

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Tuesday, August 01, 2017 WELL WORK PERMIT Horizontal 6A / Fracture

CNX GAS COMPANY LLC POST OFFICE BOX 1248

JANE LEW, WV 263786506

Re: Permit approval for SHR 40 AHS

47-095-02206-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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) 926-0450.

James A. Martin

Chief

Operator's Well Number: SHR 40 AHS Farm Name: NOBLE ENERGY, INC.

U.S. WELL NUMBER: 47-095-02206-00-00

Horizontal 6A / Fracture

Date Issued: 8/1/2017

Promoting a healthy environment.

API Number: 95-02206

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

- 1. 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.
- 2. 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.
- 3. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 5. 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.
- 6. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.
- 7. The entire well pad shall be bermed so as to prevent runoff from leaving the pad during drilling and completion operations, including a mountable berm at pad entrance.

WW-6B (04/15) API NO. 47-95 - 02206 HLA Frac OPERATOR WELL NO. SHR40AHS Well Pad Name: SHR40

Frac

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

1) Well Opera	tor: CNX G	AS COMPA	ANY LLC	494458046	095-Tyler	Centervill Shirley
				Operator ID	County	District Quadrangle
2) Operator's '	Well Number:	SHR40AH	3	Well P	ad Name: SHR	40
3) Farm Name	/Surface Own	ner: Noble E	energy	Public Ro	oad Access: Co	unty Rt.18
4) Elevation, c	current ground	l: <u>771'</u>	El	evation, propose	d post-construct	tion: 771
5) Well Type	(a) Gas	x	Oil _	Un	derground Stora	age
	Other					
	(b)If Gas	Shallow	x	Deep		
		Horizontal	X			2011/1/01/19
6) Existing Page			201100000		-	DMH 4/24/17
•	arget Formation 6325-6389 /			ipated Thickness	and Expected l	Pressure(s):
8) Proposed To	otal Vertical I	Depth: 638	37			
9) Formation a	at Total Vertic	al Depth:	Marcellus	V1		
10) Proposed	Total Measure	ed Depth:	16202'			
11) Proposed I	Horizontal Le	g Length:	8989.67			
12) Approxim	ate Fresh Wat	ter Strata De	epths:	357'		
13) Method to	Determine Fr	resh Water I	Depths:	nearest offset w	ells	
14) Approxim				for Offsets		
15) Approxim	ate Coal Sean	n Depths: N	None			
16) Approxim	ate Depth to I	Possible Voi	id (coal mi	ine, karst, other):	None	
17) Does Prop directly overly				ms Yes	N	o <u>x</u>
(a) If Yes, pr	ovide Mine I	nfo: Name	e:			
		Depth	3			
		Seam	-			RECEIVED
		Owne	-			Office of Oil and Gas
						ADD a 4 2017

APR 2 6 2017

WV Department of Environmental Protection

WW-6B	
(04/15)	

API NO. 47- 96	02206	Frac
OPERATOR WEL	L NO.	SHR40AHS
Well Pad Name	SHR40	

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	30"	NEW			40'	40'	GTS
Fresh Water	13 3/8"	NEW	J-55 54.5#	54.5	500.1	500.1	92
Coal							
Intermediate	9 5/8"	NEW	K-55 36#	36.0	2221.7	2221.7	165
Production	5 1/2"	NEW	P-110 30#	20.0	16187	16187	Lead 207 Tail 601
Tubing							
Liners							

DMH 4/24/17

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	36"	0.438	2730		stabilize to surface with f	to surface
Fresh Water	13 3/8"	17.5"	.380	2730		Type 1	1.2
Coal					8		
Intermediate	9 5/8"	13 3/8"	.352	3520		Class A	1.18
Production	5 1/2"	8 3/4"	.361	12,640	10,000	Class A	Lead 1.57 Tail 1.27
Tubing							
Liners							

PACKERS

Kind:	
Sizes:	
Depths Set:	
	BECEIVED

Office of Oil and Gas

APR 2 6 2017

WV Department of Environmental Protection

WW-6B
(10/14)

API NO. 47-95 - 02206 Frac

OPERATOR WELL NO. SHR40AHS

Well Pad Name: SHR40

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

Well previously drilled by Noble Energy. Submitting permit application to complete hydraulic fracturing operations and produce the well.

DMH 4/24/17

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

The completions phase will be multiple stages 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. Max Pressure 9,600 PSI, Max Rate 100 BPM

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 0

7 existing

22) Area to be disturbed for well pad only, less access road (acres): 0

23) Describe centralizer placement for each casing string:

PREVIOUSLY COMPLETED. From original NOBLE ENERGY submittal "Conductor- No centralizers used. Fresh Water/Surface- Bow spring centralizers every 3 joints to surface. Intermediate- Bow spring centralizers on every joint to KOP, one every third joint from KOP to 100' surface. Production - Rigid bow spring every third joint from KOP to TOC, rigid bow spring every joint to KOP"

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

PREVIOUSLY COMPLETED. From original Noble Energy submittal "Conductor - fill/soil to surface Fresh Water - 15.6 ppg Type 1 cement +2% CaCl, 0.25# lost circ., 3-%excess yield =1.18. Intermediate- 15.6 ppg Class A +0.4% Ret, 0.15% Disp, 0.2% anti Foam, 0.125# sk Lost circ. 20% Excess Yield = 1.19 to surface. Production - 14.8 ppg Class A 25:75:0 System +2.6% cement Extender, 0.7% Fluid Loss additive, 0.45% high temp retarder, 0.2% friction reducer 10% excess yield=1.27 TOC>=200' above 9.625" shoe. See attached approved variance from WV DEP.

25) Proposed borehole conditioning procedures:

PREVIOUSLY COMPLETED. From original Noble Energy submittal 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 at setting depth, circulate a minimum of one hole volume prior to pumping cement. Intermediate - Once surface casing is set and cemented intermediate hole is drilled either on air or SOBM and filled w/ KCI water once filled w/ KCI water once drilled to TD. The well is conditioned with KCI circulation prior to running casing. Once casing is at setting depth, the well is circulated minimum of one hole volume prior to pumping cement.

Production - The hole is drilled with synthetic oil base mud and once at TD the hole is circulated at a maximum above drilling pump rate for at least 6X bottoms up. Once on bottom with casing, circulate a minimum of one column prior to Dilice of the Cas pumping cement.

*Note: Attach additional sheets as needed.

APR 2 6 2017

Page 3 of 3

WV Department of

Environment 8 49 4/20107

CNX Gas Company LLC

Conventional Operator Notice and Monitoring Plan - Hydraulic Fracturing Activity

SHR40HS Well Pad

Tyler County, West Virginia



Purpose:

The purpose of this hydraulic fracturing monitoring plan is to identify and notify any potentially affected conventional well operators near planned CNX hydraulic fracturing activity.

CNX has evaluated the existing geologic conditions in the area, and the potential for communication between the geologic zone being stimulated by CNX and the zone being produced by the conventional wells exists.

This plan is being implemented as an additional safety measure to be utilized in conjunction with the existing best management practices and the site safety/emergency response plans included for the site.

1. Communications with Conventional Well Operators

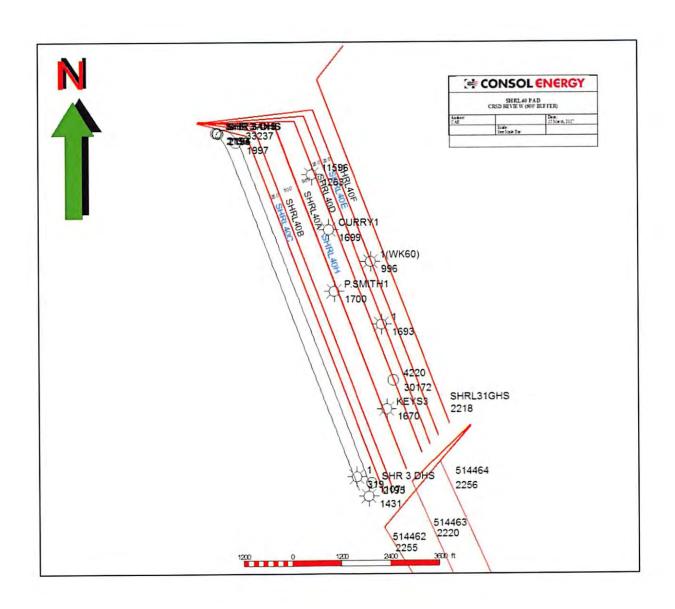
CNX has identified all known conventional wells and well operators within five hundred feet (500') of this pad and lateral sections pursuant to WV Code 35 CSR 8(5.11). A list and map of these wells and operators is provided as **Attachment A.**

Upon approval of this plan, CNX will notify operators identified in the referenced attachment, via letter, of the anticipated fracturing schedule associated with this pad. A copy of this letter is included as **Attachment B**, and includes the recommended steps a conventional operator can take to ensure safe and compliant operations.

2. Reporting

CNX will provide information relating to the hydraulic fracturing schedule, any communication with conventional operators, and ongoing monitoring of the work upon request of the OOG or immediately in the event of any discovered abnormalities that create additional risk or concern.

Attachment A:
Map and List of Conventional Operators in the SHR40 Project Area



API	COMPANY	WELLNAME	WELL#	STATUS	TD	PERMIT	STATUS COMMENTS	DISTANCE FROM LATERAL
4709500319	ALLIANCE PETROLEUM CORP	SECKMAN MARY	1	GAS	1858	8/1/1961	PRODUCING BIG INJUN WELL	475
4709500996	ANTERO RESOURCES	WEESE EVERETT & BETTY	1(WK50)	GAS	5995	11/12/1983	PB TO BIG INJUN	
4709501263	CONSOL	SECKMANL	11596	GA5	5198		PRODUCING BENSON WELL	80
4709501431	CONSOL	SECKMAN C	11071	GAS	5050		PRODUCING BENSON, RILEY, WEIR WELL	390
4709501670	ALLIANCE PETROLEUM CORP	KEYS MARY	KEY53	GAS	5175	12/10/1996	PRODUCING BENSON WELL	во
4709501693	ALLIANCE PETROLEUM CORP	BOARD MARVIN & BECKY	1	GAS	2966	5/18/2000	PRODUCING BIG INJUN, GORDON WELL	50
4709501699	ALLIANCE PETROLEUM CORP	MASON K.R.	CURRY1	GA5	3032	10/30/2000	PRODUCING BIG INJUN, GORDON WELL	170
4709501700	ALLIANCE PETROLEUM CORP	HAUGHT ROSEMARY ETAL	P.SMITH1	GAS	2907	11/1/2000	PRODUCING BIG INJUN, GORDON WELL	85
4709501997	CONSOL	DANIEL AND SUZANNE WEEKLEY	33237	CAN		11/13/2008	NEVER DRILLED	
	CONSOL	SHR 31GHS	SHR 31GHS	PERMIT			NOT DRILLED TO DATE	350
4709502195	CONSOL	SHR3 DHS	SHR3 DHS	PERMIT		8/29/2014	DRILLED MARCELLUS LATERAL BUT NOT YET FRAC'D	500
4709530172	Pittsburgh & WV Gas*	W F Seckman	4220	ABDGA5	2809		NOT AVAILABLE	
4709502256	EQT PRODUCTION COMPANY	SHR 60 PAD	514464	GA5	6612	7/23/2015	MARCELLUS HORIZONTAL	490
4709502220	EQT PRODUCTION COMPANY	SHR 60 PAD	514463	GAS	6578	3/24/2015	MARCELLUS HORIZONTAL	340
4709502255	EQT PRODUCTION COMPANY	SHR 60 PAD	514462	GAS	6563	7/23/2015	MARCELLUS HORIZONTAL	440

^{*}The operator of the well highlighted in yellow was unable to be located. At the request of the WVDEP, a field visit was conducted by CNX in an attempt to locate this well to determine if monitoring was a possibility. The review was completed on 4/24/2017 without the well being located. CNX believes that based on the field investigation and correspondence with the state, the wells have either been plugged or otherwise do not exist.



Attachment B: Conventional Operator Notice Letter - Example



[Conventional Well Operator] [Address] [State]

CONSOL Energy Inc.

CNX Center 1000 CONSOL Energy Drive Canonsburg, PA 15317-6506

(724) 485 - 4040e-mail: PCR@consolenergy.com web: www.consolenergy.com

CNX GAS PRODUCTION TEAM

Re: Tyler County Hydraulic Fracturing Notice

Dear Sir or Madam,

CNX Gas Company LLC (CNX) has developed a Marcellus pad SHR40HS located in Tyler County, West Virginia. Through CNX's evaluation pursuant to WV Code 35 CSR 8(5.11), you have been identified as the owner or operator of a well within a 500' radius of the surface location or lateral section of the wellbore. Due to the apparent presence of unique geological conditions, communication between CNX hydraulic fracturing operations and the identified well is a possibility. As an owner or operator of a conventional natural gas well in this area, we are requesting your assistance in monitoring for changes that would indicate communication between your well(s) and our planned operation.

CNX anticipates conducting hydraulic fracturing activity at the SHR40HS Pad beginning as early as 3rd Quarter 2017 (July-September) and potentially continuing through 4th Quarter 2017 (October-December). Plats for each well being hydraulically fractured on this pad are included for your reference.

We recommend that conventional operators conduct the following activities before, during, and after fracturing operations.

- · Inspect surface equipment prior to fracturing, to establish mechanical integrity and confirm well conditions.
- Monitor wells during and after fracturing and monitor for abnormal increases in fluid, gas, or pressure.
- Inspect and upgrade master valves or other necessary equipment for wellhead integrity as you see fit.
- Notify the OOG and CNX if any changes in fluid, gas production, pressure, or other conditions that cause abnormal risk or concern.

Please feel free to contact CNX's Production Control Room at 724-485-4040 (staffed 24/7) with any questions or comments. You may also contact the West Virginia Office of Oil and Gas at Received Office of Oil & Gas 304-926-0499.

Sincerely, CNX Production

MAY 04 2017



ALLIANCE PETROLEUM CORPORATION 4150 BELDEN VILLAGE AVE NW, SUITE 410 CANTON, OH 44718-2553

Re: Tyler County Hydraulic Fracturing Notice

Dear Sir or Madam.

CONSOL Energy Inc.

CNX Center 1000 CONSOL Energy Drive Canonsburg, PA 15317-6506

phone: (724) 485 – 4040 e-mail: PCR@consolenergy.com web: www.consolenergy.com

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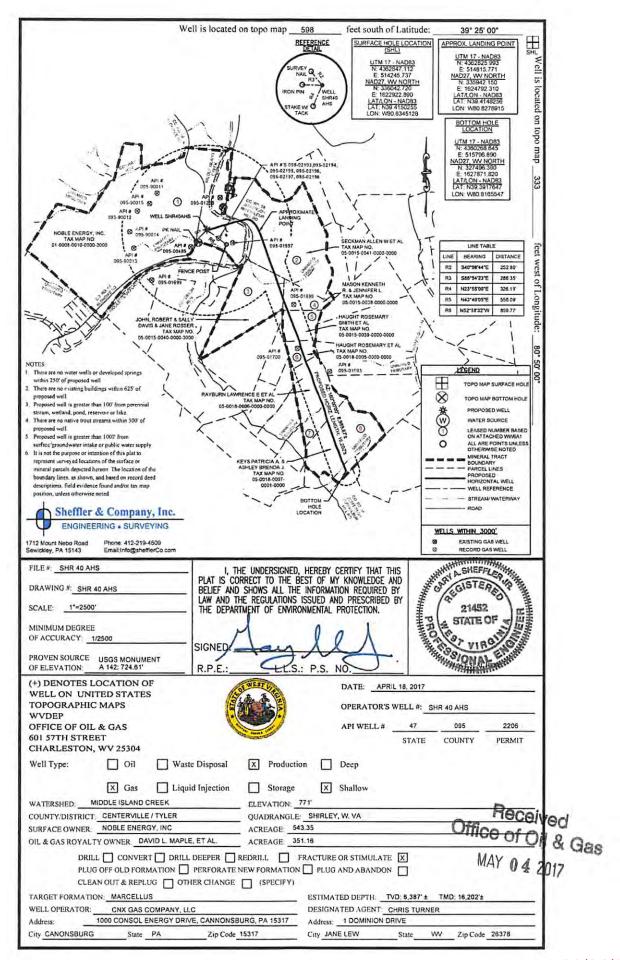
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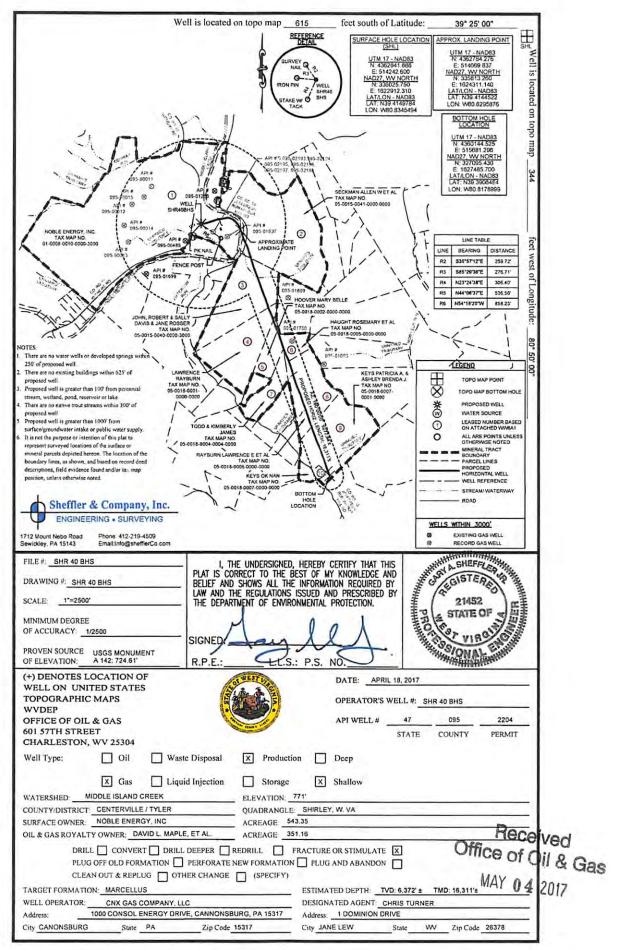
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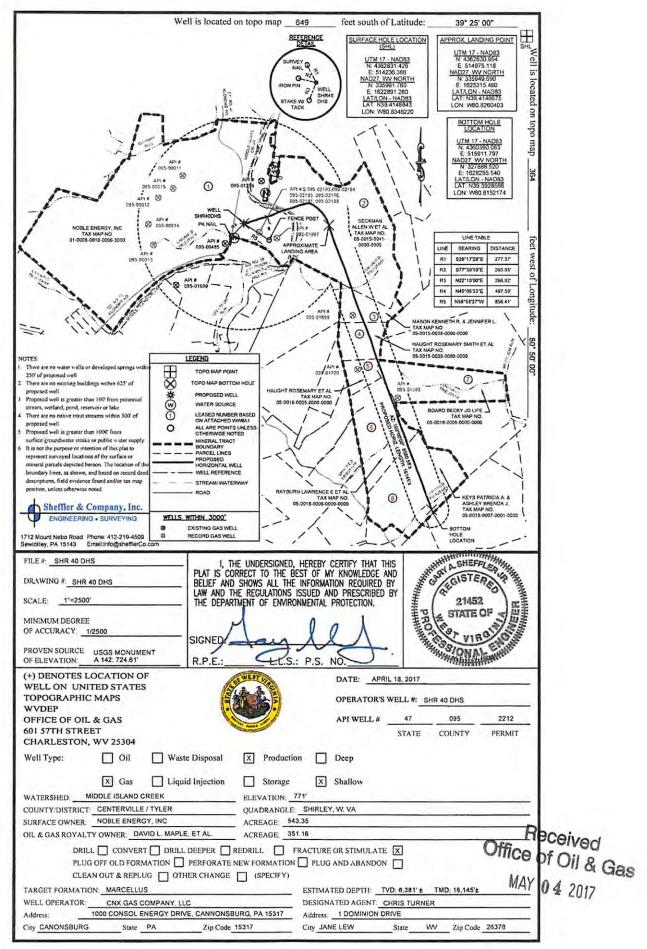
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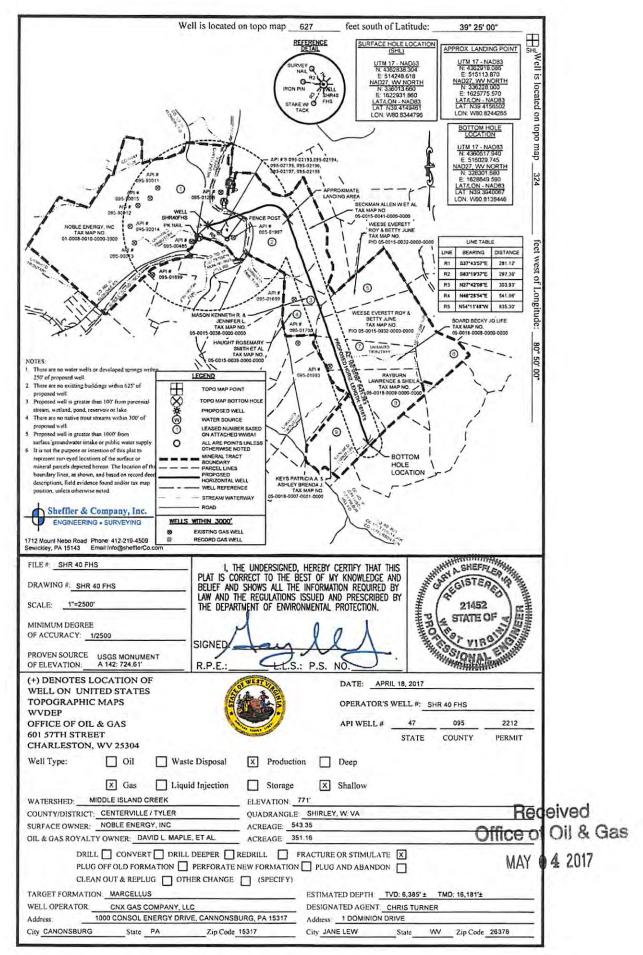
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Sincerely, CNX Production











ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET DENVER, CO 80202

Re: Tyler County Hydraulic Fracturing Notice

CONSOL Energy Inc.

