment, the same being set forth on Exhibit A attached hereto and made a part hereof, said acreage being held by the Leases also described on the aforesaid Exhibit A. The parties hereto intend that the said Exhibit A supersede 5332855.6

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DB 372-414

and replace Exhibit A-2 to the Prior Assignment. The parties hereto agree that any acreage which is part of "Lease Acreage" on Exhibit A, and not classified as "Assigned Acreage" thereon, shall be deemed "Retained Acreage." The parties hereto also agree that all Retained Acreage may not, and need not, be shown and depicted on Exhibit B to the Prior Assignment.

2. To the extent the Prior Assignment inadvertently assigned any of the Retained Acreage set forth on Exhibit A to the Assignees in the Prior Assignment, Dominion hereby grants, assigns, sets over, and re-conveys unto DAC, all of its right, title, and interest in and to any such acreages.

3. The parties hereto agree to further modify and define the Retained Acreage should information become available that would warrant such modification, such as revised surveys and/or field investigations.

4. The sole purpose of this Agreement is to more specifically define the Retained Acreage as defined in the Prior Assignment. All other terms and provisions of the Prior Assignment shall remain in full force and effect.

IN WITNESS WHEREOF, Drilling Appalachian Corporation and Dominion Exploration & Production, Inc. have caused their duly authorized representatives to execute this Agreement as of the date first above written.

DRILLING APPALACHIAN CORPORATION,  
a West Virginia corporation

By *Kenneth R. Mason*  
Kenneth R. Mason  
Its: President

DOMINION EXPLORATION & PRODUCTION, INC.,  
a Delaware corporation

By *B.A. Hardesty* *BSY*  
Benjamin A. Hardesty  
Its: President

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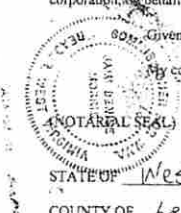
DB 372-415

STATE OF WEST VIRGINIA,  
COUNTY OF TYLER, TO-WIT:

The foregoing instrument was acknowledged before me this 9<sup>th</sup> day of March, 2010, by Kenneth R. Mason, the President of Drilling Appalachian Corporation, a West Virginia corporation, on behalf of said corporation

Given under my hand this 9<sup>th</sup> day of March, 2010.

My commission expires: April 6, 2015



Jami Morris  
Notary Public

STATE OF West Virginia,  
COUNTY OF Lewis, TO-WIT:

The foregoing instrument was acknowledged before me this 11<sup>th</sup> day of March, 2010, by Benjamin A. Hardesty, the President of Dominion Exploration & Production, Inc., a Delaware corporation, on behalf of said corporation.

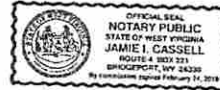
Given under my hand this 11<sup>th</sup> day of March, 2010.

My commission expires: 2/24/2016

(NOTARIAL SEAL)

Jamie L. Cassell  
Notary Public

This instrument was prepared by:  
Drilling Appalachian Corporation  
P.O. Box 99  
Alma, WV 26320



LORA C THOMAS  
TYLER County 01:26:40 PM  
Instrument No 44285  
Date Recorded 03/22/2010  
Document Type APEND/OE  
Book-Page 372-413  
Recording Fee \$9.00  
Additional \$6.00

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DB 401-343

TYLER COUNTY, WV

ASSIGNMENT

This ASSIGNMENT (this "Assignment") is from CNX GAS COMPANY LLC, a Virginia limited liability company ("Assignor"), whose address is 1000 CONSOL Energy Drive, Canonsburg, PA 15317, to DRILLING APPALACHIAN CORPORATION, a West Virginia corporation ("Assignee"), whose address is P.O. Box 99, Alma, WV 26320-0099, and is effective as of 7:01 a.m. (Central Time) on July 24, 2012 (the "Effective Time").

RECITALS

WHEREAS, Assignee previously assigned to Assignor, or its predecessors in interest, all of Assignee's right, title and interest in the oil and gas within and underlying the Leases, as more particularly described on Exhibit A, by an assignment of record in the Office of the Clerk of the County Commission of Tyler County, West Virginia, in Deed Book 322, Page 190 ("Prior Assignment");

WHEREAS, Drilling Appalachian Corporation and Dominion Exploration & Production, Inc. entered into that certain Amendment and Clarification of Retained Acreage Under Partial Assignment of Oil and Gas Leases and Rights-of-Way date February 1, 2010 of record in the Office of the Clerk of the County Commission of Tyler County, West Virginia, in Deed Book 372, Page 413, which intended to clarify the rights assigned and retained rights of Assignor and Assignee ("Clarification Assignment");

WHEREAS, the Prior Assignment did not adequately and sufficiently describe the acreage being assigned for each Lease, nor did it reflect the intent of the parties thereto, nor was the Clarification Assignment executed by the proper owner of record at the time; and,

WHEREAS, Assignor desires to execute this Assignment for purposes of correcting these discrepancies by assigning to Assignee the leasehold acreage and rights that were inadvertently assigned by the Prior Assignment and Clarification Assignment, while still retaining all leasehold acreage and rights that were intended to be retained.

NOW, THEREFORE, for and in consideration of the mutual promises contained herein, the benefits to be derived by each party hereunder, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee agree as follows:

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DB 401-344

**1.1 Assignment.** Subject to the terms and conditions of this Assignment, Assignor does hereby give, grant, convey, remise, release, assign, transfer and forever quitclaim to Assignee, and Assignee agrees to acquire, all the right, title and interest of Assignor in and to the DAC Acreage of the Leases, as defined on Exhibit A ("Conveyed Interests"), but expressly excluding the CNX Acreage attributable to the Leases, as defined on Exhibit A and depicted on Exhibit B.

