

### 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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Friday, October 18, 2019 WELL WORK PERMIT Horizontal 6A / New Drill

CNX GAS COMPANY LLC 1000 CONSOL ENERGY DR CANONSBURG, PA 15370

Re: Permit approval for SHR38KHSM 47-095-02650-00-00

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: SHR38KHSM

Farm Name: JAMES E. ASH ET AL

U.S. WELL NUMBER: 47-095-02650-00-00

Horizontal 6A New Drill Date Issued: 10/18/2019

API Number:	

### PERMIT CONDITIONS

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

### **CONDITIONS**

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. 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.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number:	

## PERMIT CONDITIONS

11. 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.



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

CNX Gas Company, LLC 1000 Consol Energy Drive Canonsburg, PA 15370

Pursuant to West Virginia Code §22-6A-8(g)(2), the Office of Oil and Gas hereby grants approval of the September 10, 2019 request by CNX Gas Company, LLC to land apply certain drill cuttings on its SHR38 well pad in Tyler County. This approval is limited to the land application of drill cuttings associated with the drilling of the conductor section of the wellbores for wells with the following API numbers: 47-095-02514, 47-095-02569, 47-095-02570, 47-095-02571, 47-095-02572, 47-095-02648, 47-095-02649, 47-095-02650, 47-095-02651, 47-095-02652, and 47-095-02653.

Drill cuttings covered under this approval must be free of any additives, lubricants, etc. and be composed of only the earthen material removed from the wellbore down to the point at which the conductor casing is installed. No material removed from the wellbore below the base of the conductor casing may be land applied.

This approval is being provided in conjunction with the assertion by CNX Gas Company, LLC, that consent from all owners of the surface of the tract where the SHR38 well pad is located has been obtained and is only valid upon the condition that consent has been obtained.

James A. Martin, Chief Office of Oil and Gas

West Virginia Department of Environmental Protection

Date

Promoting a healthy environment.

Archived: Tuesday, October 1, 2019 2:00:41 PM

From: Whetstone, Erika

Sent: Tue, 1 Oct 2019 12:40:15 +0000ARC To: Brewer, Charles T; Stansberry, Wade A Subject: [External] SHR38 Revised WW9 forms

Importance: Normal

Attachments:

4709502514.pdf 709502569.pdf 709502570.pdf 709502571.pdf 709502572.pdf 709502648.pdf 709502649.pdf 709502650.pdf 709502651.pdf 709502652.pdf 709502653.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and are expecting the content. -- WV Office of Technology

#### Good morning,

CNX Gas Company LLC would like to request a modification for wells with APIs 47-095-02514, 47-095-02569, 47-095-02570, 47-095-02571, and 47-095-02572. The purpose for this request is to allow CNX to land apply the soil conductor cuttings on site per DEP approval. Updated WW9 forms are attached to this email.

Similarly, CNX would also like to request a revision to current applications under review for APIs 47-095-02648, 47-095-02649, 47-095-02650, 47-095-02651, 47-095-02652, and 47-095-02653. Updated WW9 forms are attached with a revision to the drill cuttings disposal method.

Please let me know if you have any questions or need anything further.

Thank you, Erika

Erika Whetstone CNX | Permitting Manager - Infrastructure CNX Center | 1000 CONSOL Energy Drive | Canonsburg, PA 15317 (724) 485-4035 -w | (724) 317-2224 -m

"This communication, including any attachments, may contain confidential and privileged information that is subject to the CNX Resources Corporation Business Information Protection Policy. The information is intended solely for the use of the intended recipient(s). If you are not an intended recipient, you are prohibited from any use, distribution, or copying of this communication. If you have received this communication in error, please immediately notify the sender and then delete this communication in its entirety from your system."

470959502650

API NO. 47-095.