CNX Center 1000 CONSOL Energy Drive Canonsburg, PA 15317-6506

phone: (724) 485 – 4040 e-mail: PCR@consolenergy.com web: www.consolenergy.com

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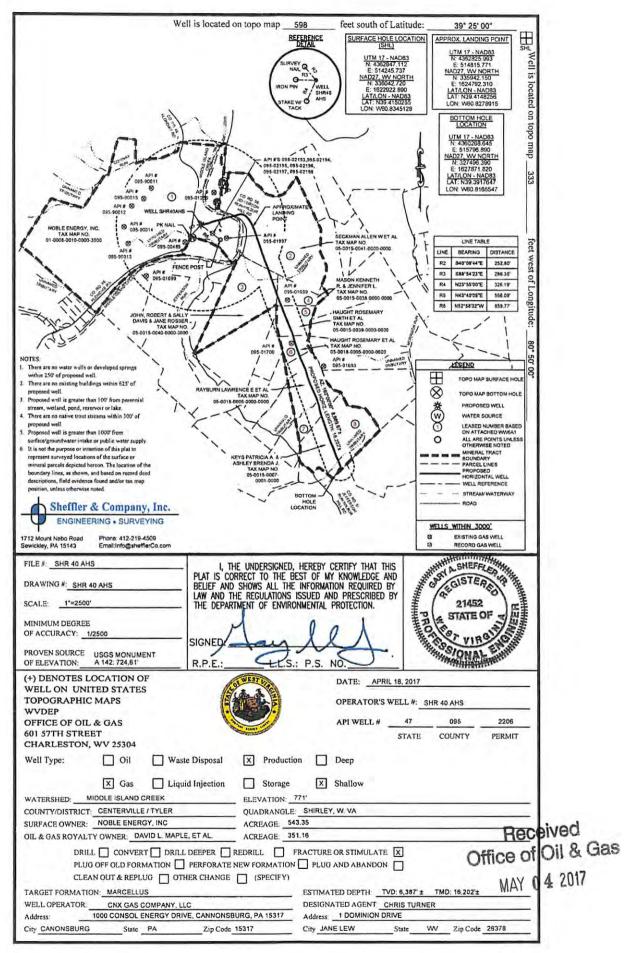
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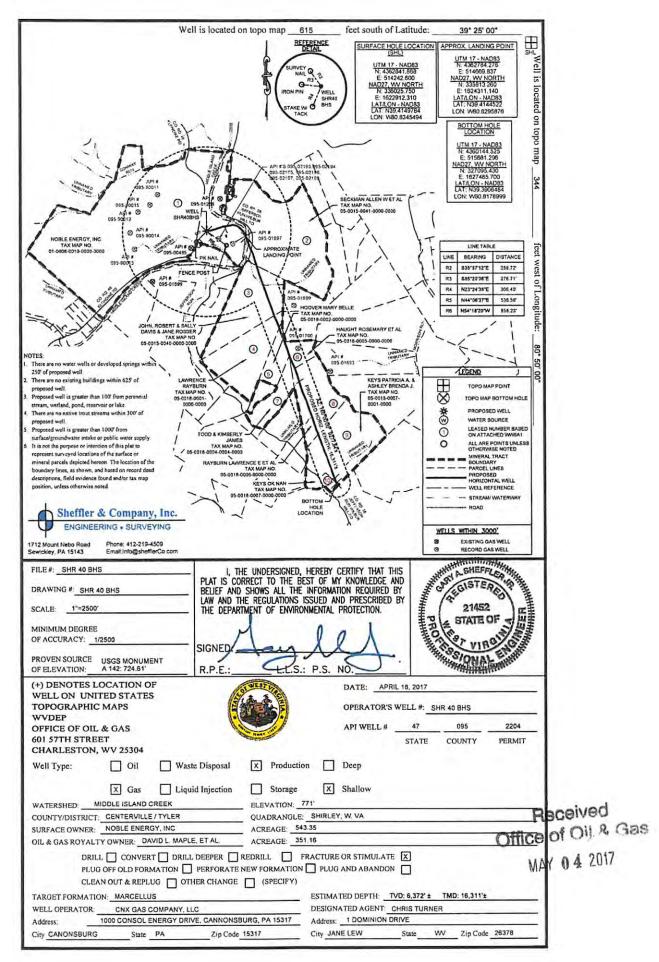
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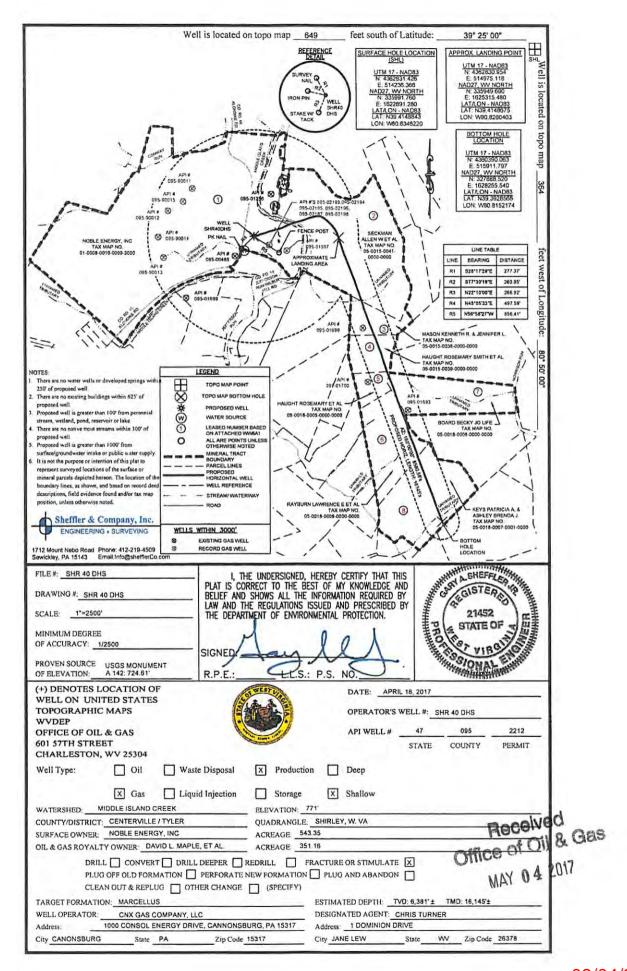
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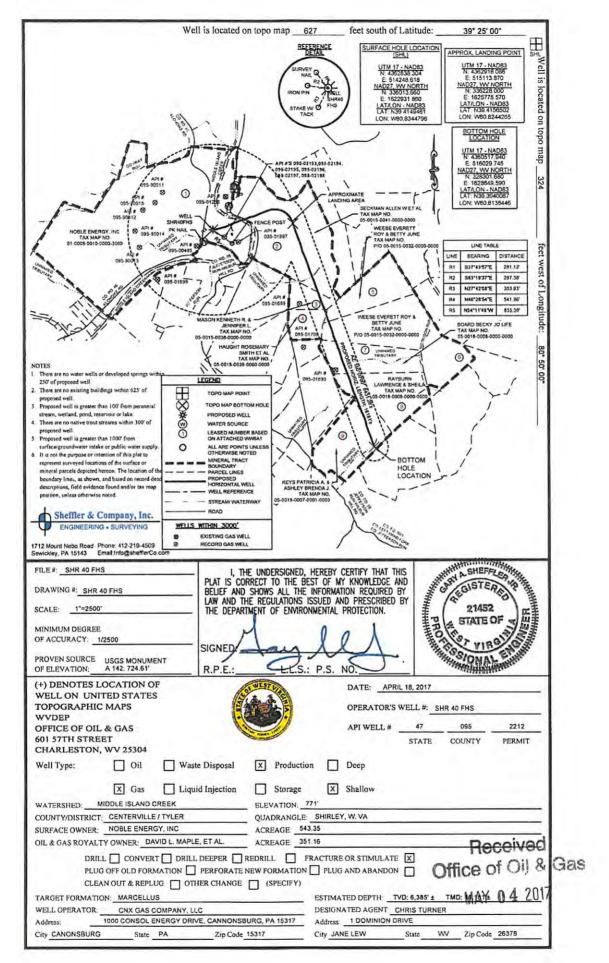
Sincerely, CNX Production













EQT PRODUCTION COMPANY 120 PROFESSIONAL PLACE BRIDGEPORT, WV 26330

Re: Tyler County Hydraulic Fracturing Notice

CONSOL Energy Inc.

CNX Center 1000 CONSOL Energy Drive Canonsburg, PA 15317-6506

e-mail: PCR@consolenergy.com
web: www.consolenergy.com

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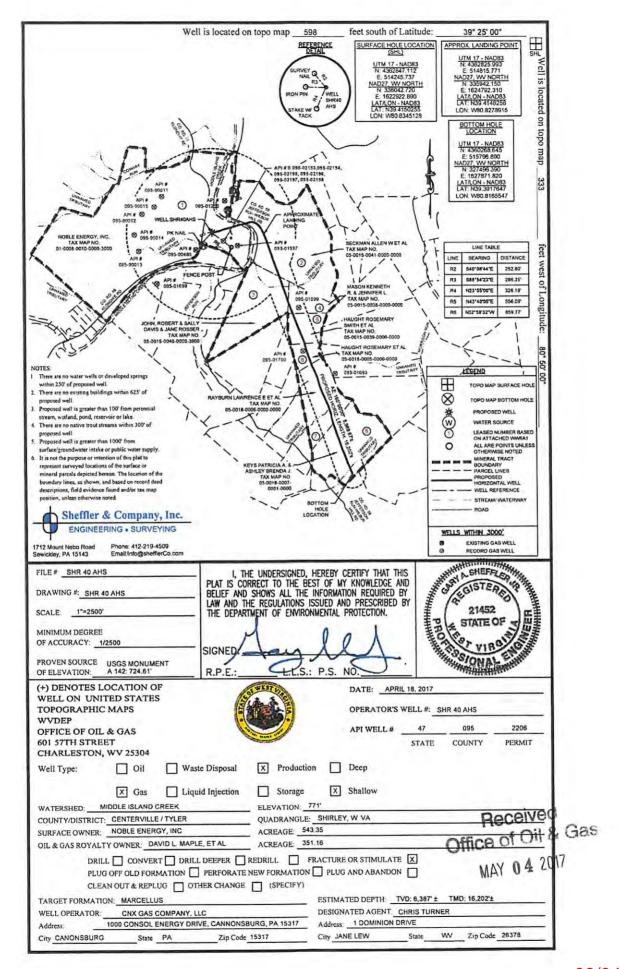
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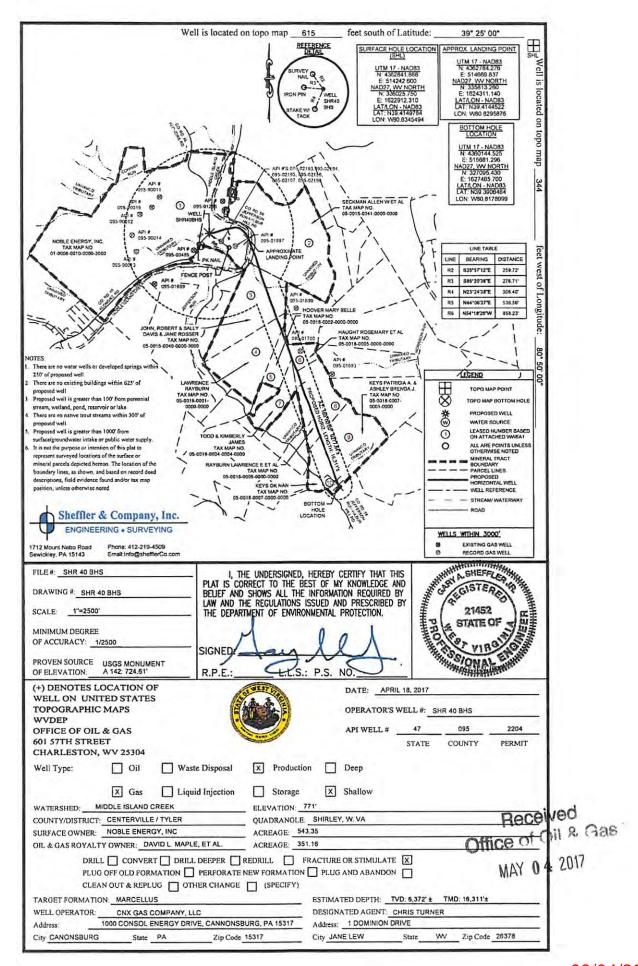
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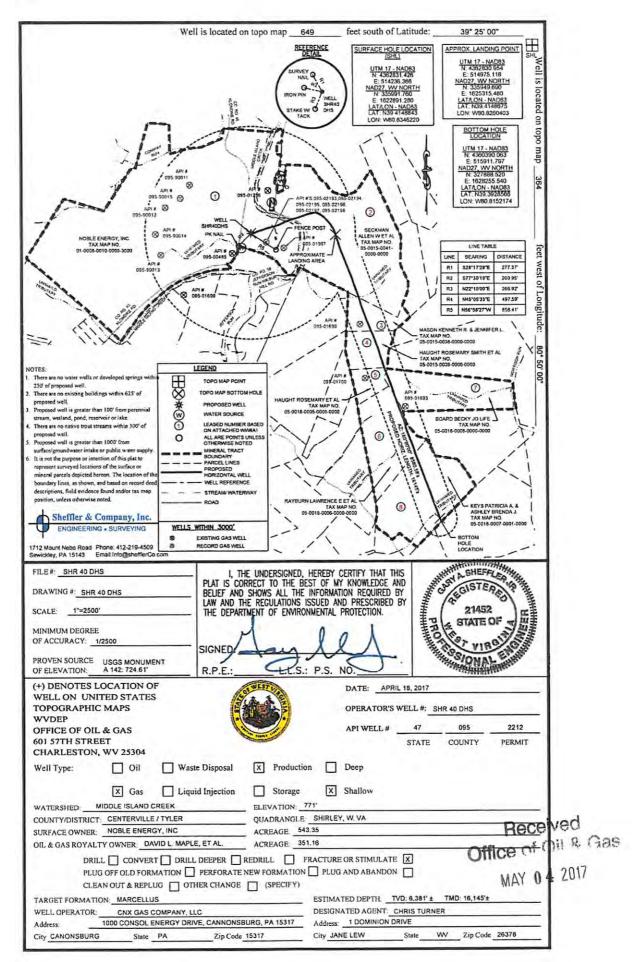
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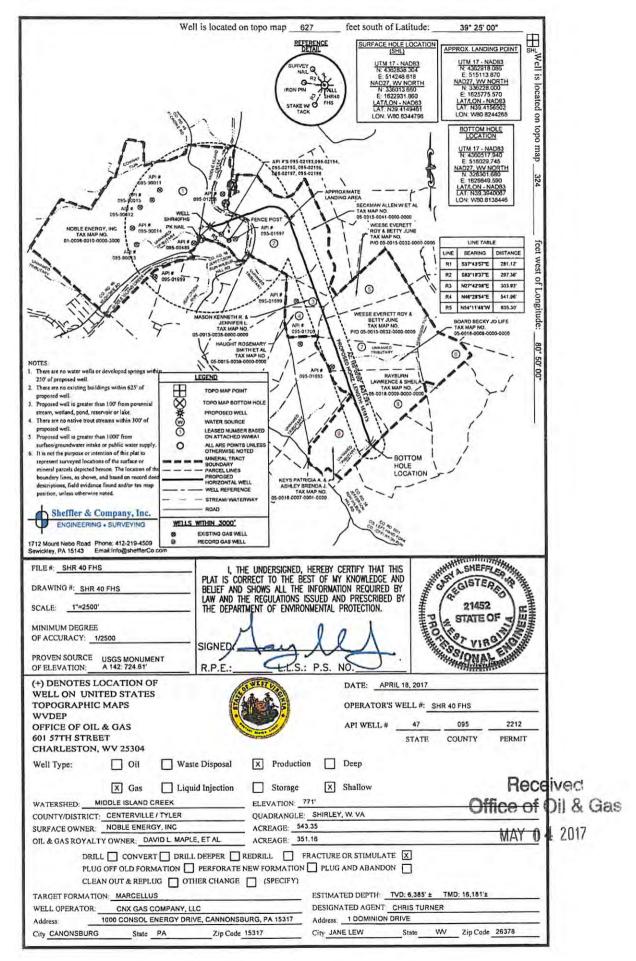
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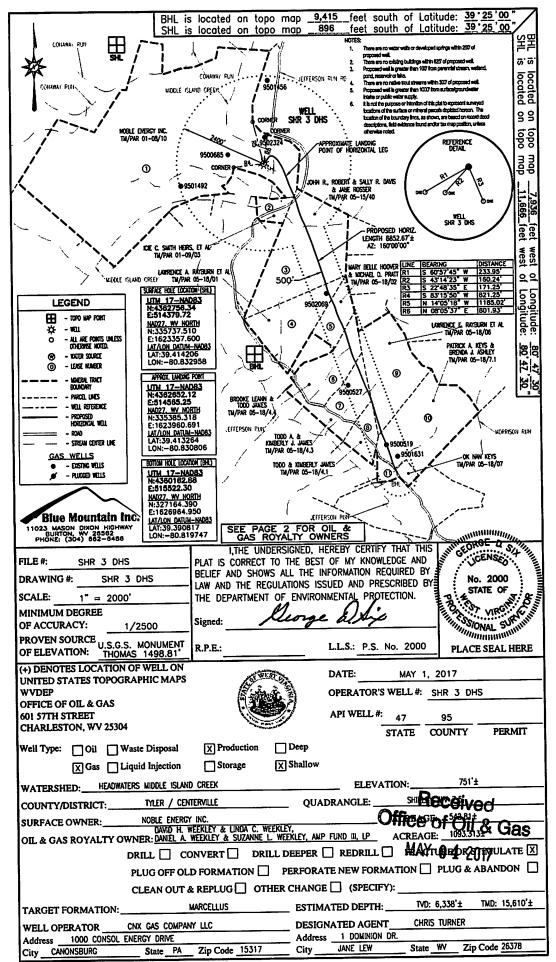
Sincerely, CNX Production Office of Oil & Gas MAY 04 2017











	The LAND		100	
\PI	Number	47 -	95	

- 02206 Frac

Operator's Well No. SHR40AHS

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name CNX GAS COMPANY LLC	OP Code 494458046
Watershed (HUC 10) Headwaters Middle Island Creek Quadrangle	Shirley
Do you anticipate using more than 5,000 bbls of water to complete the proposed	well work? Yes No No
Will a pit be used? Yes No V	
If so, please describe anticipated pit waste: no utilization of a pit	
Will a synthetic liner be used in the pit? Yes No I	f so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
Underground Injection (UIC Permit Number Reuse (at API Number at next anticipated wells SHR3 A,B,C,D. 4709502	2193 4709502124 470952194 4709502195
Off Site Disposal (Supply form WW-9 for disposal lo	ocation)
Other (Explain No drilling activity, unused frac water will be reus	sed at other wells in the area.
Will closed loop system be used? If so, describe: NA	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwa	ater, oil based, etc. NA No Drilling
-If oil based, what type? Synthetic, petroleum, etc. NA No Drilling	
Additives to be used in drilling medium? NA No Drilling	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. NA N	No Drilling
-If left in pit and plan to solidify what medium will be used? (cement, l	lime, sawdust) NA
-Landfill or offsite name/permit number? NA	
Permittee shall provide written notice to the Office of Oil and Gas of any load of West Virginia solid waste facility. The notice shall be provided within 24 hours where it was properly disposed.	
I certify that I understand and agree to the terms and conditions of the on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department provisions of the permit are enforceable by law. Violations of any term or conclaw or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and application form and all attachments thereto and that, based on my inquiry obtaining the information, I believe that the information is true, accurate, an penalties for submitting false information, including the possibility of fine or important to the contract of the con	and to f Environmental Protection. I understand that the indition of the general permit and/or other applicable arm familiar with the information submitted on this of those individuals immediately responsible for d complete. I am aware that there are significant
Company Official Signature Wanty	
Company Official (Typed Name) Matt Hanley	RECEIVED
Company Official Title Manager - Permitting	Office of Oil and Gas
	APR 2 I 2017
Subscribed and sworn before me this 9th day of July	, 20 17 COMMONWEALTH OF PENNSYLVANIA
Melli IZIIIA	WV Department of AN Notaby Publicomental Protection
13 11/12	NotaEn₩lionmental Protection 08/04/2017
My commission expires	My committed ON OFFICE ON TO

Form WW-9 Noble Energy, I	nc		Operator's W	SHR 40 AHS	
	eatment: Acres Disturbed _	5.42	Prevegetation pH	6.0	
1	Tons/acre or to corre	ect to pH			7
Fertilizer type	500				
Fertilizer amount Mulch Hay or	Straw at 2	lbs/acre Tons/acre			
		Seed Mixtures			
	Гетрогату	Seed Martines	Perman	ent	
Seed Type Fall Fescue	lbs/acre 40	Tall Fes	Seed Type scue	lbs/acre	
adino Clover	5	Ladino	Clover	5	
ovided)	n, pit and proposed area for l	and application (unless	s engineered plans inclu	uding this info have been	
an Approved by: Mu					
omments:	mulch all cut area, mai	n all E & S during op	eration.	Ē	
				RECEIVE	D
				Office of Oil an	d Gas
_{le:} Oil and Gas Inspe	ector		1 9 111	APR 2 1 201 WV Departme	17
eld Reviewed? (Date: 7	- 1- 17	TAM A	





