

west virginia department of environmental protection

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

June 29, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-9502258, 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: PEN 31 B

Farm Name: NOBLE ENERGY INC.

API Well Number: 47-9502258

Permit Type: Horizontal 6A Well

Date Issued: 06/29/2015

Promoting a healthy environment.

API Number: <u>95-02258</u>

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

CONDITIONS

- Operator shall take additional measures with this permitted activity to avoid communication with offset wells. Such additional measures are described in the attached addendum. This addendum is part of the terms of the well work permit, and includes a description of depth and completed formations of offset wells. Also included is a description of monitoring activities that will take place during fracturing operations of the permitted well work.
- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACOE). Through this permit, you are hereby being advised to consult with USACOE 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.

API Number: 95-02258

PERMIT CONDITIONS

- 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.
- 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 <u>DEPOOGNotify@wv.gov</u> within 30 days of commencement of drilling.

Noble Energy Addendum

Pennsboro PEN-31 site proposed well procedures

- Intermediate casing will extend below the Alexander and be cemented to surface.
- Operators of all deep offset wells within a 1,000' perimeter of the pad will be contacted per the table below:

Offset Deep Wells (Benson or deeper):

API	TVD	Surface Owner	Current Operator	TVDSS	Formation
4708507848	4975	Don/Virginia Comer	Consol Gas Co	-4003	Benson
4709501425	4962	Franklin Simonton et al 2	Consol Gas Co	-4027	Benson
4709501424	4972	Franklin Simonton et al 1	Consol Gas Co	-4068	Benson
4709501488	5102	John/N Williams 1	Consol Gas Co	-4077	Benson
4708507852	5112	Don/Virginia Comer	Consol Gas Co	-4103	Benson
4709501370	5230	D E Williams	Consol Gas Co	-4142	Benson
4708507851	5070	Don/Virginia Comer	Consol Gas Co	-4183	Benson
4708507716	5306	Edward Mullooly	Energy Corp of America	-4184	Benson
4708507535	5385	C W Mutschelknaus	Consol Gas Co	-4273	Angola Fm
4709501061	5995	W & J A Markle	Alliance Petroleum Corp	-4807	Rhinestreet Sh
4708507028	5993	E & G Freeland	Alliance Petroleum Corp	-4972	Rhinestreet Sh

Noble will contact these operators prior to fracturing, offer to assess the surface pressure
handling capabilities of their equipment, offer recommendations for upgrading prior to fracing
operations, and offer to monitor their wells during active frac operations.

Description of Monitoring:

Pressure transducers, and/or visual monitoring of existing pressure gauges will be utilized. For the deepest wells in the Rhinestreet, we may recommend shutting in the wells for pressure monitoring.

- Well communication would likely occur in one of two forms: a) higher than expected pressure in an offset well, or b) the offset well is watered out and reads zero pressure.
- If we observe elevated pressures (within 500 psi of the surface equipment reported maximum operating pressure) we will immediately cease pumping the current frac stage and discuss conditions with the operator before resuming pumping.

Contingency:

1) Offset wells watering out – We are recommending that an affected offset operator wait for Noble to complete operations on the lateral that was being fraced during the event (including flowback), to alleviate any potential pressure surges before the offset operator intervenes to swab the affected well and bring it back on production.

API NO. 47-0-9 5	02250
OPERATOR WELL	NO. PEN 318
Well Pad Name:	PEN 03/31

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

1) Well Operator:	Noble Energ	gy, Inc.	494501907	095-Tyler	Meade	Pennsboro	
			Operator ID	County	District	Quadrangle	
2) Operator's Well	Number: PE	N 31 B	Well Pad	Name: PE	V 03/31		
3) Farm Name/Surl	face Owner:	Noble Energy,	Inc. Public Road	d Access: Sto	ne Road	- County Rt. 6/3	
4) Elevation, curren	nt ground:	1085' Ele	evation, proposed p	oost-construction	on: 1099'		
5) Well Type (a)	Gas 🔽	Oil	Unde	rground Storag	e		
Otl	ner				4		
(b)	If Gas Shal	low 🔽	Deep				
	Hori	zontal				MAG	
6) Existing Pad: Ye	es or No No	<u> </u>			_	3/23/15	
7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s): Marcellus 6291' - 6350' / 59' Thick / 4191psi							
8) Proposed Total V	Vertical Depth	n: 6,331					
9) Formation at Tot	tal Vertical De	epth: Marcellu	IS				
10) Proposed Total	Measured De	pth: 16,521'					
11) Proposed Horiz	ontal Leg Ler	ngth: 9,390'					
12) Approximate F	resh Water St	rata Depths:	454'				
13) Method to Dete	ermine Fresh V	Water Depths: r	nearest offset w	/ell			
14) Approximate S	altwater Deptl	hs: None					
15) Approximate C	oal Seam Dep	oths: 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	e Mine Info:	Name:					
		Depth:					
		Seam:		F	ECEIVE	d Gas	
		Owner:			of Oil an		
		-		1	APR 3 0 20	15	

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OPERATOR WELLING: NEW STB
Well Pad Name: PEN 03/31

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	LS	94	40'	40'	Surface to TD
Fresh Water	13 3/8"	New	J-55	54.5	600'	600'	CTS 30% excess Yield =1.18
Coal							
Intermediate	9 5/8"	New	HCK-55	36.0	5345'	5345'	CTS 30% excess Yield = 1.18
Production	5 1/2"	New	P-110	20.0	16,521'	16,521'	10% excess Yield = 1.32 TOC=200' above 9.625 shoe
Tubing							
Liners							

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Max. Associated Surface Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	26"	0.438			Type III	surface to TD
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"	0.352	3520		Class A	30% access Yield =1.18 to surface
Production	5 1/2"	8.75"-8.5"	0.361	12,640		Class A	10% excess Yield = 1.32 TOC=200' sbove 9.625" shoe
Tubing							
Liners							

PACKERS

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Sizes:

Depths Set:

WW-6	В
(12/14)

API NO. 47- 095 OPERATOR WELL NO. PEN 31 B
Well Pad Name: PEN 03/31

09502258

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 6331 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): 20.961
- 22) Area to be disturbed for well pad only, less access road (acres): 7.948

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 Surface to TD. Fresh Water - 15.6 ppg Class A, (CA-100) 0.25 lb/sk Lost Circ 30% Excess Yield = 1.18 To Surface. Intermediate - 15.6 ppg Class A (CLC-CPF)+0.25% bwoc cellophane flakes 30% Excess Yield=1.18 To Surface. Production - 14.5 ppg 75/25 Class A/Poz +/- 2% extender, +/-0.4% fluid loss additive, +/-0.4% retarder, +/-0.4% dispersant, +/-0.2% antifoam, +/- 0.1% antisettling 10% Excess Yield=1.32 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, fill with KCl water 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 South Cand villed w/ KCl water once filled w/ KCl water once drilled to TD. The well is conditioned with KCl circulation 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 rump 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 Protetcion String:	Cement Additives	
Allied Material Name	Additive (Material) Type	Additive (Material) Description	CAS#
CCAC (Class A Common)	Base Cement	Grey powder	65997-15-1
			10043-52-4
60	Accolorator	White flate	7447-40-7
001-40	ארכובומוסו	אווורכי וופועכ	7732-18-5
			7647-14-5
CLC-CPF (Cellophane Flakes)	Lost Circulation Aid	White and colored flake	Non-Hazardous

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		j						DRILLING W	DRILLING WELL PLAN	
	Ć (1	aldon C						PEN-31B-HS	1B-HS	
)	ene	rgy					Marcellus Shale Horizontal Marshall County, WV	ale Horizontal ounty, WV	
					<u> </u>	PEN-31B SHL	SHL	11	1576557.974N 311648.034E	8.034E
Ground Elevation		1085				PEN-31B LP	3 LP	_	1576980.12N 311989.866E	3.866E
		139°			а.	PEN-31B	BHL	11	1583018.196N 304793.954E	3.954E
WELLBORE DIAGRAM	HOLE	CASING	GEOLOGY	TOP	BASE	anw	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
114.0	1	.00				100	Tune		Exercise of clock off courses	Condustration and and and and and and and and and an
	26	94#	Conductor	40	40	AIR	Surface to TD	Ψ/Z	TD.	Conductor casing = 0.436 wall thickness
			FW Shows	454	454		TO COMPANY OF THE PROPERTY OF		A MARKET TO THE STATE OF THE ST	
		13-3/8" 54 5#				Air or Fresh	15.6 ppg Class A, 0.25 lb/sk Lost Circ	Bow Spring on first 2	Fill with <3% KCI water once casing is at setting depth,	Surface casing = 0.380" wall
	17 1/2	J-55 BTC				Water Based Mud	30% Excess Yield = 1.18 To Surface	joints then every third joint to 100' form surface	circulate a minimum of one hole volume prior to pumping cement.	thickness Burst=2730 psi
_			Surface Casing	009	009					
<u> </u>			Big Lime	1973	2028		15.6ppg Class A			
		100 100 0	Big Injun	2028	2163		+0.25% bwoc cellophane	Bow spring centralizers	Once casing is at setting	Intermediate casing = 0.352"
	12 3/8	9-5/8" 36# HCK-55 BTC	Benson	4955	5017	Air or 8.0	flakes 30% Excess	every third joint to 100'	depth, circulate a minimum of one hole volume prior to	
		9	Alexander	5177	5245		Yield=1.18	teet from surface.	pumping cement.	Burst=3520 psi
			Int. Casing	5345	5345		To Surface			
_								The first Control of the control of		
	8 75" Vertical							Rigid Bow Spring every		
	C						14.5ppg	TOC		
							+/- 2% extender, +/-0.4%			
		P	Rheinstreet	5755	6081		fluid loss additive, +/-			
1.	0 6	E	Cashaqua	6081	6173		0.4% retarder, +/-0.4% dispersant +/-0.2%		Once at TD, circulate at max	Production
	PR	20-1/2. 20-1/2.	Middlesex	6173	6202	11.0ppg-	antifoam, +/- 0.1%		least 6x bottoms up. Once on	thickness Rust-12640 asi
	8 ZBC Curve	#P-110	West River	6202	6246	12.0ppg	antisettling		bottom with casing, circulate	
_	0	BTC	Burkett	6246	6289		10% Excess	i	volume prior to pumping	schedules may be changed due
	50	D	Tully Limestone	6289	6290		Yield=1.32	Rigid Bow Spring every joint to KOP	cement.	to hole conditions
-	15	(Hamilton	0000	6009		1000			
rot	Ki	3a	Marcellus	6291	6350		above 9.625" shoe			
of	.8.75" - 8.5"	3	Target	6326	6336					
	Falcia									
	200 A C C C C C C C C C C C C C C C C C C	×	Onondaga	6350	200 A	×	×	(2000)	X	X
331,	LP @ 6331' TVD / 7131'		8.75/8.	5 Hole - Cr	8.75 / 8.5 Hole - Cemented Long String	ng String			+/-9390' ft Lateral	TD @ +/-6331' TVD
•					TALL STATE) [The same of the sa

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

MAG 3/23/15

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Noble Energy, Inc. OP Code 494501907
Watershed (HUC 10) huc-10 Middle Island Creek Quadrangle Pennsboro
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 V
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
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 GetZ, 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. landfill - 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 Title Regulatory Analyst III
Subscribed and sworn before me this 26 th day of MRCh , 20 th MOTARIAL SEAL NOTARIAL S

Proposed Revegetation Tre	otmont: Agras Disturbed	20.961	Prevegetation	6.0	
	_			оп рн	
Lime10	Tons/acre or to corre	ect to pH	*		
Fertilizer type					
Fertilizer amount_	500	lbs/acre			
MulchHay or S	Straw at 2	_Tons/acre			
		Seed Mixtu	<u>res</u>		
2	Temporary		Pe	ermanent	
Seed Type	lbs/acre		Seed Type	lbs/acre	
Tall Fescue	40	Ta	III Fescue	40	
Ladino Clover	5	La	dino Clover	5	
**alternative seed mixtures	are shown on the Site Desi	 gn.			
Lar - L					
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Drawing(s) of road, location provided) Photocopied section of involved by: Plan Approved by:	Local Lof	ain all E & S du			ve beer

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 Cochranton, PA 16314 814-425-7773

Disposal Locations:

11 County Road 78 Amsterdam, OH 43903 740-543-4389

Apex Environnemental, LLC Permit # 06-08438 Northern A-1 Environnemental Services Permit ID MID020906814 3947 US 131 North, PO Box 1030 Kalkaska, MI 49646 231-258-9961

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 412-384-7569

Waste Management South Hills (Arnoni) Permit # 100592 3100 Hill Road Library, PA 15129 724-348-7013 412-384-7569

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

RECEIVED Office of Oil and Gas

APR 30 2015

WV Department of Environmental Protection

07/03/2015

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 (Buckeye Brine, LLC) Permit # 34-031-2-7177 23986 Airport Road Coshocton, OH 43812 740-575-4484 512-478-6545

Adams #2 (Buckeye Brine, LLC) 2205 Westover Road Austin Tx 78703 Permit # 34-031-2-7178 740-575-4484 512-478-6545

Adams #3 (Buckeye Brine, LLC) Permit #34-031-2-7241-00-00 2630 Exposition, Suite 117 Austin, TX 78703 512-478-6545

Mozena #1 Well (SWIW # 13) Permit # 34-157-2-5511-00-00 5367 E. State Street Newcomerstown, OH 43832 740-763-3966

Goff SWD #1 (SWIW # 27) Permit # 34-119-2-8776-000 300 Cherrington Pkwy, Suite 200 Coraopolis, PA 15108 412-329-7275 Nichlos 1-A (SWIW #13) Permit # 3862 300 Cherrington Pkwy, Suite 200 Coraopolis, PA 15108 412-329-7275

Groselle (SWIW #34)
Permit # 4096
Rt. 88
Garrettsville, OH
713-275-4816

Kemble 1-D Well Permit # 8780 7675 East Pike Norwich, Oh 43767 614-648-8898 740-796-6495



Site Safety Plan

Noble Energy, Inc. Pen 03/31 Well Pad

BHS

March 2015: Version 1

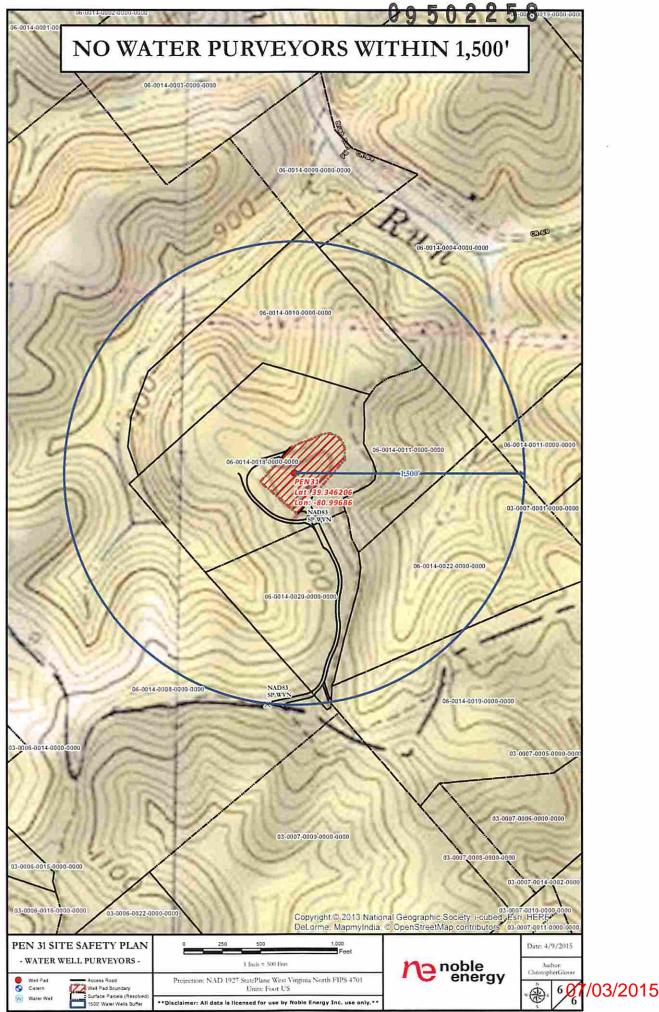
For Submission to
West Virginia Department of Environmental Protection,
Office of Oil and Gas

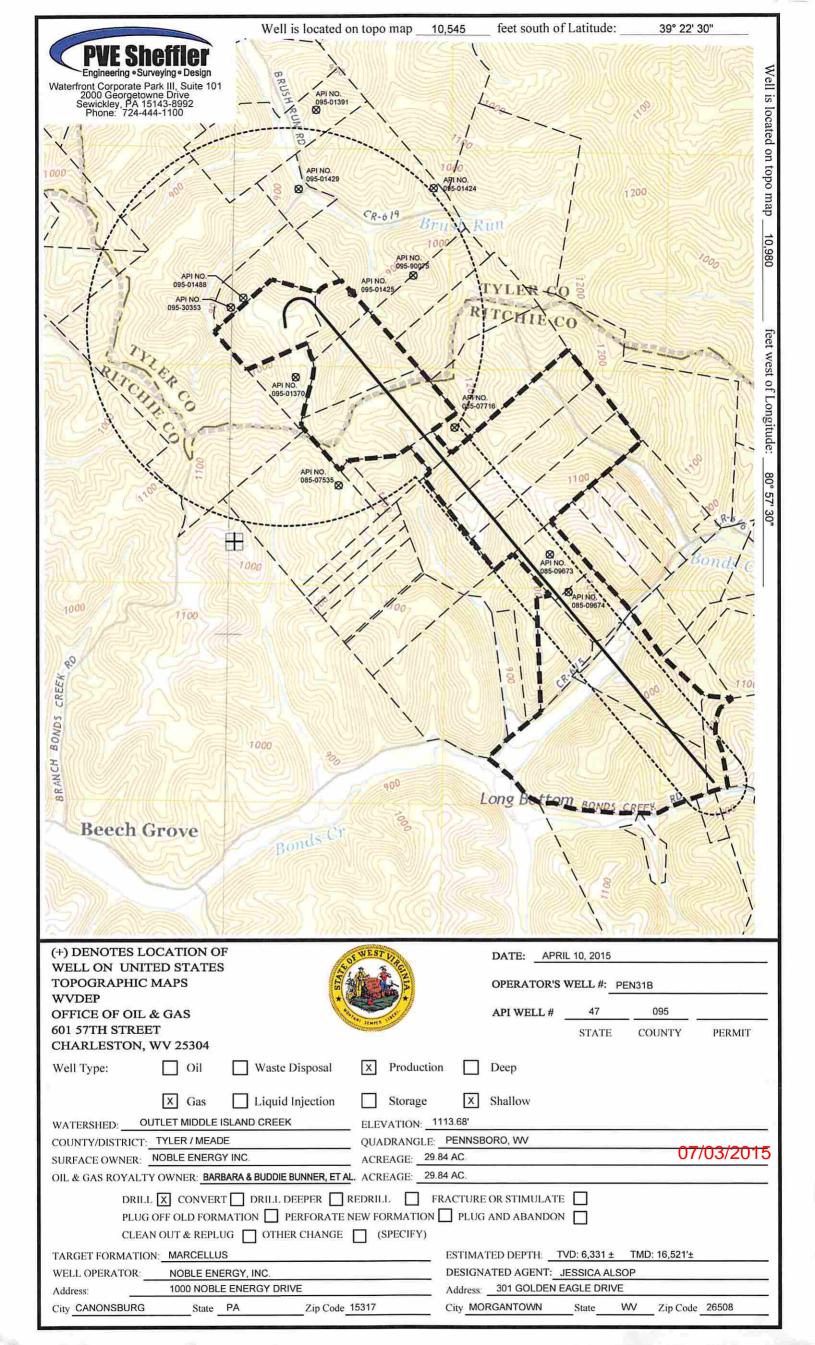
Noble Energy, Inc.
Appalachia Offices
1000 Noble Energy Drive
Canonsburg, PA 15317-9504