OPERATOR WELL NO. SHR38KHSM

Well Pad Name: SHR38

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

1) Well Operat	or: CNX G	as Compan	y, LLC	494458046	Tyler	Centervil	West Union
				Operator ID	County	District	Quadrangle
2) Operator's V	Well Number	: SHR38KH	SM	Well	Pad Name: 5	SHR38	
3) Farm Name/	Surface Ow	ner: Ash		Public I	Road Access:	Duckworth Ric	dge Road 58/2
4) Elevation, co	arrent groun		Ele	evation, propos	ed post-cons	truction: 1012'	
5) Well Type	(a) Gas	X	_ Oil	ບ	nderground S	Storage	
	Other						
	(b)If Gas	Shallow	X	Deep			
		Horizontal	X				QCB
6) Existing Pad	: Yes or No		Yes	<del></del>			8/23/2019
7) Proposed Ta Target forma	rget Formati	on(s), Depth(	s), Antici 6447'-6492	pated Thicknes 2' TVD, 45' thick	ss and Expect c, expected for	ed Pressure(s):	0.20.20.10
8) Proposed To					•		
9) Formation at	Total Verti	cal Depth: N	/larcellus	Shale (will no	t penetrate C	Onondaga)	
10) Proposed T	otal Measur	ed Depth: 1	6,620'				
11) Proposed H	orizontal Le	g Length: 9	642'				
12) Approxima	te Fresh Wa	ter Strata Dep	ths:	85', 180', 225	•		
13) Method to I	Determine F	resh Water D	epths: O	ffset water we	ll information	n collected durir	ng predrill sampling
14) Approxima	te Saltwater	Depths: 193	32'				
15) Approxima	te Coal Sean	n Depths: No	known r	mineable coal	seams; 430	'-432', 480'-482	31
16) Approxima	te Depth to I	Possible Void	(coal mir	ne, karst, other)	: None anti	cipated	
17) Does Propo directly overlying				yes		No	X
(a) If Yes, pro	vide Mine L	nfo: Name:					
		Depth:					
		Seam:					RECEIVED
		Owner:					Office of Oil and Gas
							AUG 27 2019

WV Department of Environmental Protection

API NO. 47- 47 0 9 5 0 2 6 5 0

OPERATOR WELL NO. SHR38KHSM
Well Pad Name: SHR38

18)

### **CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	L/S	94.0	80	80	77 / CTS
Fresh Water	13.375	New	J-55	54.5	600	600	417 / CTS
Coal	13.375	New	J-55	54.5	600	600	417 / CTS
Intermediate	9.625	New	J-55	36.0	2600	2600	844 / CTS
Production	5.5	New	P-110	20.0	16620	16620	3212 / TOC @ 2100'
Tubing	2.375	New	J-55	4.7		TBD	N/A
Liners	N/A						

8/23/2019

TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	24	0.375	N/A	N/A	Type 1	1.18
Fresh Water	13.375	17.5	0.380	2730	<500	Class A	1.19
Coal	13.375	17.5	0.380	2730	<500	Class A	1.19
Intermediate	9.625	12.25	0.352	3520	<2815	Class A	1.19
Production	5.5	8.75 x 8.5	0.361	13590	~10000 during frac	Class A or H	1.10
Tubing	2.375	N/A	0.190	7700	N/A	N/A	N/A
Liners	N/A						

### **PACKERS**

Kind:	N/A	-		
Sizes:				
Depths Set:				
		<del></del> J		RECEIVED Office of Oil and Gas

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WV Department of Environmental Protection WW-6B (10/14)

API NO. 47- 095 -	
OPERATOR WELL NO.	SHR38KHSM
Well Pad Name: SHR3	8

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

Utilize conductor rig to set 20" conductor into solid rock and cement back to surface. MIRU drilling rig. Air drill 17-1/2" hole. Run and cement 13-3/8" fresh water/coal casing. Note that the fresh water/coal casing will be set through the named but un-mineable coals in order to isolate sloughing formations and red beds/red shale between the Washington and Waynesburg coals. Air drill 12-1/4" hole. Run and cement 9-5/8" intermediate casing. Air drill 8-3/4" production hole to curve KOP (this section is typically directionally drilled with a slant/tangent profile for anti-collision and for lateral spacing). Displace hole with 12.0-12.8 ppg SOBM. Drill 8-1/2" curve from KOP to landing point. Continue drilling 8-1/2" lateral to TD (geosteer this section to remain in Marcellus target window). Perform clean-up cycle to condition well. Run and cement 5-1/2" production casing. Suspend well and skid to next well or RDMO drilling rig.