Safety Plan for SHR40 Well Pad

Wells SHR40AHS, SHR40BHS, SHR40DHS, SHR40FHS

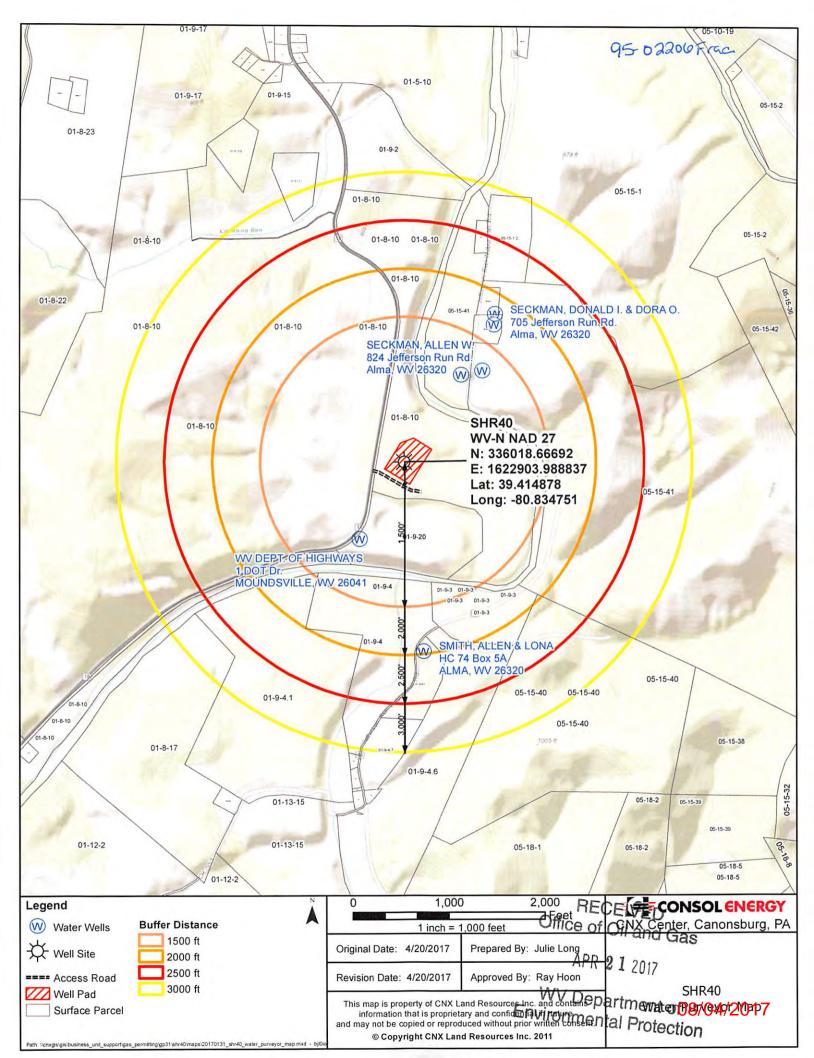
CNX Gas Company LLC

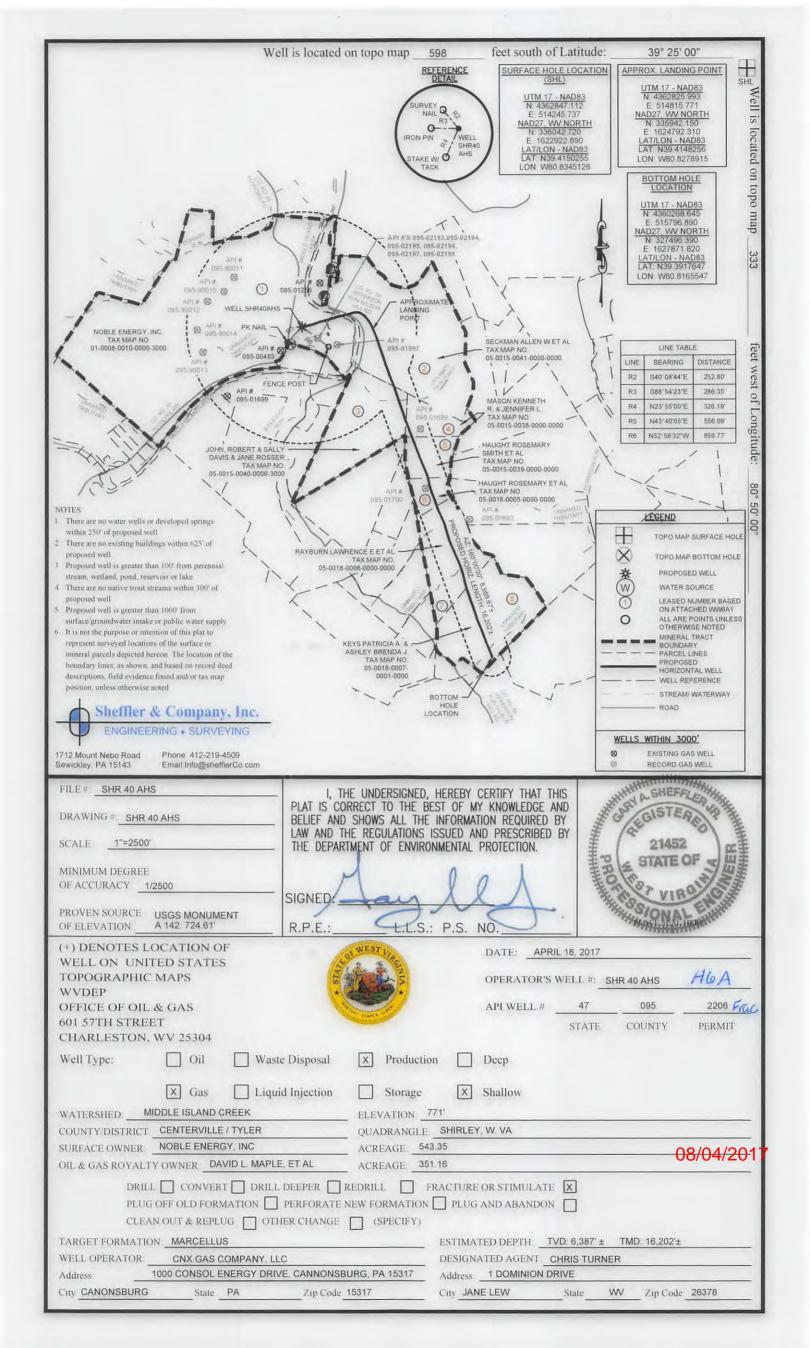


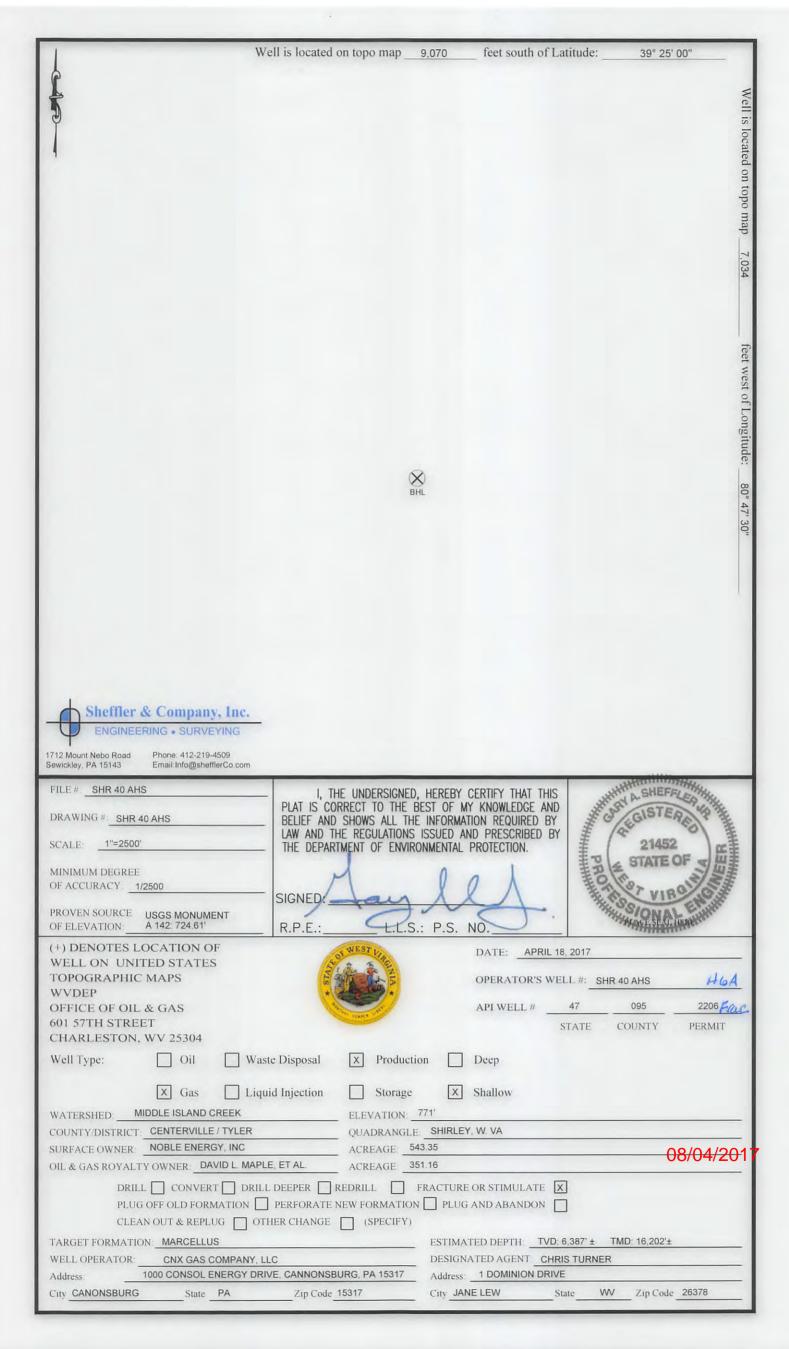
RECEIVED
Office of Oil and Gas

APR 2 1 2017

WV Department of 1 Environmental Procedure 17







Operator's Well No. SHR40AHS

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

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

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

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

See Attached

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

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

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

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: CNX GAS COMPANY LLC

By: Matt Hanley Manager - Permitting Manager - Permitting

APR 2 I 2017

WV Departme98/94/2017

Environmental Protection

Attachment - Form WW-6A-1 for SHR40AHS

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
1	1-8-10	279251000	David H. Weekley and Linda C. Weekley, h/w	Antero Resources Corporation	Not less than 1/8	507/246
			Daniel A. Weekley and Suzanne L. Weekly, h/w	Antero Resources Corporation	Not less than 1/8	507/241
			Antero Resources Corporation	CNX Gas Company and Noble Energy, Inc.	Assignment	534/460
			AMP Fund III, LP	Noble Energy, Inc.	Not less than 1/8	527/465
			Noble Energy, Inc.	CNX Gas Company LLC	Assignment	534/483
Tract ID	Tax Map &	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
D 10 10	Parcel	QLS#		-		
2	5-15-41	-	Lillie Seckman	Drilling Appalachian Corporation	Not less than 1/8	268/457
	3.43.00		George V. Myers and Merle V. Myers, h/w	Drilling Appalachian Corporation	Not less than 1/8	273/278
			Drilling Appalachian Corporation	Antero Resources Appalachian Corporation	Assignment	401/499
			Drilling Appalachian Corporation	Antero Resources Corporation	Corrective Assignment	421/138
			Antero Resources Corporation	CNX Gas Company and Noble Energy, Inc.	Assignment	422/517
			Noble Energy, Inc.	CNX Gas Company	Assignment	550/273
			Allen W. Seckman and Nancy J. Seckman, h/w	Noble Energy, Inc.	Not less than 1/8	465/594
			Noble Energy, Inc.	CNX Gas Company	Assignment	550/273
Tract ID		Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
Ш.	Parcel	QLS #	Cally D. Davids	Character Association 1.1.C	Not loss than 1/0	274/140
7 3	5-15-40	266756000	Sally R. Davis	Chesapeake Appalachia L.L.C.	Not less than 1/8 Not less than 1/8	374/140 374/742
3.5	Office		John R. Davis	Chesapeake Appalachia L.L.C. Chesapeake Appalachia L.L.C.	Not less than 1/8	374/751
> 5	₹		Jane Davis Rosser Chesapeake Appalachia L.L.C.	CNX Gas Company LLC	Farmout	Unrecorded Se
0 1	P 0 7	Y	Chesapeake Appalachia L.L.C.	SWN Production Company LLC	Assignment	465/463
de s	APR 9	í	спезареаке Аррагастта с.с.с.	SWIN Floudction company LLC	Assignment	403/403
THE P	HECEIVED TO Oil and Gas		Alberta L. Clegg	Noble Energy, Inc.	Not less than 1/8	429/325
Environ Department of			Edna M. Wood	Noble Energy, Inc.	Not less than 1/8	453/531
	SE		Kenneth E. Keith and Kelly M. Keith, h/w	Noble Energy, Inc.	Not less than 1/8	453/525
	00		Brian T. Keith	Noble Energy, Inc.	Not less than 1/8	453/529
	0		Gary M. Keith	Noble Energy, Inc.	Not less than 1/8	453/543
	S		Birk S. Stathers, Jr.	Noble Energy, Inc.	Not less than 1/8	449/533
			Joseph C. Straton	Noble Energy, Inc.	Not less than 1/8	453/539

Noble Energy, Inc.

Joseph C. Straton

Not less than 1/8

453/539

James Hess	Noble Energy, Inc.	Not less than 1/8	419/132
Terri Evans	Noble Energy, Inc.	Not less than 1/8	419/134
John W. Straton, Jr.	Noble Energy, Inc.	Not less than 1/8	457/236
Melissa K. Dunstan	Noble Energy, Inc.	Not less than 1/8	457/240
Noble Energy, Inc.	CNX Gas Company LLC	Assignment (Clegg)	482/189
Noble Energy, Inc.	CNX Gas Company LLC	Assignment (Wood, K. Keith, B. Keith, G. Keith, J. Straton)	549/529
Noble Energy, Inc.	CNX Gas Company LLC	Assignment (Stathers, Jr.)	473/216
Noble Energy, Inc.	CNX Gas Company LLC	Assignment (Hess, Evans)	465/341
Noble Energy, Inc.	CNX Gas Company LLC	Assignment (Straton, Jr. and Dunstan)	499/447
Allen W. Crummett	Noble Energy, Inc.	Not less than 1/8	455/557
Daniel D. Crummett and Elizabeth S. Crummet Trust	Noble Energy, Inc.	Not less than 1/8	453/629
Noble Energy, Inc.	CNX Gas Company LLC	Assignment (A. Crummett and D. Crummett)	549/529

Grantee, Lessee, etc

		Parcel	QLS#				
	4	5-15-38	108503000	Kenneth R. Mason and Jennifer L. Mason, h/w	Acropolis, Inc.	Not less than 1/8	331/475
				Acropolis, Inc.	Drilling Appalachian Corporation	Assignment	331/483
				Drilling Appalachian Corporation	Antero Resources Appalachian Corporation	Assignment	391/416
				Antero Resources Corporation	CNX Gas Company and Noble Energy, Inc.	Assignment	422/517
177				Noble Energy, Inc.	CNX Gas Company	Assignment	550/273
nvii	<						
	Fract ID	Tax Wap &	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
90	40	Parcel	QLS#				
DO	5,60	9 1574	261710000	Rosemary Haught	Drilling Appalachian Corporation	Not less than 1/8	331/102
0 1	63	00		Drilling Appalachian Corporation	Antero Resources Appalachian Corporation	Assignment	391/416
TIST	~	SIE		Drilling Appalachian Corporation	Antero Resources Corporation	Corrective Assignment	421/130
00	2017			Antero Resources Corporation	CNX Gas Company and Noble Energy, Inc.	Assignment	422/517
Department of mental Protection	17	VED		Noble Energy, Inc.	CNX Gas Company	Assignment	550/273
tment of Protection	,	Gae		Larry Henthorn	Noble Energy, Inc.	Not less than 1/8	465/588
7		0		Noble Energy, Inc.	CNX Gas Company	Assignment	550/273
				Alice and George Swiger, h/w	Drilling Appalachian Corporation	Not Less than 1/8	331/206

Grantor, Lessor, etc

Tract ID Tax Map & Title Opinion

does 0-sb

Book/Page

Royalty

Mabel Seckman	Drilling Appalachian Corporation	Not Less than 1/8	331/210
Dorothy Owens, individually and as Attorney in Fact for			
Denzil Ownes, h/w	Drilling Appalachian Corporation	Not Less than 1/8	331/214
Nina and George Kennedy, h/w	Drilling Appalachian Corporation	Not Less than 1/8	331/244
Fayetta J. Griffin	Drilling Appalachian Corporation	Not Less than 1/8	331/248
Laura V. Gibson	Drilling Appalachian Corporation	Not Less than 1/8	331/344
Kathleen U. Birklein	Drilling Appalachian Corporation	Not less than 1/8	331/348
Jim and Lisa Seckman, h/w	Drilling Appalachian Corporation	Not less than 1/8	331/402
Robert L. Underwood	Drilling Appalachian Corporation	Not less than 1/8	331/406
Florence Seckman	Drilling Appalachian Corporation	Not less than 1/8	331/479
Sandra and Donald Treadway, h/w	Drilling Appalachian Corporation	Not less than 1/8	331/779
Violet Seckman, by Sandra L. Treadway, Power of			
Attorney	Drilling Appalachian Corporation	Not Less than 1/8	331/783
Drilling Appalachian Corporation	Antero Resources Appalachian Corporation	Assignment	391/416
Drilling Appalachian Corporation	Antero Resources Corporation	Corrective Assignment	421/130
Antero Resources Corporation	CNX Gas Company and Noble Energy, Inc.	Assignment	422/517
Noble Energy, Inc.	CNX Gas Company	Assignment	550/273
Cleta D. Shook	Noble Energy, Inc.	Not less than 1/8	449/766
Jack A. and Jeanne Seckman, h/w	Noble Energy, Inc.	Not less than 1/8	449/768
Lewis W. and Helen Seckman, h/w	Noble Energy, Inc.	Not less than 1/8	449/758
Holly Dudash	Noble Energy, Inc.	Not less than 1/8	444/63
John and Beverly Dudash	Noble Energy, Inc.	Not less than 1/8	444/67
Gary B. Solak	Noble Energy, Inc.	Not less than 1/8	444/65
Karen J. Solak	Noble Energy, Inc.	Not less than 1/8	449/762
Delores and Ernest Church	Noble Energy, Inc.	Not less than 1/8	446/81
Rosalee and Joseph C. Snyder, h/w	Noble Energy, Inc.	Not less than 1/8	449/756
Ray B. and Nancy Mosser, h/w	Noble Energy, Inc.	Not less than 1/8	449/760
Bernice Collins	Noble Energy, Inc.	Not less than 1/8	449/764
Lawrence D. and Diana Mossor, h/w	Noble Energy, Inc.	Not less than 1/8	453/643
William and Rita Mossor, h/w	Noble Energy, Inc.	Not less than 1/8	453/541
Steve and Barbara Poling	Noble Energy, Inc.	Not less than 1/8	453/631
Debbie Sword	Noble Energy, Inc.	Not less than 1/8	458/761
Judy Burdine	Noble Energy, Inc.	Not less than 1/8	458/769
Noble Energy, Inc.	CNX Gas Company	Assignment	550/273

<u> </u>				Noble Energy, Inc.	CNX Gas Company
WV Department of Environmental Protection	Track II		Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
artm Ital P	27	Q Parcel Q F18-6	108629000	Mildred A. Cathy-Thomas, by her Attorney-in-Fact Jeff A. Cathey	Noble Energy, Inc.
ent	2017	VEC		Janette M. Pekula (McCann) and Steven Pekula, h/w	Noble Energy, Inc.
of	3	D Gas		Diana Goodpasture	Noble Energy, Inc.

and the co-sb

Book/Page

444/36

444/69

438/122

Royalty

Not less than 1/8

Not less than 1/8

Not less than 1/8

O Tax Map & Title Opir Parcel QLS #		Grantee, Lessee, etc	Royalty	Book/Page
PECEIVED & Title Option of Oil and Gas Map & Title Option of Oil and Gas Map & Title Option of Oil and				
RECEIVED ce of Oil and APR 2 I 2017				
% % EFC	Noble Energy, Inc.	CNX Gas Company LLC	Assignment	550/273
P C P	Donald L. Headley	CNX Gas Company LLC	Not less than 1/8	416/624
A CC	James D. Mattern and Linda K. Mattern, h/w	CNX Gas Company LLC	Not less than 1/8	416/614
¥	Judith R. Wigal and James R. Wigal, h/w	CNX Gas Company LLC	Not less than 1/8	416/609
	Robert L. Monroe	CNX Gas Company LLC	Not less than 1/8	414/460
	Meredith Monroe	CNX Gas Company LLC	Not less than 1/8	414/455
	James L. Smith	CNX Gas Company LLC	Not less than 1/8	414/450
	Deborah Wharton and Christopher Wharton, h/w	CNX Gas Company LLC	Not less than 1/8	416/644
	Rebecca L. Meredith	CNX Gas Company LLC	Not less than 1/8	414/460
	Susan M. Williams and Dwayne R. Williams, h/w	CNX Gas Company LLC	Not less than 1/8	409/234
	Abby E. Kyle	CNX Gas Company LLC	Not less than 1/8	416/634
	Beth E. Hendrix and Ronald R. Hendrix	CNX Gas Company LLC	Not less than 1/8	416/639
	Linda L. Campbell	CNX Gas Company LLC	Not less than 1/8	405/269
	Melody K. Lemley and Gregory H. Lemley, h/w	CNX Gas Company LLC	Not less than 1/8	406/104
	Wilma L. Devine and William P. Devine, h/w	CNX Gas Company LLC	Not less than 1/8	406/99
	Stella C. Hickman	CNX Gas Company LLC	Not less than 1/8	406/114
	V. Ruth Utter	CNX Gas Company LLC	Not less than 1/8	406/109
	Charles M. Pratt Jr. and Betty L. Pratt, h/w	CNX Gas Company LLC	Not less than 1/8	406/119
	Kenneth A. Tracewell and Kimberly L. Tracewell, h/w	CNX Gas Company LLC	Not less than 1/8	416/629
	Betty W. Embry	CNX Gas Company LLC	Not less than 1/8	414/445
	Berdina Rose and Norman W. Rose, h/w	CNX Gas Company LLC	Not less than 1/8	416/619
	David A. Buck and Jamie H. Buck, h/w	CNX Gas Company LLC	Not less than 1/8	414/440
	Anna B. Weiss and Carl F. Weiss, h/w	CNX Gas Company LLC	Not less than 1/8	414/435
	Noble Energy, Inc.	CNX Gas Company LLC	Assignment	550/273
	Jeffrey Todd Heflin	Noble Energy, Inc.	Not less than 1/8	457/673
	Jason S. Heflin and Jessica L. Heflin, h/w	Noble Energy, Inc.	Not less than 1/8	457/675
	Derek Lee Bell and Allison Schermerhorn, h/w	Noble Energy, Inc.	Not less than 1/8	444/32
	Lee H. Pratt Revocable Trust dated 11/24/2004, by Boni E. Pratt, acting as Trustee	nle Noble Energy, Inc.	Not less than 1/8	452/690
	Scott Wharton	Noble Energy, Inc.	Not less than 1/8	445/837
	Marion L. Wharton	Noble Energy, Inc.	Not less than 1/8	445/839
	Hylbert Clarence Heflin	Noble Energy, Inc.	Not less than 1/8	440/457
	Kimberly Toothman Raphael	Noble Energy, Inc.	Not less than 1/8	445/829
	Christopher Toothman	Noble Energy, Inc.	Not less than 1/8	445/832
	Bradley Toothman	Noble Energy, Inc.	Not less than 1/8	445/826

WV Department of Environmental Protection

Tract ID

W.E. Pope

W.E. Pope

J.M.L. Smith

Duncan Sartain

Estate of W.E. Pope, acting through Independent Executrix Judith A. Pope

R.C. Crabb
Southwest Savings and Loan Association
Spencer Enterprises, by Hugh Spencer, owner

257270000 Mary Keys and Haskell Keys, h/w, and John L. Seckman

Mary Hanz

Joe H. Foy

W.E. Pope

Archie Bean

J.M.L. Smith

Drilling Appalachian Corporation Drilling Appalachian Corporation

Antero Resources Corporation

Noble Energy, Inc.