**1.2 CNX Acreage.** The Conveyed Interests shall not include, and Assignor hereby excepts, reserves and retains therefrom the CNX Acreage, as more particularly described on Exhibit A and depicted on Exhibit B. Additionally, the Conveyed Interests covered by this Assignment do not include any fee, royalty, executory or other real estate interest that the Assignor may own in the oil and gas within and underlying the tracts of land covered by the Leases.

**1.3 No Warranty.** This assignment is conveyed without warranty, express or implied. Nevertheless, it is the intent of the Assignor to convey all of its right, title and interest in and to DAC Acreage regardless of whether these interests are accurately or completely reflected on Exhibit A or depicted on Exhibit B.

**1.4 Certain Definitions.** The following terms, as used herein, have the meanings set forth below:

"**CNX Acreage**" means those portions of various leasehold estates, together with all valid rights to operate the same, which are not being assigned herein, but are being retained by the Assignor. This CNX Acreage is more particularly described on Exhibit A and depicted on Exhibit B.

"**Lease/Leases**" means Assignor's interest in the leases, which are more particularly described on Exhibit A.

"**DAC Acreage**" means those portions of various leasehold estates being assigned to the Assignee by this Assignment. This DAC Acreage is more particularly described on Exhibit A and depicted on Exhibit B.

**1.5 Exhibits.** The lessors and/or lessees named in the Exhibits to this Assignment may be historic parties in the leasehold chain of title, and, in some cases, said parties may not be the current lessor and/or lessee of the applicable lease.

**1.6 Successors and Assigns.** This Assignment shall bind and inure to the benefit of the parties hereto and their respective successors and assigns.

**1.7 Counterparts.** This Assignment may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all of such counterparts shall constitute for all purposes one agreement. To facilitate recordation, there are omitted from the Exhibits to this Assignment in certain counterparts descriptions of the Conveyed Interests and/or the Subsurface Access Easement located in recording jurisdictions other than the jurisdiction in which the counterpart is to be filed or recorded.

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DB401-345

IN WITNESS WHEREOF, this Assignment has been executed by the parties hereto as of September 14, 2012, but is effective for all purposes as of the Effective Time.

ASSIGNOR:

CNX GAS COMPANY LLC

By: Richard K. Elswick C/O  
Name: Richard K. Elswick  
Its: Vice President

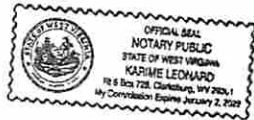
STATE OF West Virginia  
COUNTY OF Putnam, TO-WIT:

I, the undersigned, a notary public of the said county, do hereby certify that on this 14 day of September 2012, before me personally appeared Richard K. Elswick, who acknowledged himself to be the Vice President of CNX GAS COMPANY LLC, and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Karime Leonard  
Notary Public

My commission expires January 2, 2012  
(Notarial Seal)



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DB 401-346

IN WITNESS WHEREOF, this Assignment has been executed by the parties hereto as of September 14, 2012, but is effective for all purposes as of the Effective Time.

ASSIGNEE:

DRILLING APPALACHIAN CORPORATION

By: *Kenneth R. Mason*

Name: *Kenneth R. Mason*

Its: *President & CEO*

STATE OF *West Virginia*  
COUNTY OF *Putnam*, TO-WIT:

I, the undersigned, a notary public of the said county, do hereby certify that on this *27<sup>th</sup>* day of *September* 2012, before me personally appeared *Kenneth R. Mason*, who acknowledged himself to be the *President & CEO* of DRILLING APPALACHIAN CORPORATION, and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

*Karime Leonard*  
Notary Public

My commission expires: *January 2, 2017*  
(Notarial Seal)



This document was prepared by:  
CNX Gas Company LLC  
One Energy Dr.  
Jane Lew, WV 26378



Please Return To:  
Antero Resources  
P.O. Box 410  
Bridgeport, WV 26330

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**DOMESTIC LEASES**  
West Virginia

Operator	CVL Lease Number	Lease	Acres	Well	Page	Initial Lease Area	Area Acquired	Area Released	Area Under Production	Area Available	Area Available	Area Available	
Operator	CVL Lease Number	Lease	Acres	Well	Page	Initial Lease Area	Area Acquired	Area Released	Area Under Production	Area Available	Area Available	Area Available	
Continental	D021128027	West G. No. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	
Continental	D021128028	West G. No. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	
Continental	D021128029	West G. No. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28
Continental	D021128030	West G. No. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28

Page 1 of 1

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Teresia K Hamilton  
Tyler County 01:10:26 PM  
Instrument No 64505  
Date Recorded 10/29/2012  
Document Type 001  
Pages Recorded 8  
Book-Page 402-704  
Recording Fee 48.00  
Additional 44.00

DB 402-704

LAND ADMINISTRATION DIVISION  
100 BOB LIND  
JULY 2012  
JULY 2012

ASSIGNMENT

This ASSIGNMENT (this "Assignment") is from NOBLE ENERGY, INC., a Delaware corporation ("Assignor"), whose address is 100 Glenborough Drive, Suite 100, Houston, Texas 77067, to CNX GAS COMPANY LLC, a Virginia limited liability company ("Assignee"), whose address is 1000 CONSOL Energy Drive, Canonsburg, PA 15317, and is effective as of 7:00 a.m. (Central Time) on July 24, 2012 (the "Effective Time").

RECITALS

WHEREAS, Assignee previously assigned to Assignor an undivided fifty (50%) percent of Assignee's right, title and interest in the Marcellus Formations within and underlying the Leases, as more particularly described on Exhibit A, by an assignment of record in the Office of the Clerk of the County Commission of Tyler County, West Virginia, in Lease Book 388, Page 286 ("Prior Assignment").

WHEREAS, the Prior Assignment did not sufficiently describe the acreage being assigned for each Lease.