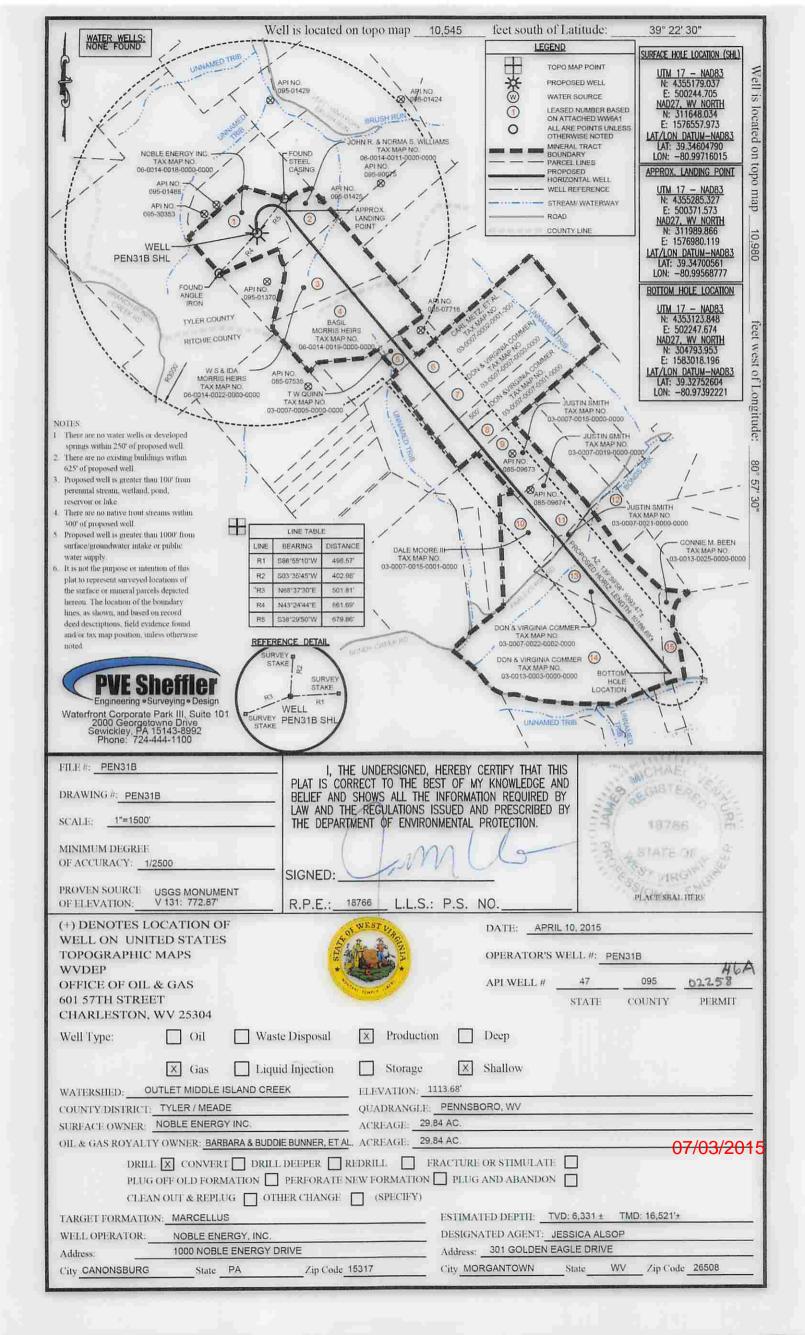
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Office of Oil and Gas

APR 3 0 2015

WV Department of Environmental Protection







Operator's Well No. PEN31 BHS

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)

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Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
1. Q079293001 Tax Map 06-14-18	Barbara & Buddie Bunner (See attached	Noble Energy Inc for additional Lessors and Lease	not less than 1/8 shold chain)	432/181
2. Q070902001 Q070902002 Tax Map 06-14-11	Richard L Clark John R & Norma S Williams	Noble Energy Inc Chesterfield Energy Corp (See attached for I	not less than 1/8 not less than 1/8 Leasehold chain)	404/217 290/307
3. Q073344001 Tax Map 06-14-22	Gladys & Gerald Llewellyn (See attached i	Noble Energy Inc for additional Lessors)	not less than 1/8	409/187
4. Q072647001 Tax Map 06-14-19	Ruth Ann & James Shaffer (See attached i	Noble Energy Inc for additional Lessors)	not less than 1/8	408/32

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

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WV Division of Natural Resources WV Division of Highways

U.S. Army Corps of Engineers

U.S. Fish and Wildlife Service

County Floodplain Coordinator

WV Department of Environmental Protection 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: By: lis:

> > Page 1 of <u>4</u>

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Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
5. O074503009	Kathleen Quinn	Noble Energy Inc	not less than 1/8	266/816
0074503012	Michael D & Beatrice M Quinn	Noble Energy Inc	not less than 1/8	266/927
O074503014	Suzanne Quinn	Noble Energy Inc	not less than 1/8	267/512
O074503015	American Cancer Society Inc	Noble Energy Inc	not less than 1/8	270/920
O074503006	Sammy L Hogue	Noble Energy Inc	not less than 1/8	265/561
Q074503002	Joe A Hogue	Noble Energy Inc	not less than 1/8	271/484
Q074503001	Frank W & Amy O McDonnell	Noble Energy Inc	not less than 1/8	263/197
Tax Map 03-7-5	, , , , , , , , , , , , , , , , , , , ,	3,		
6.	Gary A Toth	Noble Energy Inc	not less than 1/8	274/565
Tax Map 03-7-2.1		(See attached for additional Less	sors and Leasehold chain)	
The nermit a	nnlicant for the proposed well work	addressed in this applica	ition hereby solmowie	does the
possibility of	Acknowledgement of In Addition to the population for the proposed well work the need for permits and/or approve of Oil and Gas, including but not lim Division of Water and Waste Manager Division of Natural Resources WV Divis Army Corps of Engineers Fish and Wildlife Service ty Floodplain Coordinator	als from local, state, or fe	deral entities in addition	on to the
DEP, Office	or Oil and Gas, including but not lim	ited to the following:		11 OF C. V
32771	Division of Water and Waste Manage	ment		Who was
WVI	Division of Natural Resources WV Divis	ion of Highways	8, 4	
777	Army Come of Engineers	ion of rughways	NINO.	0 9
0.5.7	Sich and Wildlife Service		77	no Pan Os
Coun	ty Floodplain Coordinator			The Then
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The applicant	further acknowledges that any Offic	e of Oil and Gas permit in	no way overrides, ren	Nonaither of Color of
	need for other permits/approvals the		further affirms that al	l needed
	vals should be acquired from the appr			
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Well Operator:	Nøble Energy Inc
By:	Antrew of les
lts:	Operations Landman

Operator's Well No. PEN31 BHS

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Lease Name or Number	Grantor, Lessor, e	tc. Grantee, Lessee, etc.	Royalty	Book/Page
7. DV016722 Tax Map 03-7-7	R E & Betty Lee Markle	Consolidated Gas Supply Corporation (See attached for Leasehold chain)	not less than 1/8	112/556
8. DV016722 Tax Map 03-7-7.1	R E & Betty Lee Markle	Consolidated Gas Supply Corporation (See attached for Leasehold chain)	not less than 1/8	112/556
9. Q072676000 Tax Map 03-7-15	Justin R & Linda S Smith	Noble Energy Inc	not less than 1/8	260/562
10. DV016803	J A & Stella Hogue Homer H & Helen L Hogue	Consolidated Gas Supply Corporation	not less than 1/8	113/122
Tax Map 03-7-15.1		(See attached for Leasehold chain)		

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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

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:	Andrew R les
lts:	Operations Landman

Page 3 of 4

Operator's Well No. PEN31 BHS

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 Q072675000 Tax Map 03-7-19 	Justin R & Linda S Smith	Noble Energy Inc	not less than 1/8	260/560
12. Q072797000 Tax Map 03-7-21	Justin R & Linda S Smith	Noble Energy Inc	not less than 1/8	260/706
13. DV016722 Tax Map 03-7-22.2	R E & Betty Lee Markle	Consolidated Gas Supply Transmission (See attached for Leasehold chain)	not less than 1/8	112/556
14. DV016722 Tax Map 03-13-3	R E & Betty Lee Markle	Consolidated Gas Supply Transmission (See attached for Leasehold chain)	not less than 1/8	112/556
15. Q075447000 Tax Map 03-13-25	Connie M Been	Noble Energy Inc	not less than 1/8	264/198

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U.S. Army Corps of Engineers
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Well Operator:	Noble Energy Inc
By:	Oberettan Landon R. ley
lts:	Operations Landman

Page 4 of 4

09502252

API NO. 47- 095 OPERATOR WELL NO. PEN 31 C
Well Pad Name: PEN 03/31

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

1) Well Operator: Noble Energy, Inc.	494501907	095-Tyler	Meade	Pennsboro
	Operator ID	County	District	Quadrangle
2) Operator's Well Number: PEN 31 C	Well Pad	Name: PEN	N 03/31	
3) Farm Name/Surface Owner: Noble Energy,	Inc. Public Road	d Access: Sto	ne Road	- County Rt. 6/3
4) Elevation, current ground: 1116.48' Ele	evation, proposed p	oost-construction	n: 1099'	
5) Well Type (a) Gas Oil	Unde	rground Storag	е	
Other				
(b)If Gas Shallow	Deep			
Horizontal				
6) Existing Pad: Yes or No No				
 Proposed Target Formation(s), Depth(s), Antici Marcellus 6291' - 6350' / 59' Thick / 4191p 		nd Associated I	Pressure(s):	
8) Proposed Total Vertical Depth: 6,331				
9) Formation at Total Vertical Depth: Marcellu	IS			
10) Proposed Total Measured Depth: 15,721'		· · · · · · · · · · · · · · · · · · ·		
11) Proposed Horizontal Leg Length: 8,590'				
12) Approximate Fresh Water Strata Depths:	454'			A TROP
13) Method to Determine Fresh Water Depths:	nearest offset w	/ell	S. 42 101	N COUNTRY OF THE PARTY OF THE P
14) Approximate Saltwater Depths: None			TON CO.	9 4
15) Approximate Coal Seam Depths: None			Shirth Co.	Nen, 15
16) Approximate Depth to Possible Void (coal min	ne, karst, other):	Vone		Red Tollon
17) Does Proposed well location contain coal sean directly overlying or adjacent to an active mine?	ns Yes	No	<u></u>	
(a) If Yes, provide Mine Info: Name:				
Depth:				
Seam:				
Owner:				· · · · · · · · · · · · · · · · · · ·

Spartan Exploration Co	PEN3	PEN31 BHS	LEASEHOLD CHAIN			
1 Spartan Exploration Co Acadian Energy Resources LLC Acadian Energy Resources LLC Acadian Energy Resources LLC Acadian Energy Resources LLC Tensika Resources LLC Chesapeake Appalachia LLC Chesapeake Appalachia LLC Statoil USA Onshore Properties InC Chesapeake Appalachia LC Chesapeake Appalachia LC Statoil USA Onshore Properties InC Statoil USA Onshore Properties InC CNX Gas Company LLC CNX Gas Company LLC CNX Gas Company LLC Antero Resources Corporation Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Development Company CNG De	ITEM	NUMBER		GRANTEE/LESSEE	ROYALTY	BOOK/PAGE
Acadian Energy Resources LLC Acadian Energy Resources LLC Acadian Energy Resources LLC Tenaska Resources LLC Tenaska Resources LLC Transka Resources Corporation Transpeake Appalachia LC Transka Resources Corporation Transmission Corporation Transmission Inc Transmission		-	Spartan Exploration Co	Acadian Energy Resources	%0	369/405
Tenaska Resources LLC Chesapeake Appalachia LLC Statoii USA Onshore Properties Inc Statoii USA Onshore Properties Inc Chesapeake Appalachia LLC Ch	:	;	Acadian Energy Resources LLC	Tenaska Resources LLC	%0	370/809
Tenaska Resources LLC Chesapeake Appalachia LLC Chesapeake Appalachia LLC Chesapeake Appalachia LLC Statoil USA Onshore Properties Inc Chesapeake Appalachia LLC Chesapeake Appalachia Development LLC CMX Gas Company LLC Consolidated Gas Company LLC Character Company Character Characte	:	*	Acadian Energy Resources LLC	TSAR - WV LLC	%0	382/434
Chesapeake Appalachia LLC CNX Gas Company LC Consolidated Gas Supply Corporation Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Development Company CNG Development COMPAN COMPA			Tenaska Resources LLC	Chesapeake Appalachia LLC	%0	403/414
Chesapeake Appalachia LLC Chesapeake Appalachian LLC Chesapeake Appalachian Development Inc Dominion Appalachian Development Inc Dominion Appalachian Development Inc Dominion Appalachian Development Inc CNX Gas Company LLC CNX Gas Company LC Antero Resources Appalachian Corporation Antero Resources Corporation Consolidated Gas Transmission Corporation COnsolidated Gas Transmission Corporation CNG Development Company CNG Development CNG Development COMB CNG COMBAR C			TSAR - WV LLC	Chesapeake Appalachia LLC	%0	403/414
Chesapeake Appalachia LLC Statoil USA Onshore Properties Inc Statoil USA Onshore Properties Inc CNX Gas Company LLC Dominion Appalachian Development Inc Dominion Appalachian Development LLC CNX Gas Company LC Consolidated Gas Transmission Corporation CNG Development Company CNG Development COMP Development COMP CNG De			Chesapeake Appalachia LLC	Statoil USA Onshore Properties Inc	%0	412/126
Statoil USA Onshore Properties Inc CNX Gas Company LLC 0% Chesterfield Energy Corporation Dominion Appalachian Development Inc 0% Dominion Appalachian Development LLC CNX Gas Company LLC Dominion Appalachian Development LLC CNX Gas Company LC CNX Gas Company LC CNX Gas Company CND Energy Inc Noble Energy Inc Onsolidated Gas Supply Corporation Antero Resources Corporation Noble Energy Inc Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Development Company CNG Development Company CNG Porducing Company LC Consol Gas Company LC CONSOL C			Chesapeake Appalachia LLC	Noble Energy Inc		and the second s
Consolidated Gas Supply Corporation Antero Resources Appalachian Corporation Antero Resources Corporation Consolidated Gas Supply Corporation Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation Consolidated Gas Transmission Corporation Consolidated Gas Transmission Inc Consolidated Gas Transmission Inc Consolidated Gas Company CNG Development Company CNK Gas Company LLC CNK Gas Company LLC CNK Gas Company LLC ONS CNC CNC CNK Gas Company LLC ONS CNC CNK Gas Company LLC ONS CNC CNC CNC CNC CNC CNC CNC CNC CNC CN			Statoil USA Onshore Properties Inc	CNX Gas Company LLC	%0	424/185
Dominion Appalachian Development Inc. Dominion Appalachian Development ILC. CNX Gas Company ILC. Antero Resources Appalachian Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Consolidated Gas Supply Corporation CNG Development Company CNG Development Company CNG Development Company CNG Development Company CNG Producting Company CNG Production Inc. Dominion Exploration Resources CONSOLIDATE CONSOLIDATE CNG Production Inc. Dominion Exploration Resources CONSOLIDATE CONSOLIDATE CNG Production Inc. Dominion Exploration Resources CONSOLIDATE CO		7	Chesterfield Energy Corporation	Dominion Appalachian Development Inc	%0	Withdraw
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Consolidated Gas Supply Corporation Antero Resources Appalachian Corporation Antero Resources Corporation Owle Energy Inc. Antero Resources Corporation Antero Resources Corporation Owle Energy Inc. Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Development Company CNG Development Company CNG Porducing Company CNG Producting Company CNG Porduction Inc Owled Energy Inc. CONSOLIDATION OF PRODUCTION OF CONSOLIDATION OF CONSOL			Dominion Appalachian Development LLC	CNX Gas Company LLC	%0	Merger
Antero Resources Appalachian Corporation Antero Resources Corporation 0% Antero Resources Corporation Noble Energy Inc Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Development Company CNG Development Company CNG Porducing Company CNG Development Company CNG Porducing Company CONG Porducing Company CONG Porducing Company CONG Porducing Company CONG Porducing Company LLC CONSOL Gas Company LLC CONSOL Gas Company LLC CONSOL Gas Company LLC CNX Gas Company LC CNX Gas COMPAN CNX GAS		W. C. AMBRET	CNX Gas Company LLC	Noble Energy Inc	%0	388/286
Antero Resources Corporation Noble Energy Inc Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation Consolidated Gas Transmission Corporation Consolidated Gas Transmission Corporation CNG Development Company CNG Development Company CNG Producting Company CNG Producting Company CNG Production Inc Dominion Exploration & Production Inc Consol Gas Company COnsol Gas Company CONX Gas Company CNX Gas Company LLC CONSOL Gas COMPAN C	1 1	9	Antero Resources Appalachian Corporation	Antero Resources Corporation	%0	Change of name
Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation Consolidated Gas Transmission Corporation Consolidated Gas Transmission Corporation CNG Development Company CNG Development Company CNG Development Company CNG Producing Company CNG Producting Company CNG Production Inc Dominion Exploration & Production Inc Consol Gas Company CNX Gas COMPA		F	Antero Resources Corporation	Noble Energy Inc	%0	281/393
CNG Development Company CNG Development Company CNG Development Company CNG Development Company CNG Producing Company CNG Producing Company CNG Producing Company CNG Producing Company CNG Production Inc Dominion Exploration & Production Inc Dominion Transmission Inc Consol Gas Company CNX Gas Company CNX Gas Company CNX Gas Company LLC OS CNX GAS COMPAN		7	Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	%0	169/756
CNG Development Company CNG Development Company CNG Producing Company CNG Producting Company CNG Producting Company CNG Production Inc Dominion Exploration & Production Inc Dominion Transmission Inc Consol Gas Company CNX Gas Company LLC Noble Energy Inc CNG Production Inc O Consol Gas Company CNX Gas Company LLC Noble Energy Inc CNG Development Company O CNG Development Company CNG			Consolidated Gas Transmission Corporation	CNG Development Company	%0	176/601
CNG Producting Company CNG Producting Company CNG Production Inc CONSOI Gas Company CONSOI Gas COMPANY	:		CNG Development Company	CNG Porducing Company	%0	211/100
Consol Gas Company CNG Producting Company Consol Gas Company Consol Gas Company CNX Gas Company LLC Consol Gas Company LLC Noble Energy Inc CNG Production Inc Dominion Transmission Inc Consol Gas Company CNX Gas Company LC Noble Energy Inc O O CONSOL Gas Company LC CONS						58/366
Sonsol Gas Company LLC Consol Energy Inc Consol Energy Inc Consol Gas Company LLC Consol Energy Inc Consol Gas Company LLC Consol Gas Confidence LLC Con	\ \\	fice	CNG Producing Company	Dominion Exploration & Production Inc	%0	Change of name
Consol Gas Company Consol Gas Company Consol Gas Company CONX Gas Company LLC Consol Gas Company LLC CONX Gas Company LLC Noble Energy Inc	AP.	9 0	Dominion Exploration & Production Inc	Dominion Transmission Inc	%0	251/621
Consol Gas Company Consol Gas Company Consol Gas Company CONX Gas Company LLC CONSOL Gas Company LLC CONS		f C	CF			6/634
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CNX Gas Company LLC Noble Energy Inc 0%		d G	Consol Gas Company	CNX Gas Company LLC	%0	Merger
	of		CNX Gas Company LLC	Noble Energy Inc	%0	254/811

Environmental Protection

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	Consolidated Gas Transmission Corporation	CNG Development Company	%0	176/601
	CNG Development Company	CNG Porducing Company	%0	211/100
				58/366
	CNG Producing Company	Dominion Exploration & Production Inc	%0	Change of name
Anti-adoption as top 110	Dominion Exploration & Production Inc	Dominion Transmission Inc	%0	251/621
	T constant		3	6/634
· · · · · · · · · · · · · · · · · · ·	Dominion Transmission Inc	Consol Gas Company	%0	Merger
	(6/634
	Consol Gas Company	CNX Gas Company LLC	%0	Merger
	CNX Gas Company LLC	Noble Energy Inc	%0	254/811
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2	consolidated das supply colporation	Consolidated das Transfilission Corporation	% O	169//Se
	Consolidated Gas Transmission Corporation	CNG Development Company	%0	176/601
:	CNG Development Company	CNG Porducing Company	%0	211/100
				28/366
1	CNG Producing Company	Dominion Exploration & Production Inc	%0	Change of name
	Dominion Exploration & Production Inc	Dominion Transmission Inc	%0	251/621
				6/634
a constanting of the	Dominion Transmission Inc	Consol Gas Company	%0	Merger
				6/634
The state of the s	Consol Gas Company	CNX Gas Company LLC	%0	Merger
	CNX Gas Company LLC	Noble Energy Inc	%0	254/811
13	Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	%0	169/756
	Consolidated Gas Transmission Corporation	CNG Development Company	%0	176/601
1	CNG Development Company	CNG Porducing Company	%0	211/100
				58/366
	CNG Producing Company	Dominion Exploration & Production Inc	%0	Change of name
	Dominion Exploration & Production Inc	Dominion Transmission Inc	%0	251/621