Judith A. Pope, as Executrix

Drilling Appalachian Corporation

Southwest Savings and Loan Association

Hugh Spencer

Drilling Appalachian Corporation

Drilling Appalachian Corporation

Antero Resources Appalachian Corporation

Antero Resources Appalachian Corporation

CNX Gas Company LLC and Noble Energy, Inc.

CNX Gas Company LLC

Recital in Assignment
Assignment
Assignment
Assignment
Assignment
Assignment
Assignment
Corrective Assignment

Assignment

Assignment

Not less than 1/8

Assignment

Unrecorded 315/466 313/243 391/416 421/130

158/214

158/235

216/303

216/306

311/655

311/655

176/264

Assignment 422/517
Assignment 550/273

Office of Oil and Gas

APR 2 1 2017

WV Department of

Environmental Protection

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5-18-7.1

95-02306



CNX Gas Company LLC
1000 CONSOL Energy Drive
Canonsburg, Pennsylvania 15317
David W. Aman, Director – Joint Asset Development
Tel: 724-485-3536
DavidAman/@consolenergy.com

April 5, 2017

SWN Production Company, LLC 10000 Energy Drive Spring, Texas 77389 Statoil USA Onshore Properties Inc. 6300 Bridge Point Pkwy Building 2, Suite 500 Austin, Texas 78730

RE: Third Letter Agreement amending that certain Farmout Agreement dated May 21, 2012, by and between Chesapeake Appalachia, L.L.C., as Farmor ("CHK"), and CNX Gas Company LLC ("CNX"), and Noble Energy, Inc. ("NBL"), collectively as Farmee (as amended, and as subsequently assigned to SWN Production Company, LLC, ("SWN"), (the "FOA")

Gentlemen:

Reference is made to that certain Letter Agreement dated November 18, 2015, by and among SWN, CNX and NBL (the "11/18/15 Letter Agreement"), which modified, *inter alia*, the Well Drilling Schedule TIL date set forth on Exhibit B to the FOA, all as more fully set forth in the 11/18/15 Letter Agreement. A true and correct copy of the 11/18/15 Letter is attached as Exhibit "A" to this Third Letter Agreement.

In response to challenging economic conditions, CNX, as Farmee under the FOA, (NBL has assigned to CNX all right, title and interest via Assignment and Bill of Sale effective October 1, 2016) has revised its operations schedule, and in doing so, require a further extension of the required TIL date set forth on Exhibit B (1. Well Drilling Schedule) to the FOA, from June 30, 2017 to December 31, 2017.

In consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, SWN, successor in interest to CHK as Farmor under the FOA, and CNX as Farmor under the FOA, agree that the required TIL date set forth on Exhibit B to the FOA, Section 1, Well Drilling Schedule, is hereby extended to December 31, 2017. The FOA, as amended by this Third Letter Agreement, shall remain in full force and effect in accordance with the terms therein and herein.

This Third Letter Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which, when taken together, shall constitute one and the same agreement.

If the foregoing correctly reflects your understanding of our agreement, please sign and return three (3) originally-executed counterparts of this Letter Agreement to the undersigned

Sincerely,

CNX GAS COMPANY LLC, a Virginia limited liability company

Name: David W. Aman

Title: Assistant Vice President

Accepted and agreed to this State day of April 2017:

SWN PRODUCTION COMPANY, LLC.
a Texas Limited Liability Company

By:
Name: Stephen M. Guidry

STATOIL USA ONSHORE PROPERTIES, INC.
a Delaware Corporation

By:
Name: A.J. Kieke, Jr.

Title: Authorized Person



noble energy

1000 Noble Energy Drive Canonsburg, PA 15317-9504

> Tel: 724-820-3001 Fax: 724-416-5239

www.nableenergyinc.com

November 18, 2015

SWN Production Company, LLC 10000 Energy Drive

Spring, Texas 77389

Statoil USA Onshore Properties Inc. 2103 City West Boulevard

Suite 800

Houston, Texas 77042

RE: Second Letter Agreement amending that certain Farmout Agreement dated May 21, 2012, by and between Chesapeake Appalachia, L.L.C., as Farmor ("CHK"), and CNX Gas Company LLC ("CNX"), and Noble Energy, Inc. ("NBL"), collectively as Farmee (as amended, and as subsequently assigned to SWN Production Company, LLC, ("SWN"), (the "FOA")

Gentlemen:

Reference is made to that certain Letter Agreement dated July 30, 2014, by and among CHK, CNX and NBL (the "7/30/14 Letter Agreement"), which modified, *inter alia*, the Well Drilling Schedule TIL date set forth on Exhibit B to the FOA, all as more fully set forth in the 7/30/14 Letter Agreement. A true and correct copy of the 7/30/14 Letter is attached as Exhibit "A" to this Second Letter Agreement.

In response to challenging economic conditions, CNX and NBL, as Farmee under the FOA, have revised their operations schedule, and in doing so, require a further extension of the required TIL date set forth on Exhibit B (1. Well Drilling Schedule) to the FOA, from December 31, 2015 to June 30, 2017.

In consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, SWN, successor in interest to CHK as Farmor under the FOA, and CNX and NBL as Farmee under the FOA, agree that the required TIL date set forth on Exhibit B to the FOA, Section 1, Well Drilling Schedule, is hereby extended to June 30, 2017. The FOA, as amended by this Second Letter Agreement, shall remain in full force and effect in accordance with the terms therein and herein.

This Second Letter Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which, when taken together, shall constitute one and the same agreement.

If the foregoing correctly reflects your understanding of our agreement, please sign and return four (4) originally-executed counterparts of this Letter Agreement to the undersigned.

Sincerely,

Title:

NOBLE ENERGY, INC., a Delaware corporation

Name: Andrew P. McLain

Attorney-in-Fact

CNX GAS COMPANY LLC,

a Virginia limited liability company

By: God W. (Iman Name: DAVID W. AMAN

Title: ASSISTMAT VICE PAESIDENT

Accepted and agreed to this 18th day of November	, 2015:
SWN PRODUCTION COMPANY, LLC, a Texas Limited Liability Company	
By: Staffer of Galdry Title: W- Cond	
STATOIL USA ONSHORE PROPERTIES, INC., a Delaware Corporation	
By: July J Name: Title: A. J. Kicke, Jr. Authorized Person	
glo-	





July 30, 2014

NOBLE ENERGY 333 Technology Drive, Suite 116 Canonsburg, PA 15317

CNX GAS COMPANY LLC 1000 Consol Energy Drive Canonsburg, PA 15317-6506

REFERENCE: Letter Agreement covering that certain Farmout Agreement ("FOA") dated May 21, 2012, by and between Chesapeake Appalachia, L.L.C., as Farmor ("CHK"), and CNX Gas Company LLC, as Farmee ("CNX"), covering those three (3) Oil and Gas Leases set out on Exhibit "A" thereto ("Leases"), together with the interest and lands subject thereto ("Lands"), located in Tyler County, West Virginia

Gentlemen:

This Letter Agreement shall evidence our mutual agreement addressing the expiring Leases subject to the above-described FOA, to which NOBLE ENERGY, INC. ("Noble") has become Farmee with CNX, and to which CHK has become Farmor, a copy of said FOA being attached hereto and made a part hereof for all purposes as "EXHIBIT A" to this Letter Agreement.

Farmor and Farmoe agree that Subparagraph 7.2.1 of the FOA is hereby deleted in its entirety and replaced with the following language,

7.2.1 Reserved Interests. FARMOR shall reserve with respect to any Earned Rights, including any Oil and Gas leased, held, owned or controlled by FARMEE, or its successors and assigns a two percent (2%) overriding royalty on all leases partially assigned by such FARMOR hereunder. It is the intent of the parties that FARMEE be delivered a Not Revenue Interest of not less than eighty-two percent (82%) in all Base Leases and Leases (assuming that FARMEE acquired 100% the working/leasehold interest covering a 100% mineral interest or a 100% mineral interest, as applicable.) The Reserved Interests shall also be subject to Section 13.1.

Reserved Interests payments to Chesapeake shall be directed to: Chesapeake Appalachia, L.L.C. 6100 N. Western Avenue Oklahoma City, OK 73118

CHESAPEAKE APPALACHIA, L.L.C. July 30, 2014 Page 2

Farmor and Farmee agree that the FOA is hereby amended to revise the provisions of Subparagraph 33.24 of said FOA, effectively changing the "Formation" to include all depths from the stratigraphic equivalent of the top of the Burkett/Geneseo formation in CHK's Kirk Hadley 8H (API # 4709502031) well as encountered at 6,119' TMD to the stratigraphic equivalent of the top of the Onondaga Limestone formation encountered at 6,210' TMD. Farmor and Farmee also agree that the required TIL date of May 21, 2014, found on "Exhibit B" of the agreement, is hereby amended to December 31, 2015.

If the foregoing correctly reflects your understanding of our agreement, please sign and return four (4) originally-executed counterparts of this Letter Agreement to the undersigned. Counterpart execution is specifically allowed hereunder.

Executed this July 30, 2014	day of	, 2014, but effective for all purposes as of
FARMOR		

CHESAFEAKE APPALACHIA, L.L.C., an Oklahoma limited liability company

No. 16 1/V

FARMEE

NOBLE ENERGY, INC., a Delaware corporation

CNX GAS COMPANY LLC, a Virginia limited liability company

BY: Mark A. Acree, Attorney-in-Fact April Name:

FARMOUT AGREEMENT

This FARMOUT AGREEMENT (this "Farmout" or "Agreement") made this 21st day of May, 2012 (the "Effective Date"), by and between Chesapeake Appalachia, L.L.C., a Oklahoma limited liability company located at 6100 N. Western Avenue, Oklahoma City, Oklahoma 73118 (hereinafter referred to as "FARMOR") and CNX Gas Company LLC, a Virginia limited liability company located at 1000 CONSOL Energy Drive, Canonsburg, Pennsylvania 15317 ("CNX"), hereinafter referred to as "FARMEE." See Section 34 for certain defined terms.

WHEREAS, FARMOR claims by leasehold or otherwise undivided interests in the Oil and Gas rights and interests described on <u>Exhibit A</u> to the Formation only (with respect to each such party and as limited to the Formation, "Oil and Gas Interests") under those certain tracts of land listed on <u>Exhibit A</u> located in McElroy District, Tyler County, West Virginia ("Chesapeake Acreage"). The Farmor's Acreage within the Formation is hereinafter referred to as the "Farmout Area"; and

WHEREAS, FARMEE desires to explore and develop the Farmout Area in order to earn acreage within portions of the Farmout Area.

NOW THEREFORE, for the mutual covenants and agreements hereinafter set forth and intending to be legally bound, FARMOR and FARMEE agree as follows:

FARMOUT

Subject to the terms and conditions contained herein, FARMOR grants to FARMEE, insofar as the same are owned or controlled by such FARMOR, the right to drill, complete and operate Wells within the Farmout Area in accordance with this Agreement, with the potential to earn such FARMOR's Oil and Gas Interests on acreage within the Farmout Area as described in Sections 4 and 5 hereof ("Earned Rights").

2. TERM

Unless sooner terminated as provided for herein, this Farmout shall have a term commencing on the Effective Date and shall continue (i) with respect to the Farmout Area (other than Earned Acreage) for so long as FARMEE is in compliance with the Well Commitment; and (ii) with respect to any given Earned Acreage (defined below) for so long thereafter as Oil and Gas is produced or is capable of production in commercial quantities from each Well on or unitized with any such Earned Acreage or Operations, as defined in the Lease, are continuously being prosecuted with respect to the Earned Rights as further described in the Lease.

3. COMMITMENTS AND OPERATIONS

FARMEE shall comply with the drilling schedule and drilling requirements as provided on Exhibit B (collectively the "Well Commitment"). Each Well shall be drilled either on the Farmout Area (a "Farmout Area Well") and/or on lands pooled or unitized with portions of the Farmout Area. To the extent that less than fifty percent (50%) of the Farmout Area is to be included within a Unit, then in order for the Farmout Area to be located in such Unit and to be eligible to be Earned Acreage, FARMOR must provide written consent to FARMEE prior to FARMEE's drilling of the Well, which such consent shall not be unreasonably withheld or delayed except as provided in the Lease.

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4. EARNED ACREAGE

FARMEE may earn each FARMOR's Oil and Gas Interests with respect to certain acreage within the Farmout Area for each Well drilled by FARMEE that is drilled in strict compliance with the Well Commitment, as follows (collectively "Earned Acreage"):

- 4.1. <u>Farmout Area Wells</u>. For each Well for which the following acreage lies entirely within the Farmout Area that is capable of production in commercial quantities and turned into line for production in accordance with the schedule and requirements set forth in Exhibit B, FARMEE shall earn a portion of the Farmout Area as follows:
 - 4.1.1. <u>Vertical Wells</u>: For a Vertical Well, a circular area having a radius of seven hundred forty five (745) feet (or a total of forty (40) acres) measured from the surface with the Vertical Well location in the center of such circular area, or
 - 4.1.2. <u>Horizontal Wells</u>: For a Horizontal Well, up to (five hundred (500) feet on either side of the lateral) and a semi-circular area up to five hundred (500) feet on the end of any lateral.
 - 4.1.3. Exception: With respect to Section 4.1.1 and Section 4.1.2, to the extent such forty (40) acres or such footage on either side of such lateral cannot be obtained within the Farmout Area due to the shape of the Farmout Area or location of the Well or lateral, then for such Vertical Well, FARMEE shall earn a circular area comprised of such lesser acreage amount or for such Horizontal Well, FARMEE shall earn such lesser footage amount within the Farmout Area on either side of such lateral (provided that in no event may FARMEE earn more than five hundred (500) feet on either side of the lateral), or for any Well FARMEE shall earn, such other shape and/or size of area as agreed to in writing by FARMOR.
- 4.2. Pooled/Unitized Area Wells. For Wells drilled and completed as a well capable of producing oil and/or gas in paying quantities within a Unit pursuant to Applicable Law, by agreement, voluntarily or pursuant to Section 6 below, FARMEE shall earn acreage, upon production of the Well in accordance with the schedule and requirements set forth in Exhibit B within such Unit, as follows: the total acreage earned and treated as Earned Acreage shall be the number of acres within the Farmout Area included in such Unit. In no event shall Earned Acreage for Wells drilled within a Unit include any Farmout Area acreage falling outside of the Unit.
- 4.3. <u>Unearned Acreage</u>. Notwithstanding anything herein to the contrary, this Farmout shall terminate as to all Chesapeake Acreage that is not Earned Acreage (the "<u>Unearned Acreage</u>") on the date that FARMEE fails to comply with its Well Commitment, whereupon FARMEE shall have no further rights to the Unearned Acreage at the expiration or termination of this Farmout. Upon request from the FARMOR, FARMEE shall deliver a Release, in recordable form, reasonably acceptable to FARMOR, of FARMEE's interest in the Unearned Acreage to FARMOR in proportion to the FARMOR'S interest therein.
- 4.4. <u>Earned Acreage Submittals</u>. For each Well drilled and producing in accordance with the schedule and requirements set forth in <u>Exhibit B</u>, FARMEE shall submit to each FARMOR, the following: (i) an as-drilled map or plat depicting the Well(s) and the Earned Acreage and the Units, if applicable, the "Earned Acreage Map" and (ii) all reports and data required in Exhibit B.

5. EARNED RIGHTS TRANSFER

Within ten (10) business days after a FARMOR's receipt of FARMEE's Earned Acreage submittals set forth above, and so long as FARMEE is in compliance with the terms and conditions hereof, such FARMOR shall assign to FARMEE all of such FARMOR's right, title, and interest in and to the Earned Rights, by delivering (i) an assignment of lease in a form substantially identical to the attached Exhibit C ("Assignment") or (ii) a lease to FARMEE, in a form substantially identical to the attached Exhibit D ("Lease"), as applicable, (in each case) covering such Earned Acreage as are shown and depicted on the Earned Acreage Map, which shall become an exhibit to the Assignment or Lease, as applicable.

6. POOLING AND UNITIZATION

- 6.1. To the extent FARMOR has pooling and unitization rights, then, subject to Section 3 and as set forth below in this Section 6, FARMEE is given such rights, at its option to pool, unitize or combine the Farmout Area, or any part thereof, with any other land, lease or leases, or parts thereof, regardless of ownership thereof, either adjoining the Farmout Area or other lands which may be included in and form part of the same unit for the development of Oil and Gas ("Unit" or "Unit(s)"); provided that
 - 6.1.1. any such Unit shall not exceed forty (40) acres for a Vertical Well and twelve hundred eighty (1280) acres for a Horizontal Well; and
 - 6.1.2. such rights may be exercised from time to time whether before or after the actual spudding of a Well on the particular Unit.
- 6.2. FARMEE shall obtain any and all approvals as provided for under the terms of the Base Leases (if applicable) or as statutorily required to effectuate said pooling. Prior to execution of any Unit agreement or declaration, FARMEE shall provide to each FARMOR a unit designation plat and any declaration of pooling, unit agreement or lease modification relating to the Farmout Area.
- 6.3. FARMEE agrees to include in a Unit, upon the request of the FARMOR, any lands or Oil and Gas interests owned or controlled by the FARMOR that lie within five hundred feet (500') of any lateral of a Well to the extent such inclusion would not exceed any unit size limitations in the Base Leases.
- 6.4. In the event any of the Farmout Area is included within a Unit as permitted hereunder, for purposes of computing the Reserved Interest there shall be allocated to the Earned Acreage within such Unit a pro rata portion of the Oil and Gas produced from the Unit and such allocation shall be on an acreage basis; thus, there shall be allocated to the Earned Acreage within such Unit that pro rata portion of the Oil and Gas produced from the Unit which the number of actual Lease acres included in the Earned Acreage that is within such Unit bears to the total number of actual Lease acres included with such Unit. Royalties hereunder shall be computed on the portion of such production allocated to the Earned Acreage within such Unit just as though such production were from such Earned Acreage.

- 7. BONUS, RESERVED INTERESTS BASE LEASE AND LEASE PAYMENTS
- Bonus. Upon execution of this Farmout, FARMEE shall pay Chesapeake \$2,000.00 per net mineral acre of Chesapeake leasehold as set forth on Exhibit A hereto.

7.2. Reserved Interests.

7.2.1. Reserved Interests. FARMOR shall reserve with respect to any Earned Rights, including any Oil and Gas leased, held, owned or controlled by FARMEE, or its successors and assigns a two percent (2%) overriding royalty on all leases partially assigned by such FARMOR hereunder. It is the intent of the parties that FARMEE be delivered a Net Revenue Interest of not less than Eighty-four percent (84%) in all Base Leases and Leases (assuming that FARMEE acquired 100% the working/leasehold interest covering a 100% mineral interest or a 100% mineral interest, as applicable). The Reserved Interests shall also be subject to Section 13.1.

Reserved Interests payments to Chesapeake shall be directed to: Chesapeake Appalachia, L.L.C. 6100 N. Western Avenue Oklahoma City, OK 73118

- 7.2.2. <u>Post Production Costs</u>. The Reserved Interests are to be free and clear of all costs, expenses and taxes, including without limit, post production costs and ad valorem taxes, excepting only severance taxes applicable to production from the Earned Acreage.
- 7.2.3. Subsequent Transfers. Such Reserved Interests shall burden, attach and extend, (i) to any Earned Rights, or portion thereof leased, held, owned or controlled by FARMEE, or its successors and assigns that FARMEE, or its successors and assigns, sells, assigns or otherwise transfers or conveys, (ii) to any top leases, renewals, modifications or extensions of the Base Leases or Leases or other instruments pursuant to which such Earned Rights are held (iii) to any new leases or other agreement taken by FARMEE, or its successors and assigns on any Earned Acreage relating to such Earned Rights, or portion thereof entered into within six (6) months following termination, cancellation, or surrender of any Base Lease or Lease or other instruments (including the Assignment) pursuant to which such rights are held (collectively "Earned Rights Transfer(s)").
- 7.2.4. Conveyance Documents. In the event of an Earned Rights Transfer, FARMEE shall provide prompt written notice to each FARMOR of the name and address of the purchaser/transferee. FARMEE agrees to cause all of the Reserved Interests provisions of this Section 7.2 ("Reserved Interest Provisions") to be incorporated in any documents of conveyance of any Earned Rights, in whole or in part.
- 7.2.5. Equitable Relief. FARMOR and FARMEE hereby acknowledge and agree that each FARMOR would be damaged irreparably in the event that FARMEE fails to comply with the Reserved Interest provisions hereof. Accordingly, each FARMOR shall be entitled to an injunction, specific performance, or other equitable relief to enforce specifically FARMEE's compliance therewith.