WHEREAS, Assignor desires to execute this Assignment for purposes of correcting these discrepancies by assigning to Assignee the leasehold acreage and rights that were inadvertently assigned by the Prior Assignment ("Unearned Acreage"), while still retaining all leasehold acreage and rights that was validly assigned ("Earned Acreage").

NOW, THEREFORE, for and in consideration of the mutual promises contained herein, the benefits to be derived by each party hereunder, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee agree as follows:

**1.1 Assignment.** Subject to the terms and conditions of this Assignment, Assignor does hereby give, grant, convey, remise, release, assign, transfer and forever quitclaim to Assignee, and Assignee agrees to acquire, all the right, title and interest of Assignor in and to the Unearned Acreage attributable to the Leases, as defined on Exhibit A, being an undivided fifty (50%) interest ("Conveyed Interests"):

**1.2 Earned Acreage.** The Conveyed Interests shall not include, and Assignor hereby excepts, reserves and retains therefrom the Earned Acreage, as more particularly described on Exhibit A. Additionally, the Conveyed Interests covered by this Assignment shall not include

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402-705

Mineral Interests and any of the assets covered by the Mineral Interest Deed, to the extent said Mineral Interests and assets were conveyed to Assignee by the Mineral Interest Deed.

**1.3 No Warranty.** This assignment is conveyed without warranty, express or implied. Nevertheless, it is the intent of the Assignor to convey all of its right, title and interest in and to Unearned Acreage regardless of whether these interests are accurately or completely reflected on Exhibit A.

**1.4 Certain Definitions.** The following terms, as used herein, have the meanings set forth below:

**"Earned Acreage"** means those portions of various leasehold estates, together with all valid rights to operate the same, which are not being assigned herein, but are being retained by the Assignor. This Earned Acreage is more particularly described on Exhibit A.

**"Lease/Leases"** means the 50% of Assignor's interest in such Unearned Acreage secured by the leases, which are more particularly described on Exhibit A.

**"Marcellus Formation"** means, (a) in central Pennsylvania, specifically from the stratigraphic equivalent of the top of the Burkett in the DeArmitt #1 (API 37-129-27246) and 7000'MD through to the stratigraphic equivalent of the top of the Onondaga at 7530'MD; (b) in southwest Pennsylvania, specifically from the stratigraphic equivalent of the top of the Burkett in the GH-10C-CV (API 37-059-25397) at 7600'MD through to the stratigraphic equivalent of the top of the Onondaga at 7900'MD; and (c) in West Virginia, specifically from the stratigraphic equivalent of the top of the Burkett in the DEPI #14815 (API 47-001-02850) at 7350'MD through to the stratigraphic equivalent of the top of the Onondaga at 7710'MD.

**"Mineral Interest"** means those certain oil and gas and mineral fee interests granted by Assignor to Assignee pursuant to the Mineral Interest Deed.

**"Mineral Interest Deed"** means that certain Mineral Interest Deed between Assignor and Assignee dated effective as of July 1, 2011, including all recorded counterparts thereof.

**"Prior Assignment"** means that assignment of record in the Office of the Clerk of the County Commission of Tyler County, West Virginia, in Lease Book 388, Page 285.

**"Unearned Acreage"** means those portions of various leasehold estates being assigned to the Assignee by this Assignment. This Affected Acreage is more particularly described on Exhibit A.

**1.5 Exhibits.** The lessors and/or lessees named in the Exhibits to this Assignment may be historic parties in the leasehold chain of title, and, in some cases, said parties may not be the current lessor and/or lessee of the applicable lease.

**1.6 Successors and Assigns.** This Assignment shall bind and inure to the benefit of the parties hereto and their respective successors and assigns.

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402-706

1.7 Counterparts This Assignment may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all of such counterparts shall constitute for all purposes one agreement. To facilitate recordation, there are omitted from the Exhibits to this Assignment in certain counterparts descriptions of the Conveyed Interests and/or the Subsurface Access Easement located in recording jurisdictions other than the jurisdiction in which the counterpart is to be filed or recorded.

IN WITNESS WHEREOF, this Assignment has been executed by the parties hereto as of August 31, 2012, but is effective for all purposes as of the Effective Time.

ASSIGNOR:

NOBLE ENERGY, INC.

By: Shawn E. Conner *ms*

Name: Shawn E. Conner

Its: Vice President - Business Development and Lease

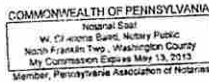
Commonwealth  
STATE OF Pennsylvania  
COUNTY OF Washington, TO-WIT:

I, the undersigned, a notary public of the said county, do hereby certify that on this 31<sup>st</sup> day of August 2012, before me personally appeared Shawn E. Conner who acknowledged himself to be the Vice President - Business Development and Lease of NOBLE ENERGY, INC., and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

St. Charles Davis  
Notary Public

My commission expires: May 13, 2013  
(Notarial Seal)



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WV Department of  
Environmental Protection

402-709

IN WITNESS WHEREOF, this Assignment has been executed by the parties hereto as of September 13<sup>th</sup>, 2012, but is effective for all purposes as of the Effective Time.