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

Run CBL to ~60 degrees in the curve and back to surface to determine production casing TOC. Test production casing and toe prep well. MIRU stimulation/hydraulic fracturing equipment. Fracture well by pumping required number of stages utilizing plug-and-perf method. Max anticipated treating pressure is ~10,000 psi and max anticipated treating pump rate is 80-90 bpm. Number of stages and stage spacing to be finalized after drilling. After last stimulation stage, drill out frac plugs and clean-out well to PBTD. Flow back and clean-up well. Tie well into production. Run tubing when required.

<ol> <li>Total Area to be disturbed</li> </ol>	, including roads, stockpile area,	, pits, etc., (acres): 15.57
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22) Area to be disturbed for well pad only, less access road (acres): 6.97

23) Describe centralizer placement for each casing string:

Fresh water string: centralize shoe joint and every other joint to surface - utilize bow spring centralizers. Intermediate string: centralize shoe joint and every 3rd joint to surface - utilize bow spring centralizers. Production string: centralize every joint from shoe to TOC - utilize single piece/rigid bow centralizers. Actual centralizer placement may be changed based on hole conditions.

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

Fresh water string: Class A cement with 1%-3% CaCl2 and 1/4 pps cello-flake/LCM. Intermediate string: Class A cement with 0%-2% CaCl2 and 1/4 pps cello-flake/LCM. Production string: Class A or H cement or Class H:Poz blend with dry blend and/or liquid additives including retarder, suspension agent, gas block, defoamer, fluid loss control, extender, dispersant, anti-settling agent. Actual cement blends may vary slightly depending upon cementing service company utilized.

25) Proposed borehole conditioning procedures:

Air sections are typically vertical holes - will ensure the hole is clean at section TD prior to TOOH to run casing (may require mist and/or soap to clean the hole). For the production hole - once at TD, circulate at max flowrate with max rotation until the shakers clean-up (typically requires multiple bottoms-up). For the production casing - once on bottom with casing, circulate a minimum of one hole volume prior to pumping cement.

8/23/2019

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\*Note: Attach additional sheets as needed.

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### **Cement Additives**

- Conductor 2% CaCl2
- Freshwater/Coal 2% CaCl2
- Intermediate 2% CaCl2
- Production
  - o 2.6% Cement Extender
  - o 0.7% Fluid Loss Additive
  - o 0.5% High Temperature Retarder
  - o 0.2% Friction Reducer

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### DRILLING WELL PLAN

SHR-38K-HSM (Marcellus HZ)