	Dominion Transmission Inc	Consol Gas Company	%0	6/634 Merger
† 				6/634
	Consol Gas Company	CNX Gas Company LLC	%0	Merger
-	CNX Gas Company LLC	Noble Energy Inc	%0	254/811
14	Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	%0	169/756
	Consolidated Gas Transmission Corporation	CNG Development Company	%0	176/601
!	CNG Development Company	CNG Porducing Company	%0	211/100
				1
				28/366
	CNG Producing Company	Dominion Exploration & Production Inc	%0	Change of name
	Dominion Exploration & Production Inc	Dominion Transmission Inc	%0	251/621
				6/634
	Dominion Transmission Inc	Consol Gas Company	%0	Merger
				6/634
:	Consol Gas Company	CNX Gas Company LLC	%0	Merger
	CNX Gas Company LLC	Noble Energy Inc	%0	254/811

BOOK/PAGE	432/178	432/175	432/172	432/169	432/166	433/24	433/21	432/638	432/600	432/633	432/630	432/628	432/625	432/622	432/619	432/616	432/613	432/610	432/607	432/840	432/636	438/152	437/744	437/742	437/746	438/128	438/130	437/748	437/763	437/761
ROYALTY	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8	not less than 1/8			
GRANTEE/LESSEE	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc	Noble Energy Inc
GRANTOR/LESSOR	Eleanor L Stewart	Good Samaritan	Helen D Markle	Candance L Ferrebee	Joann & Albert Paul Barkhurst	Naomi & George L Neely	Beatrice C & Lewis E Pierce	Charlene A Bryant	Brenda G & Carl R Highlander	St John United Methodist Church	Sandra Hiley	Rachel D Morrison	Patricia Lynn & Steve V Blackwell	Merle Lee Hiley	Linda L & Richard A Strosky	Kenneth Allen & Helen M Markle	Dorothy A & Robert W Reardon	Deborah D Conrad	Barbara L & Troy Vanek	Linda Jeanne McCoy	Georgia Maxine Ferrebee	Keith Cecil & Mona Hess	Victoria Ann McCray	Betty L & John O Baker, Sr	Donald Lee Burrows	John & Kathleen M Markle	Jeffrey A Burrows	Scott's Run Settlement House	Alice May & Harry F Wood	Cyndy Faye & Arnold D Weeks, Jr
ADDITIONAL LESSORS LEASE NUMBER	Q079293002	Q079293003	Q079293004	Q079293005	Q079293006	Q079293007	Q079293008	Q079293009	Q079293010	Q079293011	Q079293012	Q079293013	Q079293014	Q079293015	Q079293016	Q079293017	Q079293018	Q079293019	Q079293020	Q079293021	Q079293022	Q079293023	Q079293024	Q079293025	Q079293026	Q079293027	1 0079293028	0079293029	Q079293030	Q079293031
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2017277072	Donald R Hiley	Noble Energy Inc	not less than 1/8	437/758
Q079293033	Jonathon & Christine Barnhart	Noble Energy Inc	not less than 1/8	437/756
Q079293034	Lovia Marie Seckman	Noble Energy Inc	not less than 1/8	437/750
Q079293035	Nancy Marie White	Noble Energy Inc	not less than 1/8	437/752
Q079293036	Vikki D Underwood	Noble Energy Inc	not less than 1/8	437/754
Q079293037	Cecil Leroy Lowe	Noble Energy Inc	not less than 1/8	435/62
Q079293038	Sandra J & John Hritz	Noble Energy Inc	not less than 1/8	435/58
Q079293039	James Clair & Carolyn Sue Carney	Noble Energy Inc	not less than 1/8	435/56
Q079293040	Harry Clifford & Cynthia Hess	Noble Energy Inc	not less than 1/8	438/156
Q079293041	Charles Frederick & Judith Lynn Carney	Noble Energy Inc	not less than 1/8	438/150
Q079293042	Daniel J Howell	Noble Energy Inc	not less than 1/8	435/52
Q079293043	Loretta Pearl Fisher	Noble Energy Inc	not less than 1/8	435/68
Q079293044	Yvonne A Sword	Noble Energy Inc	not less than 1/8	435/66
Q079293045	Donald H & Felipa M Carney	Noble Energy Inc	not less than 1/8	438/74
Q079293046	Scott Randolph	Noble Energy Inc	not less than 1/8	438/206
Q079293047	Harold Ray Carney	Noble Energy Inc	not less than 1/8	438/192
Q079293048	Ronald A Carney	Noble Energy Inc	not less than 1/8	438/194
Q079293049	lda L Baisden	Noble Energy Inc	not less than 1/8	438/126
Q079293050	Dale M Baker	Noble Energy Inc	not less than 1/8	438/102
Q079293051	Marianne & Frederick Poholek	Noble Energy Inc	not less than 1/8	438/92
Q079293052	Karla K & James Miller	Noble Energy Inc	not less than 1/8	435/48
Q079293053	Janice C Northcraft	Noble Energy Inc	not less than 1/8	435/50
Q079293054	Eugene E Randolph	Noble Energy Inc	not less than 1/8	458/745
Q079293055	Benjamin L Baker	Noble Energy Inc	not less than 1/8	464/220
Q079293056	Colleen M Sheppard	Noble Energy Inc	not less than 1/8	446/75
Q079293057	Todd A Schmidt	Noble Energy Inc	not less than 1/8	444/59
Q079293058	Stanley M Kowaleski Jr	Noble Energy Inc	not less than 1/8	442/345
O 079293059	Leisa Ann Caton	Noble Energy Inc	not less than 1/8	442/343
O O O O O O O O O O	Jeffrey Barnhart	Noble Energy Inc	not less than 1/8	449/776
O 9079293061	Diane Campbell	Noble Energy Inc	not less than 1/8	449/549
29 79293062	Karen L & Brian C Durham	Noble Energy Inc	not less than 1/8	449/551
a a a a a b a a a b a a a a a a a a a a	Donald B Fox	Noble Energy Inc	not less than 1/8	449/545
QQ79293064	Joyce E Jamieson	Noble Energy Inc	not less than 1/8	452/708
M 0079293065	Henry Markle	Sparta Exploration Co	not less than 1/8	357/80

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WV Department of Environmental Protection

Copy of Memorandum	Copy of	Memorandum	474/52	Copy of Lease	Copy of Lease	Copy of	Memorandum	409/643	409/639	409/653	409/196	417/173	417/198	419/198	419/121	420/282	417/133	417/136	420/210	424/144	429/291	417/142	436/175	437/765	Copy of	Memorandum	438/186	438/84	438/104	438/108	438/110
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Q079293066		Q079293067	Q079293068	Q079293069	Q079293070			Q073344002	Q073344003	0073344004	Q073344005	Q073344006	0073344007	Q073344008	Q073344009	Q073344010	Q073344011	0073344012	0073344013	Q073344014	Q073344015	Q073344016	Q073344017	Q073344018			Q073344020	n Q073344021		Q073344024	Q073344025
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Barbara A & Marvin Pippin	Tammie & David Cooper	Donald Lee & Julie Ann Irwin	Betty Jane & Roland Bozeman		Gordon McConnell	Gerritt & Anita Kenyon	Kevin Warren Johnson	Beverly & Francis Joseph Rautenstrach	Jennifer Sue Rounds	Joseph McConnell	Shirley & Mark Byam	Evelyn Kenyon	Patricia & Edward Husted	Tammy Jo & Terry Smith	Kelly Ann & Robert Wayne Petty	David Eugene McConnell Jr	Barbara Kay & Larry R Jerin	Wayne R & Marilyn C Rounds	Gerritt Dexter Jr & June J Campbell	Paul Kenyon	David & Deborah Campbell	Cynthia & Roy E Webb	Marlene K Fudge	Joan G Dygert	Linda J Abbey	Richard Campbell	William G Orton	3	Michael R & Mary Kate Durett	Kim Renee Bernardo	Jeffrey A Durett
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		Richard J Hitchcock	Noble Energy Inc	not less than 1/8	Memorandum
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		Mark C & Tammy McConnell	Noble Energy Inc	not less than 1/8	Memorandum
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:		Julia Arlene Morris	Noble Energy Inc	not less than 1/8	Memorandum
i	Q072647002	Helen Kay Moore	Noble Energy Inc	not less than 1/8	408/30
•	Q072647003	Timothy Pfost	Noble Energy Inc	not less than 1/8	408/36
	Q072647004	Betty Jane Patterson	Noble Energy Inc	not less than 1/8	408/39
	Q072647005	Leighton M & Frank Kelley	Noble Energy Inc	not less than 1/8	408/50
	Q072647006	Arlis Gene Westbrook	Noble Energy Inc	not less than 1/8	408/53
	Q072647007	Paula Irene Morris & Harold McDaniel	Noble Energy Inc	not less than 1/8	408/55
	Q072647008	Alvin Leroy & Phoebe Kathleen Kelley	Noble Energy Inc	not less than 1/8	408/61
	Q072647009	Roy F & Kendall Morris	Noble Energy Inc	not less than 1/8	408/26
	Q072647010	David E & Joyce G Morris	Noble Energy Inc	not less than 1/8	408/45
	Q072647011	Barbara Sharon & Leslie Meadows	Noble Energy Inc	not less than 1/8	408/42
	Q072647012	Robert V Griffis	Noble Energy Inc	not less than 1/8	409/202
	Q072647013	Corneila Peral Morris Jenkins	Noble Energy Inc	not less than 1/8	408/34
	Q072647014	Nancy J Lewis	Noble Energy Inc	not less than 1/8	408/28
i	Q072647015	F Richard & Linda Humphries Hall	Noble Energy Inc	not less than 1/8	409/632
	Q072647016	Mary Lynne Crowe	Noble Energy Inc	not less than 1/8	409/641
•••••••••••••••••••••••••••••••••••••••	Q072647017	Scott Alexander Gray	Noble Energy Inc	not less than 1/8	409/637
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Floyd E & Mary Beth Herrick	Marian Huffman & Robert Glen Anderson	Larry E & Judy K Lewis	Gladys & Gerald Llewellyn	Larry D Westbrook	Sandra J Lloyd	Janice E McPherson	Harold O Jr & Rose Zella Morris	Marily Kay Houston	Arlene Goodrum	Timothy Donald & Lori Brown	Leah Kathryn Armstrong Nancy Shalom Wilson & William Edward Ir	Luke	Kay Louise Bumgarner	Joan E Morris	Jay Lee Walker	James Michael Walker	William L & Faye Grimm	Norma L King	Margaret M & Paul Edward Johnson	Anna Hartman	Maxine Elaine Bayliss	Kay Huffman & Jerry Allen Lane	Linda A Busch	Karen Beth Hoffman	Amanda Jane Grimm Maxwell	Kathy Morris	John Malyar Jr	O R & Faith Ann Bowyer	Lenore M Wimbrough	Carolyn Sue & William Ray Elmore	Terry & Harold Douglas O'Dell	Heather Jamie Bess
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Robin Lyn & Michael H Strouse	Lon Pfost	Belinda J Zeugner	Sandra K Hoffman	Kacy Wilson	Linda S Kirkwood	William L Hoffman	Helen Ester Summers	Debra A & James Mayer	Bruce & Laura Francis Shanholtzer	Terry & Harold Douglas O'Dell	Thomas R & Lisa McGrath	Brunhilde Rodeheaver	Valerie J McGrath	Timothy J McGrath	Mark L McGrath	Sarah Jane & William Dayton Garton	Mary Griffin	William R Rader	Linda Carol & Kenneth P Jaeb	Kenneth E Griffin	Maxine Androcy Kuzma	Edna Androcy Kochick	Allan R McGrath	Patricia Coyle & James Marciniak	David Wayne & Brenda Woods	Tammy Thompson	Michael Thomas & Deborah A Woods	Phyllis Jeanette & Clyde B Robertson	Michael & Linda Morris	Karen Dornon & Denver Stevens	Kevin Morris	Emerson Louis & Kathy E Rice	Gregory A Davidson
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Debra Sue & Richard Lee Clendenin Brian Shanholtzer	Linda & Barry Faries	Lois C & Ellis C Burke	John J & Frances M Rader	Jack R Rader	James L & Beth Rader	Patricia Hanson	Tammie & David Cooper	Patrick S & Mona McGrath	Margaret J Hall	Steven Androcy Jr	Donald & Mary Ann Hammond	Sherry Arnold	Glenn Harland Phillips Jr	Crystal Akers	Vilma Kucharek Gontarz	Mary Jeanne Hardman	Raymond Chester & Darlene Blinn	Fredric Morris Blinn	Victoria Kucharek Aber	Tracy & Albert Stone	Brett D Garrison		Jenise Hartje	Deborah Faye Phillips	Roy C & Karen Malyar	Mildred Elaine Fortson	Danette Chivington	Virginia & John Buckholtz		Brenda S Boggs	Mary Lou Wodicka	Donald E II & Barbara Hardman
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John P & Lois Kuchark	Gordon McConnell	Geraldine E & Roy A Hemenway	Betty Jane & Roland Bozeman	Joan & James Wynne	Charles W & Ethel Campbell	Richard James Gideon Sr	Tammie & David Cooper	Tammie & David Cooper	Daniel Morris Gideon	Donna & Raymond Chavez		Nancy & George Douglas		Stephen D & Jo E Blinn	David & Deborah Campbell	Richard J & Jan McConnell	John W & Marian A Rounds	Barbara A & Marvin Pippin	Gerritt & Anita Kenyon	Sherry Arnold	Kevin Warren Johnson	Glen Estep	Beverly & Francis Joseph Rautenstrach	Jennifer Sue Rounds	Barbara Kay & Larry R Jerin	Jeannie & David Smith	Barbara Joy May	James Paul & Sheila Irwin	Betty Straughn	Dixie L Goodwin	Bonita J Moody	Evelyn Kenyon	Shirley & Mark Byam
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		Steven Harold Morris	Noble Energy Inc	not less than 1/8	Memorandum
		Mark A Morris	Noble Energy Inc	not less than 1/8	Copy of
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		Joel Robert Morris	Noble Energy Inc	not less than 1/8	Memorandum
		Julia Arlene Morris	Noble Energy Inc	not less than 1/8	Copy of
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9	Q080521003	Mary Myer	Apalachian Corporation	not less than 1/8	272/790
	Q080521004	William Markle	Antero Resources Apalachian Corporation	not less than 1/8	272/775
		-	Antero Resources		No. of Parts of Section 2.
	0080521005	Shirley Deulley	Apalachian Corporation	not less than 1/8	272/823
	Q080521006	David & Betty Colvin	Antero Resources Apalachian Corporation	not less than 1/8	722/827
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	T Q080521007	Ronnie Krajcik	Apalachian Corporation	not less than 1/8	272/815
	AM A008052	Robert Bonner	Antero Resources Apalachian Corporation	not less than 1/8	278/774
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This MEMORANDUM OF LEASE, dated this 30 day of September, 2014, is utilized to indicate the existence of a Paid-UP Oil, and Gas Lease (hereinalter, "Lease") of even date herewith, by and between Hansel James Phillips, 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 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. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>. County of <u>Tyler</u>, State of West Virginia, generally bounded now or formerly as follows:

On the North by: Norma S. Williams
On the East by: Norma S. Williams
On the South by: Williams Revocable Trust
On the West by: Frank Steven Grass

and being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in Fiduciary: Settlement Book 9; 41, Page 324; 152, said land being identified for tax purposes as <u>06-14-18</u> on this date, and stipulated to contain, for the purpose of calculating payments, <u>Twenty-eight</u> (28.00) 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: Dovil A. Bouther Signature David A Corethers Printed Name	LESSOR: Dianes Phillips Signature Printed Name: Hansel James Phillips Address:
WITNESS:	LESSEE:
Signature	NOBLE ENERGY, INC.
Printed Name	Signature By: MARK A. ACREE Its: Attorney-In-Fact

RECEIVED
Office of Oil and Gas

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WV Department of Environmental protection

INDIVIDUAL ACKNOWLEDGMENT STATE / COMMONWEALTH OF COUNTY OF Daddridge The foregoing instrument was acknowledged before mp, this James Phillips, a single man. . 20<u>14,</u> by <u>Hansel</u> MY COMMISSION EXPIRES: 2/8/2020 Official Seal Public, State of West Virgi Blake Thatcher 1307 Oakmorf Rood Charleston, WY 25314 Whission expires February 8, 2020 Printed Name Notary Public CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON In witness thereof, I hereunto set my hand and affixed my seal. MY COMMISSION EXPIRES: Thomas C. Ruschett T. Signature COMMONWEALTH OF PENNSYLVANIA OF PENNSYLVANIA

OF APIAL SEAL

Thomas C Exercist II, Notary Public
Canton Twp., Washington County
My Commission Expires Makin 14, 2018

LASER, PENNSYLVANIA ASSOCIATION OF NOTARIES Thomas C Burchett TI Printed Name **Notary Public**

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



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

On the North by:
On the East by:
On the South by:
On the West by:
On the West

and being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in Settl. Book 48. Page 352, said land being identified for tax purposes as 06-14-18 on this date, and stipulated to contain, for the purpose of calculating payments, Twenty-eight (28.00) scres, 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.

LESSOR:

Signature Tolio m 6:450 n Printed Name	Signature Printed Name: Dorothy V. Carney Wiseman Address: 1/9 Claffican Sur Compton III 24426	uar.
WITNESS: Signifiure Tuke on Gibson Printed Name	LESSOR: Yoga ! Wiseman Signature Printed Name: Roger L. Wiseman Address: Samus as about	<u>-</u>
WITNESS:	LESSEE:	
Signature Printed Name	NOBLE ENERGY, INC. Signature By: MARK A. ACREE Its: Attorney-In-Fact	- RECEIVED Office of Oil and Gas

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WV Department of Protection Protection 12015

WITNESS:

KRISTAL N MAYBERRY

NOTARY PUBLIC

COMMONWEALTH OF VIRGINIA

MY COMMISSION EXPRES OCT. 31, 2017

COMMISSION 9 7877209

INDIVIDUAL ACKNOWLEDGMENT

INDIVIDUAL ACKNOWLEDGMENT

STATE / COMMONWEALTH OF VIGINIC S

COUNTY OF Allegany 8

The foregoing instrument was acknowledged before me, this Thoday of October, 2014, by Dorothy

V. Carney Wiseman and Roger L. Wiseman, her husband.

My Commission Expires:

Signature

Notary Public

CORPORATE ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF WASHINGTON

On this 17 day of NOVEMBER 2014, 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:

COMMONWEALTH OF PENNSYLVANIA
ROTARIAL SENL
ISSUED SEIGHBURG CONTY
COMMON WASHINGTON COUNTY
COMMON THE SENGT MARCH 14, 2018
SEN PURISHERANDA ASSOCIATION OF NOTARIES

Thomas C. Burchett TE. Signature

Thomas C. Burchett III.
Printed Name
Notary Public

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

PAID-UP OIL AND GAS LEASE

This PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") is made and entered into this 12th day of November, 2013. (hereinafter, "Effective Date") between Alexander Hiley. a minor, by his Guardian.

whose mailing address is: 1108 Brock Rd. Athens, GA 30607 (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, "Lessoe"), 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).
- DESCRIPTION / LEASED PREMISES: All those certain tracts of land situate in the District of Meade. County of <u>Tyler</u>, State of West Virginia, generally bounded now or formerly:

On the North by: Norma S. Williams
On the East by: Norma S. Williams
On the South by: Williams Revocable Trust
On the West by: Frank Stephen Grass

being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in Will Book 4. Page 461 recorded in Ritchic County. WY said land being identified for tax purposes as <u>06-14-18</u> on this date, and stipulated to contain for the purpose of calculating all payments required hereunder <u>Twenty-eight (28.00)</u> acres, more or less, hereinafter, <u>"Lensed Premises."</u> 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 Lessec'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 critical payable at any time prior to the expiration of the Primary Term stall 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 (12.3%) of the net amount realized by Lessee computed at the wellhead. As used in this Lense, 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 properties the expiration of the Primary Term, if this Lease is not being maintained by any other provision hereof, the Lease EIVED nevertheless be extended one (1) year beyond the completion of plugging operations of the last well on properties in the permit Lessee to deepen, rework, or recomplete any well on the Leased Premises or lands pooled or unitized therewith, and if such 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 unity (1) the partment of

Environmental Protection

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(ties). Any cancellation or surrender of a Declaration of Pooling or unit order shall acither 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 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, egrass 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 substantace 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

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 easing, from the Lessed 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 walves, 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 Frve 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 coverage the confidence of the Lesse, from conducting drilling, completing, equipping, or reworking operations thereon, or from producing oil and gos of the 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, tomado, burricane, earthquake, seismic disturbance, or other acts of God, war, rebellion, insurrection, rick, strikes, differences with workmen, failure of carriers to transport or furnish facilities for transportation, as a result of a lawsuit APR some law, order, or regulation of the government, as a result of shortage in material or equipment, or as a result of any cause whatsoever beyond the reasonable control of the Lessee, then while so prevented, Lessee's obligation to comply with such covenant shall be suspended for so long as compliance is thus prevented, and for an additional twelve (12) months therefore Department of

Environmental Protection

- 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
- 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.
- 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 Lesse, 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.
- 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; (e) during the last from the Leaser Fremises of any lates purportedly posted or interact unstream using the last free (2) years, (c) unting 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
- 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.
- 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 shove-described method of notice.
- 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.