ASSIGNEE:

CNX GAS COMPANY LLC

By: Richard K. Elswick

Name: Richard K. Elswick

Its: Vice President

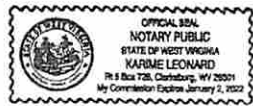
STATE OF West Virginia  
COUNTY OF St. Albans, TO-WIT:

I, the undersigned, a notary public of the said county, do hereby certify that on this 13<sup>th</sup> day of September, 2012, before me personally appeared Richard K. Elswick, who acknowledged himself to be the Vice President of CNX GAS COMPANY LLC, and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

[Signature]  
Notary Public

My commission expires: January 2, 2022  
(Notarial Seal)



This document was prepared by:  
CNX Gas Company LLC  
One Energy Dr.  
Jane Lew, WV 26378

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JUN 8 2015

WV Department of  
Environmental Protection

402-708

EXHIBIT A

LEASES

Lease No.	Reference #	Lessor	Lease Date	Book/Page	Total Lease Acreage	Gross Unearned Acreage (See Below)	Net Unearned Acreage (See Below)	Earned Acreage (See Below)	District	County
1	DAD41259/001	Verna O. Ash, James E. Ash, And	8/13/1987	269/571	111	(See Below)	(See Below)	(See Below)	Centerville	Tyler
1	DAD41259/002	Ralph E. Phillips and Veinida	1/21/1988	271/103	111	(See Below)	(See Below)	(See Below)	Centerville	Tyler
AGGREGATE LEASE ACREAGE FOR DAD41259 (Lease No. 1):										
2	DAD36575	Gary W. Davis, et ux.	3/29/1988	272/216	38.5	23.86 (See Below)	11.93 (See Below)	14.64 (See Below)	Centerville	Tyler
AGGREGATE LEASE ACREAGE FOR DAD36575 (Lease No. 2):										
3	DAD38736/0001	Gale V. Davison, et al.	2/22/1988	271/726	69	(See Below)	(See Below)	(See Below)	Centerville	Tyler
3	DAD38736/002	Rosemary Eagic	4/12/1988	272/297	69	(See Below)	(See Below)	(See Below)	Centerville	Tyler
3	DAD38736/003	Eleanor L. Roth As Poa For	2/22/1988	271/728	69	(See Below)	(See Below)	(See Below)	Centerville	Tyler
AGGREGATE LEASE ACREAGE FOR DAD38736 (Lease No. 3):										
4	DAD40964/001	Edna Dillon	3/3/1988	271/604	45	(See Below)	(See Below)	(See Below)	Centerville	Tyler
4	DAD40964/002	Samuel David Dillon And	5/31/1988	273/472	45	(See Below)	(See Below)	(See Below)	Centerville	Tyler
4	DAD40964/003	Howard D. Spurlock And	5/10/1988	273/97	45	(See Below)	(See Below)	(See Below)	Centerville	Tyler
4	DAD40964/004	Edith M. Doak, single	5/26/1988	273/93	45	(See Below)	(See Below)	(See Below)	Centerville	Tyler
4	DAD40964/005	Pearl G. McIntyre, Single	5/26/1988	273/95	45	(See Below)	(See Below)	(See Below)	Centerville	Tyler

EXHIBIT A

RECEIVED  
Office of Oil and Gas

JUN 8 2015

WV Department of  
Environmental Protection





Office of Oil & Gas  
601 57<sup>th</sup> street, SE  
Charleston, WV 25304-2345

Re: Drilling Under Roads

To Whom It May Concern:

Noble Energy, Inc. has the right to drill, stimulate and produce wells that are drilled under the County and State Roads as designated on the plats.

Should you have any questions or desire additional information, please do not hesitate to contact me at [dee.swiger@nblenergy.com](mailto:dee.swiger@nblenergy.com) or 724-820-3061.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dee Swiger'.

Dee Swiger  
Regulatory Analyst III

DS/

Enclosures:

Received  
Office of Oil & Gas  
MAR 13 2015

06/26/2015

**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE CERTIFICATION**

Date of Notice Certification: \_\_\_\_\_

API No. 47- 095 - \_\_\_\_\_  
Operator's Well No. SHR 08 L \_\_\_\_\_  
Well Pad Name: SHR 08 / 81 \_\_\_\_\_

**Notice has been given:**

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>514174.04</u>
County: <u>095-Tyler</u>		Northing: <u>4358000.65</u>
District: <u>Centerville</u>	Public Road Access: <u>County Rt. 58/2</u>	
Quadrangle: <u>West Union</u>	Generally used farm name: <u>Seckman</u>	
Watershed: <u>huc-10 Middle Island Creek</u>		

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

\*PLEASE CHECK ALL THAT APPLY

- 1. NOTICE OF SEISMIC ACTIVITY or  NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- 2. NOTICE OF ENTRY FOR PLAT SURVEY or  NO PLAT SURVEY WAS CONDUCTED
- 3. NOTICE OF INTENT TO DRILL or  NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or  
 WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- 4. NOTICE OF PLANNED OPERATION
- 5. PUBLIC NOTICE
- 6. NOTICE OF APPLICATION

**OOG OFFICE USE ONLY**

RECEIVED/  
NOT REQUIRED

RECEIVED

RECEIVED/  
NOT REQUIRED

RECEIVED

RECEIVED

RECEIVED

**Required Attachments:**

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been notified as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

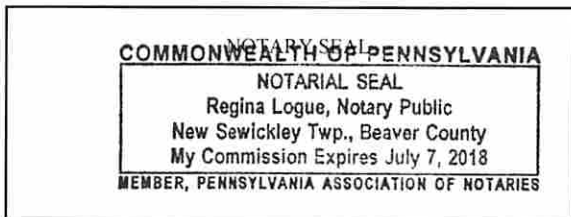
Received  
Office of Oil & Gas  
MAR 13 2015

06/26/2015

**Certification of Notice is hereby given:**

THEREFORE, I Dee Swiger, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:	<u>Noble Energy, Inc.</u>	Address:	<u>1000 Noble Energy Drive</u>
By:	<u><i>Dee Swiger</i></u>		<u>Canonsburg, PA 15317</u>
Its:	<u>Regulatory Analyst III</u>	Facsimile:	<u>724-416-5248</u>
Telephone:	<u>724-820-3061</u>	Email:	<u>dee.swiger@nbenergy.com</u>



Subscribed and sworn before me this 9<sup>th</sup> day of MARCH 2015.  
*Regina Logue* Notary Public  
 My Commission Expires 07/07/2018

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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MAR 13 2015