Marcellus Shale Horizontal

Tyler County, WV

				T	-	ID 2017	11014 0111		ounty, ww	L L WANT CONTROL	
Ground Elevation 1012 GL Elevation		-	_		HSM SHL	N 320233.16, E 1622448.53 (NAD27)					
Ground Elevation		1012 GL E	levation		S	HR-38K	-HSM LP	N 320248.85, E 1621769.57 (NAD27)			
Azimuth		341	0		SH	IR-38K-	HSM BHL	N 32	29365.68, E 161863	0.4 (NAD27)	
WELLBORE DIAGRAM	HOLE	CASING	GEOLOGY	MD	TVD	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS	
	24"	20° L/S	Conductor	80	80	AIR	To Surface	N/A	N/A	Stabilize surface fill/soil	
	-		Shallowest Fresh Water		85						
			Deepest Fresh Water		225		15 6 ppg Class A	Centralize every other			
	47.450	13-3/8" 54.5#	Washington Coal		430	AIR/	+ 1% to 3% CaCl2 + 1/4 pps Flake	joint from shoe to	Face Market State of the State	Set through fresh water zone Set through coal zones	
	17-1/2*	J-55 BTC	Red Beds		432	FW Mist	20% OH Excess	surface	Ensure the hole is clean at section TD	Cemented to surface	
		1 1 1	Waynesburg Coal		580	1	Yield = 1.19 TOC @ surface	Bow spring centralizers		No known mineable coal seam:	
			FW / Coal Casing	600	600	1	100 tg atriace	The state of the s			
			Big Lime		1867		15.6 ppg Class A + 0% to 2% CaCl2 + 1/4 pps Flake				
	12-1/4*	1	Big Injun		1932			Centralize every 3rd		Set through potential salt water	
		9-5/8* 36.0# J-55 LTC	Price	ce 20	2072	72 AIR / + 1/4 pps Flake 32 Soap 20% OH Excess		joint from shoe to	Soap the hole as needed	zones Cemented to surface	
107			Weir	1	2232		surface	and ensure the hole is clean at section TD	Casing to be set below the Big Injur and Berea and into Devonia		
181 183			Berea		2422	Yield = 1.19 TOC @ surface	Bow spring centralizers				
			Intermediate Casing	2600 2600	170 @ 50.055			Shale			
. 11			Gordon		2642					Note: Actual centralizer placement may be changed due to hole	
			Warren		3337						
11 11	8-3/4"		Benson		4917	AIR	15.0 ppg Class A or H				
111 111	Tangent		Alexander		5162	AIR	with additives (retarder,		Once at TD, circulate at max flowrate with max rotation		
11 11			Cashaqua		6162		suspension agent, gas block, defoamer, fluid	Centralize every joint	until shakers clean-up		
H H		5-1/2" 20.0#	Middlesex		6267		loss, extender, etc.)	from shoe to TOC	(typically requires multiple bottoms-up)	conditions	
		P-110CY BPN	West River		6307		10% OH Excess	Single-piece/rigid bow		Note: Actual cement blends ma	
11 11			Burkett		6377	N + 1	Yield = 1.10	centralizers	Once on bottom with casing, circulate a minimum of one	vary slightly depending upon	
11 11	8-1/2" Curve		Tully		6407	12.0-12.8	TOC @ >= 500' above		hole volume prior to	service company utilized	
	& Lateral		Hamilton	100	6428	ppg SOBM	9-5/8" shoe		pumping cement		
			Marcellus		6447						
			Production Casing	16620	6480						

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### SHR38 Pad Frac - SOG Review

In accordance with WVDEP 35CSR8 Section 5.11, all known shallow oil and gas (SOG) wells have been identified within a 500' radius of the SHR38 pad. Any SOG well that falls within the Area of Review (AOR) has been reviewed and is provided in a list that includes API, Operator, Well Name, Well Number, Current Status, Total Depth, and Producing Formation at Total Depth. See following pages, including (Figures 3 and 4).

The Marcellus Shale of the Shirley area is found at an approximate True Vertical Depth (TVD) of 6500'. In the Shirley area, there are very few producing formations between the Big Injun and the Benson Sand. Most wells are either approximately 2000' or 5000' deep. Although there are a significant number of SOG Communication events in the Shirley area, it is highly unlikely that communication will occur with any wells producing from formations shallower than the Benson Sand, found at an approximate TVD of 5000'. This is based on previous experience and study of SOG Communication with Marcellus fracs throughout Ritchie and Doddridge counties.

The current hypothesis for SOG Communication is that Marcellus frac fluids and pressure intersect and migrate up a nearby fault that acts as a conduit for upward migration and intersection with high permeability reservoirs of the Alexander and Benson. Both of these reservoirs are primarily depleted, allowing an easier pressure migration throughout these formations. Geomechanical data is collected from dipole sonic logs. CNX's nearest sonic data is from the SHR1C well (Figure 1), immediately north of the SHR38 pad. Frac modeling (Figure 2) of the Marcellus in the area does not show significant upward frac growth. In fact, typical frac height would need to be more than double to reach the Alexander, approximately 1000' above the Marcellus Shale.