WITNE

RECEIVED Office of Oil and Gas

APR **3 0** 2015

WV Department of Environmental Protection INDIVIDUAL ACKNOWLEDGMENT

STATE OF Georgia 5 COUNTY OF Jackson 5

MY COMMISSION EXPIRES:

NOD, 11, 2017

Signature Jak R. 77 Kaha Printed Name Taak R. MEKETIE Notary Public

JACK R MCKERLIE

Notary Public

Jackson County

State of Georgia

My Commission Expires Nov 11, 2017

RECEIVED
Office of Oil and Gas

APR 30 2015

WV Department of Environmental Protection

PREPARED BY / UPON RECORDATION RETURN TO: Land Department Noble Energy, Inc. 333 Technology Drive, Suite 116 Canonsburg, PA 15317

PAID-UP OIL AND GAS LEASE

This PAID-UP OIL AND GAS LEASE (hereinafter, "Lense") is made and entered into this 12th day of November, 2013. (hereinaster, "Effective Date") between Justin Hilev a minor, by his Guardian. whose mailing address is 1108 Brock Rd. Athens. GA 30607 (hereinaster, "Lessor," whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is 333 Technology Drive, Suite 116, Canonsburg, Pennsylvania 15317, (hereinaster, "Lessor,"), with Lessor and Lessee being sometimes hereinafter referred to as "Parties".

- 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 and agreements 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 scam, by any methods now or hereafter known or discovered, in and under the Leased Premises (defined
- DESCRIPTION / LEASED PREMISES: All those certain tracts of land situate in the District of Meade. County of Tyler, State of West Virginia, generally bounded now or formerly:

On the North by: Norma S. Williams Norma S. Williams On the East by: Williams Revocable Trust On the South by: Frank Stephen Grass On the West by:

being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in Will Book 4. Page 461 recorded in Fitchie County, WY said land being identified for tax purposes as 06-14-18 on this date, and stipulated to contain for the purpose of calculating all payments required hereunder Twenty-eight (28.09) 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

- TERM: Subject to the other provisions contained herein, this Lease shall be in force for a primary term of five (5) years (hercinafter, "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.
- 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.
- S. 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 (12.5%) of the net amount realized by Lessee computed at the wellhead. As used in this Lesse, 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 Lesse, 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 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
- 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.
- 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.
- 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, not being maintained by any other provision neters but lessed no commenced operations for uniting, completing, reworking equipping, or any other operations to obtain production on the Lessed Premises or lands pooled or unitized therewith, this Lesse equipping, or any other updrautous to total production on the penals of tenness or rains product manner. At any time after shall remain in full force and effect as long as such operations are conducted in a reasonably prudent manner. At any time after shall remain in full force and effect as long as such operations are conducted in a reasonably product 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.
- 9. POOLING AND UNITIZATION: Lessee is hereby granted the right to pool or unitize the Leave Hennises, or any production units. Furthermore, Lessee shall in an event be required to delly many than the control of the production of any substance covered hereby, so as to create one (1) or more drilling or part thereof, with any other lands for the production or any substance covered faceby, so as to seem on such unit. Said delline 3 0 2015

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(ties). 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 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 scross 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 egrees 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

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 easing, 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, easing, 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 (55.00) 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 hereinahove 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, tomado, hurricane, earthquake, scismic 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 cause whatsoever beyond the reasonable control of the Lessee, then while so prevented, Lessee's obligation to comply with such covenant shall be suspended for so long as compliance is thus prevented, and for an additional twelve (12) months thereafter.

- 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 Partles.
- 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 unlitized 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 unlitized 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.

LESSOR

Printed Name: Justin H

ddress: Wis Brader RO

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Office of Oil and Gas

APR 3 0 2015

WV Department of Environmental Protection

WITNESS

INDIVIDUAL ACKNOWLEDGMENT

STATE OF GEOGGIA

MY COMMISSION EXPIRES: Nev 11,2017 Signature Jan M. on okahi Printed Name Jack Renekerter Notary Public

JACK R MCKERLIE Notary Public Jackson County State of Georgia My Commission Expires Nov 11, 2017

> RECEIVED Office of Oil and Gas

> > APR 3 0 2015

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

_____WV Department of Environmental Protection

This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") effective this 11th day of October, 2013, by and between Deborah Sue Williams & Marvy K. Williams, wife and husband whose address is 32 Hillside Dr., Forest Hills, KY 41527, (hereinafter, "Lessor" whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is at 333 Technology Drive, Suite 116, Canonsburg, Pennsylvania

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

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 set form above, and for so long increatier 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. Lossoo 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 DESCRIPTION / LEASED PREMISES: All those certain tracts of land situate in the District of Meade. County of Tyler. State of West Virginia, generally bounded now or formerly as follows: On the North by: Norma S. Williams On the East by: Norma S. Williams On the South by: Williams Revocable Trust On the West by: Frank Stephen Grass and being the same land acquired by Lessor by virtue of Affidavit of Heirship to be recorded in the Office of Clerk of the County Commission, said land being identified for tax purposes as Tax Map 14 Parcel 18 on this date, and stipulated to contain, for the purpose of calculating payments, Twenty Eight (28.00) 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. Printed Name: Deborah Sue Williams Printed Name Address: 82 Hillside Dr., Forest Hills, KY 41527 WITNESS: Printed Name: Martyn K. Williams Printed Name Address: 82 Hillside Dr., Forest Hills, KY 41527

WITNESS: NOBLE ENERGY, INC. RECEIVED Office of Oil and Gas Printed Name: MARK A. ACREE, Attorney-In-Fact

APR 3 0 2015

WV Department of Environmental Protection

INDIVIDUAL ACKNOWLEDGMENT COUNTY OF MY COMMISSION EXPIRES: Official Seal Printed Name Notary Public Commissioner for West Virginia Rodney Parsons Ona, WV My Commission Expires April 20, 2016 CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON On this _____ day of ______, 2013, before me, the undersigned officer, personally appeared MLAKK 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 numbers therein excitated and as behalf of 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 official seal. MY COMMISSION EXPIRES: Notary Public

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

This MEMORANDUM OF LEASE, dated this 25th day of October, 2013, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Brenda S. Boggs, single whose address is 5328 Flagfish Ct. Waldorf, MD 20603, (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, "Lessor")

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

- 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 primary term of the Lease for an additional five (5) years after the end of the primary term, thereby continuing the term of the
- 2. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>, County of <u>Tyler</u>, State of West Virginia, generally bounded now or formerly as follows: On the North by:

Basil Morris heirs

•	TOTAL MOLES INCID	
On the East by:	Ritchie County;	
On the South by:	Ritchie County;	
On the West by:	Frank Stephen Grass	
("Leased Premises"). This Memo	land acquired by Lessor by virtue of Aff sion in Tyler County West Virginia, sai to contain, for the purpose of calculat	idavit of Death and Heirship to be recorded in the Office of Clerk of d land being identified for tax purposes as TM 14, Parcel 22 on this ting payments, Thirty-One and 76/100 (31.76) acres, more or less or the purpose of providing notice of the existence of the Lease and no fithe Lease.
WITNESS:		<u>LESSOR</u> ·
Printed Name: WITNESS:	Bolly Abants	Printed Name: Brenda S. Boggs Address: 5328 Flagfish Ct. Walderf. MD 20603 240 210-4366
Printed Name		Printed Name: Address:
WITNESS:		
rinted Name:		NOBLE ENERGY, INC. By: Www.ll. Line House Mark A. ACREE, Attorney-In-Fact
		70X

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WV Department of 3/2015 Environmental Protection

INDIVIDUAL ACKNOWLEDGMENT STATE OF COUNTY OF The foregoing instrument was acknowledged before me, this 29th day of November 2013, by Brenda S. Boges, single BILLY JONATHAN C. ABANDO NOTARY PUBLIC CHARLES COUNTY MY COMMISSION EXPIRES: MARYLAND MY COMMISSION EXPIRES 08/25/2016 CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON On this 10 to day of 100 100 2013, 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 official seal. MY COMMISSION EXPIRES: Vinly Dire Name COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL
KARLY JAME NANZ
Notary Public
PITTSBURGH CITY, ALLEGHENY COUNTY
My Commission Expires Feb 17, 2017

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

PAGE 2

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Office of Oil and Gas

WV Department of Environmental Protection 07/03/2015

This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP Oil AND GAS LEASE (hereinafter, "Lease") effective this 29th day of November, 2013, by and between Gordon McConnell, single whose address is P.O. box 250455. Holly Hill, FL 32125, (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.

	printing to the			
2. <u>Descriptio</u> State of West Virgini	N/LEASED PREMISES: All those certain, generally bounded now or formerly	in tracts of land situate in the District of <u>Meade</u> , County of <u>Tyler</u> as follows:		
On the North by:	Basil Morris Heirs			
On the East by:	Ritchie County			
On the South by:				
On the West by:	Frank Stephen Grass			
Commission, said land ourpose of calculating This Memo	t being identified for tax purposes as payments, Thirty One and 76/100 (3	<u>Hidavit of Heirship</u> to be recorded in the Office of Clerk of the County <u>Tax Map 14 Parcel 22</u> on this date, and stipulated to contain, for the <u>1.76</u>) acres, more or less (" <u>Leased Premises</u> "). For the purpose of providing notice of the existence of the Lease and ion of the Lease.		
WITNESS:		LESSOR Lindon M C Lonnell Printed Name: Gordon McConnell		
Printed Name:		Address: P.O. box 250455, Holly Hill, FL 32125		
WITNESS:				
rinted Name		Printed Name: Address:		

WITNESS: Printed Name:

RECEIVED Office of Dil and Gas

APR 8 0 2015

WV Department of renvironmental Proใช้(ผู้3/2015

INDIVIDUAL ACKNOWLEDGMENT

COUNTY OF VOLUSIA	§ §
The foregoing instrument was acknown, 2013, by Gordon McConnell, single	
MY COMMISSION EXPIRES:	Printed Name Debra M. Bengamin
DEBRA M. BENJAMIN MY CHAMISSION # 11 F1 R42 ENPIRES: August 6, 2015 (40) 28-0153 Florica Noticy Service com	Notary Public
(CORPORATE ACKNOWLEDGMENT
COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON	§ 5
appeared MARK A. ACREE, as Attorney-in-Fac	2013, before me, the undersigned officer, personally at for NOBLE ENERGY, INC., a Delaware corporation, personally known to me the within instrument, and acknowledged to me that he executed the same for the deorporation.
In witness thereof, I hereunto set my	hand and affixed my official seal.
MY COMMISSION EXPIRES:	
	Notary Public
PREPARED BY / UPON RECORDATION, RETURN TO: Land Department	

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

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Office of Oil and Gas

APR 30 2015

WV Departmental Protection



This MEMORANDUM OF LEASE, dated this 7th day of October, 2014, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Michael R. Durett and Mary Kate Durett, husband and wife whose address is 4194 King Richard Court Sarasqta, Florida 34232. (hereinafter, "Lessor" whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is at 333 Technology Drive, Suite 116, Canonisburg, 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. <u>DESCRIPTION / LEASED PREMISES:</u> All those certain tracts of land situate in the District of <u>Meade</u>, County of <u>Tyler</u>. State of West Virginia, generally bounded now or formerly as follows:

the County Commission in Tyler County West Virginia, said to	wit of Death and Heirship to be recorded in the Office of Clerk of and being identified for tax purposes as TM 14, Parcel 22 on this payments, Thirty One and 76/100 (31,7600) acres, more or less
This Memorandum of Lease has been executed for the shall not be considered in any way a modification or alteration of the shall not be considered in any way a modification or alteration of the shall not be considered in any way a modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in any way as modification or alteration of the shall not be considered in the shall not be consi	he purpose of providing notice of the existence of the Lease and of the Lease.
WITNESS: Printed Name: Brandon South	Printed Name: Michael B. Durett Address: 4194 King Richard Court Sarasota, Florida 34232 Printed Name: Mary Kate Durett Addless: 4194 King Richard Court Sarasota, Florida 34232

NOBLE ENERGY, INC.

MARK A. ACREE, Attorney-In-Fact

R Office	ECEIVED of Oil and Gas
	R 3 0 2015

WV Department of Protection Protection 15

WITNESS:

Printed Name:

On the North by:

On the South by:

On the West by:

On the East by:

Basil Morris;

Ritchie County;

Ritchie County;

Frank Stephen Grass;

INDIVIDUAL ACKNOWLEDGMENT
STATE OF Florida COUNTY OF Saveseta
The foregoing instrument was acknowledged before me, this day of day of 2014, by Michael R. Durett and Mary Kate Durett, husband and wife.
MY COMMISSION EXPIRES:
Brandon Surfine State of Florida MY COMMISSION & EE 841787 Expires: October 8, 2018 Notary Public
CORPORATE ACKNOWLEDGMENT
COMMONWEALTH OF PENNSYLVANIA § COUNTY OF WASHINGTON §
On this
In witness thereof, I hereunto set my hand and affixed my official seal.
MY COMMISSION EXPIRES: COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Thomas C. Burchet Canton Twp Washington County My Commission Expires March 14, 2018 MEMBER, PERNSYLVANIA ASSOCIATION OF NOTARIES

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

NOGLE PAID UP - WV - 2013.07.31

PAGE 2

This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP Oil and Gas Lease (hereinafter, "Lease") effective this 14th day of October, 2014, by and between Kim Renee Bernardo, single whose address is 1766 Old Timber Dr. Monroe, MI 48161, (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, "Lessoe").

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. <u>DESCRIPTION</u> of West Virginia, generation	/LEASED PREMISES: All those certain to raily bounded now or formerly as follow	racts of land situate in the District of \underline{Meade} , County of \underline{Tyler} , State vs:
On the North by:	Basil Morris Heirs	
On the East by:	Ritchie County	
On the South by:	Ritchie County	
On the West by:	Frank Stephen Grass	
identified for tax purpos required hereunder This This Memora	in the Probate Court of Allegheny Co- ses as Tax Map 14 Parcel 22 on this date, tw One and 76/100 (31.76) acres, more and of Lease has been executed for the	EDUTIONS Of amoviding natice of the existence of the Lease and shall
not be considered in any	y way a modification or alteration of the	
WITNESS:		LESSOR
Printed Name:	Q Prewitt	Printed Name: Kim Renee Bernardo Address: 1766 Old Timber Dr. Monroe, MI 48161
WITNESS:	•	
Don from Printed Name_Do	M BUSSELL	Printed Name: Address:

WITNESS:	NOBLE ENERGY, INC.
Printed Name:	By::: Mark A. ACREE, Attomey-In-Fact BECEIVED Office of Oil and Gas

APR 30 2015

INDIVIDUAL ACKN	OWLEDGMENT				
STATE OF TUCKUSAL S COUNTY OF MACHINE					
The foregoing instrument was acknowledged before me, 2014, by <u>Kim Renee Bernardo, single</u> .	this 3nd day of November				
MY COMMISSION EXPIRES:	larmy Massingul				
TAMMY MASSINGILL Printed Notary Notary Public, State of Michigan County of Monroe My Commission Expires 03-22-2021 Acting in the County of	Public				
CORPORATE ACK	OWLEDGMENT				
COMMONWEALTH OF PENNSYLVANIA \$ COUNTY OF WASHINGTON \$	742-70Vyx*				
On this 15 day of ANNARY 2014, 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	official scal.				
MY COMMISSION EXPIRES:	Thomas C. Burchett -				
PREPARED BY / UPON RECORDATION. RETURN TO: Land Department NOBLE ENERGY, INC. 333 Technology Drive, Suite 116 Canonsburg, PA 15317	COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Thomas C. Burchat II, Notary Public Canton Twp., Washington County My Commission Excites March 14, 2013 MENSER, PENNSYLVANIA ASSOCIATION OF HOTARIES				

RECEIVED
Office of Oil and Gas

APR 3 0 2015

WV Department of Environmental Protection

This MEMORANDUM OF LEASE, dated this <u>L1th</u> day of <u>November</u>, 2014, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "<u>Lease</u>") of even date herewith, by and between <u>leffrey A. Durett, a single man</u> whose address is <u>1275 Underhill Road East Aurora</u>, <u>New York 14052</u>, (hereinafter, "<u>Lessor</u>" whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is at 333 Technology Drive, Suite 116, Canonsburg, Pennsylvania 15317. (hereinafter, "<u>Lessee</u>").

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

On the North by:	Basil Morris;	
On the East by:	Ritchie County;	
On the South by:	Ritchie County;	
On the West by:	Frank Stephen Grass;	
the County Commissi	on in Tyler County West Virginia, said	davit of Death and Heirship to be recorded in the Office of Clerk of land being identified for tax purposes as TM 14, Parcel 22 on this g payments, Thirty One and 76/100 (31,7600) acres, more or less
This Memo shall not be considere	randum of Lease has been executed for d in any way a modification or alteration	the purpose of providing notice of the existence of the Lease and of the Lease.
WITNESS:		LESSOR Add C
		Printed Names effice & Durett
Printed Name:		Printed Names <u>Jeffrey K. Dürett</u> Address: <u>1275 Underhill Road East Aurora. New York 14052</u>
WITNESS:		
Printed Name		Printed Name: Address:
WITNESS:		NOBLE ENERGY, INC. RECEIVED Office of Oil and Gas MARK A. ACREE, Attorney-In-Fact A APP 20 0 00000000000000000000000000000
Printed Name:		MARK A. ACREE, Attorney-In-Fact APR 30 2015

NOBLE PAID UP - WV - 2013.07.31

WV Department of Environmental Protection 07/03/2015

INDIVIDUAL ACKNOWLEDGMENT STATE OF New York COUNTY OF Jeffrey A. Durett, a single man. MY COMMISSION EXPIRES: 3 21 15 **Notary Public** Kristy Lee Wedgwood Notary Public, State of New York Commission No. 01WE6237636 CORPORATE ACKNOWLEDGMENT Qualified in Erie County My Commission Expires 3/21/20_15 COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON On this 15 day of JANUARY 2015, 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 official seal. MY COMMISSION EXPIRES: Thomas C. Buchett TT. Notary Public

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL

Thomas G. Burchert II, Notary Public
Contor Tran. Washington County
My Commission Expires March 14, 2018
MEYEER. PENNSYLVANIA ASSOCIATION OF NOTARIES

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

NOBLE PAID UP - WV - 2013.07.31

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Officerof Oil and Gas

APR 3 0 2015

WV Department of Environmental Proteon/2015



This MEMORANDUM OF LEASE, dated this 20th day of January, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter. "Lease") of even date herewith, by and between Richard J. Hitchcock, a married man dealing in his sole and senamte property whose address is 3023 S. Atlantic Ave Davtona Beach, Florida 32118, (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 therevith, 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. <u>DESCRIPTION/LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>. County of <u>Tyler</u>. State of West Virginia, generally bounded now or formerly as follows:

and being the same land acquired by Lessor by virtue of Affidavit of Death and Heirship to be recorded in the Office of Clerk of

MP 14-19 & 14-22

Basil Morris heirs;

Ritchie County:

Ritchie County;

Donald E. Williams, et. al:

On the North by:

On the East by:

On the South by:

On the West by:

NOBLE PAID UP - WV - 2013.07 31

and Tax Map 15. Parcel 8 on this date, and stipulated to contain 60/100 (110.60) acres, more or less ("Leased Premises").	nd being identified for tax purposes as <u>Tax Map 14 Parcets 19, 22</u> n. for the purpose of calculating payments, <u>One Hundred Ten and</u>
This Memorandum of Lease has been executed for t shall not be considered in any way a modification or alteration of	he purpose of providing notice of the existence of the Lease and of the Lease.
WITNESS: Printed Name: EARBARA PANE WITNESS: Printed Name: geonette mitzel Printed Name: geonette mitzel	Printed Name: Richard C. Hitchcock Address: 3023 S. Atlantic Ave Davtona Beach, Florida 32118 Printed Name: Address:
WITNESS: Printed Name:	RECEIVED Office of Oil and Gas APR 3 0 2015 NOBLE ENERGY, INC. WV Department of MARK A. ACREE, Attorney-In-Fact Mark A. ACR