06/26/2015

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF APPLICATION

**Notice Time Requirement:** notice shall be provided no later than the filing date of permit application.

Date of Notice: \_\_\_\_\_ Date Permit Application Filed: \_\_\_\_\_

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

- SURFACE OWNER(s)  
Name: James Eli Ash  
Address: 8707 Middle Island Road  
Alma, WV 26320  
Name: Bessie Eileen Warner  
Address: HC 74 Box 78  
Alma, WV 26320
- SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_
- SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: none  
Address: \_\_\_\_\_

COAL OPERATOR  
Name: none  
Address: \_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: James Eli Ash  
Address: 8707 Middle Island Road  
Alma, WV 26320

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: none  
Address: \_\_\_\_\_

Received  
Office of Oil & Gas  
MAR 13 2015

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF APPLICATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**

**Date of Notice:** \_\_\_\_\_ **Date Permit Application Filed:** \_\_\_\_\_

**Notice of:**

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

- SURFACE OWNER(s)  
Name: Beverly Seckman  
Address: 353 Foundry St.  
New Martinsville, WV 26155  
Name: Stanly Seckman  
Address: 659 Jefferson Run Road  
Alma, WV 26320
- SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_
- SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

- COAL OWNER OR LESSEE  
Name: none  
Address: \_\_\_\_\_
- COAL OPERATOR  
Name: none  
Address: \_\_\_\_\_
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_
- OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: none  
Address: \_\_\_\_\_

**Received**  
**Office of Oil & Gas**  
MAR 13 2015



**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF APPLICATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**

**Date of Notice:** \_\_\_\_\_ **Date Permit Application Filed:** \_\_\_\_\_

**Notice of:**

- PERMIT FOR ANY WELL WORK       CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

- PERSONAL SERVICE       REGISTERED MAIL       METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice    WSSP Notice    E&S Plan Notice    Well Plat Notice   is hereby provided to:

- SURFACE OWNER(s)  
Name: Rebecca A. Seckman AKA Rebecca A. Barth  
Address: 5042 Tyler Highway  
Sistersville, WV 26175  
Name: Kathy A. Seckman AKA Kathy A. Roberts  
Address: 42842 Trail Run Road  
New Maramoras, OH 45767
- SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_
- SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

- COAL OWNER OR LESSEE  
Name: none  
Address: \_\_\_\_\_
- COAL OPERATOR  
Name: none  
Address: \_\_\_\_\_

- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: Bessie Eileen Warner  
Address: HC 74 Box 78  
Alma, WV 26320
- OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: none  
Address: \_\_\_\_\_

**Received**  
**Office of Oil & Gas**  
**MAR 13 2015**

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

**This Notice Shall Include:**

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

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MAR 10 2015  
06/26/2015



examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

**Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

**Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

**Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

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Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

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**Time Limits and Methods for Filing Comments.**

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

**Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

**Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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WW-6A  
(8-13)

API NO. 47- 095 -  
OPERATOR WELL NO. SHR 08 L  
Well Pad Name: SHR 08 / 81

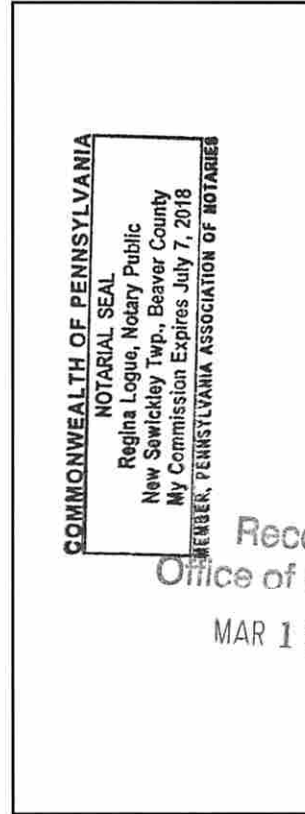
**Notice is hereby given by:**

Well Operator: Noble Energy, Inc. *[Signature]*  
Telephone: 724-820-3061  
Email: [dee.swiger@nblenergy.com](mailto:dee.swiger@nblenergy.com)

Address: 1000 Noble Energy Drive  
Canonsburg, PA 15317  
Facsimile: 724-416-5248

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [deprivacyofficer@wv.gov](mailto:deprivacyofficer@wv.gov).



Subscribed and sworn before me this 9<sup>th</sup> day of March, 2015

*Regina Logue*

Notary Public

My Commission Expires 07/07/2018

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06/26/2015



**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF ENTRY FOR PLAT SURVEY**

**Notice Time Requirement:** Notice shall be provided at least **SEVEN (7)** days but no more than **FORTY-FIVE (45)** days prior to entry

**Date of Notice:** 01/12/2015      **Date of Planned Entry:** by 02/20/2015

**Delivery method pursuant to West Virginia Code § 22-6A-10a**

- PERSONAL SERVICE     
 REGISTERED MAIL     
 METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

**Notice is hereby provided to:**

SURFACE OWNER(s) and Mineral Owner(s)

Name: James Eli Ash  
Address: 8707 Middle Island Road  
Alma, WV 26320

Name: Bessie Eileen Warner  
Address: HC 74 Box 78  
Alma, WV 26320

Name: Beverly J. Seckman  
Address: 353 Foundry Street  
New Martinsville, WV 26155

COAL OWNER OR LESSEE

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

MINERAL OWNER(s)

Name: Ralph E. Phillips  
Address: 6411 Veterans Highway  
New Martinsville, WV 26155

\*please attach additional forms if necessary

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State:	<u>West Virginia</u>	Approx. Latitude & Longitude:	<u>latitude 39.374884 Longitude -80.835658</u>
County:	<u>Tyler</u>	Public Road Access:	<u>County Rt. 58/2</u>
District:	<u>Centerville</u>	Watershed:	<u>huc-10 Middle Island Creek</u>
Quadrangle:	<u>West Union</u>	Generally used farm name:	<u>Seckman</u>