### SHR38 Pad Frac SOG Review / CRSD Review Thursday, November 8, 2018

Figure 1. Stratigraphic intervals of high stress should serve as adequate confining layers, or frac barriers, for a Marcellus frac, seen below in the SHR1C Stress Profile log.

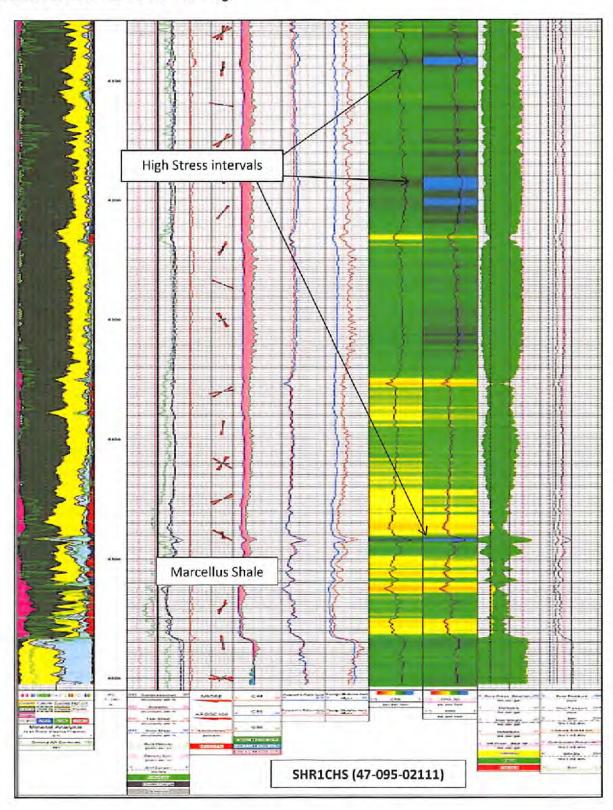




Figure 2. Stratigraphic intervals of high stress should serve as adequate frac barriers for a Marcellus frac. The frac modeling example below is from the Oxford area of western Doddridge County, where the Marcellus and adjacent shallower shales are lithologically similar to Pennsboro. Frac modeling only yields frac height of approximately 300' and falls far short of the 1000' required to communicate with the Alexander or Benson formations. Therefore, faulting is the primary suspect for upward frac migration.

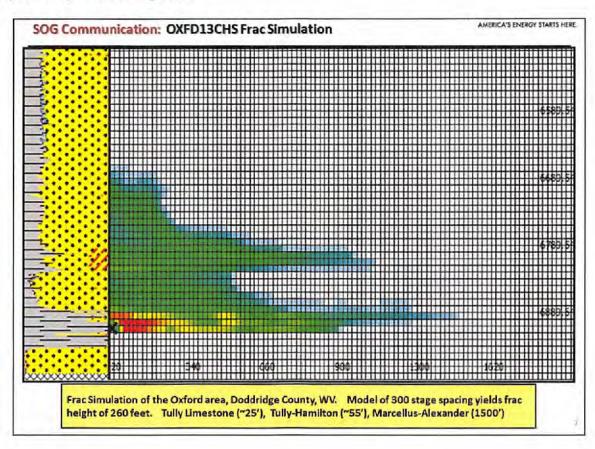




Figure 3. All wells within 500' buffer around the SHR38 pad have been reviewed and listed below.

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9500291 4709501104 1 4701704162 W. L. J. 47017418	9500291 4709501017	709501393 <sup>47499</sup> 01	470 170 4762	201230101 201771433	707700 253	4701701 470170386



Figure 4. All wells within 500' buffer around the SHR38 pad have been reviewed and listed below.