MP 15-8

Hattie Jones;

Billy J. Cox;

Ritchic County;

Terry & Eldon Markle;

PAGE I

07/03/2015

INDIVIDUAL ACKNOWLEDGMENT COUNTY OF duy of January MY COMMISSION EXPIRES: EAFIBARA J. MEEGAN Commission # EE 136426 Expires Jonuary 29, 2016 Botto fin Toy Fast-cross no he has Printed Name Notary Public CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON 26 day of MARCH On this <u>&6</u> day of <u>MARCH</u>, 2015, 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 official seal. MY COMMISSION EXPIRES: Thomas C. Burchett II Notary Public COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Thomas C. Burchett II. Hotary Public Canton Twp., Washington County My Commission Expires Murch 14, 2018 BEUSER, FENNSYLVARIA ASSECIATION OF ROTARIES

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

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Office of Oil and Gas

NOBLE PAID UP - WV - 2013 07 31

PAGEA PR 3 0 2015

WV Department of Environmental Protection

07/03/2015

This MEMORANDUM OF LEASE, dated this 14th day of January, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Mark C. McConnell and Tammy McConnell, husband and wife whose address is 2000 S. Apache Rd., Lot 230, Buckeye, AZ 85326-9116., (hereinafter, "Lessor" whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is at 333 Technology Drive, Suite 116, Canonsburg, Pennsylvania 13317, (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. <u>DESCRIPTION/LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>, County of <u>Tyler</u>, State of West Virginia, generally bounded now or formerly as follows:

	MP14-19 & 14-22	MP 15-8	
On the North by:	Norma S. Williams	Hartie Jones	
On the East by:	Ritchie County	Ritchie County	
On the South by:	Ritchie County	Billy J. Cox	
On the West by:	Donald F. Williams, et. al	Terry and Elden Markle	

and being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in AH Book 432, Page 578, said land being identified for tax purposes as Tax Map 14 Parcels 19, 22 and Tax Map 15, Parcel 8 on this date, and stipulated to contain, for the purpose of calculating payments, One hundred, ten and 6/10 (110.6) 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:	/ra-
Printed Name:	Printed Name: Mark C. McConnell Address: 2000 S. Apache Rd., Lot 230
WITNESS:	Buckeye, AZ 85326-9116
Printed Name	Printed Northe: Tammy McConnell Address: 2000 S. Apache Rd., Lot 230 Buckeye, AZ 85326-9116

WITNESS:	NOBLE ENERGY, INC.	PEIVED
Printed Name:	1	Oll and Gas
NOBLE PAID UP - WV - 2013.07.31	AVV Dep	artment of

INDIVIDUAL ACKNOWLEDGMENT STATE OF _____ The foregoing instrument was acknowledged before me, this _____23rd___2015_, by Mark C. McConnell and Tammy McConnell, husband and wife. MY COMMISSION EXPIRES: NOV, DE 2016 Official Seal
CITLALY GASTELUM MORALES
Notary Public State of Arizona
Maricopa County
My Comm Expires November 5,2016 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 official seal. MY COMMISSION EXPIRES:

Notary Public

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

RECEIVED Office of Oil and Gas

APR **30** 2015

WV Department of **Environmental Protection**

This MEMORANDUM OF LEASE, dated this day of, 20, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between William Charles Dickerson, single whose address is 6611 Kenilworth Ave., Ste 403, Riverdale, MD 20737-1300, (hereinafter, "Lessor" whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is at 1000 Noble Energy Drive, 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 Meade, County of, State of West Virginia,
generally bounded now or formerly as follows:
On the North by: Norma S. Williams
On the East by: Ritchie County
On the South by: Ritchie County On the West by: Possid R. Williams at al.
On the West by: Donald R. Williams, et al
being the same land acquired by Lessor by virtue of Will of Eva Dickerson recorded in the office of Clerk of the County Commission in Prince George's County, Georgia, said land being identified for tax purposes as Tax Map 14 parcel 19 on this date, and stipulated to contain for the purpose of calculating all payments required hereunder Fourty Six and 34/100 (46.34) 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.
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: LESSOR Printed Name: A 111 070 (DOME 1) 1177 (DOME 1)
Printed Name: Name
WV Department of Environmental Protection

09502258

WIINESS:		
Printed Name	Printed Name:	
Times (value	radicas.	
WITNESS:		
	Printed Name:	
Printed Name:	Address:	
WITNESS:		
2: IV	Printed Name:	
Printed Name:	Address:	
VITNESS:	<u>Lessee</u>	
	NOBLE ENERGY, INC.	*,*,*,*,*(*)*/*/
	By:	
Printed Name:	MARK A. ACREE, Attorney-In-Fact	V

RECEIVED
Office of Oil and Gas

APR 3 0 2015

WV Department of Environmental Protection

INDIVIDUAL ACKNOWLEDGMENT

COMMONWEALTH/STATE OF MCYUN	end s	
COUNTY OF DY INCE CHEOVOYCS	\$ \$	
The foregoing instrument was acknowle	edged before me this	3 day of <u>feb</u>
My Commission expires: LEAH SANDERS NOTARY PUBLIC STATE OF MARYLAN (Scal) My Commission Expires January 27, 2019	Printed-Name: <u>LCc</u> Notary Public	arolyt an sanders
INDIVIDUAL AC	KNOWLEDGMENT	
COMMONWEALTH/STATE OF	§	
The foregoing instrument was acknowle	edged before me this	day of
My Commission expires:		
(Seal)	Printed Name: Notary Public	
INDIVIDUAL AC	KNOWLEDGMENT	
COMMONWEALTH/STATE OF	8	
The foregoing instrument was acknowle	edged before me this	
My Commission expires:		
(Seal)	Printed Name: Notary Public	
INDIVIDUAL AC	CKNOWLEDGMENT	
COMMONWEALTH/STATE OF	§	
The foregoing instrument was acknowledged	edged before me this	day of
		 -
(Seal)		
(3)	Printed Name: Notary Public	RECEIVED Office of Oil and Gas
		ADD 9 A 2015

APR 3 0 2015

WV Department of Environmental Protection

This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Leise") effective this 14th day of January. 2015, by and between Robert E. Appar and Mary Ann Appar, husband and wife whose address is 2945 Rt. 96. Waterloo, NY 13165, (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. <u>DESCRIPTION/LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>. County of <u>Tyler</u>. State of West Virginia, generally bounded now or formerly as follows:

On the North by:	Basil Morris Heirs
On the East by:	Ritchie County
On the South by:	Ritchie County
On the West by:	Frank Stephen Grass

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: W Valle ()	LESSOR LESSOR
Printed Name: 4150 M. Keshel	Printed Name: <u>Robert E. Apgal</u> Address: <u>2945 Rt. 96. Waterloo, NY 13165</u>
WITNESS:	- May an appar
Printed Name_LISC_m_KeSpe/	Printed Name: <u>Mary Ann Apgar</u> Address: 2945 Rt. 96, Waterloo, NY 13165

WITNESS:	NOBLE ENERGY, INC.	• • •
	By:	1
Printed Name:	MARK A. ACREE, Attorney-In-Fact	Am

INDIVIDUAL ACKNOWLEDGMENT
STATE OF NEW YORK SCOUNTY OF SECONDS
The foregoing instrument was acknowledged before me, this
MY COMMISSION EXPIRES: 5/3/18 Luc M. Kule
Printed Name
LISA M KESHEL Notary Public - State of New York No. 01KE6221474 CORPORATE ACKNOWLEDGMENT My commission Expires May 03, 20 / 7
COMMONWEALTH OF PENNSYLVANIA § COUNTY OF WASHINGTON §
On this day of, 2015, 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 official seal.
My Commission Expires:
Notary Public
PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOBLE ENERGY, INC. 333 Technology Drive, Suite 116 Canonsburg, PA 15317

RECEIVED
Office of Til and Gas

NOBLE PAID UP - WV - 2013.07.01

APR 3 0 2015

This MEMORANDUM OF LEASE, dated this 14th day of Ianuary, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Steven Harold Morris, a single man whose address is 121 Park Blvd. New Smyrna Beach, Florida 32168, (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, "Lessoe").

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

and being the same land acquired by Lessor by virtue of Affidavit of Death and Heirship to be recorded in the Office of Clerk of the County Commission in Tyler County West Virginia, said land being identified for tax purposes as Tax Map 14 Parcels 19, 22 and Tax Map 15, Parcel 8 on this date, and stipulated to contain, for the purpose of calculating payments. One Hundred Ten and

MP 15-8

Ritchie County;

Terry & Eldon Markle;

07/03/2015

Billy J. Cox:

Hattie Jones:

MP 14-19 & 14-22

Basil Morris heirs;

Donald E. Williams, et. al;

Ritchie County;

Ritchie County:

60/100 (110.60) acres, more or less ("Leased Premises").

On the North by:

On the East by:

On the South by:

On the West by:

NOBLE PAID UP -- WV - 2013.07.31

This Memorandum of Lease has been executed for shall not be considered in any way a modification or alteration	the purpose of providing notice of the existence of the Lease at of the Lease.	nd
WITNESS: Printed Name: Konee K Hayes WITNESS:	Printed Name: Steven Harold Morris Address: 121 Park Blvd. New Smyrna Beach, Florida 32168	
Printed Name To ma L 1/2 man	Printed Name: Address:	
WITNESS: Printed Name:	NOBLE ENERGY, INC. By: MARK A. ACREE, Attorney-In-Fact	

INDIVIDUAL ACKNOWLEDGMENT

COUNTY OF				
The foregoing instrument was ackno Steven Harold Morris, a single man.	wledged before	me, this	day of	, 2015, by
MY COMMISSION EXPIRES:				
	Pri	inted Name		
	No	otary Public		
	ODDODATE A	CKNOWLEDGI	EFF MT	
C	OKTOKATEA	CKNOWLEDGE	MENT	
COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON	§ §			
On this day of	nt for NOBLE I the within instr	ENERGY. INC.,	a Delaware comoration, ne	rsonally known to me
In witness thereof, I hereunto set my	hand and affixed	d my official seal		
My Commission Expires:				
		Notary Pu	blic	

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

NOBLE PAID UP - WV - 2013.07.31

RECEIVED
Office of Oil and Gas

APR 3 0 2015

WV Department of Environmental Protection 07/03/2015

This MEMORANDUM OF LEASE, dated this 14th day of January, 2015, is utilized to indicate the existence of a PAID-UP Oil. AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Mark A. Morris, a married man dealing in his sole and separate property whose address is 116 Park Blvd. New Smyrma Beach. Florida 32168, (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, "Lessoe").

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

and being the same land acquired by Lessor by virtue of Affidavit of Death and Heirship to be recorded in the Office of Clerk of

MP 15-8

Hattie Jones;

Billy J. Cox;

Ritchie County:

Terry & Eldon Markle;

MP 14-19 & 14-22

Basil Morris heirs;

Ritchie County;

Ritchie County;

Donald E. Williams, et. al;

On the North by:

On the East by:

On the South by:

On the West by:

NOBLE PAID UP - WV - 2013.07.31

the County Commission in Tyler County West Virginia, said and Tax Map 15, Parcel 8 on this date, and stipulated to conta 60/100 (110.60) acres, more or less ("Leased Premises").	land being identified for tax purposes ain, for the purpose of calculating pay	as Tax Map 14 Percels 19, 22 ments, One Hundred Ten and
This Memorandum of Lease has been executed for shall not be considered in any way a modification or alteration	the purpose of providing notice of to of the Lease.	he existence of the Lease and
WITNESS: State	Printed Name: Mark A. Morris Address: 116 Park Blvd, New Str	ıyma Beach, Florida 32168
WITNESS: Dui Lul Printed Name Terri Lusk	Printed Name:Address:	
WITNESS:	noble energy, inc.	RECEIVED Office of Oil and Gas
Printed Name:	By:MARK A. ACREE, Attorno	APR 3 0 2013 WV Department of Environmental Protection

Notary Public

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

NOSLE PAID UP - WV - 2013.07.31

MY COMMISSION EXPIRES:

RECEIVED
Office of Oil and Gas

APR 30 2015

This MEMORANDUM OF LEASE, dated this 14th day of January, 2015, is utilized to indicate the existence of a PAID-UP OII, AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Joel Robert Morris, a married man dealing in his sole and separate property whose address is 2259 Swoope Dr. New Smyrna Beach, Florida 32168, (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, "Lessoe").

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

MP 14-19 & 14-22

NOBLE PAID UP - WV - 2013.07.31

	MP 14-19 & 14-22	MP 15-8
On the North by:	Basil Morris beirs:	Hattie Jones:
On the East by:	Ritchie County:	Ritchie County:
On the South by:	Ritchie County;	Billy J. Cox;
On the West by:	Donald E. Williams, et. al;	Terry & Eldon Markle;
and Tax Map 15, Page 60/100 (110.60) acres	on in Tyler County West Virginia, said <u>cel 8</u> on this date, and stipulated to con , more or less (" <u>Leased Premises</u> ").	idavit of Death and Heirship to be recorded in the Office of Clerk of land being identified for tax purposes as Tax Map 14 Parcels 19, 22 tain, for the purpose of calculating payments, One Hundred Ten and rethe purpose of providing notice of the existence of the Lease and no fithe Lease. LESSOR LESSOR
Printed Name: PA	micia A Scott	Printed Name: Joel Robert Morris Address: 2259 Swoope Dr. New Smyrma Beach, Florida 32168
WITNESS:		
Oin X Printed Name	int inst	Printed Name:Address:
WITNESS:		NOBLE ENERGY, INC.
Printed Name:		By: RECEIVED MARK A. ACREE, Attorney-In-Fact Office of Oil and Gas
		APR 30 2015

WV*Department03/2015

Environmental Protection

INDIVIDUAL ACKNOWLEDGMENT STATE OF Florida COUNTY OF Volume The foregoing instrument was acknowledged before me, this 231d. <u>Joel Robert Morris</u>, a married man dealing in his sole and separate property. My Commission Expires: /2-26-2017 PATRICIA A. SCOTT Commission # FF 068648 Expires December 26, 2017 Booke the Tay Fig. Income 100-155-1011

Printed Name

Notary Public

PATRICIA

& Scott

CC	DRPORATE ACKNOWLEDGMENT
COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON	§ §
On this day of appeared MARK A. ACREE, as Attorney-in-Fact to be the person whose name is subscribed to it purposes therein contained and on behalf of said	, 2015, before me, the undersigned officer, personally for NOBLE ENERGY, INC., a Delaware corporation, personally known to me he within instrument, and acknowledged to me that he executed the same for the corporation.
In wimess thereof, I hereunto set my h	and and affixed my official seal.
MY COMMISSION EXPIRES:	
	Notary Public

PREPARED BY LEON RECORDATION, RETURN TO: Land Department NOBLE EXERTY, INC. 333 Technology Drive, Suite 116 Canonsburg, PA 15317

NOBLE PAID UP - WV - 2013.07.31

PAGE 2

RECEIVED Office of Oil and Gas

APR **3 0** 2015 07/03/2015

This MEMORANDUM OF LEASE, dated this 14th day of January, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Julia Arlene Morris, a single woman whose address is 116 Park Blvd. New Smyrns Beach, Florida 32168, (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, "Lessoe").

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

and being the same land acquired by Lessor by virtue of Affidavit of Death and Heirship to be recorded in the Office of Clerk of

MP 15-8

Hattle Jones:

Billy J. Cox;

Ritchie County:

Terry & Eldon Markle:

07/03/2015

PAGE 1

MP 14-19 & 14-22

Basil Morris heirs:

Ritchie County:

Ritchie County:

Donald E. Williams, et. al;

On the North by:

On the East by:

On the South by:

On the West by:

NOBLE PAID UP - WV - 2013.07.31

and Tax Map 15, Parcel 8 on this date, and stipulated to co 60/100 (110.60) acres, more or less ("Leased Premises").	id land being identified for tax purposes as intain, for the purpose of calculating payme	Tax Map 14 Parcels 19, 22 mrs, <u>One Hundred Ten and</u>
This Memorandum of Lease has been executed shall not be considered in any way a modification or alteration.	for the purpose of providing notice of the ion of the Lease.	existence of the Lease and
WITNESS: Printed Name: Gint United Name Printed Name Filed Fr	Printed Name: Julia Arlene Morris Address: 116-Bark Blvd; New Smyn 3630 SR YY Printed Name: Address:	na Beach, Florida 32168
WITNESS: Printed Name:	NOBLE ENERGY, INC. By:	RECEIVED Office of Oil and Gas APR 3 0 2015
	MARA A. ACREE, AIIOTIESY	In-Fact WV Department of Environmental Protection

IN	DIVIDUAL ACKNOWLEDGMENT
STATE OF Florida COUNTY OF VOLUSIA	§ §
The foregoing instrument was acknow Julia Arlene Morris, a single woman.	wledged before me, this <u>13th</u> day of <u>March</u> , 2015, by
MY COMMISSION EXPIRES: 10/17/2018	
GINA M. NESTA NOTARY PUBLIC STATE OF FLORIDA Comm# FF165510 Expires 10/17/2018	Printed Name Gine M Deste Notary Public
cc	DRPORATE ACKNOWLEDGMENT
COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON	91 91
On this day of appeared MARK A. ACREE, as Anomey-in-Fact to be the person whose name is subscribed to the purposes therein contained and on behalf of said	2015, before me, the undersigned officer, personally for NOBLE ENERGY, INC., a Delaware corporation, personally known to me he within instrument, and acknowledged to me that he executed the same for the corporation.
In witness thereof, I hereunto set my h	and and affixed my official seal.
MY COMMISSION EXPIRES:	

Notary Public

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

RECEIVED
Office of Oil and Gas

NOBLE PAID UP - WV - 2013.07.31

APR² 3 0 2015

This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP Oil and Gas Lease (hereinafter, This MEMORANDUM OF LEASE, utilized to indicate the existence of a ram-up of Lease (hereinance, "Lease") effective this 15th day of October, 2013, by and between Jenise Hartie, single whose address is 2821 S. Niagra Circle, Grand Junction, CO 81501, (hereinafter, "Lesser" 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 set forth above, and for so long increanter as ou, 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 provision 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.
- DESCRIPTION / LEASED PREMISES: All those certain tracts of land situate in the District of Mende, County of Tyler, State of West Virginia, generally bounded now or formerly as follows:

On the North by:	Norma S. Williams	
On the East by:	Ritchie County	
On the South by:	Ritchie County	
On the West by:	Donald F. Williams, et, al	

and being the same land acquired by Lessor by virtue of Affidavit of Heirship to be recorded in the Office of Clerk of the County Commission, said land being identified for tax purposes as Tax Map 14 Parcel 19 on this date, and stipulated to contain, for the purpose of calculating payments, Fourty Six and 34/100 (46.34) 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.