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 5th Street SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

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**Notice is hereby given by:**

Well Operator: Noble Energy, Inc.  
Telephone: 724-820-3061  
Email: dee.swiger@nblenergy.com

Address: \_\_\_\_\_  
1000 Noble Energy Drive, Canonsburg, PA 15317  
Facsimile: 724-743-0050

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

06/26/2015

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
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**Notice is hereby provided to:**

SURFACE OWNER(s) and Mineral

Name: Rebecca A. Seckman a/k/a Rebecca A. Barth  
Address: 5042 Tyler Highway ✓  
Sistersville, WV 26175

Name: Kathy A. Seckman a/k/a Kathy A. Roberts  
Address: 42842 Trail Run Road ✓  
New Marmoras, OH 45767

Name: Stanley E. Seckman ✓  
Address: 659 Jefferson Run Road  
Alma, WV 26320

COAL OWNER OR LESSEE

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

MINERAL OWNER(s)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*please attach additional forms if necessary

**Notice is hereby given:**

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District:	<u>Centerville</u>	Watershed:	<u>huc-10 Middle Island Creek</u>
Quadrangle:	<u>West Union</u>	Generally used farm name:	<u>Seckman</u>

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Telephone: 724-820-3061  
Email: dee.swiger@nblenergy.com

Address: \_\_\_\_\_  
1000 Noble Energy Drive, Canonsburg, PA 15317  
Facsimile: 724-743-0050

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**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF PLANNED OPERATION**

**Notice Time Requirement:** notice shall be provided no later than the filing date of permit application.

**Date of Notice:** \_\_\_\_\_ **Date Permit Application Filed:** \_\_\_\_\_

**Delivery method pursuant to West Virginia Code § 22-6A-16(c)**

- CERTIFIED MAIL                                       HAND  
RETURN RECEIPT REQUESTED                                      DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

**Notice is hereby provided to the SURFACE OWNER(s)**

(at the address listed in the records of the sheriff at the time of notice):

Name: James Eli Ash  
Address: 8707 Middle Island Road  
Alma, WV 26320

Name: Bessie Eileen Warner  
Address: HC 74 Box 78  
Alma, WV 26320

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>514174.04</u>
County:	<u>095-Tyler</u>		Northing:	<u>4358000.65</u>
District:	<u>Centerville</u>	Public Road Access:	<u>County Rt. 58/2</u>	
Quadrangle:	<u>West Union</u>	Generally used farm name:	<u>Seckman</u>	
Watershed:	<u>huc-10 Middle Island Creek</u>			

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: Noble Energy, Inc.  
Telephone: 724-820-3061  
Email: dee.swiger@nblenergy.com

Address: 1000 Noble Energy Drive  
Canonsburg, PA 15317  
Facsimile: 724-416-5248

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**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF PLANNED OPERATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**

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(at the address listed in the records of the sheriff at the time of notice):

Name: Rebecca A. Seckman AKA Rebecca A. Barth  
Address: 5042 Tyler Highway  
Sistersville, WV 26175

Name: Kathy A. Seckman AKA Kathy A. Roberts  
Address: 42842 Trail Run Road  
New Marmoras, OH 45767

**Notice is hereby given:**

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**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
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**Notice is hereby provided to the SURFACE OWNER(s)**  
(at the address listed in the records of the sheriff at the time of notice):

Name: Beverly Seckman  
Address: 353 Foundry St.  
New Martinsville, WV 26155

Name: Stanly Seckman  
Address: 659 Jefferson Run Road  
Alma, WV 26320

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

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County:	<u>095-Tyler</u>		Northing:	<u>4358000.65</u>
District:	<u>Centerville</u>	Public Road Access:	<u>County Rt. 58/2</u>	
Quadrangle:	<u>West Union</u>	Generally used farm name:	<u>Seckman</u>	
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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways**

1900 Kanawha Boulevard East • Building Five • Room 110  
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin  
Governor

Paul A. Mattox, Jr., P. E.  
Secretary of Transportation/  
Commissioner of Highways

March 10, 2015

James A. Martin, Chief  
Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

Subject: DOH Permit for the SHR-08 Well Site, Tyler County

Dear Mr. Martin,

The West Virginia Division of Highways has assigned Permit #06-2015-0053 for the subject site to the application submitted by Noble Energy, Inc. for access to the State Road for the well site located off of Tyler County Route 58/2 SLS.

The operator has signed an OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton  
Regional Maintenance Engineer  
Central Office Oil & Gas Coordinator

Cc: James L. McCune  
Noble Energy, Inc.  
CH, OM, D-6  
File

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Office of Oil and Gas

JUN 8, 2015

E.E.O./AFFIRMATIVE ACTION EMPLOYER

WV Department of  
Environmental Protection 06/26/2015

# Hydraulic Fracturing Fluid Product Component Information Disclosure

## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**
Fresh Water	Operator				100.00%
HYDROCHLORIC ACID 5-10%	Halliburton		Hydrochloric acid	7647-01-0	10.00%
SAND - COMMON WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00%
SAND - PREMIUM WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00%
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30.00%
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10.00%
Scalechek® LP-65 Scale Inhibitor	Halliburton	Scale Inhibitor	Ammonium chloride	12125-02-9	10.00%
LGC-36 UC	Halliburton	Liquid Gel Concentrate	Guar gum	9000-30-0	60.00%
			Naphtha, hydrotreated heavy	64742-48-9	60.00%
LCA-1	Halliburton	Solvent	Paraffinic solvent	Confidential Business Information	100.00%
HAI-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor	Methanol	67-56-1	60.00%
			Propargyl alcohol	107-19-7	10.00%
FE-1A ACIDIZING COMPOSITION	Halliburton	Additive	Acetic acid	64-19-7	60.00%
			Acetic anhydride	108-24-7	100.00%
LoSurf-300D	Halliburton	Non-ionic Surfactant	1,2,4 Trimethylbenzene	95-63-6	1.00%
			Ethanol	64-17-5	60.00%
			Heavy aromatic petroleum naphtha	64742-94-5	30.00%
			Naphthalene	91-20-3	5.00%
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5.00%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100.00%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100.00%

\* 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.