API	STATE	COUNTY	LATITUDE	LONGITUDE	OPERATOR	STATUS	WELL NAME	WELL NO		ELEVATION
4701702361	WV	Doddridge	39.33791934	-80.82944913	Ritchie Petroleum Corp	Oil and Gas	LG Hammer 2		2396 Weir	990
4701702462	wv	Doddridge	39.34440133	-80.82341529	Unknown	not available	Paul Strickling		Dodd 2936 Dodd 2936	830
4701702936	wv	Doddridge	39.34430633	-80.82337929	Greylock Conventional LLC	Gas	P Strickling 1	-	4900 Benson	:845
4701703058	wv	Doddridge	39.34116734	-80.8266802	Greylock Conventional LLC	Gas.	Middle Island		5117 Alexander	1039
4701703252	wv	Doddridge	39.33671524	-80.82565321	Greylock Conventional LLC	Gas	W & V McCutcheon		5500 Alexander	1092
4701703586	w	Doddridge	39.37483806	-80.83367761	Consol Gas	Not Drilled	Never Drilled (Canceled)		not drilled not drilled	960
4701771437	wv	Doddridge	39.33436122	-80.82657418		not available	McCutchan-Haines			1135
4701771535	wv	Doddridge	39.33871526	-80.82489324		not available	N A Joseph			977
4709500097	wv	Tyles	39.57191314	-80.84222593	Unknown	Gas	John Ash	1	2005 Big Injun (undiff	941
4709500103	wv	Tyler	39.38803655	-80.84941881	Lemon, Robert and Betty	Oil and Gas	D D Davis	1	1925 Big Injun (undiff)	946
4709500113	wv	Tyler	39.38780257	-80.85102277	Unknown	Oll and Gas	D D Davis	2	1885 Big Injun (undiff,	830
4709500120	WV	Tyler	39.38944545	-80,84290196	Unknown	Dry w/ Gas Show	W.C. Pierson / Josephs Mills	)	1952 Squaw	873
4709500123	wv	Tyler	39.38858257	-B0.85033279	J A & M Oil and Gas	Oil w/ Gas Show	D D Davis	3	1883 Big Injum (umfilf)	803
4709500208	wv.	Tyler	39.39188259	-80.84805585	Unknown	Dry w/ O&G Show	Frank II Ash	1	2109 Price Fm & eguly	927
4709500300	wv	Tyler	39.35951588	-80.83941496	Prior, Ferrell	Gas	Alexander Doak Heirs	1	1836 Big Injun (undiff	785
4709500508	wv	Tyler	39.3854884	-80.84398493	Equitrans	Gas	W N Maore		1900 Big Injun (undiff)	857
4709500757	w	Tyler	39.34307445	-B0.83071912	Allied Energy	Oil and Gas	Delmer Mulvay		2209 Berea Ss	760
4709500870	wv	Tyler	39.35004941	-80.82286032	Greylock Conventional LLC	Gas	Izetta B Garner	- 6	4901 Benson	790
4709500876	wv	Tyler	39.36557401	-80.84080595	Triad Hunter	Gas	Jacob L Dillon	1	7387 Berea Ss	975
4709500924	WV.	Tyler	39.38476329	-80.83893904	Greyrock Conventional IIC	Gas	W Paul McCutchen		5122 Alexander	735
4709500955	w	Tyler	39.3483235	-80.82911817	Greylock Conventional LLC	Gas	Jay & Mary Collins		5279 Alexander	883
4709500956	wv	Tyler	39.35286655	-80.82783921	Greylock Conventional LLC	Gas	Jay & Mary Collins		5430 Alexander	1028
4709501036	wv	Tyler	39.35339266	-80.83313209	Greylock Conventional LLC	Gas	Edwin D Mulvay et us		5177 Benson	753
4709501101	WV	Tyler	39.37483806		EQT	Not Drilled	Never Drilled (Canceled)		not drilled not drilled	960
4709501107	wv	Tyler	39.3568727	-80.83182713	Alliance Petroleum	Gas	Karen Jane Osborne	- 3	5306 Alexander	763
4709501108	wv	Tyler	39.35687256	-80.82472879	Alliance Petroleum	Gas	Karen Jane Osboine	- 3	5240 Alexander	978
4709501109	wv	Tyler	39.35759781	-80.837443	Alliance Petroleum	Gas	Karen Jean Osborne	2	5325 Alexander	943
4709501178	WV.	Tyler	39.37483806	-80.83367761	Unknown	Not Drilled	Never Drilled (Canceled)	-	not drilled not drilled	960
4709501206	wv	Tyler	39.37483806	-80.83367761	Anvil	Not Drilled	Never Drilled (Canceled)		not drilled not drilled	960
4709501226	wv	Tyles	39.3728251	-80.839312	Alliance Petroleum	Dry	Verna Q Ash	1	5140 Benson	1013