Huds hullment Printed Name: Lindam Clement WITNESS:	Printed Name: Jenise Hartje Address: 2821 S. Niagra Circle, Grand Junction, CO 81501
Printed Name	Printed Name: Address:
WITNESS:	NOBLE ENERGY, INC.
Printed Name:	MARK A. ACREE, Attomey-In-Fact

RECEIVED Office of Oil and Gas

APR 3 0 2015

INDIVIDUAL ACKNOWLEDGMENT STATE OF Colorado COUNTY OF MESA , 2013, by Jenise Hartic, single. MY COMMISSION EXPIRES: O 5 3-3-2016 VERONICA LEE BURCHETT Nature Public **NOTARY PUBLIC** STATE OF COLORADO MY COMMISSION EXPINES 05-03-16 CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON On this _____ day of ______, 2013, 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 official seal. MY COMMISSION EXPIRES: Notary Public

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

> FECEIVED Office of Oil and Gas

> > AAR 3 0 2015

This MEMORANDUM OF LEASE, dated this <u>25th</u> day of <u>October</u>, 2013, is utilized to indicate the existence of a PAID-UP Oil. AND GAS LEASE (hereinafter, "<u>Lease</u>") of even date herewith, by and between <u>Brenda S. Borgs, single</u> whose address is <u>5328 Flagfish Ct. Waldorf, MD 20603</u>, (hereinafter, "<u>Lessor</u>" whether one or more), and NOBLE ENERGY, INC., a Delaware corporation, whose address is at 333 Technology Drive, Suite 116, Canonsburg, Pennsylvania 15317, (hereinafter, "Tessor") "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. <u>DESCRIPTION</u> State of West Virgini	ON/LEASED PREMISES: All those certain tr ia, generally bounded now or formerly as i	racts of land situate in the District of <u>Meade</u> , County of <u>Tyler,</u> follows:
On the North by:	Norma S. Williams;	
On the East by:	Ditable Courts	
On the South by:	Disable Courses	
On the West by:	Donald E. Williams;	
the County Commiss	sion in Tyler County West Virginia, said to contain, for the purpose of calculating	avit of Death and Heirship to be recorded in the Office of Clerk of land being identified for tax purposes as TM 14. Parcel 19 on this g payments, Forty Six and 34/100 (46.3400) acres, more or less
This Memo	orandum of Lease has been executed for ed in any way a modification or alteration	the purpose of providing notice of the existence of the Lease and of the Lease.
WITNESS: Printed Nagged WITNESS:	Billy Abands	Printed Name: Brenda S. Boges Address: 5328 Flagfish Ct. Waldorf, MD 20603 240 210-4366
Printed Name		Printed Name:Address:

WITNESS:	NOBLE ENERGY, INC.	
	a Marthelyn	W
		11~
Printed Name:	MARK A. ACREE, Attorney-In-Fact	,
	X	.V.
	J.Z.	ΛX

RECEIVED Office of Oil and Gas

APR 30 2015

INDIVIDUAL ACKNOWLEDGMENT STATE OF COUNTY OF The foregoing instrument was acknowledged before me, this Brenda S. Boggs, single. BILLY JONATHAN C. ABANDO MY COMMISSION EXPIRES: NOTARY PUBLIC CHARLES COUNTY MARYLAND
MY COMMISSION EXPIRES 05/25/2016 CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON 2014 On this 16th day of January purposes therein contained and on behalf of said corporation. In witness thereof, I hereunto set my hand and affixed my official seal. MY COMMISSION EXPIRES:

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL KARLY JANE NANZ Notary Public PITTSBURGH CITY, ALLEGHENY COUNTY My Commission Expires Feb 17, 2017

PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOSLE ENERGY, (NC. 333 Technology Drive, Suite 116 Canonsburg, PA 15317

NOBLE PAID UP - WV - 2013.07.31

PAGE 2

RECEIVED
Office of Oil and Gas

APR **30** 2015

This MEMORANDUM OF LEASE, dated this 12th day of November, 2013, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Nancy Douglas and George Douglas, wife and husband whose address is 945 Minota Avenue Akron, Ohio 44306, (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. DESCRIPTIO State of West Virginia	N/LEASED PREMISES: All those a, generally bounded now or for	e certain tracts of land situate in the l merly as follows:	District of <u>Meade</u> ,	County	of]	<u>Fyler,</u>
On the North by:	Norma S. Williams;					
On the East by: _	Ritchie County;					
On the South by:	Ritchie County;			-		
On the West by:	Donald E. Williams;					
he County Commissi	on in Tyler County West Virgi	e of Affidavit of Death and Helrship nia, said land being identified for to calculating payments, <u>Forty Six an</u>	ax purposes as TM	14. Parce	l 19 o	n this
	randum of Lease has been exec d in any way a modification or a	cuted for the purpose of providing alteration of the Lease.	natice of the existen	nce of the	Leas	e and
		LESSOR	^			

Printed Name: Mancy Douglas
Address: 945 Minota Avenue Akron. 330-472-6690 Printed Nati George Douglas Address: 945 Minota Avenue Akron, Ohio 44306 330-472-6690

WITNESS:	NOBLE ENERGY, INC.	ට d Gas
Printed Name:	MARK A. ACREE, Attorney-In-Fact	ا قار

INDIVIDUAL ACKNOWLEDGMENT
STATE OF OLIO COUNTY OF Summent was acknowledged before me, this 14th day of Locember, 2013, by Nancy Douglas and George Douglas, wife and husband.
My Commission Expires:
Sheila K. Rorrer, Notary Public Residence - Summit County State Wide Jurisdiction, Ohio My Commission Expires July 24 Zelute Printed Name Notary Public
. CORPORATE ACKNOWLEDGMENT
COMMONWEALTH OF PENNSYLVANIA § COUNTY OF WASHINGTON §
On this day of, 2013, 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 official seal.
My Commission Expires;
Notary Public

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

NOBLE PAID UP - WV - 2013.07.31

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Office of Oil and Gas

PAGE 2

APR 3 0 2015

This MEMORANDUM OF LEASE, dated this 12th day of November, 2013, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lesse") of even date herewith, by and between Stephen D. Blinn and Jo E. Blinn, husband and wife whose address is 292 Transit Drive Tallmadge, Ohio 44778, (hereinafter, "Lesser") 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

	"extended" primary term.	as the end of the primary want, mereby communing the term of the
2. <u>DESCRIPTION</u> State of West Virginia	N/LEASED PREMISES: All those certain to Legenerally bounded now or formerly as	tracts of land situate in the District of Meade. County of Tyler, follows:
On the North by:	Norma S. Williams;	
On the East by:	Ritchie County;	
On the South by:	Ritchie County;	
On the West by:	Donald E. Williams;	
the County Commission date, and stipulated to ("Lensed Premises"). This Memor	on in Tyler County West Virginia, said o contain, for the purpose of calculatin	davit of Death and Heirship to be recorded in the Office of Clerk of land being identified for tax purposes as TM 14. Parcel 19 on this are payments, Forty Six and 34/100 (46.3400) acres, more or less the purpose of providing notice of the existence of the Lease and a of the Lease. LESSOR Printed Name: Stephen D. Blina Address: 292 Transit Drive Tallmadge, Ohio 44278 330-633-5639
Printed Name		Oo E. Liberton Printed Name: Jo E. Blinn Address: 292 Transit Drive Tallmadge, Ohio 44278 330-633-5639

WITNESS:	NOBLE ENERGY, INC. By: Mulllur	RECEIVED Office of Oil and Gas
Printed Name:	MARK A. ACREE, Attorney-In-Fact	APR 3 0 2015

Notary Public

PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOBLE ENERGY, Inc. 333 Technology Drive, Suite 116 Canonsburg, PA 15317 RECEIVED
Office of Oil and Gas

APR 3 0 2015

NOBLE PAID UP - WV - 2013.07.31



This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease," effective this 1st day of September, 2014, by and between G. Douglas Davidson and Jodi L. Davidson, husband and wife whose address is 2689 Willow Glen Rd. Hilliard, OH 43026, (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:

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

On the South by:	Ritchie County	
On the West by:	Donald E. Williams	
		tington County Ohio Case Number 2008 1019 to be recorded in the lentified for tax purposes as Tax Map 14 Parcel 19 on this date, and nts, Fourty Six and 34/100 (46.34) acres, more or less (*Leased
This Memo shall not be considered	orandum of Lease has been executed for ed in any way a modification or alteration	the purpose of providing notice of the existence of the Lease and of the Lease.
WITNESS: WITNESS: WITNESS: Printed Name	Ba Dee L Destrey Bailery	Printed Name: C. Douglas Davidson Address: 2689 Willow Gren Rd. Hilliard, OH 43026 Printed Name: Jod Savidson Address: 2689 Willow Glen Rd. Hilliard, OH 43026
WITNESS:	·	NOBLE ENERGY, INC.
Printed Name:		MARK A. ACREE, Attorney-In-Fact

On the North by:

On the East by:

Norma Williams

Ritchie County

INDIVIDUAL ACKNOWLEDGMENT

STATE OF OHID COUNTY OF FRANKLIN §
The foregoing instrument was acknowledged before me, this 23rd day of September 2014, by G. Douglas Davidson and Jodi L. Davidson, husband and wife.
Printed Name HAPREET KAUR Notary Public CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA & COUNTY OF WASHINGTON On this day of December 2015, 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 official seal.
MY COMMISSION EXPIRES: Thomas C. Buckett TT Notary Public
PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOTARIAL SEAL Thomas C. Burchett II, Notary Public Conton Twp., Washington County 333 Technology Drive, Suite 116 Canonsburg, PA 15317 Canonsburg, PA 15317

Office of Oil and Gas

APR 3 0 2015

WV Departmental Protection



This MEMORANDUM OF LEASE, dated this 7th day of October, 2014, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Michael R. Durett and Mary Kate Durett, husband and wife, whose address is 4194 King Richard Court Sarasota, Florida 34232, (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, "Lessoe").

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

On the North by:	Norma S. Williams;	
On the East by:	Ritchie County;	
On the South by:	Ritchie County:	
On the West by:	Donald E. Williams;	
the County Commission	in Tyler County West Virginia, said I	wit of Death and Heirship to be recorded in the Office of Clerk of and being identified for tax purposes as TM 14. Parcel 19 on this payments, Forty Six and 34/100 (46,3400) acres, more or less
This Memoran shall not be considered in	dum of Lease has been executed for t n any way a modification or alteration o	he purpose of providing notice of the existence of the Lease and of the Lease,
WITNESS: Printed Name: WITNESS: Printed Name Paul	Sufrie Branden Surlans	Printed Name: Michael R. Daren Address: 4194 King Richard Court Sarasota, Florida 34232 When Late Duren Printed Vanje: Mary Kate Duren Address: 4194 King Richard Court Sarasota, Florida 34232

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Office of Oil and Gas

WITNESS:	NOBLE ENERGY, INC. By: Mullllu	APR 3 0 2 015
Printed Name:	MARK A. ACREE, Attorney-In-Fact	WW Department of Environmental Protection

INDIVIDUAL ACKNOWLEDGMENT
STATE OF Florida & COUNTY OF Samesta &
The foregoing instrument was acknowledged before me, this
MY COMMISSION EXPIRES:
Brandon Surine State of Florida MY COMMISSION # EE 841787 Expires: October 8, 2016 Printed Name Notary Public
CORPORATE ACKNOWLEDGMENT
COMMONWEALTH OF PENNSYLVANIA § COUNTY OF WASHINGTON §
On this 15 day of DECEMBER 2014, 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 official seal.
MY COMMISSION EXPIRES: Notary Public Notary Public
COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Thomas C. Burchett II, Notary Public Canton Twp., Washington County My Commission Expres March 14, 2018 NEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

PSEPARED BY / UPON RECORDATION. RETURN TO: Land Department NOBLE ENERGY, INC. 333 Technology Drive, Suite 116 Canonsburg. PA 15317 RECEIVED
Office of Oil and Gas

PAGE 2 APR 3 0 2015

NOBLE PAID UP - WV - 2013.07.31

This MEMORANDUM OF LEASE, utilized to indicate the existence of a Pam-UP Oil and Gas Lease (hereinafter. "Lease") effective this 14th day of January, 2015, by and between Robert E. Apgar and Mary Ann Apgar, husband and wife whose address is 117 Comwell St. Penn Yan, NY 14527, (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. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Mende.</u> County of <u>Tyler.</u> State of West Virginia, generally bounded now or formerly as follows:

On the South by:	Ritchie County	
On the West by:	Donald F. Williams, et. al	
ommission, said la	land acquired by Lessor by virtue of <u>Affid</u> and being identified for tax purposes as <u>Ta</u> ng payments, <u>Fourty Six and 34/100</u> (46.3)	avit of Heirship to be recorded in the Office of Clerk of the County \(\times \text{Map 14 Parcel 19} \) on this date, and stipulated to contain, for the 4) acres, more or less ("Leased Premises").
This Ment hall not be consider	norandum of Lease has been executed for red in any way a modification or alteration	the purpose of providing notice of the existence of the Lease and of the Lease.
VITNESS	M Keshel	Printed Name: Robert E. Appar Address: 2945 Rt. 96, Waterloo, NY 13165
VITNESS: JQ rinted Name_L15	M. leske	Printed Name: Mary Ann Appar Address: 2945 Rt. 96, Waterloo, NY 13165

WITNESS:	NOBLE ENERGY, INC.	taratatatatata.
	By:	BECENTER
Printed Name:	MARK A. ACREE, Attorney-In-Face	RECEIVED And Gas

APR 3 0 2015

On the North by:

On the East by:

Norma S. Williams

Ritchie County

, INDIVIDUAL ACKNOWLEDGMENT
STATE OF New York SCOUNTY OF SEVERAL \$
The foregoing instrument was acknowledged before me, this
MY COMMISSION EXPIRES: 5/30/18 LISA M. MALLO
Printed Name 1350 M. 1931/9] Notary Public
LISA M KESHEL Notary Public - State of New York No. 01KE6221474 CORPORATE ACKNOWLEDGMENT Qualified in Seneca County My commission Expires May 03, 20
COMMONWEALTH OF PENNSYLVANIA § COUNTY OF WASHINGTON §
On this day of, 2015, 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 official seal.
MY COMMISSION EXPIRES:
Notary Public
PREPARED BY / UPON RECORDATION. RETURN TO: Land Department NORILE ENERGY, INC: 333 Technology Drive, Suite 116 Canonsburg, PA 15317

RECEIVED
Office of Oil and Gas

APR 3 0 2015

NOBLE PAID UP -- WV - 2013.07.01

This MEMORANDUM OF LEASE, dat, 20, is utilized to indicate the existence "Lease") of even date herewith, by and between address is 6611 Kenilworth Ave., Ste 403, Rive whether one or more), and NOBLE ENERGY, at 1000 Noble Energy Drive, Canonsburg, Penns	te of a PAID-UP OIL AND GAS LEASE (hereinafter, William Charles Dickerson, single whose erdale, MD 20737-1300, (hereinafter, "Lessor" INC., a Delaware corporation, whose address is
Lessor did LEASE, LET, GRANT, and and/or assigns, the rights to explore, develop, products, including methane gas present in or as described below, subject to the provisions containfollowing:	sociated with any coal seam, from the premises
I. PRIMARY TERM: The primary term of commencing on the date immediately set forth about substances covered by the Lease are capable of Leased Premises or from lands pooled therewith, our pursuant to the provisions contained in the Lease, Lessee may extend the primary term of the Lease, the primary term, thereby continuing the term of term.	f being produced in paying quantities from the or the better the Lease is otherwise maintained or prolonged including an extension of term contained therein. The for an additional five (5) years after the end of
Meade , County of	ose certain tracts of land situate in the District of Tyler , State of West Virginia,
generally bounded now or formerly as follows:	
On the North by: Norma S. Williams	
On the East by: Ritchie County	
On the South by: Ritchie County	2 Moralmona
On the West by: Donald R. Williams, et al	Mart. May
calculating all payments required hereunder <u>Four</u> hereinafter, " <u>Leased Premises</u> ." The Leased Premises to the Lease to the Leased Premises to the Lease to the	orge's County, Georgia, said land being identified date, and stipulated to contain for the purpose of arty Six and 34/100 (46.34) acres, more or less, mises shall be deemed to include all accreted or
	ecuted for the purpose of providing notice of the ed in any way a modification or alteration of the
WITNESS:	LESSOR A DO Chalo Olh
Printed Name:	Printed Name: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ADD 3 0 2015

APR 30 ZUID

WITNESS:	
Printed Name	Address:
WITNESS:	
Printed Name:	Address:
WITNESS:	•
Printed Name:	
WITNESS:	LESSEE
	NOBLE ENERGY, INC.
Printed Name:	By: By: MARK A. ACREE, Attorney-In-Fact A P
	A

RECEIVED
Office of Oil and Gas

INDIVIDUAL ACKNOWLEDGMENT

COMMONWEALTH/STATE OF MCCUIC	rd s		
COUNTY OF DYINGE CHEOVORS	 \$		
The foregoing instrument was acknowled, 2015, by	dged before me this	day of <u>feb</u>	
My Commission expires:	0 -		
(Scal) NOTARY PUBLIC STATE OF MARYLANI My Commission Expires January 27, 2016	Printed-Name: <u>V2V</u> Notary Public	n sancters	
INDIVIDUAL ACE	KNOWLEDGMENT		
COMMONWEALTH/STATE OF	§		
COUNTY OF	\$		
The foregoing instrument was acknowled	dged before me this	day of	
My Commission expires:			
(Seal)	Printed Name:		
	Notary Public		
INDIVIDUAL ACE	KNOWLEDGMENT		
COMMONWEALTH/STATE OF	\$		
COUNTY OF	 \$		
The foregoing instrument was acknowled	dged before me this <u></u>	day of	
My Commission expires:			
(Seal)			
	Printed Name: Notary Public		
INDIVIDUAL ACE	KNOWLEDGMENT		
COMMONWEALTH/STATE OF	\$		
COUNTY OF	§		
The foregoing instrument was acknowled	dged before me this	day of	
My Commission expires:			
(Scal)	-		
	Printed Name: Notary Public		
	•	RECEIVED	c
		Office of Oil and Ga	ن .

APR 3 0 2015

This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") effective this 14th day of October, 2014, by and between Kim Renee Bernardo, single whose address is 1766 Old Timber Dr. Monroe, MI 48161. (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, "Lessor").

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 cual 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. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>, County of <u>Tvler</u>, State of West Virginia, generally bounded now or formerly as follows:

On the North by:	Norma S. Williams	
On the East by:	Ritchie County	
On the South by:	Ritchie County	
On the West by:	Donald F. Williams, et. al	

and being the same land acquired by Lessor by virtue of instrument to be recorded in the Office of Clerk of the County Commission, and currently recorded in the Probate Court of Allegheny County. State of Maryland as Estate Number 32059, said land being identified for tax purposes as Tax Map 14 Parcel 19 on this date, and stipulated to contain for the purpose of calculating all payments required hereunder Fourty Six and 34/100 (46.34) 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.

LESSOR

WITNESS: Paula (). Prewitt Printed Name: 1 Paula F. Prewitt WITNESS:	Printed Name: Kim Rence Bernardo Address: 1766 Old Timber Dr. Monroe, MI 48161
Printed Name	Printed Name: Address:

NOBLE ENERGY, INC.

Office of Oil and Gas

MARK A. ACREE, Attomey-Inflet CE MED

APR **3 0** 2015

WITNESS:

Printed Name:

09502258

INDIVIDUAL ACKNOWLEDGMENT		
STATE OF MUCHUMAN S COUNTY OF MONTHS		
The foregoing instrument was acknowledged before me, the 2014, by Kim Rence Bernardo, single.	nis 370 day of Your blv	
MY COMMISSION EXPIRES: Printed	My Massingul	
TAMMY MASSINGILL Notary F Notary Public, State of Michigan County of Monroe My Commission Expires 03-22-2021 Acting in the County of MONTO		
CORPORATE ACKNO	DWLEDGMENT	
COMMONWEALTH OF PENNSYLVANIA § COUNTY OF WASHINGTON §	Sitting the state of the state	
On this 15 day of JANUARY appeared MARK A. ACREE, as Attorney-in-Fact for NOBLE ENER to be the person whose name is subscribed to the within instrument purposes therein contained and on behalf of said corporation.	2014; before me, the undersigned officer, personally GY, INC., a Delaware corporation, personally known to me, and acknowledged to me that he executed the same for the	
In witness thereof, I hereunto set my hand and affixed my	Official seal.	
MY COMMISSION EXPIRES:	Thomas C. Burchett II	
PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOBLE ENERGY, INC. 333 Technology Drive, Suite 116 Canonsburg, PA 15317	COMMONWEALTH OF PENNSYLVANIA NCTARIAL SEAL Thomas C. Burchari II, Notary Public Canton Twp Washington County Vy Commission Exercises March 14, 2018 MENSEL, PENNSYLVANIA ASSOCIATION OF NOTARIES	

RECEIVED
Office of ©# and Gas

APR 3 0 2015

This MEMORANDUM OF LEASE, dated this 14th day of Ianuary, 2015, is utilized to indicate the existence of a PAID-UP Oil AND GAS Lease (hereinafter, "Lease") of even date herewith, by and between Mark C. McConnell and Tammy McConnell, husband and wife whose address is 2000 S. Apache Rd., Lot 230, Buckeye, AZ 85326-9116, (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.
- DESCRIPTION/LEASED PREMISES: All those certain tracts of land situate in the District of Meade, County of Tyler.
 State of West Virginia, generally bounded now or formerly as follows:

	MP14-19 & 14-22	MP 15-8
On the North by:	Norma S. Williams	Hattie Jones
On the East by:	Ritchie County	Ritchie County
On the South by:	Ritchie County	Billy J. Cox
On the West by:	Donald F. Williams, et. al	Terry and Elden Markle

and being the same land acquired by Lessor by virtue of instrument recorded in the Office of Clerk of the County Commission in AH Book 433, Page 578, said land being identified for tax purposes as Tax Map 14 Parcels 19, 22 and Tax Map 15, Parcel 8 on this date, and stipulated to contain, for the purpose of calculating payments, One hundred, ten and 6/10 (110.6) acres, more or tess ("Lessed 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:	/ra
Printed Name:	Printed Name: Mark C. McConnell Address: 2000 S. Apache Rd., Lot 230
WITNESS:	Buckeye, AZ 85326-9116
Printed Name	Printed Name: Tammy McConnell Address: 2000 S. Apache Rd., Lot 230 Buckeye, AZ 85326-9116

WITNESS:	NOBLE ENERGY, INC.	RECEIVED
_	By:	Office of Oil and Gas
Printed Name:	MARK A. ACREE, Attorney-	In-Fact / APR 3 0 2015

Notary Public

PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOBLE ENERGY, Inc. 133 Technology Drive, Suite 116 Canonsburg, PA 15317 RECEIVED
Office of Oil and Gas

APR 30 2015

NOBLE PAID UP - WV - 2013.07.31

This MEMORANDUM OF LEASE, dated this 11th 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 Jeffrey A. Durett, a single man whose address is 1275 Underhill Road East Aurora, New York 14052, (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.
- DESCRIPTION / LEASED PREMISES: All those certain tracts of land situate in the District of Mende. County of Tyler

tate of West Virginia	, generally bounded now or formerly	as follows:
on the North by:	Norma S. Williams;	
on the East by:	Ritchie County;	
on the South by:	Ritchia Countre	
On the West by:	Donald E. Williams;	
ne County Commissing te, and stipulated to Leased Premises*). This Memore	on in Tyler County West Virginia, so o contain, for the purpose of calcula	ffidavit of Death and Heirship to be recorded in the Office of Clerk of id land being identified for tax purposes as TM 14, Parcel 19 on the uting payments, Forty Six and 34/100 (46,3400) acres, more or less for the purpose of providing notice of the existence of the Lease and ion of the Lease.
VITNESS:		LESSOR A A A
		Printed Name: Jerney A. Durett
rinted Name:		Address: 1275 Underhill Rond East Aurora, New York 14052
ITNESS:		
		Printed Name:
rinted Name		Address:

NOBLE ENERGY, INC.