- 7.2.6. <u>Binding Nature</u>. The terms, covenants, rights and obligations in this Section 7.2, including without limitation, the Reserved Interest Provisions shall be covenants running with the land and shall be binding upon FARMEE, its successors and assigns.
- 7.2.7. Breach. In addition to any other grounds provided by Applicable Law or equity, upon FARMEE's failure to timely pay proceeds attributable to the Reserved Interests on any or all production in accordance herewith and the applicable Assignment or Lease to FARMOR, and upon written notice by certified mail by FARMOR to FARMEE of non-payment of royalties, twelve percent (12%) compounded annual interest, calculated from the last day of the month for which said Reserved Interests were due, shall be due and payable to FARMOR by FARMEE. At FARMOR's option, all payments received shall be applied first to any outstanding interest due on prior late paid royalties, then to any prior outstanding unpaid Reserved Interests and then to any current royalties due. No notations on the remittance statements or provisions in any division order shall amend this provision. Notwithstanding the foregoing, if any proceeds attributable to the Reserved Interests on any and all production are withheld by FARMEE on the basis of title defect(s), or adverse claims concerning the Earned Acreage, and are otherwise withheld in compliance with governing law and the terms of this Agreement and any applicable Assignment or Lease, no interest shall accrue and FARMEE shall not be required to pay any interest to FARMOR pursuant to this provision.
- 7.3. <u>Base Lease and Lease Payments</u>. FARMEE shall pay Base Lease and Lease payments as provided in the Assignment or the Lease attached as <u>Exhibit C</u> or <u>Exhibit D</u>, as applicable.

8. AUDIT RIGHTS

Each FARMOR and its duly authorized representatives shall have access to audit FARMEE's records related to Farmout Area, Wells drilled thereon and/or pooled or unitized therewith, the production and sales volumes and proceeds therefrom, and the distribution of payments required under the Earned Rights and other related records and information, during reasonable business hours and upon thirty (30) day advance written notice required to confirm FARMEE's compliance with this Farmout, the Base Leases, and/or transfer of the Earned Rights, during the term of this Farmout and for a period of two (2) years following the termination of this Farmout provided that such audit rights shall continue as to each Earned Rights, even after the termination of this Farmout, until the date that is two (2) years following such termination of such Earned Rights. FARMEE's volumes, sale prices and other information is proprietary and confidential and shall be handled with the due confidentiality by FARMOR and will be used by FARMOR only to verify FARMEE's compliance with this Farmout, the Base Leases, and/or the Earned Right Transfers.

TAXES/NO PARTNERSHIP

During the term of this Farmout, FARMEE shall pay all taxes imposed on its operations hereunder, including taxes levied or assessed on the privilege of producing Oil and Gas from the Farmout Area, on the improvements or other property of FARMEE in or on the Farmout Area, on the Earned Rights of FARMEE and on the income accruing to FARMEE therefrom (excluding, however, any severance tax attributable to the Reserved Interests). It is not the purpose or intention of this Agreement to create any partnership, mining partnership or association, and

neither this Agreement nor the operations hereunder shall be construed or considered as creating any such legal relationship.

10. COMPLIANCE WITH LAWS

FARMEE agrees that it will conduct all activities in compliance with all Applicable Laws.

11. DAMAGES

FARMEE shall (i) reclaim and restore the Farmout Area, any drill site and any lands affected by the FARMEE's activities in compliance of applicable rules and regulations, (ii) repair any material damage caused by the actions of FARMEE, including without limitation damage to roads, wells, facilities, equipment storage, pipelines, and improvements to the land overlying the Farmout Area, and (iii) pay for any damage or loss to the Farmout Area or property located therein caused by the actions of FARMEE.

12. REASSIGNMENT; REVERSION; RIGHT TO PURCHASE FARMEE WELLS

- 12.1. Failure to Maintain. If FARMEE earns an interest in a Base Lease within the Farmout Area, as provided for above, and said Earned Acreage is not being maintained by FARMEE or FARMEE's successors or assigns, by production, operations or as otherwise set out in the Base Lease or FARMEE releases, abandons, surrenders or otherwise allow or causes any of the Earned Rights, or portion thereof to terminate or expire, FARMEE shall advise FARMOR at least sixty (60) days in advance of the expiration date or of any obligation date necessary to maintain such Base Lease and upon request of the FARMOR (i) any Earned Acreage and/or Earned Rights will revert to FARMOR (in proportion to the interests that were originally transferred to FARMEE by each FARMOR or as otherwise agreed by FARMOR) and (iii) FARMEE shall have no further rights to such Earned Acreage and Earned Rights. Upon request of the FARMOR, FARMEE shall deliver, without any payment or royalty to FARMEE, a Reassignment of such Earned Acreage and Earned Rights to FARMOR in accordance with the foregoing.
- 12.2. Temporary Cessation. If there is a cessation of production from any Well, not in a Unit, or all Wells in a Unit, for a period exceeding one hundred and eighty (180) consecutive days, and if within said one hundred and eighty (180) consecutive days no additional drilling or reworking operations have been conducted thereon or the rights of FARMEE hereunder or under any Earned Acreage is not otherwise being maintained, then upon request by the FARMOR any Earned Acreage and/or Earned Rights will revert to FARMOR (in proportion to the interests that were originally transferred to FARMEE or as otherwise agreed by FARMOR) and FARMEE shall have no further rights to such Earned Acreage and Earned Rights. Upon request of the FARMOR, FARMEE shall deliver without any payment or royalty to FARMEE, a Reassignment of such Earned Acreage and Earned Rights to FARMOR in accordance with the foregoing.
- 12.3. Plugging and Abandonment; Well Purchase. If any Well drilled hereunder fails to produce gas in commercial quantities, or if the production from any producing Well drilled under this Agreement is permanently exhausted, or if any Well is shut-in for longer than one hundred and eighty (180) days, or as may be agreed to in writing by the parties, then such Well shall be plugged and abandoned by FARMEE in accordance with Applicable Laws and without expense to the FARMOR subject to the following provisions. Prior to the plugging and abandonment of any Well(s) drilled on the Farmout Area or Unit, including without limitation any dry holes, FARMEE shall provide written

notice to each FARMOR of any proposed plugging or abandonment and each FARMOR shall have the right, but not the obligation, for a period of thirty (30) days (or for a period of twenty-four (24) hours if a drilling rig is on location in a non-Coal Area or for a period of seventy-two (72) hours if a drilling rig is on location in a Coal Area) after receipt of written notice from FARMEE, to notify FARMEE of its intent to purchase the Well, and/or associated Earned Acreage, and/or Earned Rights for the fair market value of the salvageable material and equipment (if any) on or in the Well; provided that if the FARMOR gives notice of its intent to purchase the Well, and/or associated Earned Acreage, and/or Earned Rights, each FARMOR shall acquire an undivided fifty percent (50%) interest in such Well, and/or associated Earned Acreage, and/or Earned Rights and pay fifty percent (50%) of such fair market value. "Coal Area" shall mean an area where Chesapeake, or any affiliate of Chesapeake, now or in the future owns or controls coal reserves. If the FARMOR elects to purchase any Well, and/or associated Earned Acreage, and/or Earned Rights, then (i) such Well will no longer be eligible to earn or hold acreage, (ii) any such Earned Acreage and Earned Rights associated with the Well will revert to the electing FARMOR, (iii) FARMEE shall immediately surrender and have no further rights to such Well, Earned Acreage, or Earned Rights, and (iv) FARMEE shall deliver, as applicable, a Reassignment of such Earned Acreage and Earned Rights to the electing FARMOR (on a mutually acceptable form) transferring the Well, Earned Acreage and Earned Rights and associated equipment to the FARMOR.

13. TITLE

- 13.1. Proportionate Interest. Unless otherwise specially addressed herein, all payments, fees and Reserved Interests provided for in this Farmout are based on the FARMOR or the Landowner collectively owning one hundred percent (100%) of the Oil and Gas Interests in the Farmout Area. If FARMOR or any Landowner collectively own less than one hundred percent (100%) of the Oil and Gas Interests in any of the Base Leases or under any Lease, then, to the extent not already reduced herein to account for such lesser ownership, all payments, fees and royalties accruing hereunder shall be reduced in direct proportion to the ownership interest in and under such Base Lease or Lease, as applicable (including the mineral interest covered thereby).
- 13.2. Ownership Change. No change of ownership of the Farmout Area, or in the right to receive payments, fees and royalties hereunder, shall be binding on FARMEE until thirty (30) days after FARMEE has been furnished with written evidence satisfactory to FARMEE of such change of ownership or right to receive payments, fees and royalties.
- 13.3. No Warranty. The FARMOR does NOT warrant: the title to, or that it holds or controls a full interest in: (i) the Farmout Area, (ii) any associated Oil and Gas Interests or Earned Rights, or (iii) Base Leases, and each FARMOR hereby expressly disclaims any warranty of title or other warranty. FARMEE accepts, without any recourse whatsoever against FARMOR, the rights and Earned Acreage granted hereunder. There shall be no obligation on the part of the FARMOR to purchase base abstracts or supplemental abstracts, nor shall the FARMOR be obligated to do any curative work in connection with the title to the (i) the Farmout Area, (ii) any associated Oil and Gas Interests or Earned Rights, or (iii) Base Leases, or to contribute to the costs of such work. Should the FARMOR possess title opinions, abstracts or other title or ownership documents pertaining to the Base Leases, or the Oil and Gas Interests, then such FARMOR agrees to furnish to FARMEE copies thereof upon request from FARMEE. FARMEE understands and agrees that it receives no representation or warranty from the FARMOR as to the

accuracy or correctness of any title or ownership information provided by such FARMOR hereunder. FARMEE shall furnish to FARMOR such records and documents including but not limited to abstracts, supplemental abstracts, title opinions, surveys, and production reports, with respect to each of (i) the Farmout Area, (ii) any associated Oil and Gas Interests or Earned Rights, and (iii) Base Leases, as may reasonably be required by the FARMOR. In addition, FARMEE shall be bound by any agreement and/or contractual obligations now or in the future entered into by the FARMOR, or any Affiliate of the FARMOR which affect the any of (i) the Farmout, (ii) associated Oil and Gas Interests or Earned Rights, or (iii) Base Leases, so long as such FARMOR either provides to FARMEE a copy of such agreement and/or contractual obligation and such agreement or contractual obligation does not materially affect FARMEE's operations, or if such agreement or contractual obligation is of record in the county where the property is located as of the date hereof. Each FARMOR expressly reserves the right to remove from this Agreement any (i) Farmout Area, or (ii) associated Oil and Gas Interests or Earned Rights, or (iii) Base Leases, for which a Landowner disputes title, unless FARMEE agrees in writing to indemnify, defend and hold harmless each FARMOR from any Claims related to such (i) Farmout Area, or (ii) associated Oil and Gas Interests or Earned Rights, or (iii) Base Leases, subject to such dispute.

14. INDEMNIFICATION

To the fullest extent permitted by Applicable Law, FARMEE agrees to and shall indemnify, defend and hold harmless each FARMOR and each of their respective Affiliates, and each of their and their Affiliates' respective agents, Affiliates, employees, officers, directors, contractors, agents, consultants, lessees, visitors, licensees, invitees, successors and assigns ("FARMOR Parties"), from and against any and all Claims, liabilities, costs, expenses (including, without limitation, court costs and reasonable attorney's fees), losses and damages that arise from or are caused by FARMEE and or its Affiliates, and their respective agents, Affiliates, employees, officers, directors, contractors, agents, consultants, lessees, visitors, licensees, invitees, successors and assigns ("FARMEE Parties"), related to: (i) FARMEE's operations hereunder or under an Assignment or Lease or the Base Leases, (ii) any failure to perform any of the terms, covenants related to this Farmout, any Assignment or Lease or the Base Leases, or (iii) any failure to comply with Applicable Law, (iv) any accident, death or personal injury, or damage to or loss or theft of property or (v) from pollution, contamination, spills, or environmental damage of any kind. This indemnification provision shall survive expiration or termination of this Farmout. It is agreed that the foregoing indemnities shall be binding upon FARMEE and its Affiliates and their successors and assigns.

15. INSURANCE

FARMEE shall procure and maintain in effect during the term of this Agreement the insurance coverages as set forth on Exhibit E.

16. SURRENDER

Subject to provisions that survive, FARMEE, in its sole discretion, may surrender and cancel this Farmout as to all or any part of the Farmout Area, by delivering a duly executed Surrender of Farmout in recordable form to each FARMOR, and if the Farmout or a Memo of Farmout was recorded, then by recording the Surrender of Farmout.

17. ASSIGNMENT

This Farmout, the Farmout Area, any associated Oil and Gas Interests or Earned Rights, or any Base Leases may not be sold, assigned, encumbered or otherwise transferred by FARMEE, in whole or in part, without the express written consent of each FARMOR, which consent may be unreasonably withheld, delayed or conditioned by such FARMOR, except in the case of (i) transfers or assignments to the parent company, or Affiliates of FARMEE or (ii) a merger involving FARMEE or its subsidiaries or parent company who has the ability to perform all duties and obligations hereunder, or (iii) the sale of all or substantially all of the assets of FARMEE or (iv) transfers or assignments to joint venture partners or third party investors in the Wells, provided that any such sale, assignment, merger or other transfer shall not act as a novation and FARMEE shall remain fully liable for all obligations under this Farmout. In the event each FARMOR consents to any transfer, such consent shall not relieve FARMEE and or any transferee, assignee, sublessee, etc., from securing each FARMOR's written consent to any further transfer, nor shall any such consent be construed as a consent to any further transfer or as a waiver of any portion of this section or of the FARMOR's rights hereunder.

18. BASE LEASES

- 18.1. Compliance. FARMOR and FARMEE each agree to preserve and protect the Base Leases and to comply with all express or implied terms, conditions and covenants contained in the Base Leases for the Farmout Area, provided however, FARMOR shall not be liable in damages to FARMEE for any failure to pay or improper payment to any Landowner resulting from inadvertence, oversight or mistake. FARMEE shall assume all duties and obligations relating to the Oil and Gas Interests, Earned Rights, the Farmout Area, and of the lessee in any Base Lease and shall comply with all the expressed and implied covenants thereof, insofar and to the extent that they are applicable to the Oil and Gas Interests, Earned Rights or the FARMEE's operations in the Farmout Area.
- 18.2. No Breach. Neither FARMOR nor FARMEE shall fail to take any action or shall do, or permit anything to be done which would constitute a violation or breach of any of the terms, conditions or provisions of the Base Leases, except as provided in Section 18.1 or which would cause the Base Leases to be surrendered, terminated or forfeited.
- 18.3. <u>Cure Rights.</u> If either Chesapeake or FARMEE takes or fails to take any action required to maintain the Base Leases, which action or inaction does not relate to an obligation of the other party, and any Landowner declares that any Base Lease is in default as a result of such action or inaction on the part of Chesapeake or FARMEE, then any non-breaching party may, at its option, following written notice to the other parties (including to the breaching party), cure such default in a commercially reasonable manner and deduct the actual reasonable expense of doing so from any payments, fees or royalties thereafter due to the breaching party.
- 18.4. Enforcement Rights. As between FARMOR and FARMEE, Chesapeake shall have the right to enforce all the terms and conditions of the Base Leases, both express and implied, if such enforcement (i) is required to preserve Chesapeake's coal or oil and gas rights or interests, or (ii) where Chesapeake's coal or oil and gas rights or interests are not at issue, does not materially interfere with FARMEE's rights hereunder and under any Earned Rights.
- 18.5. <u>Conflicts</u>. If any conflict relating to any terms and conditions between the provisions of this Farmout and any of the Base Leases, the provisions of the Base Lease shall control.

- 18.6. No Liens. FARMEE agrees to protect and preserve (i) the Farmout Area, (ii) any associated Oil and Gas Interests and (iii) the Base Leases, from any and all liens, judgments, encumbrances and any other Claims.
- 18.7. No Amendment. FARMEE shall not modify or amend the provisions contained in any Base Lease, except upon the prior written consent of each FARMOR which consent may not be unreasonably withheld or delayed.
- 18.8. Notice. FARMOR and FARMEE shall each promptly provide the other parties any notices from any Landowner relating to the (i) the Farmout Area, (ii) any associated Oil and Gas Interests or Earned Rights, (iii) Base Leases, or (iv) this Farmout.
- 18.9. <u>Top Leasing.</u> During the term of the Farmout and during any term of each Base Lease, FARMEE, and any of its Affiliates, shall not make or enter into any top lease with respect to (i) the Chesapeake Acreage (ii) any associated Oil and Gas Interests or Earned Rights, or (iii) Base Leases, unless waived in writing by each FARMOR.
- 18.10. Reimbursement. FARMEE shall reimburse each FARMOR, within thirty (30) days of invoice, for the full amount of payments to Landowners made by such FARMOR and attributable to the Oil and Gas Interests within the Farmout Area or Earned Rights within the Farmout Area, including without limit, all delay rental payments made on the Farmout Area subsequent to the execution date of this Agreement until time as such FARMOR relinquishes its operating rights. After FARMEE has earned any Farmout Area provided for herein, all such payments, and the parties' respective shares in bearing such payments, shall be governed by the assignment documents.
- 18.11. Consents. If a consent to or approval for this Farmout is required under any Base Lease, then FARMEE shall use its commercially reasonable efforts to obtain such consent as promptly as practicable, and until such consent or approval is obtained, the parties shall use commercially reasonable efforts to make the benefits of that Base Lease available to FARMEE pending receipt of such consent or approval, provided that no action will be required or permitted in violation of any Base Lease. FARMOR shall cooperate with FARMEE in acquiring any required consents.

19. TERMINATION / DEFAULT

If FARMEE fails to meet any Well Commitment, then FARMEE's rights under this Agreement will automatically terminate as to all of the Farmout Area, except as to the Earned Acreage previously conveyed hereunder. If FARMEE fails to make any payments required hereunder, or otherwise breaches this Agreement (except for failures to meet any Well Commitment), then following thirty (30) days after receipt of written notice of such default from the FARMOR, and the failure of FARMEE to cure, or commence to cure, such default within such thirty (30) day period, all of FARMEE's rights under this Agreement will automatically terminate as to all Farmout Area, except as to the Earned Acreage previously conveyed hereunder. FARMEE shall continue to be responsible for any obligations which FARMEE incurs prior to the date of default and for any such sums shall be paid with interest at prime (as declared from time to time by PNC Bank) plus four percent (4%) for the period of delinquency. The right of termination as herein set forth shall be in addition and without prejudice to any other rights or causes of action which each FARMOR may have either at law, equity or otherwise arising out of FARMEE's failure or default hereunder. No termination shall operate to relieve FARMEE of any liability or obligation hereunder that accrues prior to or as a result of such termination.

20. NOTICE

All notices, requests, claims, demands and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in person, facsimile or by overnight courier to the respective parties at the addresses set forth above or to such other addresses furnished to the other party in writing in the manner set forth above.

21. ENTIRE CONTRACT

This Farmout, together with each Assignment and/or Lease delivered pursuant hereto, contain the entire agreement between FARMOR and FARMEE, related to the subject matter herein. Except as expressly set forth in this Farmout, no warranties, representations, or promises have been made or relied upon by either party as an inducement to or modification of this Farmout.

22. AMENDMENTS

Any amendments to this Farmout shall be in writing and signed by duly authorized representatives of each FARMOR and FARMEE and no course of dealing between the parties shall be construed to alter the terms hereof.

23. SUCCESSORS

The terms and provisions of this Farmout shall be binding upon and inure to the benefit of the parties hereto and their permitted successors and assigns.

24. RECORDING

A memorandum of this Farmout and a memorandum of any Lease(s) will be executed by the parties. The memorandum of Farmout and any Leases shall be recorded.

25. GOVERNING LAW

This Agreement shall be construed and enforced in accordance with the Applicable Laws of the Commonwealth of Pennsylvania and any action brought shall be brought exclusively in a court of competent jurisdiction in such Commonwealth/State without regard to choice of law issues.

26. THIRD PARTY BENEFICIARIES

Nothing contained herein is intended or shall be deemed to create or confer any rights upon any third person not a party hereto, whether as a third party beneficiary or otherwise, except as expressly provided herein.

27. SURVIVAL

All obligations of FARMEE accrued prior to any termination, including without limitation indemnification and all other covenants, and all of FARMOR's rights and remedies under this Farmout shall survive any termination or expiration.

28. RELATIONSHIP OF THE PARTIES

FARMOR shall have no control over the drilling, testing, and completing operations provided for in this Agreement and any well drilled hereunder is to be drilled and completed as a producer or plugged and abandoned, as the case may be, at FARMEE's sole expense, cost, risk and liability.

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Nothing contained in this Farmout is intended to create or establish any relationship other than that of farmor and farmee and nothing herein shall be construed to create or establish any partnership, joint venture or association or to make FARMEE or FARMOR the representative or agent of the other for any purpose whatsoever of this Farmout.

29. SEVERABILITY/CONFLICTS

If any term, provision or condition contained in this Farmout shall, to any extent, be deemed unenforceable, invalid, or contradictory to the terms of the Base Lease, said provision shall be deemed null and void; provided however, that so long as the economic substance of this Farmout is not materially effected by such unenforceable or invalid provision, the remainder of this Farmout or the application of such term, provision or condition to persons, entities or circumstances other than those in respect of which it is invalid or unenforceable shall not be effected thereby, and each and every other term, provision and condition of this Farmout shall be valid and enforceable to the fullest extent permitted by Applicable Law.

30. FURTHER ASSURANCES

Each party shall execute and deliver such further instruments and take such other actions at and after the Effective Date as may be reasonably requested by the other party from time to effectuate, confirm or perfect the terms and intent of this Farmout.