4709501227	wv	Tyler	39.37456504	-80.83426712	Alliance Petroleum	Gas w/ Oil Show	Verna O Ash	2	5142 Benson	986
4709501234	wv	Tyler	39.37064915	775 77 77 77 77	Alliance Petroleum	Gas	James E Ash		5096 Benson	909
4709501235	wv	Tyler	39.38838857		Anja Resources	Gas	Geneva Foots Bullman	- 1	4890 Benson	812
4709501237	w	Tyler	39.37006898		Alliance Petroleum	Gas	Verna O Ash		5157 Benson	1029
4709501238	wv.	Tyler	39.37722216	-80.83837803	Alliance Petroleum	Gas	Edna Dillon	1	5129 Benson	957
4709501254	-	Tyler	39.35731382	The second second	Alliance Petroleum	Gas	Charles Lee Cumberledge	3	5150 Benson	1018
4709501266	w	Tyler	39.37780228		Alliance Petroleum	Dry	David A Preston	1	4868 Benson	747
4709501269	_	Tyler	39.3808472		Alliance Petroleum	Gas	Lawrence Mercer	1 2	5007 Benson	-850
4709501283	-	Tyler	39.38592343		Alliance Petroleum	Gas	Bruce & Varonica Smith		5009 Benson	863
4709501285	_	Tyler	39.38954841		Allianca Petroleum	Gas	James C Ferrell		5100 Benson	1032
4709501286		Tyler	39.39534969		Schultz Run Gas Company	Gas w/ Oil Show	Robert H Tennant		5005 Benson	826
4709501300	-	Tyler	39.36122369		Alliance Petroleum	Gas	John R Pratt	- 7	5150 Benson	949
4709501304	-	Tyler	39,37384024		Schultz Run Gas Company	Gas	Duane Clark et al	3	4923 Benson	758
4709501312	_	Tyler	39.37483806		Energy Corporation of America	Not Drilled	Never Drilled (Canceled)		net drilled not drilled	960
4709501314	-	Tyler	39.36107879		Greylock Conventional LLC	Gas	Charles Daughtery et al		5090 Benson	926
4709501318	-	Tyler	39.35658893		Greylock Conventional LLC	Gas .	Charles Daughtery et al		5167 Benson	1012
4709501332	1	Tyler	39.37483806		Energy Corporation of America		Never Drilled (Canceled)		not drilled not drilled	950
4709501336	_	Tyler	39.38635824		Alliance Petroleum	Gas	Elmer Cecil		5069 Benson	956
4709501338		Tyler	39.38215313		Alliance Petroleum	Gas	Timothy N Ingoglia		5045 Benson	949
4709501350	_	Tyler	39.3857785		Alliance Petroleum	Gas	Ryan I Lind et ux	- 1	4907 Benson	785
4709501351	-	Tyler	39.39172362		Alliance Petroleum	Gas	Robert H Tennant		5034 Benson	924
4709501382	_	Tyler	39.38563332		Alliance Petroleum	Gas	Matthew Ash	- 1	5136 Benson	1049
4709501383	-	Tyler	39.38331337		Alliance Petroleum	Gas	Matthew Ash		5117 Henson	1027
4709501405	_	Tyler	39.37282494		Alliance Petroleum	Gas	Conrad Costillow	1-A	2136 Big Injun (undiff	
4709501428		Tyler	39.38070228		Alliante Petroleum	Gas	Lawrence Mercer Hrs		5002 Benson	893
4709501486		Tyler	39.37152		Drilling Appaachian Corp	Dry	Verna O Ash	- 4	2155 Big Injun (undiff	_
4709501951		Tyler	39.39563978		Diversified Resources	Gas w/ Oil Show	Donna Marie Vandine		6280 Marcellus Sh	728
4709502245		Tyler	39.37127601			The state of the state of	J E Ash et al	SHR08L	not stilled not drilled	1015
4709530346	_	Tyler	39,38142731			Gas	Lucretta Mercer	2	2101 Squaw	954
4709530650		Tyler		-80.83688306		Gas	P P Doak		1992 Big Injun (undiff	
4709530657	-	Tyler	39.35807958	1710.70		Gas	A U Davis		1972 Big Injun (undiff	
4709530824	-	Tyler	39.37910719			Gas	Lawrence Mercer	-	1904 Squaw	738
4709530824	_	Tyler	39.3/910/19			Gas	Wm Smith		1836 Big Injun (undiff	_
		Tyler	39.37490217		-	Gas	Martin M Grove	-	2010 Big Injun (undiff	
	I WW M	I + A LE I	33.31430217	-00.0-1000/35/						
4709530887 4709570182	_	Tyler	39.37864113	-80.8357641		not available	John Mercer		1841 Big Injun (undiff	770