MARK A. ACREE, Attorney-In-Fact RECEIVED
Office of Oil and Gas

APR 30 2015

WITNESS:

Printed Name:

INDIVIDUAL ACKNOWLEDGMENT STATE OF New York COUNTY OF Erie The foregoing instrument was acknowledged before me, this _ ay of _ Novern bur _ 2014, by Jeffrey A. Durett, a single man. MY COMMISSION EXPIRES: 3 3115 Kristy Lee Wedgwood Notary Public, State of New York Commission No. 01WE6237636 CORPORATE ACKNOWLEDGMENT Qualified in Eric County COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON My Commission Expires 3/21/2015 On this 15 day of ARUARY 2014, 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 official seal. MY COMMISSION EXPIRES: Thomas C. Buckett II

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

NOBLE PAID UP - WV - 2013.07.31

COMMONWEALTH OF PENNSYLVANIA

RECEIVED Office of Oil and Gas

APR 30 2015



WV Department of **Environmental Protection**

07/03/2015

MEMORANDUM OF LEASE

This MEMORANDUM OF LEASE, dated this 20th day of January, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Richard J. Hitchcock, a married man dealing in his sole and separate property whose address is 3023 S. Atlantic Ave Daytona Beach, Florida 32118, (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:

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

MP 15-8

Ritchie County;

Hattie Jones:

MP 14-19 & 14-22

Basil Morris heirs;

Ritchie County:

Ritchie County;

On the North by:

On the East by:

On the South by:

NOBLE PAID UP - WV - 2013.07.31

On the South by:	Ritchie County;	Billy J. Cox;
On the West by:	Donald E. Williams, et. al:	Terry & Eldon Markle;
and Tax Man 15. Par 60/100 (110.60) acres	reel 8 on this date, and stipulated to c s, more or less ("Leased Premises").	Affidavit of Death and Heirship to be recorded in the Office of Clerk of aid land being identified for tax purposes as Tax Map 14 Parcels 19, 22 contain, for the purpose of calculating payments, One Hundred Ten and for the purpose of providing notice of the existence of the Lease and tion of the Lease
WITNESS:		LESSOR
Printed Name: BAR	LA PALLE	Printed Name: Richard C. Hitchcock Address: 3023 S Atlantic Ave Davtona Beach, Florida 32118
WITNESS:		***************************************
Stanted Name 320	troutgel	Printed Name: Address:
WITNESS:		NOBLE ENERGY, INC. Office of Oil and Gas
Printed Name:		MARK A. ACREE, Attorney-In-Fact & APR 3 0 2015

INDIVIDUAL ACKNOWLEDGMENT
STATE OF Flor, de secontry of Volume s
The foregoing instrument was acknowledged before me, this
MY COMMISSION EXPIRES:
Conarission # EE 195426 Coppres Scrusery 29, 2018 Expres Scrusery 29, 2018 Printed Name Nutary Public
CORPORATE ACKNOWLEDGMENT
COMMONWEALTH OF PENNSYLVANIA § COUNTY OF WASHINGTON §
On this <u>26</u> day of <u>MARCH</u> , 2015, 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 official seal.
MY COMMISSION EXPIRES: Thomas C. Burchett II
COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Thomas C. Burchett II, Notary Public Canton Twp., Washington County My Commission Exprise Murch 14, 2018 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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

RECEIVED
Office of Oil and Gas

NOBLE PAID UP - WV - 2013.07.31

APR 3 0 2015



This MEMORANDUM OF LEASE, utilized to indicate the existence of a PAID-UP On AND GAS LEASE (hereinafter, "Lease") effective this 25th day of February, 2015, by and between 10 Ann Balis and Tom Balis, wife and husand whose address is 202 Chippewa Lane, Loudon, TN 37774, (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 Lesse 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. <u>DESCRIPTION / Leased Prepases</u>: All those certain tracts of land situate in the District of <u>Meade</u>. County of <u>Tyler</u>, State of West Virginia, generally bounded now or formerly as follows:

-		
On the East by:	Ritchic County	
On the South by:	Ritchie County	
On the West by:	Donald F. Williams, et. al	
purpose of calculating	nd being identified for tax purposes as <u>Tar</u> ig all payments required hereunder <u>Fourty (</u>	it of Heirship to be recorded in the Office of Clerk of the Courx Map 14 Parcel 12 on this date, and stipulated to contain for Six and 34/100 (46.34) acres, more or less ("Leased Premises"). the purpose of providing notice of the existence of the Lease a
shall not be consider	ed in any way a modification or alteration	of the Lease.
WITNESS: Printed Name: Printed-Name	July John De Form	Printed Name: Jo Ann Balis Address: 202 Chippewa Lane, Loudon, TN 37774 Printed Name: Tom Balis Address: 202 Chippewa Lane, Loudon, TN 37774

***************************************	HOBLE ENERGY, INC.
	By: RECEIVED
Printed Name:	MARK A. ACREE, Attorney-Office of Oil and Gas

APR 30 2015

WITNESS.

On the North by: Norma S. Williams

INDIVIDUAL ACKNOWLEDGMENT STATE OF Florida The foregoing instrument was acknowledged before me, this , 2015, by Io Ann Balis and Tom Balis, wife and husend MY COMMISSION EXPIRES: DENISE D. HARDING MY COMMISSION & EE193773 EXPIRES: June 18, 2016 Printed Name Notary Public CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON On this ______ day of _______, 2015, 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 official seal. MY COMMISSION EXPIRES: Notary Public

PREPARED BY / UPON RECORDATION. RETURN TO: Land Department NOBLE ENERGY, INC. 1000 Noble Energy Drive Canonsburg, PA 15317

RECEIVED
Office of Oil and Gas

NOBLE PAID UP - WV -2013.07.01

APR 30 2015

This MEMORANDUM OF LEASE, dated this 14th day of lanuary, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Steven Harold Morris, a single man whose address is 121 Park Blvd. New Smyrna Beach, Florida 32168, (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 LRASE, 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. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>. County of <u>Tyler</u>. State of West Virginia, generally bounded now or formerly as follows:

MP 15-8

MP 14-19 & 14-22

On the North by:	Basil Morris heirs:	Hattie Jones;		
On the East by:	Ritchie County;	Ritchie County;		
On the South by:	Ritchie County;	Billy J. Cox;		
On the West by:	Donald E. Williams, et. al;	Terry & Eldon Markle;		
and being the same land acquired by Lessor by virtue of Affidavit of Death and Heirship to be recorded in the Office of Clerk of the County Commission in Tyler County West Virginia, said land being identified for tax purposes as Tax Map 14 Parcels 19. 22 and Tax Map 15, Parcel 8 on this date, and stipulated to contain, for the purpose of calculating payments, One Hundred Ten and 60/100 (110.60) 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.

I ECCOD

WITNESS: V. Houges Printed Name: Rence K. Hoves	Printed Name: Steven Harold Morris Address: 121 Park Blvd, New Smyrna Beach, Florida 3216
WITNESS:	
Printed Name TO mas L 14 man	Printed Name: Address:

WITNESS:	NOBLE ENERGY, INC.	
		RECEIVER
Printed Name:	By: Off MARK A. ACREE, Attorney-In-Fact	ice of Oil and Gas
	8	

INDIVIDUAL ACKNOWLEDGMENT

COUNTY OF		_	9 §		
The foregoing Steven Harold Morris, a		wledged b	efore me, this	day of	, 2015, by
My Commission Expiri	ES:				
			Printed Name		
			Notary Public		
	c	ORPORA	TE ACKNOWLEDOM	ÆNT	
COMMONWEALTH C COUNTY OF WASHIN		\$			
On this	name is subscribed to t	he within	instrument, and ackno	refore me, the undersigned a Delaware corporation, per whedged to me that he execu-	i officer, personally sonally known to me uted the same for the
In witness the	reof, I hercunto set my l	and and	affixed my official seal	•	
MY COMMISSION EXPIRE	S:				
			Notary Pu	blic	

Office of Oil and Gas

APR 30 2015

WV Department of Environmental Protection

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

NOBLE PAID UP - WV - 2013.07.31

PAGE 2

PAGE I

07/03/2015

MEMORANDUM OF LEASE

This MEMORANDUM OF LEASE, dated this 14th day of January, 2015, is utilized to indicate the existence of a PAID-UP Oil and Gas Lease (hereinafter, "Lease") of even date herewith, by and between Mark A. Morris, a married man dealing in his sole and separate property whose address is 116 Park Blvd. New Smyrna Beach, Florida 32168, (hereinafter, "Leasor" 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. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>. County of <u>Tyler</u>. State of West Virginia, generally bounded now or formerly as follows:

and being the same land acquired by Lessor by virtue of Affidavit of Death and Heirship to be recorded in the Office of Clerk of the County Commission in Tyler County West Virginia, said land being identified for tax purposes as Tax Map 14 Parcels 19. 22 and Tax Map 15. Parcel 8 on this date, and stipulated to contain, for the purpose of calculating payments, One Hundred Ten and

MP 15-8

Ritchie County:

Terry & Eldon Markle;

Hattie Jones:

Billy J. Cox;

MP 14-19 & 14-22

Basil Morris heirs:

Donald E. Williams, et. al;

Ritchie County;

Ritchie County;

60/100 (110.60) acres, more or less ("Leased Premises").

On the North by:

On the East by:

On the South by:

On the West by:

NOBLE PAID UP - WV - 2013.07.31

This Memorandum of Lease has been executed for t shall not be considered in any way a modification or alteration of	he purpose of providing notice of the existence of the Lease and of the Lease.
WITNESS:	LESSOR
Printed Name: Patricia A Scott	Printed Name: Mark A. Morris Address: 116 Park Blvd, New Smyrna Beach, Florida 32168
WITNESS: Printed Name_Terris USK.	Printed Name:Address:
	RECEIVED Gas Office of Oil and Gas
	ADK 0 °
WITNESS:	
Printed Name:	By: MARK A. ACREE, Attorney-In-Fact

Notary Public

RECEIVED
Office of Oil and Gas

APR 3 0 2015

NOBLE PAID UP - WV - 2013.07.31

333 Technology Drive, Suite 116 Canonsburg, PA 15317

PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOBLE ENERGY, INC.

purposes therein contained and on behalf of said corporation.

My COMMISSION EXPIRES:

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

Wy Department of EnvironmentateProtection

MEMORANDUM OF LEASE

This MEMORANDUM OF LEASE, dated this 14th day of January, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Joel Robert Morris, a martled man dealing in his sole and separate property whose address is 2259 Swoope Dr. New Smyrma Beach. Florida 32168, (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. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>, County of <u>Tyler</u>, State of West Virginia, generally bounded now or formerly as follows:

MP 15-8

Hattie Jones;

Billy J. Cox;

Ritchie County:

Terry & Eldon Markle;

PAGE I

07/03/2015

MP 14-19 & 14-22

Basil Morris heirs;

Ritchie County;

Ritchie County:

Donald E. Williams, et. al;

On the North by:

On the East by:

On the South by:

On the West by:

NOBLE PAID UP - WV - 2013.07.31

the County Commission in Tyler County West Virginia	of Affidavit of Death and Heirship to be recorded in the Office of Clerk of a said land being identified for tax purposes as Tax Map 14 Parcels 19, 22 to contain, for the purpose of calculating payments, One Hundred Ten and 7.
This Memorandum of Lease has been execu shall not be considered in any way a modification or alt	/)
WITNESS:	Printed Name: Ibel Robert Mofris
Printed Name: <u>FATILICIA A SCoH</u> WITNESS:	Address: 2259 Swoope Dt. New Smyrna Beach, Florida 32168
Ohi Lud Printed Name_ Terri Lust	Printed Name:Address:
	RECEIVED Gas Office of Oil and 2015
	Office of On 2015
WITNESS:	NOBLE ENERGY, INC.
Printed Name:	NOBLE ENERGY, INC. MARK A. ACREE, ALIGNAY TO FAITH PROTECTION MARK A. ACREE, ALIGNAY TO FAITH PROTECTION

INDIVIDUAL ACKNOWLEDGMENT STATE OF Florida COUNTY OF Volume The foregoing instrument was acknowledged before me, this 231 d. Joel Robert Morris, a married man dealing in his sole and separate property. MY COMMISSION EXPIRES: 12-26-2017 PATRICIA A. SCOTT Commission # FF 068848 Expires December 26, 2017 Bendel from her from superman accusate rem Printed Name Notary Public

CORPORATE ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON	§ §
appeared MARK A. ACREE, as Attorney-in-Fac	2015, before me, the undersigned officer, personally to for NOBLE ENERGY, INC., a Delaware corporation, personally known to me the within instrument, and acknowledged to me that he executed the same for the deporation.
In witness thereof, I hereunto set my l	oand and affixed my official seal.
My Commission Expires:	
	Notary Public

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

NOBLE PAID UP - WV - 2013.07.31

RECEIVED
RECEIVED
Office of Oil and Gas
APR 3 0 2015
APR 3 0 PAGE 2

WV Department of Environmental Protection

07/03/2015

MEMORANDUM OF LEASE

This MEMORANDUM OF LEASE, dated this 14th day of January, 2015, is utilized to indicate the existence of a PAID-UP OIL AND GAS LEASE (hereinafter, "Lease") of even date herewith, by and between Julia Arlene Morris, a single woman whose address is 116 Park Blvd. New Smyrna Beach, Florida 32168, (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. <u>DESCRIPTION / LEASED PREMISES</u>: All those certain tracts of land situate in the District of <u>Meade</u>. County of <u>Tyler</u>, State of West Virginia, generally bounded now or formerly as follows:

and being the same land acquired by Lessor by virtue of Affidavit of Death and Heirship to be recorded in the Office of Clerk of the County Commission in Tyler County West Virginia, said land being identified for tax purposes as Tax Map 14 Parcels 19, 22 and Tax Map 15. Parcel 8 on this date, and stipulated to contain, for the purpose of calculating payments, One Hundred Ten and

MP 15-8

Hattle Jones;

Billy J. Cox;

Ritchie County;

Terry & Eldon Markle;

PAGE I

07/03/2015

MP 14-19 & 14-22

Basil Morris heirs:

Ritchie County:

Ritchie County:

60/100 (110.60) acres, more or less ("Leased Premises").

Donald E. Williams, et. al;

On the North by:

On the East by:

On the South by:

On the West by:

NOBLE PAID UP - WV - 2013.07.31

•	
This Memorandum of Lease has been executed for shall not be considered in any way a modification or alteration	the purpose of providing notice of the existence of the Lease and of the Lease.
WITNESS:	LESSOR
Printed Name: (2) No. 14) este	Printed of Ime: Julia Arlene Morris Address! 146 Park Bivd. New Smyrna Beach, Florida 32168
WITNESS:	— 380 SR 44
All Arms	Printed Name:
1	
	PECEIVED RECEIVED Gas Office of Oil and Gas NOBLE ENERGY, INC. APR 30 2015 PARTMENT Of Location
	RECOIL and Co
	Office 3, 0 2015
WITNESS:	NOBLE ENERGY, INC. APR 3
Printed Name:	By: Department Protection
Limica issue:	MARK A. ACREE, Attomer-th-Fact entain
	NOBLE ENERGY, INC. APR 3 U LO By: MARK A. ACREE, Atto APP. HFact, ental Protection Environmental

INDIVIDUAL ACKNOWLEDGMENT STATE OF Florida COUNTY OF Volusia day of March Julia Arlene Morris, a single woman. MY COMMISSION EXPIRES: 10/17/2018 GINA M. NESTA NOTARY PUBLIC STATE OF FLORIDA Comm# FF165510 Expires 10/17/2019 Notary Public CORPORATE ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON On this _____ day of _______ 2015, 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 official seal. MY COMMISSION EXPIRES: Notary Public PREPARED BY / UPON RECORDATION, RETURN TO: Land Department NOSLE ENERGY, INC. 333 Technology Drive, Suite 116 Canonsburg, PA 15317

NOBLE PAID UP - WV - 2013.07.31

PAGE 2



Office of Oil & Gas 601 57th 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 <u>dee.swiger@nblenergy.com</u> or 724-820-3061.

Sincerely,

Dee Swiger

Regulatory Analyst III

DS/

Enclosures:

Office of Oil and Gas

APR 3 0 2015

WV Department of Environmental Protection

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

Date of Notic	e Certification: 4/27/15		API No. 47	- 095 -	
			Operator's	Well No. PEN	31 B
			Well Pad N	íame: PEN (03/31
Notice has b					
	e provisions in West Virginia Code tract of land as follows:	§ 22-6A, the Operator has prov	ided the req	uired parties v	vith the Notice Forms listed
State:	West Virginia		Easting:	500244.705	
County:	095-Tyler	UTM NAD 83	Northing:	4355179.037	·
District:	Meade	Public Road Acce		Stone Road -	County Rt. 6/3
Quadrangle:	Pennsboro	Generally used fa	rm name:	Noble Energy,	Inc.
Watershed:	huc-10 Middle Island Creek				
prescribed by it has provide information re of giving the requirements Virginia Code	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and set the owners of the surface described and set the owners of the surface described and (c), so surface owner notice of entry to surface owner notice of entry to surface owner notice of subsection (b), section sixteen of \$22-6A-11(b), the applicant shall thave been completed by the applicant	shall contain the following info bed in subdivisions (1), (2) an ection sixteen of this article; (ii urvey pursuant to subsection (of this article were waived in tender proof of and certify to the	rmation: (14 nd (4), subs) that the rea a), section to writing by	A) A certification (b), section (b), section (c), section	on from the operator that (i) ction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice wher; and Pursuant to West
that the Oper	West Virginia Code § 22-6A, the Operator has properly served the require ECK ALL THAT APPLY		nis Notice C	ertification	OOG OFFICE USE ONLY
☐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIR SEISMIC ACTIVITY WAS			☐ RECEIVED/ NOT REQUIRED
: 1 2. NOT	TICE OF ENTRY FOR PLAT SUR	VEY or 🔳 NO PLAT SURVE	EY WAS CO	ONDUCTED	RECEIVED
■ 3. NOT	TICE OF INTENT TO DRILL or	[] NOTICE NOT REQUIR NOTICE OF ENTRY FOR F WAS CONDUCTED or			RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER IF (PLEASE ATTACH)	BY SURFA	CE OWNER	
■ 4. NOT	ΓΙCE OF PLANNED OPERATION				☐ RECEIVED
■ 5. PUB	BLIC NOTICE				☐ RECEIVED
■ 6. NOT	TICE OF APPLICATION				RECEIVED
Required A	ttachments:			DECE	VED

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice 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 attacked Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required over 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 affidavis of postal receipt for certified mailing.

WW-6AC (1/12)

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:

By:

Canonsburg, PA 15317

Its:

Regulatory Analyst III

Telephone:

Noble Energy, Inc.