31. CONSTRUCTION/COUNTERPARTS

This Farmout was drafted by the joint effort between FARMOR and FARMEE and neither party shall be deemed to have controlled the drafting of any provisions. The recitals and all Exhibits are made a part of and incorporated by reference into the body of this Agreement. This Agreement may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all of such counterparts shall constitute for all purposes one agreement.

32. SEVERAL LIABILITY

Notwithstanding anything in this Agreement to the contrary, each FARMOR shall be severally liable for the acts and omissions of it and its related FARMOR Parties and no FARMOR shall have any liability for any acts or omissions of the other FARMOR or such other FARMOR's related FARMOR Parties.

33. DEFINED TERMS

The terms used in this Farmout are as set forth below.

- 33.1. "Affiliates" means, with respect to any person or entity, any other person or entity that, directly or indirectly through one or more intermediaries, is controlled by such person or entity, or is a successor or assignee of such person or entity and is engaged in Oil and Gas acquisition, development or operations, and their respective successors and assigns. For this purpose, "control" means possession, directly or indirectly, of power to direct or cause the direction of management or policies (whether through ownership of securities or other ownership interest, by contract or otherwise).
- 33.2. "Agreement" has the meaning set forth in the Preamble.

- 33.3. "Applicable Laws" means all local, state and federal laws, statutes, codes, acts, constitutions, ordinances, judgments, decrees, injunctions, bonds, advisories, circulars, orders, resolutions, rules, regulations, permits, licenses, authorizations, administrative orders, standards, directives, and other requirements of any governmental entity, whether now or hereafter enacted, created or promulgated, of any kind or nature, including, without limitation, all zoning, land use, building, health, security and Environmental Laws related to the Farmout Area, any Wells, or to the activities under this Farmout.
- 33.4. "Assignment" has the meaning set forth in Section 5.
- 33.5. "Base Lease(s)" means all of the leases, assignments or other instruments within the Farmout Area, pursuant to which Landowners leased, assigned, or otherwise directly or indirectly transferred to FARMOR rights, inter alia, to produce and drill for Oil and Gas in, on and from portions of the Farmout Area and/or Oil and Gas interests, as more particularly described therein, as in effect on the date hereof and as amended or modified from time to time but excluding any additional leases assignments, conveyances or otherwise transfers to FARMOR of any rights, inter alia, to produce and drill for Oil and Gas in, on and from portions of the Farmout Area and/or any Oil and Gas interests and acquired or controlled by FARMOR or their Affiliates after the date hereof within the Farmout Area.
- 33.6. "Claims" means any and all losses, damages, costs and expenses, liabilities, suits, actions, claims, delays, settlements, judgments, demands, and other obligations and proceedings whatsoever (including, without limitation, attorney's fees, fines, penalties, court costs, expert and consultant fees, any personal injury, sickness, disease, death, damage, injury, destruction to or loss of property of any kind and loss of use thereof).
- 33.7. "Chesapeake" has the meaning set forth in the Preamble.
- 33.8. "Chesapeake Acreage" has the meaning set forth in the Recitals.
- 33.9. "control" has the meaning set forth in Section 34.1.
- 33.10. "Coal Area" has the meaning set forth in Section 12.3.
- 33.11. "Earned Acreage" has the meaning set forth in Section 4.
- 33.12. "Earned Acreage Map" has the meaning set forth in Section 4.4.
- 33.13. "Earned Rights Transfer(s)" has the meaning set forth in Section 7.2.3.
- 33.14. "Earned Rights" has the meaning set forth in Section 1.
- 33.15. "Effective Date" has the meaning set forth in the Preamble.
- 33.16. "Environmental Laws" means any federal, state and local laws and regulations, judgments, orders and permits governing safety and health and the protection of the environment, including without limitation, the following laws, as they may be from time to time amended: the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq., (CERCLA), the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq., the Clean Water Act, 33 U.S.C. 1251 et seq., the

Clean Air Act, 42 U.S.C. 7401 et seq., the Toxic Substance Control Act, 15 U.S.C. 2601 et seq. and the Safe Drinking Water Act, 42 U.S.C. 300f through 300j.

- 33.17. "FARMEE" has the meaning set forth in the Preamble.
- 33.18. "FARMEE Parties" has the meaning set forth in Section 14.
- 33.19. "FARMOR Parties" has the meaning set forth in Section 14.
- 33.20. "FARMOR" has the meaning set forth in the Preamble.
- 33.21. "Farmout" has the meaning set forth in the Preamble.
- 33.22. "Farmout Area" has the meaning set forth in the Recitals.
- 33.23. "Farmout Area Well" has the meaning set forth in Section 3.
- 33.24. "Formation" means the geological formation commonly known as the Marcellus Shale horizon, which shall be defined as from the top of the Marcellus in Chesapeake's Kirk Hadley 8H well (API: 47-095-02031-000) at 6313' TMD through to the top of the Onondaga Limestone formation.
- 33.25. "Horizontal Well" means each horizontal leg or separate parallel segment resulting from drilling utilizing a horizontal drilling technique in and through the Formation and producing from the Formation.
- 33.26. "JDA" has the meaning set forth in Section 33.
- 33.27. "JOA" has the meaning set forth in Section 33.
- 33.28. "Landowner" means the person, persons, entity or entities who is the lessor, owner, sublessor or other similar title holder, of an ownership or possessory interest in the Farmout Area and identified as such in any Base Lease, including any and all heirs, representatives, successors and assigns of such person, persons, entity or entities.
- 33.29. "Lease" has the meaning set forth in Section 5.
- 33.30. "Oil and Gas" means oil, oil well casinghead gas, gas, natural gas liquids, coalbed methane gas and other hydrocarbons or constituents thereof.
- 33.31. "Oil and Gas Interests: has the meaning set forth in the Recitals.
- 33.32. "Reassignment" means FARMEE, or FARMEE's successors or assigns, shall surrender and, promptly reassign to the FARMOR, in form substantially identical to the attached Exhibit C or Exhibit D, free from any overriding royalty, lien, encumbrance or other burden placed thereon by FARMEE, or FARMEE's successors or assign.
- 33.33. "Reserved Interest Provisions" has the meaning set forth in Section 7.2.4.
- 33.34. "Reserved Interests" Has the meaning set forth in Section 7.2.1.
- 33.35. "Royalty" or "Royalties" has the meaning set forth in Section 18.12.

- 33.36. "Tax Partnership" has the meaning set forth in Section 33.
- 33.37. "Tax Partnership Agreement" ha the meaning set forth in Section 33.
- 33.38. "Unearned Acreage" has the meaning set forth in Section 4.3.
- 33.39. "Unit" or "Unit(s)" has the meaning set forth in Section 6.1.
- 33.40. "Vertical Well" means a single vertical hole or directional hole drilled into and producing from the Formation.
- 33.41. "Well" means a Vertical Well or a Horizontal Well, and "Wells" means more than one (1) Well as herein defined.
- 33.42. "Well Commitment" has the meaning set forth in Section 3.

[End of Farmout Agreement]

IN WITNESS WHEREOF, FARMOR and FARMEE set their hands and seals below. Witness: FARMOR: CHESAPEAKE APPALACHIA, L.L.C., an Oklahoma limited liability company By: By: Name: Henry J. Hood Its: Senior Vice President Land Witness: FARMEE: CNX GAS COMPANY LLC, a Virginia limited liability company By: Richard K. Elswick By: DWA Its: Vice President EXHIBITS: Exhibit A Exhibit B Oil and Gas Interests and Farmout Area Well Commitment-Drilling Schedule and Drilling Requirements; Royalties Exhibit C Form of Partial Assignment of Lease(s)

Exhibit D

Exhibit E

Form of Lease(s)

Insurance Requirements

ACKNOWLEDGEMENTS

STATE OF OKLAHOMA

8

COUNTY OF OKLAHOMA

This instrument was acknowledged before me on this 15th day of October, 2012, by Henry J. Hood, Senior Vice President – Land for Chesapeake Appalachia, L.L.C., an Oklahoma Limited Liability Company.

Notary Public, State of Oklahoma My Commission Expires:

STATE OF WEST VIRGINIA

§

COUNTY OF LEWIS

8

I, a Notary Public of said County, do certify that Richard K. Elswick, who signed this writing above, bearing the date the day of 2012, as Vice President for CNX GAS COMPANY LLC has this day in my said County before me acknowledged the said writing to be the act and deed of said corporation.

Given under my hand this 24th day of October 2012

My Commission expires.

Notary Public

OFFICIAL SEAL NOTARY PUBLIC

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EXHIBIT "A"

Oil and Gas Interests and Farmout Area

ATTACHED TO AND MADE A PART OF THAT CERTAIN FARMOUT AGREEMENT DATED JULY 31ST, 2012 BY AND BETWEEN CHESAPEAKE APPALACHIA, L.L.C. AND

CNX GAS COMPANY, L.L.C.

Oil and Gas Interests and Farmout Area

LEASEHOLD RIGHTS:

I.

LEASE INTERESTS

TMP(s)	County/State	Chesapeake Doc. Number(s)	Recordation Book/Page	Lessor	Chesapeake Net Acres
5-15-40	Tyler County, West Virginia	1-299295-001	374/140	Sally R. Davis, widow	33.3333
5-15-40	Tyler County, West Virginia	1-299295-002	374/742	John R. Davis, single	47.916662
5-15-40	Tyler County, West Virginia	1-299295-003	374/751	Jane Davis Rosser, married dealing in sole capacity	23.3375

II.

FARMOUT AREA

The Farmout Area encompasses those lands covered by the Oil and Gas Interests insofar as and to the extent that same are owned by FARMOR.

EXHIBIT B

ATTACHED TO AND MADE A PART OF THAT CERTAIN FARMOUT AGREEMENT DATED AUGUST 1ST, 2012 BETWEEN

CHESAPEAKE APPALACHIA, L.L.C. AND CNX GAS COMPANY, L.L.C.

Commitments

DRILLING SCHEDULE AND OPERATIONAL COMMITMENTS AND REQUIREMENTS

FARMEE shall comply with the following schedules, commitments and requirements:

1. WELL DRILLING SCHEDULE

TIL DATE	# OF HORIZONTAL WELLS	MINIMUM LENGTH OF LATERAL	# OF VERTICAL WELLS
May 21, 2014	1	4000'	N/A

2. PRE-DRILLING REQUIREMENTS

DELIVERABLE	DEADLINE	CHESAPEAKE RECIPIENT
A. Applications for Federal and State Drilling Permits with attachments and approvals (one copy of each)	At least ten (10) days prior to the commencement of drilling operations on the subject Well	Anneliese.martinez@chk.com (405) 935-7540 Office (405) 849-7540 Fax
B. Approved Drilling	At least ten (10) days	Anneliese.martinez@chk.com

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	Permit	commencement of	(405) 935-7540 Office
		drilling operations on the subject Well	(405) 849-7540 Fax
C.	Certified Survey Plat of the drillsite location prepared by a registered surveyor, showing the Well location and the configuration of the proposed drilling unit	At least ten (10) days prior to the commencement of drilling operations on the subject Well	Anneliese,martinez@chk.com (405) 935-7540 Office (405) 849-7540 Fax
D.	Geological Prognosis	At least ten (10) days prior to the commencement of drilling operations on the subject Well	Anneliese.martinez@chk.com (405) 935-7540 Office (405) 849-7540 Fax
E.	Drilling Prognosis	At least ten (10) days prior to the commencement of drilling operations on the subject Well	<u>Annellese.martinez@chk.com</u> (405) 935-7540 Office (405) 849-7540 Fax
F.	FARMOR's written approval of the location of said Well prior to the commencement of drill-site preparation and drilling operations	At least ten (10) days prior to the commencement of drilling operations on the subject Well	Anneliese.martinez@chk.com (405) 935-7540 Office Hayley.Gibson@chk.com (405) 935-2368
G.	Notification of spudding	At least two (2) days prior to spudding the subject Well	Anneliese.martinez@chk.com (405) 935-7540 Office (405) 849-7540 Fax

3. <u>DATA AND REPORTS</u> After actual drilling of any Well has been commenced and until such Well has been completed as a producer or plugged and abandoned as a dry hole, upon the request of the FARMOR, FARMEE shall furnish to FARMOR daily, weekly or monthly reports as to the progress of drilling and any and all information requested by the FARMOR relative to the drilling thereof, as follows:

A. Drilling Phase Data Requirements.

DELIVERABLE	DEADLINE	CHESAPEAKE RECIPIENT
Daily drilling reports	Each morning before 8:00 AM from the time charges begin under the drilling rig contract until operations on the subject Well have ended and the drilling rig is released	nonopsrpts@chk.com eastern.central@chk.com productionnonop@chk.com
Timely notice of intent to log, co or test; Chesapeake's representatives, if they so desire may be present to witness same	re in advance	Anneliese.martinez@chk.com (405) 935-7540 Office (405) 849-7540 Fax

Additional Chesapeake Contact Information:

Contact Name & Title			<u>Phone</u>	<u>FAX</u>	
PRIMARY		Office:	405-935-1409	Office:	405-849-1409
Title:	Geoscience Manager – Marcellus South	Home:		Home:	
Email:	Mike.Cervantes@chk.com	Pager:		Cell:	405-249-2476
SECONDARY: David Brooks		Office:	405-935-2677	Office:	405-849-2677
Title:	Land Manager - Marcellus South	Home:	NAME OF THE OWNER OWNER OF THE OWNER	Home:	
Email:	David.Brooks@chk.com	Pager:		Cell:	

A. <u>Data and Information</u>. Upon the request of the FARMOR, FARMEE agrees to promptly furnish to FARMOR copies and/or sets of applications, all logs, electrical logs, histories, driller's records, core analyses and descriptions, completion data, and operations and production data and other data and test results pertinent to the drilling and completion of each Well drilled pursuant to this Agreement.

DELIVERABLE	DEADLINE	CHESAPEAKE RECIPIENT			
1. All data and	Within two	eastern.central@chk.com			
information from the Well, including but not	(2) weeks of receipt from vendors	productionnonop@chk.com			
limited to the		Amanda.siebert@chk.com			
information set forth below:		nonoprpts@chk.com			
below.		Anneliese.Martinez@chk.com			
☐ Directional Survey — Final Composite Prints (4) / Digital 1 CD (ASCII)					
☐ Cased Hole Logs — Field Prints (2) / Final Prints (3) / Digital 1 CD (LAS & plot files)					
☐ Mud Logs – Daily (e-mail)					
☐ Mud Logs — Final Prints (4) / Digital 1 CD (LAS & plot files)					
☐ Wire line Logs — Field Prints (4) / Final Prints (4) / Digital 1 CD (LAS & plot files)					
☐ LWD Logs — Daily (e-mail)					
☐ WD Logs — Final Prints (4) / Digital 1 CD (LAS & plot files)					
☐ Geological and/or Paleo Interpretations — Final Reports (2) / Digital 1 CD					
☐ DST Reports (2)	}				
☐ Core Analysis — Prelim Report (3) / Final Report (4) / Final w/ Photos (2) / Digital 1 CD (report & photos)					
☐ Reservoir Fluid Analysis – Final Report					

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(a) / Di=in-1 4 CD	TT			
(2) / Digital 1 CD				
☐ Bottom Hole Pressure Survey — Final Report (2)				
☐ Velocity Survey — Final Report (2) / Digital 1 CD				
2. Electronic Log Data		eastern.central@chk.com		
		productionnonop@chk.com		
		Amanda.siebert@chk.com		
		nonoprots@chk.com		
		Anneliese.Martinez@chk.com		
3. Data Websites, if		eastern.central@chk.com		
being used to distribute any data		productionnonop@chk.com		
		Amanda.siebert@chk.com		
		nonoprpts@chk.com		
		Anneliese.Martinez@chk.com		
4. Approved MMS		eastern.central@chk.com		
Sundry Notices / State Sundry Notices		productionnonop@chk.com		
/ State Filings		Amanda.siebert@chk.com		
		nonoprpts@chk.com		
		Anneliese.Martinez@chk.com		
5. MMS Well Summary Reports* / State		eastern.central@chk.com		
Completion Reports*		productionnonop@chk.com		
*Includes Prognosis,	7	Amanda.siebert@chk.com		
Completion, Well History and Report of		nonoprots@chk.com		
Test Results		Anneliese.Martinez@chk.com		
6. Other Regulatory		eastern.central@chk.com		
Information from the		productionnonop@chk.com		
Well		Amanda.slebert@chk.com		
L	1	1		

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	-		nonoprpts@chk.com			7	
			Annelies	e.Martin	ez@chk.com		
7.	Samples.						
	a)	Not Required	\boxtimes	b)	Required		
FARMEE shall collect one complete set of washed samples and one complete set of unwashed samples at							
8.	Mud Loggi	lud Logging Unit.					
	a)	Not Required Required from 2	3,000' to T	b) D	Required		

FARMEE shall furnish each FARMOR one copy of the field prints of the daily mud log on a regular basis (daily to weekly) while drilling.

B. General

- All non-routine reports and notices shall be telephoned to the <u>Primary Contact</u> noted above.
- All invoices shall be directed to: Chesapeake Energy Corporation, P.O. Box 18496, Oklahoma City, Oklahoma 73154-0496, Attn: Steven Bryant
- C. Completion Phase Data Requirements. If the Well is completed as a producer, FARMEE shall furnish full information on the completion progress to: eastern.central@chk.com, productionnonop@chk.com, Amanda.siebert@chk.com, nonoprpts@chk.com, and Anneliese.Martinez@chk.com, including one copy of each of the following (except as noted below):
 - Detailed daily completion report including perforations, treatments, production and the results of backpressure and productivity tests.
 - 2. Oil, gas and water analysis.
 - 3. All reports required by governmental agencies.
 - Weekly recap of daily production information for sixty (60) days following completion.

B. WELL SITE AND OTHER FEES

<u>Location Fee.</u> Upon receipt by FARMEE of a drilling permit from the State agency with jurisdiction over well drilling permits authorizing the drilling of a Well on the Farmout Area

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or on lands unitized or pooled with the Farmout Area for the exploration, exploitation and production of Oil and Gas, FARMEE shall pay to FARMOR a location fee of \$3,500 for each Vertical Well and \$7,500 for each Horizontal Well.

C. SPACING REQUIREMENTS

FARMEE shall at all times maintain a spacing distance from any and all Wells drilled by FARMEE and/or its Affiliates and assigns within the Farmout Area in accordance with the laws of the State of Pennsylvania and the regulations of Pennsylvania's Department of Environmental Protection.

D. OPERATIONS

- A. <u>Control</u>. FARMOR shall have no control over the drilling, testing, and completing operations provided for in this Agreement.
- B. <u>Costs and Risks</u>. FARMEE hereby accepts and assumes the sole expense, cost, risk and liability for all obligations, covenants, and duties hereunder, including without limitation, any Well drilled hereunder and its operations.
- C. <u>Re-Drilling</u>. Further, if the hole or holes should be lost or damaged, or if a Well being drilled shall blowout or crater for any cause, FARMEE shall bear the entire cost of redrilling the new hole or killing the Well or bringing it under control, as the case may be.
- D. Other Requirements. FARMEE agrees to comply with the safety and other requirements of each FARMOR, provided to FARMEE from time to time. The foregoing shall in no way limit FARMEE's obligation to provide all necessary protection and supervision to regulate, control and maintain the safety of persons and property in or about the Farmout Area.
- E. Access. Each FARMOR shall, at all times, have access to the Farmout Area and any Wells drilled pursuant to this Agreement through its agents and representatives to inspect operations thereon. Each FARMOR's employees and authorized representatives, at the sole risk of such FARMOR, shall have access to the derrick floor of any Well at all times.
- F. <u>Free Gas</u>. If any activities by FARMEE trigger a free gas obligation, then FARMEE shall be fully responsible for the free gas obligations.
- G. <u>Seismic Operations</u>. While this Farmout is in effect, each FARMOR grants to FARMEE, to the extent provided for in the Base Leases or as such FARMOR or its Affiliates otherwise have obtained, a right to conduct seismic/geophysical operations on the Farmout Area, at FARMEE's sole risk, cost and expense and at locations where FARMEE deems reasonable and necessary on the Farmout Area to determine if the Farmout Area is prospective for Oil and Gas production from the Formation. Each FARMOR will be provided a copy, free of cost, of any seismic data including interpretations thereof acquired or made by the FARMEE in any Farmout Area or Unit.
- H. <u>Cooperation and Protection of Facilities</u>. FARMEE shall at all times conduct its operations so as not to interfere with the FARMOR's or such FARMOR's Affiliates'

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wells, production facilities and operations on the Chesapeake Acreage. None of FARMOR or FARMEE shall improve, modify, degrade or restrict roads and facilities built by the other party without other party's written consent which shall not be unreasonably withheld, conditioned or delayed, except as is reasonably necessary in emergency situations where such activity is necessary to preserve or protect human life, property and/or the environment. In addition, FARMOR do not commit, consent to the use of or assignment to FARMEE of any assets, properties, rights, installations, plants or appurtenances of any nature except as expressly set forth herein.

I. <u>Depth Limitations</u>. FARMEE shall have the right to penetrate, but not perforate or stimulate formations from the surface of the earth to the top of the Formation, and shall further have the right to penetrate, but not perforate or stimulate, one hundred-fifty feet (150') below the top of the Onondaga formation.

END OF EXHIBIT B

EXHIBIT "C"

ATTACHED TO AND MADE A PART OF THAT CERTAIN FARMOUT AGREEMENT DATED AUGUST 1ST, 2012 BY AND BETWEEN CHESAPEAKE APPALACHIA, L.L.C. AND CNX GAS COMPANY, L.L.C.