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and

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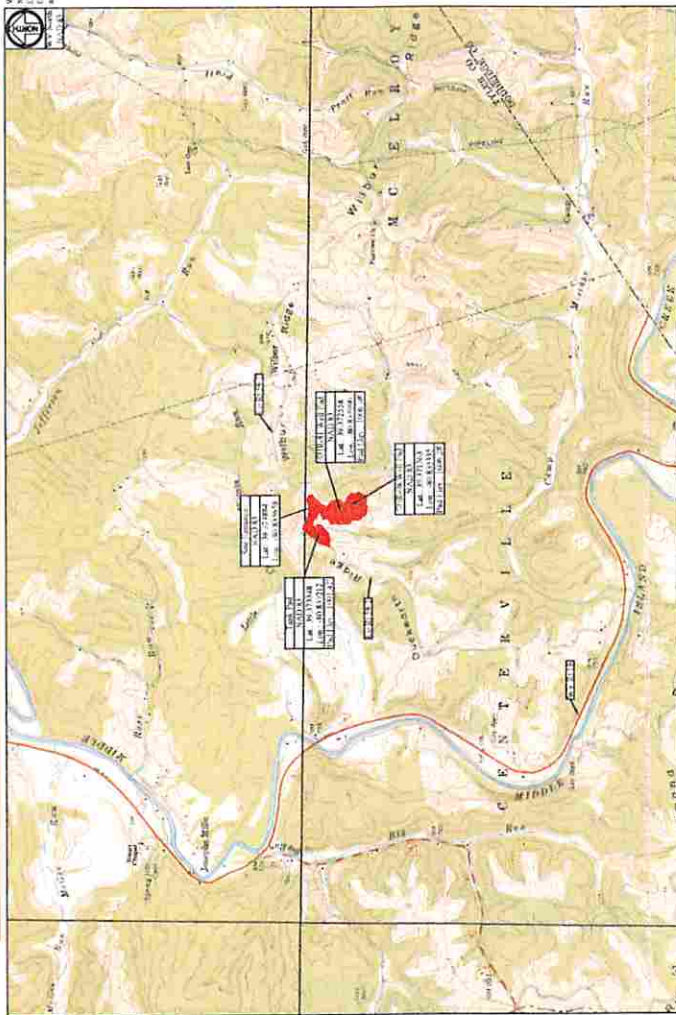


# SHR-08 & SHR-81 Well Pad Sites

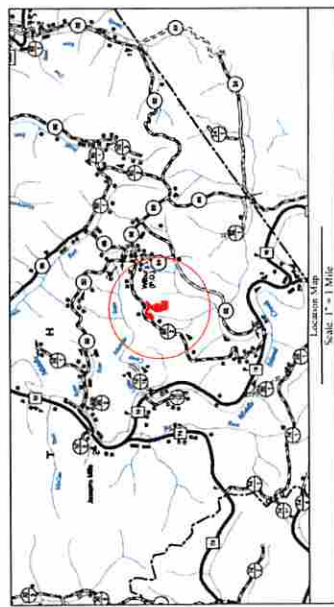
## Site Design, Construction Plan, & Erosion and Sediment Control Plans

Noble Energy, Inc.  
Tyler County  
Centerville District  
Latitude 39.374884°  
Longitude -80.835658°

**Final Design: Issued for Permitting**

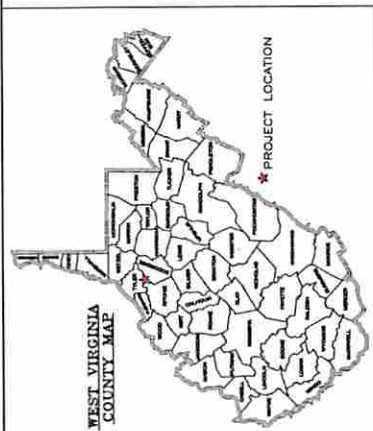


Site Locations (NAD 27)		Site Locations (NAD 83)	
Station	Latitude (DD)	Longitude (DD)	Longitude (DD)
Well Pad Center	39.374884	-80.835658	-80.835658
Well Pad Corner	39.374884	-80.835658	-80.835658
Well Pad Corner	39.374884	-80.835658	-80.835658
Well Pad Corner	39.374884	-80.835658	-80.835658
Well Pad Corner	39.374884	-80.835658	-80.835658
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Well Pad Corner	39.374884	-80.835658	-80.835658

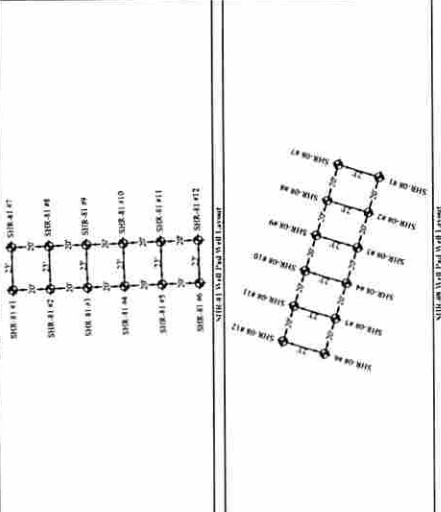


**Project Contacts**  
 Joe DeWitt, Project Engineer  
 Noble Energy, Inc.  
 10000 West Virginia Turnpike  
 Charleston, WV 25309  
 Phone: (304) 263-1111  
 Fax: (304) 263-1111  
 Email: Joe.DeWitt@nobleenergy.com

**Alignment Route:**  
 From US 81, turn onto WV Rt 18 North at West Union  
 Follow WV Rt 18 North for 10.3 mi. Turn Right onto Co Rt 2  
 (Deakworth Road). Follow Co Rt 2 for 2.4 mi. The site  
 entrance will be on the Right (South) side of the road.