Address: 1000 Noble Energy Drive

Canonsburg, PA 15317

Facsimile: 724-416-5248

Email: dee.swiger@nblenergy.com

COMMONWEAL HATOR PENNSYLVANIA

NOTARIA, SL.

Regina Logue, Notary Public

New Sewickley Twp., Beaver County

My Commission Expires July 7, 2018

BER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Subscribed and sworn before me this 26th day of march 2015

ana dogue 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.

Office of Oil and Gas

APR 3 0 2015

Wy Department of Environmental Protection

07/03/2015

WW-6A (9-13)

API NO. 47-	095 _	
OPERATOR	WELL NO	. PEN 31 B
Well Pad Nat	me: PEN 0	3/31

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

Noti	ce Time Requirem	ent: notice shall be provide	ed no later tha	n the filing date of permit application.
	e of Notice: <u>᠘/</u> 27) ce of:	5 Date Permit Application	on Filed: <u>4/</u>	17/15-
V	PERMIT FOR AN WELL WORK			ROVAL FOR THE AN IMPOUNDMENT OR PIT
Deli	very method pursu	ant to West Virginia Cod	e § 22-6A-10	(b)
v	PERSONAL SERVICE	REGISTERED MAIL		OD OF DELIVERY THAT REQUIRES A PT OR SIGNATURE CONFIRMATION
certification ce	ficate of approval for tered mail or by any ment control plan req urface of the tract on and gas leasehold being ribed in the erosion a actor or lessee, in the of coal seams; (4) The work, if the surface to bundment or pit as de a water well, spring ide water for consum- osed well work active ection (b) of this sect design of the sheriff requision of this article to the R. § 35-8-5.7.a req	the construction of an impo- method of delivery that requ- uired by section seven of this which the well is or is propo- ged developed by the proposed and sediment control plan sub- event the tract of land on whowners of record of the surf- ract is to be used for the place scribed in section nine of this or water supply source locate- ption by humans or domestic ity is to take place. (c)(1) If re- ion hold interests in the land of the contrary, notice to a lier uires, in part, that the operate	undment or pirites a receipt of	of the application, the applicant for a permit for any well work or for a star as required by this article shall deliver, by personal service or by a signature confirmation, copies of the application, the erosion and the well plat to each of the following persons: (1) The owners of record of the ted; (2) The owners of record of the surface tract or tracts overlying the surface tract is to be used for roads or other land disturbance as not to subsection (c), section seven of this article; (3) The coal owner, toposed to be drilled is located [sic] is known to be underlain by one or concept of the coal and gas leasehold being developed by the proposed function, enlargement, alteration, repair, removal or abandonment of any any surface owner or water purveyor who is known to the applicant to thousand five hundred feet of the center of the well pad which is used to (6) The operator of any natural gas storage field within which the elements in common or other co-owners of interests described in the eight, article one, chapter eleven-a of this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. rovide the Well Site Safety Plan ("WSSP") to the surface owner and any as provided in section 15 of this rule.
☑ A	pplication Notice	☑ WSSP Notice ☑ E&S	Plan Notice	☑ Well Plat Notice is hereby provided to:
Nam Addi Cano Nam Addi	ress:	rgy Drive s) (Road and/or Other Distu	urbance)	COAL OWNER OR LESSEE Name: none Address: RECEIVED COAL OPERATORIFICE of Oil and Gas Name: none Address: APR 3 0 2015 Address: APR 3 0 2015 SURFACE OWNER OF WARRY OF AND/OR WATER PURIVEY OF AND/OR WATER PURIFY OF AND/OR WATER
Nam Addi Charl	ningdale, OH 43910 le: Frank Grass ress: 5115 Lansing Dr lotte, NC 28270			Name:
Nam	ie:) (Impoundments of Tits)		Address:
ALTERNATION OF	552455 ⁶ -Z-7			*Please attach additional forms if necessary 07/03/2015

API NO. 47-	095 -	6		
OPERATOR	WELL	NO.	PEN 31 B	
Well Pad Nat	ne. Pl	EN 03	/31	

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: 4/27/15 Date Permit Application Filed: 4/27/15 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ REGISTERED PERSONAL METHOD OF DELIVERY THAT REOUIRES A SERVICE MAIL 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: ☐ COAL OWNER OR LESSEE ☑ SURFACE OWNER(s) Name: none Name: Noble Energy, Inc. Address: 1000 Noble Energy Drive Address: Canonsburg, PA 15317 RECEIVED
Office of Oil and Gas Name: _____ ☐ COAL OPERATOR Name: none Address: Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) SURFACE OWNER OF WAPPER WELL Name: Donald W. Williams AND/OR WATER PURVEYOR(s)
Name: VALV Department of Address: 160 Koons Ave. Medina, OH 44256 Address: Environmental Environmental Name: Carl D. Williams Address: 5357 Rocky Creek Road ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD Marianna, Florida 32448 Name: none ☐ SURFACE OWNER(s) (Impoundments or Pits) Address: Name: Address: -07/03/2015*Please attach additional forms if necessary

API NO. 47	095 .			
OPERATOR	WELL	NO.	PEN 31 B	
Well Pad Nar	ne: P	EN 03	/31	_

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: 4/27/15 Date Permit Application Filed: 4/27/15 Notice of: PERMIT FOR ANY CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ REGISTERED PERSONAL METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL 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: ☐ COAL OWNER OR LESSEE ☑ SURFACE OWNER(s) Name: Noble Energy, Inc.
Address: 1000 Noble Energy Drive Name: none Address: Canonsburg, PA 15317 ☐ COAL OPERATOR Name: Name: none Address: Address: RECEIVED SURFACE OWNER OF WATER WELL AND/OR WATER BURNES ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Dianne Calhoun and Deborah S. Hatfiled 🗸 AND/OR WATER PURVEYOR(s) Address: 2815 Bayshore Gardens Parkway Bradenton, FL 34207 Name: Address: Name: Address: OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: none Address: Name: Address: -07/03/2015*Please attach additional forms if necessary

API NO. 47-<u>095</u>

OPERATOR WELL NO. PEN 31 B

Well Pad Name: PEN 03/31

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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

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 protecutive 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 Apthobized 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 the well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall be fine tember 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds and 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

API NO. 47- 095 -

OPERATOR WELL NO. PEN 31 B

Well Pad Name: PEN 03/31

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 Secretary at:

| Office of Oil and Gas

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

APR & 0 2015

WV Department of

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.

API NO. 47- 095 -

OPERATOR WELL NO. PEN 31 B

Well Pad Name: PEN 03/31

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.

PEN 31 B Well Pad Name: PEN 03/31 OPERATOR WELL NO. API NO. 47- 095

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: 724-416-5248

Oil and Gas Privacy Notice:

duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as appropriately secure your personal information. If you have any questions about our use or your personal information, please contact The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will

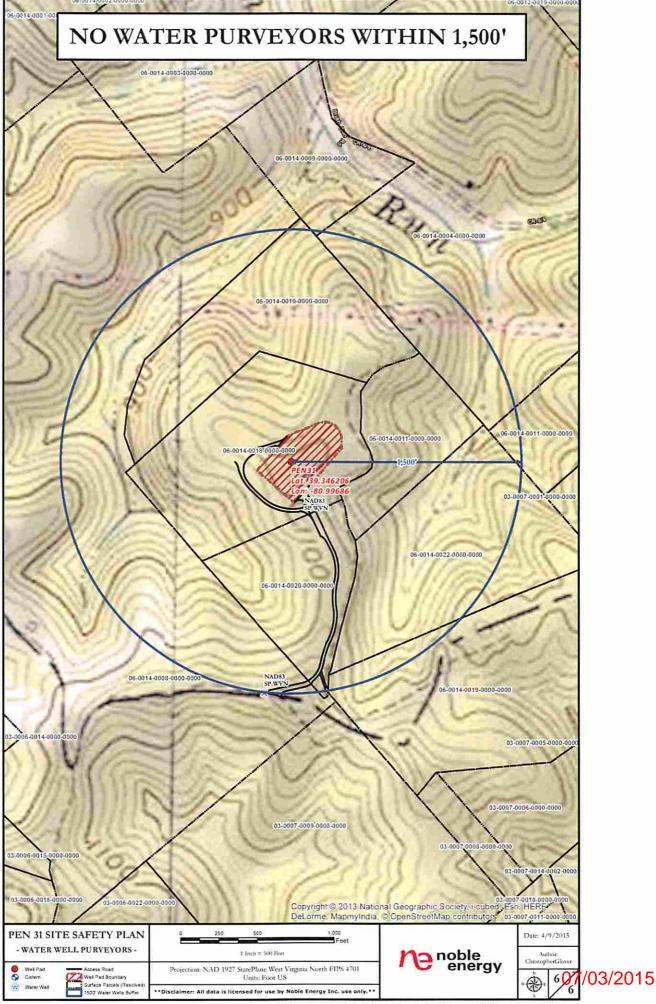
DEP's Chief Privacy Officer at depprivacy of ficer www.gov.

COMMONWEALTH OF PENNSYLVANIA Twp., Beaver Ccunty ina Sogue, Notary Public

Subscribed and sworn before me this 21th day of march, 2015

Notary Public

My Commission Expires 07/07/2018



STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time R Date of Notice	equirement: Notice shall be provided at least of 203/26/2015 Date Permit A		
Delivery meth	od pursuant to West Virginia Code § 22-6A-	16(b)	
■ HAND	☐ CERTIFIED MAIL		
DELIVER		ED	
receipt requeste drilling a horize of this subsection subsection may	Va. Code § 22-6A-16(b), at least ten days prior of or hand delivery, give the surface owner not contal well: <i>Provided</i> , That notice given pursuation as of the date the notice was provided to the be waived in writing by the surface owner. The facsimile number and electronic mail address	ice of its intent to enter upon to ant to subsection (a), section to surface owner: <i>Provided</i> , how he notice, if required, shall include	he surface owner's land for the purpose of en of this article satisfies the requirements vever, That the notice requirements of this lude the name, address, telephone number,
Notice is here	eby provided to the SURFACE OWNER	(s):	
Name: Noble En	ergy, Inc.	Name:	
	Noble Energy Drive	Address:	
Canonsburg, PA	15317	A	
he surface own	eby given: est Virginia Code § 22-6A-16(b), notice is here her's land for the purpose of drilling a horizonta West Virginia	al well on the tract of land as for	
	Tyler	UTM NAD 83 Pasting. Northing:	4355179.037
District:	Meade	Public Road Access:	Stone Road - County Route 6/3
	Pennsboro	Generally used farm name:	Noble Energy, Inc.
Watershed: N	Middle Island Creek		
facsimile numb related to horiz	hall Include: est Virginia Code § 22-6A-16(b), this notice per and electronic mail address of the operate contal drilling may be obtained from the Secre 17 th Street, SE, Charleston, WV 25304 (304-92	or and the operator's authorize tary, at the WV Department of	ed representative. Additional information of Environmental Protection headquarters,
Notice is here	eby given by:		
	Noble Energy, Inc.	Authorized Representative:	Dee Swiger
Address:	1000 Noble Energy Drive	Address:	1000 Noble Energy Drive
Canonsburg, PA	15317	Canonsburg, PA 15317	
Telephone:	724-820-3061	Telephone:	724-820-3061
Email:	Dee.swiger@nblenergy.com	Email:	Dee.swiger@nblenergy.com
Facsimile:	724-820-3095	Facsimile:	724-820-3095
			-

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 normatical of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information, act requests and 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.

WV Department of Environmental Protection 15

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

WAIVER

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Surface Own I, Noble Energy		nat I have read the notice pro	visions listed	l above and hereby waive the
notice require	ments under West Virginia Code			
State:	West Virginia	UTM NAD 83	Easting:	500244.705
County:	Tyler	— UIM NAD 83	Northing:	4355179.037
District:	Pennsboro	Public Road Acc	ess:	Stone Road - County Route 6/3
Quadrangle:	Meade	Generally used f	arm name:	Noble Energy, Inc.
Watershed:	Middle Island Creek			
Name: Noble	Energy, Inc.	Signature:	(55	2
	Noble Energy Drive			
Canonsburg, P.	A 15317	Date: 04/09	/2015	

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APR 3 0 2015

WV Department of Environmental Profession15

WW-6A5 (1/12)

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

Notice Time F Date of Notice	Requirement: notice shall be provided no later the: 4/27/15 Date Permit Application	an the filing on Filed:	date of permit : ルコール	application.09 5 0 2 2 5 8
Delivery meth	od pursuant to West Virginia Code § 22-6A-10	6(c)		
	IED MAIL HAND N RECEIPT REQUESTED DELIV			
return receipt r the planned op required to be drilling of a he damages to the	. Va. Code § 22-6A-16(c), no later than the date equested or hand delivery, give the surface owner provided by subsection (b), section ten of this art orizontal well; and (3) A proposed surface use a surface affected by oil and gas operations to the sarequired by this section shall be given to the surface.	er whose land in shall including icle to a surfa and compens extent the da	I will be used fo de: (1) A copy ace owner whose ation agreement mages are comp	r the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for bensable under article six-b of this chapter.
(at the address Name: Noble Er	by provided to the SURFACE OWNER(s) listed in the records of the sheriff at the time of n lergy, Inc. Noble Energy Drive	Name:	Frank Grass ;; 5115 Lansing Dr	ive
Canonsburg, PA		Charlott	e, NC 28270	
operation on the State: County: District:	est Virginia Code § 22-6A-16(c), notice is hereby the surface owner's land for the purpose of drilling West Virginia 095-Tyler Meade I	g a horizonta JTM NAD 8 Public Road A	l well on the trace Easting: Northing:	
This Notice SI Pursuant to We to be provided horizontal well surface affecte information re	est Virginia Code § 22-6A-16(c), this notice shall by W. Va. Code § 22-6A-10(b) to a surface of a surface use and compensated by oil and gas operations to the extent the dailated to horizontal drilling may be obtained from located at 601 57th Street, SE, Charleston, W	owner whose ion agreement mages are command the Secret	e land will be un nt containing an empensable under ary, at the WV	sed in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection
Well Operator	Noble Energy, Inc.	Address:	1000 Noble Energ	y Drive
Telephone:	724-820-3061		Canonsburg, PA	15317
Email:	dee.swiger@nblenergy.com	Facsimile:	724-416-5248	
Oil and Gas P	rivacy 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 Aer 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.

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> WV Department of Environmental Protection

WW-6A5 (1/12)

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

	Requirement: notice shall be provided no e: 4/27/15 Date Permit Ap			application.
Delivery met	hod pursuant to West Virginia Code § 22	2-6A-16(c)		
		HAND DELIVERY		
return receipt the planned o required to be drilling of a h damages to th	requested or hand delivery, give the surface peration. The notice required by this sub- provided by subsection (b), section ten of corizontal well; and (3) A proposed surface e surface affected by oil and gas operations	the owner whose land osection shall inclu- this article to a surf- the use and compenses to the extent the date	I will be used for de: (1) A copy ace owner whos sation agreemen images are comp	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
(at the address Name: Carl D.	Rocky Creek Road	me of notice): Name: Address	Donald W. Williams 5: 160 Koons Ave. OH 44256	
operation on State: County:	est Virginia Code § 22-6A-16(c), notice is the surface owner's land for the purpose of West Virginia 095-Tyler		l well on the tra	
District:	Meade	Public Road		Stone Road - County Rt. 6/3
Quadrangle:	Pennsboro	_ Generally use	ed farm name:	Noble Energy, Inc.
to be provide horizontal we surface affect information re	Test Virginia Code § 22-6A-16(c), this noticed by W. Va. Code § 22-6A-10(b) to a sull; and (3) A proposed surface use and conced by oil and gas operations to the extent elated to horizontal drilling may be obtain located at 601 57 th Street, SE, Charle	reface owner whose appensation agreeme the damages are co- ned from the Secret	e land will be unt containing an ompensable und arry, at the WV	code section; (2) The information required used in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection or by visiting

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WW-6A5 (1/12)

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

	Requirement: notice shall be provided no later the cice: 4/2715 Date Permit Application	han the filing on Filed:	date of permit	application.		
Delivery me	thod pursuant to West Virginia Code § 22-6A-1	16(c)				
	IFIED MAIL	O VERY				
return receip the planned required to b drilling of a damages to t	W. Va. Code § 22-6A-16(c), no later than the date requested or hand delivery, give the surface own operation. The notice required by this subsection be provided by subsection (b), section ten of this are horizontal well; and (3) A proposed surface use the surface affected by oil and gas operations to the sees required by this section shall be given to the surface.	er whose land on shall include ticle to a surfa and compense extent the da	will be used for de: (1) A copy ace owner whose ation agreement mages are comp	r the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for pensable under article six-b of this chapter.		
(at the addre	reby provided to the SURFACE OWNER(s) ss listed in the records of the sheriff at the time of		NASHE O NASHE			
	e Calhoun and Deborah S. Hatfiled		William C. Williams			
Address: 281 Bradenton, FL	5 Bayshore Gardens Parkway		Address: 8570 Country Club Road Bloomingdale, OH 43910			
Braderitori, FL	. 54207	Bloomin	guale, OH 43910			
	West Virginia Code § 22-6A-16(c), notice is hereby the surface owner's land for the purpose of drilling West Virginia O95-Tyler Meade	g a horizonta UTM NAD 8 Public Road A	l well on the traction in the traction in Easting: Northing:			
Watershed:	huc-10 Middle Island Creek	Generally use	d farm name.	Those Energy, and		
Pursuant to V to be provid horizontal w surface affect information	Shall Include: West Virginia Code § 22-6A-16(c), this notice shall be by W. Va. Code § 22-6A-10(b) to a surface rell; and (3) A proposed surface use and compensated by oil and gas operations to the extent the darrelated to horizontal drilling may be obtained from the control of the control	owner whose ation agreement amages are come om the Secret	e land will be un nt containing an empensable und ary, at the WV	sed in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection		
W-II 0		A .d.d	22223.50 E			
Well Operate		Address:				
Telephone:	724-820-3061	-	Canonsburg, PA 15317			
Email:	dee.swiger@nblenergy.com	Facsimile:	724-416-5248			
Oil and Gas	Privacy Notice:					

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin Governor

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

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 57th Street, SE Charleston, WV 25304

Subject: DOH Permit for the PENNS-03 Well Site, Ritchie County

Dear Mr. Martin,

The West Virginia Division of Highways has assigned Permit #03-2015-0125 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 Ritchie County Route 6/3 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

Hay K. Clayton

Regional Maintenary Engineer
Central Office Of Class Cogninator
Office Of Off and Cogninator

APR 3 0 2015

WV Department of **Environmental Protection**

File

0950225

093022							
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

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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^{**} 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.

EROSION & SEDIMENTATION CONTROL PLANS

MEADE DISTRICT - TYLER COUNTY - WEST VIRGINIA PEN-03/31 WELL SITES NOBLE ENERGY

MARCH 10, 2015



MAIN OFFICE 4031 ALLPORT CUTOFF MORRISDALE, PA 16858 PHONE: (814) 342-7090 FAX: (814) 342-7090

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OVERALL EXISTING CONDITIONS PLAN

COVER SHEET DESCRIPTION

DRAINAGE AREA AND SOIL MAP

OVERALL SITE PLAN

BRANCH OFFICE 200 BURSCA DRIVE BRIDGEVILLE, PA 15017 PHONE: (312) 221-1824 FAX: (412) 221-1828



DIRECTIONS TO WELL SITE

SCALE: 1" = 1,000" SITE LOCATION MAP

Ne noble energy

333 Technology Drive Suite 116, Canonsburg PA 15317 Noble Energy Inc.

Phone: (724) 820-3000



PERTIES AS SHOWN SURVEYED BY GEOTECH INEERING, INC. 8-20-14, 8-25-14, 10-22-14, 12-11-1 ASEMAPPING DERIVED FROM BLUE MOUNTAI LIGHT DATA FLOWN 04-10-14

Department of

ACCESS ROAD PLAN & PROFILE - STA, 9+00 TO STA, 16+31 ACCESS ROAD PLAN & PROFILE - STA, 0+00 TO STA, 9+00

ACCESS ROAD PLAN & PROFILE - STA, 0+00 TO STA 6+61

PROFILE SECTIONS - ACCESS ROAD PROFILE SECTIONS - ACCESS ROAD

Office

WELL PAD PEN-31 - SITE PLAN WELL PAD PEN-03 - SITE PLAN SEEDING AND LINING PLAN SITE RESTORATION PLAN EROSION AND SEDIMENTATION CONTROL DETAILS EROSION AND SEDIMENTATION CONTROL DETAILS EROSION AND SEDIMENTATION CONTROL DETAILS

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