Form of Term Partial Assignment of Lease(s)

THIS TERM PARTIAL ASSIGNMENT OF LEASES (this "Assignment"), is made this also of a graph of the company that
address is, ("Assignor") and
lay of, 2011, by and between
Assignment. THAT FOR and in consideration of Ten Dollars (\$10.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor does hereby TRANSFER and ASSIGN unto Assignee, subject to the conditions, exceptions, and reservations hereinafter stated (including the reservation of the Reserved Interests, defined below), all its right title, and interest in and to that portion of each oil and gas lease that lies within the (a) boundaries of the
This Assignment and the Earned Rights are limited in depth to the Marcellus Shale horizon, which shall be defined as from the top of the Marcellus in Chesapeake's Kirk Hadley 8H well (API 47-095-02031-000) at 6313' TMD through to the top of the Onondaga Limestone formation.
This granting of Earned Rights hereby shall specifically include the right to penetrate and dril through the shallower oil and gas formations in order to drill and produce the Earned Rights
Conditions and Limitations. This Assignment is made expressly subject to all the terms conditions, limitations, and payments contained in the Base Leases and is further subject to all the terms, covenants, conditions, and reservations of that certain Farmout Agreement dated among Assignor, Assignee and, which agreement is incorporated herein by reference thereto (the "Farmout").
Reservations/Reserved Interest. There is excepted and reserved in this Assignment by Assignor for itself, its successors and assigns, all right, title, interest and estate in and to Base

Page 27

Leases to the extent such rights are not related to or within the Unit or the Formation and Assignor shall have the concurrent right of ingress and egress and all rights essential to the exploration, drilling, development production or transportation of any coalbed methane, oil, gas, and any constituents with respect formations and lands outside of the Unit and/or Formation.

Assignor hereby expressly excepts and reserves unto itself, and its successors and assigns, an overriding royalty interest equal to _____percent (____%) in and to all the Oil and Gas (defined below) produced, marketed and sold from the Earned Rights, free from all costs, and which shall be exclusive of and in addition to all lease burdens (royalty, overriding royalty, and payments out of production) that may exist as of the date hereof (the "Reserved Interest"). "Oil and Gas" as used herein means any of oil or natural gas, occluded natural gas, and any associated natural gas and other hydrocarbons contained therein or produced in connection therewith.

The Reserved Interest shall be decreased proportionately with respect to each Base Lease if (a) such Base Leases covers less than the entire and undivided mineral fee interest and/or (b) Assignor owns less than the entire leasehold interest under such Base Lease. In accordance with the terms of the Farmout, upon any transfer or assignment of all or any part of the Earned Rights by Assignor or it successors and assigns, Assignor shall include the provisions of Section 7 of the Farmout relating to the Reserved Interest in such transfer or assignment instrument.

No Deductions. Assignee is not be permitted to deduct from the Reserved Interest any costs of any kind or nature whatsoever, including without limitation any costs for production, heating, sweetening, gathering, dehydrating, compressing, processing, manufacturing, transporting, trucking, marketing, blending, and other costs and expenses incurred by Assignee in marketing said Oil and Gas and any all excise, depletion, privilege and production taxes now or hereafter levied, or assessed or charged on Oil and Gas owned by Assignor and produced form the Premises excepting only severance taxes applicable to production from the Earned Acreage.

<u>Timing of Reserved Interest Payment</u>. Payments for the Reserved Interest shall be made by the Assignee to Assignor and shall be due and payable monthly no later than the last day of the third calendar month following the calendar month in which production occurred to an address identified by Assignor, in writing, from time to time.

Payment of Royalties. Assignee agrees to pay directly to the lessor under each Base Lease and all holders of other existing burdens on production from such Base Lease all royalties, rentals, fees and payments (including overriding royalties) for all Oil and Gas produced, marketed and sold from wells drilled on the Earned Rights in accordance with the terms, deductions and requirements of and subject to the Base Leases, any unit order or declaration and Exhibit B to the Farmout (collectively "Royalty" or "Royalties"). If Assignee shall furnish to Assignor, upon its written request, evidence of said payments and all necessary production figures and associated pricing schedules for the accurate vertication thereof. When any portion of the Farmout Area is committed to a unit, with respect to such portion, Assignee shall be responsible for and pay any shortfall between: (x) the royalties, rentals, fees and payments required under the Unit order or declaration, including any formula prescribed therein for the allocation of production/royalty from a unit and (y) the royalties, rentals, fees and payments required under each Base Lease.

Monthly Statements. Assignee shall furnish to Assignor monthly statements of oil and gas and other hydrocarbons produced for each month from all producing wells located upon the

Earned Rights or pooled or unitized therewith and the total payments due that month with respect to the Reserved Interests and the Royalties no later than the last day of the calendar month which is three (3) months following the calendar month in which production occurred, including the Royalties payable to the lessors under the Base Leases.

No Warranty. This Assignment is made without warranty of any kind, either expressed, implied or statutory and this Assignment is made "As-Is, Where-Is" with all faults and without recourse to Assignor. This Assignment is made subject and subordinate to (i) all instruments of title or other documents of record and (ii) all reservations, restrictions and conditions contained or referred to in prior deeds, leases, licenses, easements, rights of way, encumbrances, pledges, instruments, and other title documents of record affect or pertain to the Oil and Gas or the Earned Rights and the rights of the surface owners. Assignee expressly assumes the obligation in determining the sufficiency of the title of Assignor to the Earned Rights prior to the assignment thereof and releases Assignor for any liability with respect to any failure of title.

<u>Retained Rights</u>. All of the rights retained by Assignor and the rights granted Assignee shall be exercised in such manner that neither shall unduly interfere with the operations of the other upon the Base Leases.

<u>Miscellaneous</u>. All of the provisions of this Assignment shall be binding upon and inure to the benefit of the parties named herein and their respective successors and assigns. This Agreement may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all of such counterparts shall constitute for all purposes one agreement.

IN WITNESS HEREOF, Assignor has caused this Assignment to be properly executed the day and year first above written, but shall become effective as of the date of first production of the ______ Well described hereinabove. Assignor will be notified of this date.

ASSIGNOR:

By:		
Nam		
Its:		
ASSIGNEE:		
By:		
Nam	e:	
Tec.		

COMMONWEALTH/	STATE OF §		
COUNTY OF	§		
This instrument was	acknowledged before me on this	day of , on behalf of s	uch
· , · · ·	Notary Public My Commission Expires	- Andrews - Andr	
COMMONWEALTH/S	TATE OF§		
COUNTY OF	§		
This instrument was a	cknowledged before me on this	day of, on behalf of su	ch, 20, by
• • • • • • • • • • • • • • • • • • •	Notary Public My Commission Expires	· · · · · · · · · · · · · · · · · · ·	

EXHIBIT "D"

ATTACHED TO AND MADE A PART OF THAT CERTAIN FARMOUT AGREEMENT DATED AUGUST 1ST, 2012 BY AND BETWEEN CHESAPEAKE APPALACHIA, L.L.C. AND CNX GAS COMPANY, L.L.C.

Form of Lease(s)

OIL AND GAS LEASE

THIS OIL A 20, by and bet	ND GAS LEASE (" <u>Lease</u> ") is made tween:	and entered into as o	of the da	ay of
Lessor:	and	a	, whose addre	ss is,
Lessee:		a	, whose addre	ss is
the royalties and exclusively unto I title and interest each tract or parsurrounding the below) (collective or parcels of land part hereof (each location of the	rant. Lessor for and in consideration I the performance of the covenant Lessee, subject to the conditions, exc of Lessor in and to all Oil and Gas (cel of land that lies within the (a) I Well (API# ely, such interest in such oil and gas le are set forth and described on Exhit such tract or parcel of land, to the Well and associate xhibit "B" attached hereto and by this	s herein, hereby greptions, and reservat (defined below) under boundaries of the	ants, demises, ions hereinafte rlying or with the role of the Formed Right of and by this such Unit, a tricularly identifications.	leases and lets a stated, all right, in that portion of Jonit (the "Unit") ornation (defined ghts"). Said tract reference made a "Premises"). The
	Earned Rights hereby shall specifical gas formations in order to drill and progressions.			drill through the
a.	Certain Definitions:			
	s used herein means any of oil or nat ther hydrocarbons contained therein o			
the Marcellus in	used herein means the Marcellus Sha Chesapeake's Kirk Hadley 8H well (ondaga Limestone formation.			
" <u>Farmout</u> " mear 2.0	ns that certain Farmout Agreement ar	mong Lessor, Lessee	and	dated
	ts retained by Lessor and the rights er shall unduly interfere with the open			

- b. <u>Oil and Gas Rights</u>: Lessor further grants Lessee insofar as the same are owned or controlled by CNX, any and all rights necessary or convenient to develop, produce, market or sell Oil and Gas including, but not limited to, the sole and exclusive right and privilege of:
 - i. Conducting geological, geophysical and other exploratory work for Oil and Gas with respect to the Earned Rights, and
 - ii. Exploring, stimulating, investigating, prospecting and drilling (either horizontally, vertically or directionally) with respect to the Earned Rights, and
 - iii. Producing, operating, gathering, transporting, storing, compressing, processing, blending, treating, marketing and selling Oil and Gas with respect to the Earned Rights;

2. Term.

- a. <u>Primary Term.</u> This Lease shall remain in force for a term of ninety (90) days from and after the Effective Date (herein called the "<u>Primary Term</u>"), and shall continue as long thereafter as:
 - i. any Oil and Gas is produced in commercial quantities from the Earned Rights or lands pooled or unitized therewith; or
 - ii. Operations (defined below) are continuously prosecuted as provided below with respect to the Earned Rights or land(s) pooled or unitized therewith.
- b. Operations. As used in this Lease, the term "Operations" includes the following activities: operations for the drilling of a new well, the reworking, deepening, plugging back of a well, or any other operations conducted in an effort to obtain or reestablish, production of Oil and Gas from the Earned Rights and/or other lands pooled or unitized therewith. Operations shall be deemed to have commenced when the first work, including any preparatory, incidental or related work such as surveying or staking the location, is initiated for such Operations. Drilling operations shall be considered to be "continuously prosecuted" if not more than one hundred eighty (180) days shall elapse between the completion or abandonment of one (1) well or hole and the commencement of drilling operations on another well or hole.
- c. <u>Partial Release Permitted.</u> Lessee may surrender this Lease in whole or in part at any time whatsoever. Lessee may at any time execute and deliver to Lessor or record a release covering all or any portion of the Premises and thereby be relieved of all obligations thereafter to accrue as to the acreage surrendered.
- d. <u>Pre-Existing Wells</u>. It is mutually agreed between Lessee and Lessor that any and all existing oil and/or gas wells, which existed at the time of the signing of the "Farmout Agreement" and are located on the Premises, are specifically excepted and excluded from the operations of this Lesse.

3. Rental and Royalty Payments.

	a.	Bonus. Lessee agrees to pay Lessor a one-time bonus of	Dollars
(S) ner net mineral acre upon execution of this Lease	

- b. <u>Effect of Bonus Payment</u>. It is agreed that Lessee, as it may elect, may drill or not drill on the land, and the bonus and rentals paid and royalties to be paid constitute adequate compensation for such privilege.
- c. <u>Reserved Interest</u>. Lessee shall pay to Lessor a royalty equal to sixteen percent (16%) of the Net amount realized by Lessee of all Oil and Gas produced, sold and marketed from the Earned Premises (the "<u>Reserved Interest</u>").

- d. <u>No Deductions</u>. Lessee is not be permitted to deduct from the Reserved Interest any costs of any kind or nature whatsoever, including without limitation any costs for production, heating, sweetening, gathering, dehydrating, compressing, processing, manufacturing, transporting, trucking, marketing, blending, and other costs and expenses incurred by Lessee in marketing said Oil and Gas and any all excise, depletion, privilege and production taxes now or hereafter levied, or assessed or charged on Oil and Gas owned by Lessor and produced from the Earned Rights excepting only severance taxes applicable to production from the Earned Acreage.
- e. <u>Payments</u>. Payments for the Reserved Interest shall be due and payable monthly to Lessor no later than the last day of the third calendar month following the calendar month in which production occurred; *provided, however*, that in the event any such payment is less than \$25.00, Lessee, at its discretion, may withhold such payment until the total due Lessor equals or exceeds \$25.00.
- f. Shut-In Royalty. If, at any time, any well is capable of producing Oil and Gas in commercial quantities, but is shut-in and no Oil and Gas therefrom is sold by Lessee, the well nonetheless shall be deemed to be a commercially producing well but Lessee shall be under no obligation to market such Oil and Gas under terms, conditions or circumstances which, in Lessee's reasonable judgment, are unsatisfactory; provided that, if the well is shut-in for a period of 90 consecutive days or longer, a shut-in royalty shall thereafter accrue at the rate of Five Dollars (\$5.00) per net mineral acre leased hereunder per year that is within a Unit established for said well or, if no such unit is established, by the amount of net mineral acreage leased hereunder that would be within the 80 gross acres surrounding such well in the shape of a circle.
- g. <u>Shut-In Royalty Payment</u>. Shut-in royalties shall be payable twelve (12) months following the time such well is shut-in and thereafter annually. If the well resumes actual production before the expiration of such twelve month period during which shut-in payments are accruing, payment will be on a pro-rata basis. Shut-in royalty payments shall be deemed a royalty under all provisions of this Lease.
- 4. <u>Venting Rights</u>. Lessee shall have no obligation to recover, and no obligation to pay the Reserved Interest on, any Oil and Gas that may be vented by any coal operator or that may be vented by Lessee for safety purposes or to remove impurities therefrom; and Lessee shall have no obligation to recover or pay the Reserved Interest on any Oil and Gas that may be lost during repairs to or testing of any well, or during the gathering and/or transmission of any Oil and Gas, or other products.

5. Pooling.

- a. <u>Pooling Option</u>. Lessee, at its option when, in Lessee's judgment, it is necessary or advisable to do so in order to develop and operate the Earned Rights, may pool or united any part or parts of the Earned Rights pursuant to a voluntary agreement or statutory authority, provided that the each unit created thereby is no greater than 640 acres and that 100% of the Earned Rights is included within such unit ("Pooling Rights").
- b. <u>Pooling Rights</u>. Said Pooling Rights shall include without limitation: (i) any part or parts of any formations, seams, zones or depths leased hereunder with any other land, lease, leases or parts thereof and/or (ii) any part or parts of any formations, seams, zones or depths of any other land, lease or leases into one or more unit or units for the production of the Oil and Gas through any type of wells including without limitation vertical, horizontal, or slant hole wells, primary or secondary recovery methods (including by water flooding, gas injections or injections of other substances) and/or combinations of any other drilling or recovery techniques whether or not such drilling or recovery technique is known at the date this Lease was entered into or developed in the future.
- c. Revised Rights. Such units may be enlarged, revised, or altered in any manner whatsoever including without limitation the drilling of additional wells when, in Lessee's judgment, it is necessary or advisable to do so in order to develop and operate the Earned Rights.

- d. <u>Pooling Royalty</u>. In the event any of the Earned Rights is included within a unit as permitted hereunder, for purposes of computing the Reserved Interest there shall be allocated to the Earned Acreage within such unit a pro rata portion of the Oil and Gas produced from the unit and such allocation shall be on an acreage basis; thus, there shall be allocated to the Earned Acreage within the unit that pro rata portion of the Oil and Gas produced from the unit which the number of surface acres included in the Earned Acreage included in the Unit bears to the total number of surface acres included in the unit. Royalties hereunder shall be computed on the portion of such production allocated to the Earned Acreage within the unit just as though such production were from such Earned Acreage.
- e. <u>Scope of Unit Operations</u>. Notwithstanding anything to the contrary contained in this Lease, the commencement of Operations on any such unit shall have the same force and effect in all respects as the commencement of Operations on the Earned Rights hereby leased, and Operations conducted on any such drilling unit or production of Oil and Gas anywhere from such unit shall have the same force and effect as drilling or Operations conducted on or production obtained from the Earned Rights for all purposes, including but not limited to the extension of the term of this Lease.
- 6. Force Majeure. If any activity or Operation permitted or required hereunder, or the performance by Lessee of any covenant, agreement or requirement herein provided, is delayed or interrupted, by any order, regulation or requirement of the Government of the United States or any state or other governmental body, or any agency, officer, representative or authority of any of them, or war, armed hostilities, act of God, labor disturbance, strike, civil disturbance, shortage of equipment or materials, fire, explosion, or flood, (any one or more of which shall be referred to as "force majeure"), the period of such delay or interruption shall not be counted against the Lessee; and the passage of time under this Lease shall automatically be tolled and extended during such period of force majeure and for a period of two (2) months thereafter. Lessee shall not be liable to Lessor in damages for failure to perform any Operations, or failure to predouce Oil and Gas, or failure to perform any other covenant, agreement or requirement of this Lease, during such period of force majeure. Lessee shall be relieved from all obligations under this Lease during the continuance of such force majeure, except for the obligation to pay the Reserved Interest due for Oil and Gas produced, marketed and sold prior to the commencement of or during such force majeure.

7. Title.

- a. <u>No Warranty</u>. Lessor has not and does not make warranty to the Earned Interests, whether express, implied or statutory, and this Lease is made "As-Is, Where-Is" with all faults and without recourse to Lessor. This Lease is made subject and subordinate to (i) all instruments of title or other documents of record and (ii) all reservations, restrictions and conditions contained or referred to in prior deeds, leases, licenses, easements, rights of way, encumbrances, pledges, instruments, and other title documents of record affect or pertain to the Earned Rights and the rights of the surface owners. Lessee expressly assumes the obligation in determining the sufficiency of the title of Lessor to the Earned Rights granted hereunder and release Lessor for any liability with respect to any failure of title.
- b. <u>Adverse Claims</u>. In the event of any question, claim or controversy inconsistent with Lessor's title to or ownership of the Earned Rights exists or notice of an adverse claim affecting all or any part of the payments due hereunder, Lessee may suspend the payment of the Reserved Interest (including shut-in royalties) by keeping them in an interest bearing escrow account until final judicial determination of such question, claim or controversy, and then to distribute the same, including interest, among those lawfully entitled thereto.
- c. <u>Recoupment</u>. In the event Lessee is required by any such final adjudication to pay anyone other than Lessor for Oil and Gas produced, sold and marketed from the Earned Rights for which the Reserved Interest has previously been paid to Lessor, Lessee may, in addition to any other remedies available to Lessee, recoup such overpayment from future payments of the Reserved Interest due Lessor under this Lease.

- d. <u>Liens</u>. Lessee may, at its option, pay, discharge and/or redeem any overdue tax, mortgage or other lien owed by, or claimed to be due from, Lessor bearing upon the Earned Rights or the Oil and Gas recoverable therefrom; and, in the event of any such payment or redemption, Lessee may reimburse itself out of the Reserved Interest thereafter accruing hereunder.
- e. <u>Lesser Interest</u>. If Lessor owns an interest in the Oil and Gas covered by the Premises that is less than the entire undivided Oil and Gas ownership interest therein, then the Reserved Interest and other payments to be paid to Lessor shall be reduced or adjusted in proportion to Lessor's interest in such Oil and Gas.
- f. Ownership Change. No change of ownership of the Premises, or any interest therein or in the right to receive the Reserved Interest or other payments hereunder, shall be binding on Lessee until thirty (30) days after Lessee has been furnished with written evidence satisfactory to Lessee of such change of ownership or right to receive payments.
- g. <u>Divided Ownership.</u> If the Premises should be owned in severalty or in separate tracts, the Earned Rights attributable to the Premises nevertheless may be developed and operated by Lessee as one lease; and all of the Reserved Interest and payments provided for hereunder shall be divided among, and paid to, such separate owners in the proportion that the acreage owned by such separate owner bears to the entire leased acreage.
- 8. <u>Indemnity</u>. Lessee covenants and agrees to indemnify, defend and hold Lessor harmless from and against any and all losses, claims, liabilities, damages, expenses and costs, including attorney's fees, arising from personal injury, including death, or property damages to any person occurring, directly or indirectly, as a result of Lessee's Operations and activities conducted pursuant to this Lease; provided, however, that the foregoing indemnification will not cover loss, damage or liability arising from the intentional or negligent acts of Lessor.
- 9. <u>Breach</u>. In addition to any other grounds provided by law or equity, upon Lessee's failure to pay royalties on any or all production as provided in Paragraph 3.f. above (within the prescribed 90 day period) to Lessor, and upon written notice by certified mail by Lessor to Lessee of non-payment of royalties, 12% compounded annual interest, calculated from the last day of the month for which said royalties were due, shall be paid to Lessor by Lessee. At Lessor's option, all payments received shall be applied first to any outstanding interest due on prior late paid royalties, then to any prior outstanding unpaid royalties and then to any current royalties due. No notations on the remittance statements or provisions in any division order shall amend this provision.
- 10. <u>Severability</u>. This Lease is intended by the parties to be in conformity with all applicable and valid federal and state laws and those rules or regulations promulgated thereunder having the force and effect of law which are in effect on the Effective Date of this Lease. Should any part of this Lease, or any provision herein contained, be rendered or declared invalid by reason of any existing or subsequently enacted federal or state laws and those rules or regulations promulgated thereunder, or by a decree or order of any court of competent jurisdiction, such invalidation of such part or portion of this Lease shall not invalidate the remaining portions hereof, and such remaining parts or provisions shall remain in full force and effect.
- 11. <u>Assignment.</u> This Lease and all of the conditions, covenants and terms thereof shall extend to and bind the successors and assigns of Lessor and Lessee. The rights of either party to this Lease may be assigned in whole or in part and the provisions of this Lease shall extend to and be binding upon their respective heirs, successors, personal representatives and assigns. Reference herein to Lessor and Lessee shall include reference to their respective, successors and assigns.
- 12. <u>Removal of Fixtures</u>. Lessee shall have the right at any time, and from time to time before expiration or termination of this Lease, to remove all fixtures installed on the Premises, including the right to draw and remove casing, except that coal protection casing will not be removed without Lessor's consent.

- 13. Operations. Lessee shall, to the extent reasonable practicable, bury below plow depth its pipe lines on said land when requested by a Lessor owning an interest in the surface. No well shall be drilled nearer than two hundred (200) feet to any house now on said land without the written consent of the owner of the surface on which such house is located. Lessee shall pay for damages to growing crops caused by its operations on said lands.
- 14. <u>No Implied Warranties or Covenants</u>. The parties have expressed herein their entire understanding and agreement, and no implied covenants or conditions whatsoever shall be read into this Lease.
- 15. <u>Lease Execution</u>. Lessor and Lessee further agree that this Lease shall not be considered fully executed until such time as Lessee's corporate representative with full and proper authority to contractually bind Lessee has fully, validly and properly affixed his or her signature to this Lease under seal.
- 16. <u>Notices</u>. All notices and/or payments necessary to be given under the terms of this Lease shall be directed: to each party at the party's address on the first page of this Lease or to such other address as each party may designate in writing to the other party, and, the receipt of any such notice with postage prepaid shall, be notice to the addressees of the contents of such writing.