Well Pad	Latitude (NAD 83)	Longitude (NAD 83)
SHR-08	39.374884	-80.835658
SHR-81	39.374884	-80.835658



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**811**  
 Call before you dig.  
 1-800-245-4866  
 www.811.org

**WEST VIRGINIA**  
 1-800-245-4866  
 www.westvirginia.gov

**113 THE LANE**  
 Call before you dig.

Revision	Date
02-15-2015 <td>DMZ </td>	DMZ



THIS DOCUMENT IS PREPARED FOR NOBLE ENERGY

SHR-08 & SHR-81 Well Pad Sites  
 Tyler County, WV  
 Centerville District  
 Cover Sheet

Property Owner Information - SHR-08 & SHR-81 Site Design	
Owner Name	Noble Energy, Inc.
Address	10000 West Virginia Turnpike, Charleston, WV 25309
City	Charleston, WV
State	WV
Zip	25309

Property Owner Information - Clearing Type	
Clearing Type	Clearing
Clearing Code	1
Clearing Area	1.0000
Clearing Volume	1.0000

Access Road	
Access Road Name	Access Road
Access Road Length	1.0000
Access Road Width	1.0000
Access Road Area	1.0000
Access Road Volume	1.0000

SHR-08 & SHR-81 Site Design Operations	
Operation Name	Clearing
Operation Length	1.0000
Operation Width	1.0000
Operation Area	1.0000
Operation Volume	1.0000

Additional Information	
Additional Information Name	Additional Information
Additional Information Value	Additional Information

**Sheet Description**

Sheet	Description
1	Cover Sheet
2	Site Soil Map
3	Pre-Construction Site Conditions
4	Site Plan View
5	EAS Plan View
6	Plan View
7	Disturbed Area
8	Cross Sections - SHR-08 Well Pad
9	Cross Sections - Tank Pad
10	Cross Sections - Well Pad Access Road
11	Cross Sections - Well Pad Access Road
12	Cross Sections - Well Pad Access Road
13	Cross Sections - Well Pad Access Road
14	Cross Sections - Well Pad Access Road
15	Cross Sections - Well Pad Access Road
16	Cross Sections - Well Pad Access Road
17	Cross Sections - Well Pad Access Road
18	Site Reclamation Plan
19	Site Reclamation Details
20	Site Reclamation Details
21	Free Clearing Exhibit

The drawings on this sheet and other sheets included herein have been prepared by Noble Energy, Inc. and its subsidiaries. It is the responsibility of the user to verify the accuracy of the data and to ensure that all applicable laws and regulations are followed. Noble Energy, Inc. is not responsible for any errors or omissions in the drawings or for any consequences arising from the use of the drawings.

Scale: 1" = 1 Mile





# SHR-08 & SHR-81 Well Pad Sites

Site Design, Construction Plan, & Erosion and Sediment Control Plans

Noble Energy, Inc.  
Tyler County  
Centerville District  
Latitude 39.374884°  
Longitude -80.835658°

Final Design: Issued for Permitting



Well Pad	Area (sq ft)	Volume (cu yd)
SHR-08	1,200	150
SHR-81	1,200	150

**NOTES:**

1. All work shall conform to the following standards:
2. All work shall be done in accordance with the following standards:
3. All work shall be done in accordance with the following standards:
4. All work shall be done in accordance with the following standards:
5. All work shall be done in accordance with the following standards:
6. All work shall be done in accordance with the following standards:
7. All work shall be done in accordance with the following standards:
8. All work shall be done in accordance with the following standards:
9. All work shall be done in accordance with the following standards:
10. All work shall be done in accordance with the following standards:

**Project Contacts:**

Project Manager: [Name]  
Site Engineer: [Name]  
Erosion Control Specialist: [Name]  
Sediment Control Specialist: [Name]  
Construction Manager: [Name]



Property Owner Information: SHR-08 & SHR-81 Site Design
Name: Noble Energy, Inc.
Address: [Address]
City: [City]
State: [State]
Zip: [Zip]
Phone: [Phone]
Fax: [Fax]
E-mail: [E-mail]

Property Owner Information: Clearing Plan
Name: Noble Energy, Inc.
Address: [Address]
City: [City]
State: [State]
Zip: [Zip]
Phone: [Phone]
Fax: [Fax]
E-mail: [E-mail]

Approved Area
Area: [Area]
Volume: [Volume]
Notes: [Notes]

SHR-08 & SHR-81 Site Design Summary
Well Pad Area (sq ft): [Value]
Volume (cu yd): [Value]
Clearing Area (sq ft): [Value]
Volume (cu yd): [Value]
Construction Area (sq ft): [Value]
Volume (cu yd): [Value]
Total Area (sq ft): [Value]
Total Volume (cu yd): [Value]



Revision	Description
1	Issue for Permitting
2	Final Design
3	Final Design
4	Final Design
5	Final Design
6	Final Design
7	Final Design
8	Final Design
9	Final Design
10	Final Design
11	Final Design
12	Final Design
13	Final Design
14	Final Design
15	Final Design
16	Final Design
17	Final Design
18	Final Design
19	Final Design
20	Final Design
21	Final Design
22	Final Design
23	Final Design
24	Final Design
25	Final Design
26	Final Design
27	Final Design
28	Final Design
29	Final Design
30	Final Design
31	Final Design

COVER SHEET  
SHR-08 & SHR-81 Well Pad Sites  
Centerville District  
Tyler County, WV



06/26/2015