IN WITNESS WHEREOF, the undersigned parties have executed this Lease as of the day and year first above written.

LESSOK:		
By:		
By: Its:		
LESSEE:		
By:		

ACKNOWLEDGMENTS

COUNTY OF	9			
This instrument was	acknowledged before me on this, a	day of, on behalf of such	, 20	, by
	Notary Public My Commission Expires			
COMMONWEALTH/S	TATE OF§			
COUNTY OF	§			
This instrument was	acknowledged before me on this, a	day of , on behalf of such	, 20	, by

EXHIBIT "E"

ATTACHED TO AND MADE A PART OF THAT CERTAIN FARMOUT AGREEMENT DATED AUGUST 1ST, 2012 BY AND BETWEEN CHESAPEAKE APPALACHIA, L.L.C. AND CNX GAS COMPANY, L.L.C.

Insurance Requirements

Insurance Requirements				
For bodily injury and property damage, including, without limitation,				
Products/Completed Operations, Independent Contractors, Contractual				
Liability, and Premises Operations,				
\$1,000,000 combined single limit per occurrence				
With a deductible acceptable to FARMOR				
During any construction on the Chesapeake Acreage, Products/Completed Operations coverage for two (2) years following the final payment to any contractor or subcontractor performing the construction work and if any demolition work is to be performed, general liability coverage must be increased to \$5,000,000 combined single limit per occurrence				
Statutory Limits, or				
Evidence that ASSIGNEE is a "Qualified Self Insurer"				
\$1,000,000 each bodily injury by accident				
\$1,000,000 policy limit for bodily injury by disease				
\$1,000,000 each employee bodily injury by disease				
For bodily Injury and property damage covering owned, non-owned and hired automobiles with at least				
\$1,000,000 combined single limit per occurrence				
For (bodily injury and property damage) with contractual liability insurance to cover liability assumed under this Agreement, with at least				
\$9,000,000 combined single limit per occurrence				
Which must extend over and above the required Comprehensive or Commercial General Liability, Employer's Liability, and Automobile Bodily Injury and Property Damage Liability limits				

ADDITIONAL INSURED(S)

FARMOR and any FARMOR Parties, specified by FARMOR must be named as additional insureds on all Liability Insurance specified above.

POLICY REQUIREMENTS

All insurance policies shall be: (i) primary, and non-contributory; (ii) written on an occurrence basis, except as permitted below; (iii) include a waiver of subrogation against FARMOR and FARMOR Parties, where permitted by law (iv) maintained without interruption from the date of commencement of any ASSIGNEE Operations until ASSIGNEE and all equipment, machinery, materials and other property of ASSIGNEE have been removed from the Chesapeake Acreage, and (v) issued by insurance companies having an A.M. Best rating of at least A-VII or better and authorized to do business in the state where the Chesapeake Acreage is located. All policies of insurance shall include a written undertaking from the insurer to notify all insureds and additional insureds at least ten (10) days' prior to cancellation for nonpayment of premiums, and at least thirty (30) days' prior to cancellation, expiration or significant modification of coverage for any other reason.. Insurance may be written on a claims made basis by ASSIGNEE if and only if, any and all claims made policies expressly provide include a retroactive coverage date that is on or before the date of this Agreement and that any replacement policies issued during any time that this Agreement is effective, also include a retroactive coverage date that is on or before the date of this Agreement. With respect to any and all Claims against FARMOR or any FARMOR Parties by any employee of ASSIGNEE or ASSIGNEE Parties, the indemnification obligations under this Agreement shall not be reduced in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for ASSIGNEE or any ASSIGNEE Party under workers' or workmen's compensation acts, disability acts or other employee benefit acts. The insurance required herein may be met through the combination of primary excess, and self insurance. Self insurance is limited to a maximum of \$1,000,000.

CERTIFICATE OF INSURANCE

Prior to the commencement of any ASSIGNEE Operations on the Chesapeake Acreage, ASSIGNEE will issue certificates of insurance or evidence of self-insurance satisfying the foregoing insurance requirements, disclosing deductibles and any self insurance. The certificates of insurance, both current and renewals, will be provided to FARMOR prior to ASSIGNEE performing any ASSIGNEE Operations and from time to time upon request of FARMOR, addressed as follows:

Chesapeake Appalachia, L.L.C. 6100 N. Western Avenue Oklahoma City, OK 73118

CONTRACTORS, SUBCONTRACTORS AND AGENTS

ASSIGNEE shall require each of its contractors, subcontractors and agents who enter the Chesapeake Acreage to obtain and maintain similar coverages, based on the terms and conditions set forth above





Matthew Hanley Manager – Gas Permitting CONSOL Energy Inc. 1000 CONSOL Energy Drive Canonsburg, PA 15317

West Virginia Department of Environmental Protection Office of Oil and Gas 601 57th Street SE Charleston, WV 25304-2345

RE: Road Letter - SHR 40 Well Pad Rework Applications

To Whom It May Concern:

CNX Gas Company LLC 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 need additional information, please do not hesitate to contact me at <u>matthanley@consolenergy.com</u> or 724-485-3011.

Sincerely,

Matthew Hanley

CNX Gas Company LLC

Office of Oil and Gas

APR 2 1 2017

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

Date of Notice Certification:			API No. 47- 95 - 02206 Frac		
		Opera	tor's Well No. SHR40	DAHS	
		Well I	Pad Name: SHR40		
Notice has l					
	ne provisions in West Virginia Code	§ 22-6A, the Operator has provided the	ne required parties v	vith the Notice Forms listed	
	tract of land as follows:				
State:	West Virginia	UTM NAD 83 Eastin			
County:	095-Tyler	North			
District:	Centerville	Public Road Access:	County Rt.18		
Quadrangle:	Shirley	Generally used farm nar	ne: Noble Energy, Inc		
Watershed:	Headwaters Middle Island Creek				
information r of giving the requirements Virginia Cod	ed the owners of the surface descri- equired by subsections (b) and (c), so surface owner notice of entry to so of subsection (b), section sixteen of e § 22-6A-11(b), the applicant shall thave been completed by the applican	ection sixteen of this article; (ii) that the dirvey pursuant to subsection (a), see if this article were waived in writing ender proof of and certify to the secr	he requirement was tion ten of this arti g by the surface ov	deemed satisfied as a result cle six-a; or (iii) the notice wher; and Pursuant to Wes	
that the Ope	West Virginia Code § 22-6A, the Operator has properly served the require ECK ALL THAT APPLY		ice Certification	OOG OFFICE USE ONLY	
□ 1. NO	TICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED BY SEISMIC ACTIVITY WAS CON		RECEIVED/ NOT REQUIRED	
☐ 2. NO	TICE OF ENTRY FOR PLAT SURV	VEY or NO PLAT SURVEY WA	AS CONDUCTED	☐ RECEIVED	
☐ 3. NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED B		RECEIVED/ NOT REQUIRED	
	NO DRILLING	WAS CONDUCTED or			
		☐ WRITTEN WAIVER BY SU (PLEASE ATTACH)	RFACE OWNER		
■ 4. NO	TICE OF PLANNED OPERATION			☐ RECEIVED	
■ 5. PUI	BLIC NOTICE			☐ RECEIVED	
■ 6 NO	TICE OF APPLICATION			☐ RECEIVED	

Required Attachments:

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

WV Departmental Follow/2017

Certification of Notice is hereby given:

THEREFORE, I Matt Hanley , 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: CNX GAS COMPANY LLC Address: 1000 Consol Energy Dr By: Matt Hanley Canonsburg, PA 15317 Facsimile: Its: Telephone: 724-485-3011 Email: Matthanley@consolenergy.com Subscribed and sworn before me this day of COMMONOTARY SEAL SYLVANIA

Oil and Gas Privacy Notice:

FRANKLIN TWP, GHEENE GOUNTY

My Committaion Expires Dec 11, 2017

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.

My Commission Expires

Office of Oil and Gas

APR 2 1 2017

WV Department of
Environmental Protection
08/04/22/197

WW-6A (9-13)

API NO. 47- 95	- 02206	Frae
OPERATOR WE	LL NO.	SHR40AHS
Well Pad Name:	SHR40	

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: 4/20/17 Date Permit Application Filed: 4/20/17 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) ☐ PERSONAL REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION **SERVICE** MAIL 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. Name: Address: 1000 Noble Energy Drive Address: Canonsburg, PA 15317 COAL OPERATOR Name: Name: Address: Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbance) ☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s) Address: Name: WV Department of Highways Address: 1 DOT Drive Name: Moundsville, WV 26041 Address: ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name:
Address:
Office

*Please attach additional forms if necessary of Oil and Gas Name: Name: Address: APR 2 1 2017

WV Departmental Protection

API NO. 47- 95	_ 02206	Frac
OPERATOR WE	LL NO.	SHR40AHS
Well Pad Name:	SHR40	

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: 4/20/17 Date Permit Application Filed: 4/20/17 Notice of: ✓ PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT WELL WORK Delivery method pursuant to West Virginia Code § 22-6A-10(b) REGISTERED ✓ METHOD OF DELIVERY THAT REQUIRES A ☐ PERSONAL RECEIPT OR SIGNATURE CONFIRMATION SERVICE MAIL 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. Name: Address: Address: 1000 Noble Energy Drive Canonsburg, PA 15317 COAL OPERATOR Name: Name: Address: Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbance) IJ SURFACE OWNER OF WATER WELL Name: JD/OR WAIL.

Ime: Allen W. Seckman

ddress: 824 Jefferson Run rd.

Jma, WV 28320

JOPERATOR OF ANY NATURAL GAS STOKA.

Name: Address: Office of Oil and Gas

*Please attach additional forms if necessary

APR 21 2017

Environmental Protection Address: Name: Address: ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Address:

WW-6A	
(8-13)	

API NO. 47-95 -	02206	Frac
OPERATOR WELL		
Well Pad Name: SHR	10	

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 protect the waters of the state. A waiver, if santed, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, and this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Cotton 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple year has local one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by the cember 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling hyperizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding if any to the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration and the interest of the control of the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration of the control of the contr

API NO. 47-95 OPERATOR WELL NO. SHR40AHS Well Pad Name: SHR40

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. The location or construction of the applicant's proposed well work.

Chief, Office of Oil and Gas

Department of Environmental Protection
601 57th St. SE

Charleston, WV 25304
(304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a big of persons of persons of the location of the permit decision and a big of persons of the location of the permit decision and a big of persons of the location of the permit decision and a big of persons of the location of the permit decision and a big of persons of the location of the permit decision and a big of persons of the location of th

WW-6A (8-13) API NO. 47-95 - 02206 Fvcc /
OPERATOR WELL NO. SHR40AHS
Well Pad Name: SHR40

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.

Office of Oil and Gas

APR 2 1 2017

Environmental Profession

WW-6A (8-13) API NO. 47-95 - 02206 Frac OPERATOR WELL NO. SHR40AHS Well Pad Name: SHR40

Notice is hereby given by:

Well Operator: CNX GAS COMPANY LLC

Telephone: 724-485-3011
Email: MattHanley@consolenergy.com

Address: 1000 CONSOL ENERGY DRIVE

Canonsburg, PA 15317

Facsimile:

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.

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
SHERRI J KURAN
Rotary Public
FRANKLIN TWR, GREENE COUNTY
My Commission Expires Dec 11, 2017

Subscribed and sworn before me this 9th day of Many 2017.

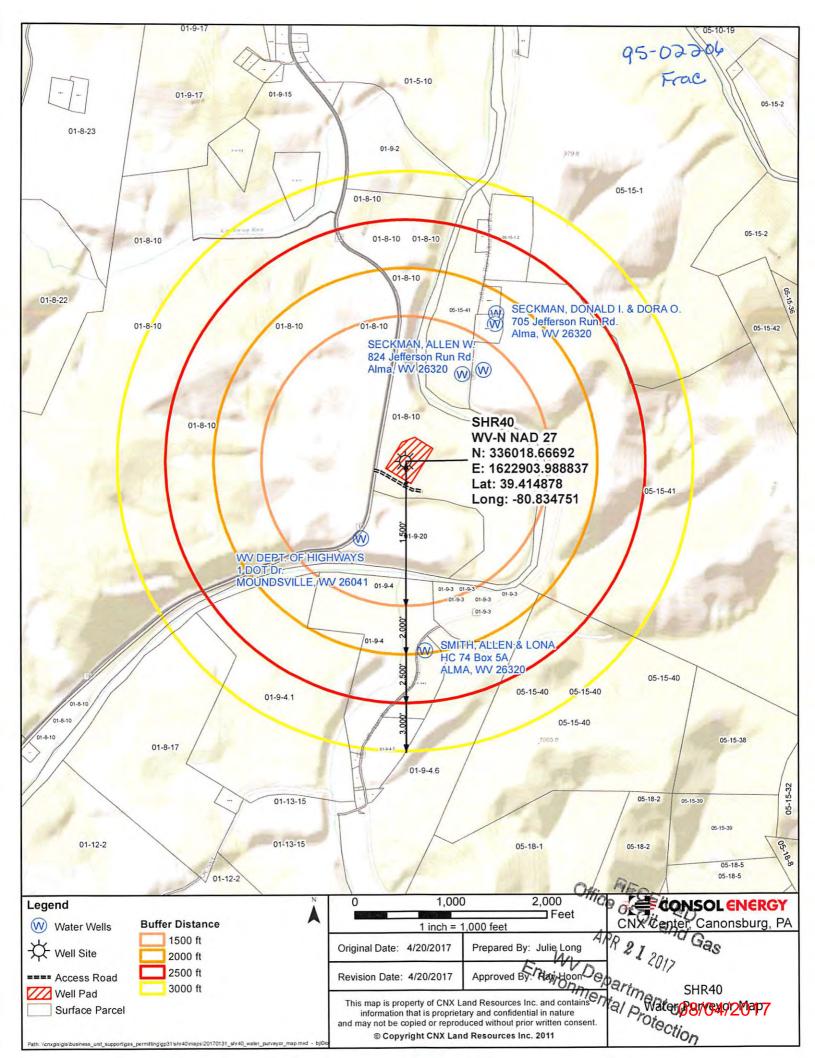
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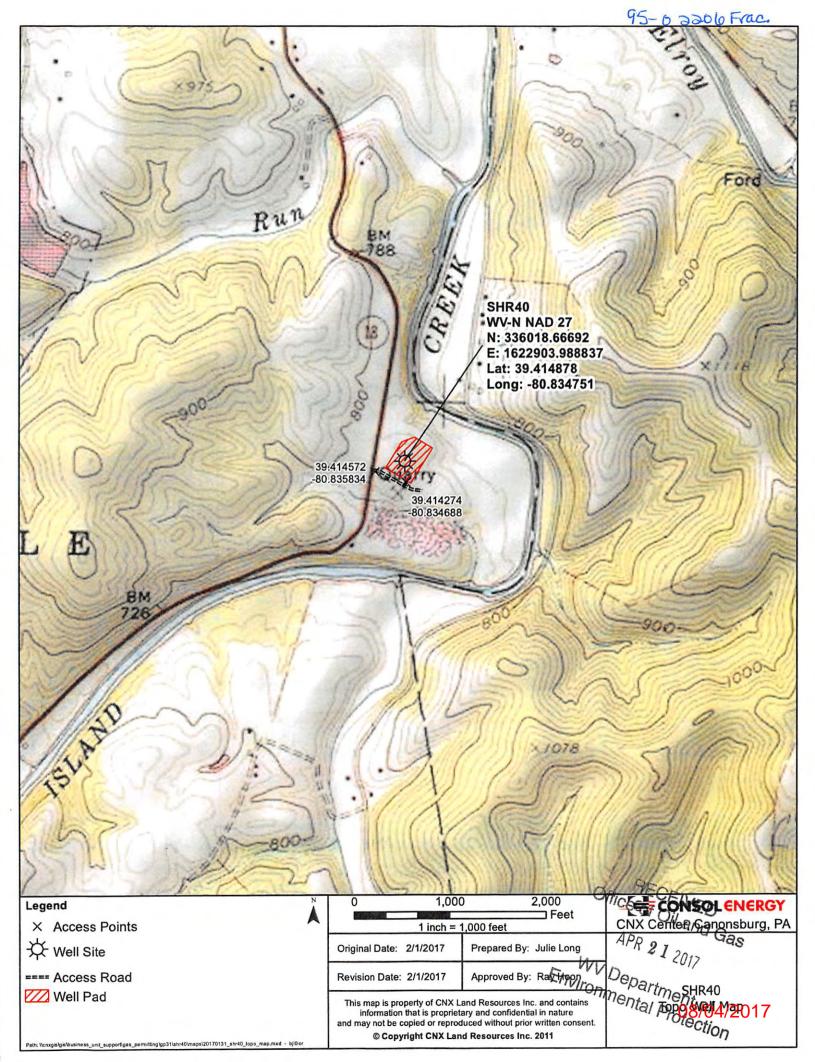
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Office of Oil and Gas

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Environmental Protection





WW-6A5 (1/12)



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

Delivery met	hod pursuant to West Virgi	inia Code §	22-6A-16(c)		
CERTI	FIED MAIL		HAND		
	RN RECEIPT REQUESTED		DELIVERY		
return receipt the planned of required to be drilling of a damages to th	requested or hand delivery, goperation. The notice require provided by subsection (b), shorizontal well; and (3) A proper surface affected by oil and	give the surfa- ed by this si section ten or roposed surfa- gas operation	ace owner whose lan ubsection shall inclu of this article to a sur- face use and compen as to the extent the d	d will be used for ide: (1) A copy face owner whose sation agreement amages are com	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
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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

WV Departmos/04/2017

Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Jim Justice Governor

Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

February 28, 2017

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 SHR-40 Pad, Tyler County

SHR-40 Well Site

47-015-02206 -AHS

Dear Mr. Martin,

The West Virginia Division of Highways has transferred Permit #06-2013-0420 for the subject site to CNX Gas Company LLC, for access to the State Road for the well site located off of WV Route 18 in Tyler County.

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

Very Truly Yours,

Gary K. Clayton

Regional Maintenance Engineer Central Office Oil &Gas Coordinator

Day K. Clayton

Cc: Ray Hoon

CNX Gas Company LLC

CH, OM, D-6

File

Office on PRECEIVED

Office of Oil and Gas

APR 2 I 2017

Environmental Protection

Section V - Proposed Additives to be used in Fracturing or **Stimulations**

Type: Water CAS: 7732-18-5

Type: Silica CAS: 14808-60-7

Type: Hydrochloric Acid CAS: 7647-01-0

Type: Copolymer of Two Propenamide CAS: 69418-26-4

Type: Petroleum distillate CAS: 64742-47-8

Type: Glutaraldehyde CAS: 111-30-8

Type: Ethylene glycol CAS: 107-21-1

Type: Diethylene glycol mono n-butyl ether CAS: 112-34-5

Type: Oleic acid diethanolamide CAS: 93-83-4

CAS: 68551-12-2 Type: Alcohols, C12-16, ethoxylated

Type: Quaternary ammonium compound CAS: 68424-85-1

Type: Ammonium chloride CAS: 12125-02-9

CAS: 112-34-5 Type: Short chained glycol ether

Type: Ethoxylated (C10-16) alcohols CAS: 68002-97-1

Type: Metanol CAS: 67-56-1

Type: Formaldehyde CAS: 50-00-0

Type: Thiourea CAS: 62-56-6

Type: Acetophenone CAS: 98-86-2

Office of Oil and Gas

Environmental Protection

Environmental Protect

08/04/2017



LOCATION MAP

PROPERTY OWNERS

- 1. JAMES L HOWARD 01-08-0010 4804 HATHAWAY DR. FRANKLIN, OH 45005
- 2. DAVID & LINDA WEEKLEY 01-08-0010 2908 MACON ST SOUTH CHARLESTON, WV 25303
- 3. DANIEL & SUZANNE WEEKLEY 01-08-0010 75 NICOLE DR GLASTON BURY, CT 6073
- 4. JOHN JAMES HOWARD LIVING TRUST 01-08-0010 2750 WESTFAIR AVE LANCASTER, OH 43130
- 5. JOSEPH HOWARD 01-08-0010 10 WOODLAND PARK DR PARKERSBURG, WV 26104



NOBLE ENERGY, INC. 333 TECHNOLOGY DRIVE. SUITE 116 CANONSBURG, PA 15317 TEL: (724) 820-3000

SHR40 WELL SITE

WELL SITE LOCATION

NAD 83 - LAT: N 39°24'54.057": LONG: W 80°50'03.975" NAD 27 - LAT: N 39°24'53.768": LONG: W 80°50'04.595"

ENTRANCE LOCATION

NAD 83 - LAT: N 39°24'52.809"; LONG: W 80°50'08.464" NAD 27 - LAT: N 39°24'52.520": LONG: W 80°50'09.084"

> SHIRLEY QUADRANGLE TYLER COUNTY, WEST VIRGINIA DATE: MARCH 24, 2015



Engineers and Land Surveyors

11023 Mason Dixon Hwy. Burton, WV 26562-9656 (304) 662-6486

NOTE: DRAWING WAS CREATED ON 22X34 PAPER. IIXI7 DRAWINGS ARE HALF SCALE. REFER TO SCALE BAR FOR PROPER SCALING.



LOCATION MAP SHIRLEY WY 7.5M USGS QUADRANGLE SCALE PRIDGO

Transfered to CNX Gas Company 3/28/2017



SHEET INDEX DRAWING NUMBER DRAWING NAME COVER SHEET 2,3 AS-BUILT CONDITIONS PLAN AS-BUILT CONDITIONS PLAN W/ ORTHO 4.5

SUITE I

SHR40 WELL PAD AS-BUILT COVER SHEET

Ne noble energy

AS SHOWN 9300-15 DRAWNS NAME SHRUE_COMPLETE_ASSURT DWG

SHEET LOF 3