API Number 47 - 095	03450
Operator's Well No.	SHR38KHSM

## 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 West Union
Do you anticipate using more than 5,000 bbls of water to complete t	he proposed well work? Yes 🗸 No
Will a pit be used? Yes No V	
If so, please describe anticipated pit waste: no pits	
Will a synthetic liner be used in the pit? Yes No	If so, what ml.? NA
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
	nber_ 47-001-00561, 47-097-01514, 47-097-01613, 34-013-2-0609 )
Reuse (at API Number SHR37 wells API TBD	
Off Site Disposal (Supply form WW-9 form Other (Explain No Pits	or disposal location)
Will closed loop system be used? If so, describe: Yes	
Drilling medium anticipated for this well (vertical and horizontal)?	Air freshwater oil based etc. Verset at how question to cure had of point (RCF).
	Horizontal: synthetic oil-based mud (SOBM) from curve KOP to lateral TD
-If oil based, what type? Synthetic, petroleum, etc. Synthet	
Additives to be used in drilling medium? Bactericide, Polymers, and V	Veighting Agents  Double Lond application of soil conductor
Drill cuttings disposal method? Leave in pit, landfill, removed offsi	le, etc. cutti us and All other cuttings will
-If left in pit and plan to solidify what medium will be used	? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? See attached.	
Permittee shall provide written notice to the Office of Oil and Gas o West Virginia solid waste facility. The notice shall be provided with where it was properly disposed.	
on August 1, 2005, by the Office of Oil and Gas of the West Virgini provisions of the permit are enforceable by law. Violations of any law or regulation can lead to enforcement action.	term or condition of the general permit and/or other applicable unined and am familiar with the information submitted on this my inquiry of those individuals immediately responsible for accurate, and complete. I am aware that there are significant of fine or imprisonment.  RECEIVED
Company Official Signature Coule of Whole	Office of Oil and Gas
Company Official (Typed Name) Erika Whetstone	OCT <b>01</b> 2019
Company Official Title Manager - Permitting	001 01 2013
	WV Department of
Subscribed and sworn before me this 27th day of S	Environmental Protection
Dara M Musel	Control Notary Public Washington County  Notary Public Washington County
My commission expires 03/11/2023	My commission expires March 11, 2023 Commission number 1288863
	Membar, Pennsylvania Association of Notaries

Proposed Revegetation Treatm	ent: Acres Disturbed 1	5.57 Prevegetation	рН 6.5
Lime according to pH t	test Tons/acre or to correct	ct to pH 7.0	
Fertilizer type 10-20	)-20	<del></del>	
Fertilizer amount_50	0	lbs/acre	
Mulch_ hay or stra	w @ 2	_Tons/acre	
		Seed Mixtures	
Tem	porary		manent
Seed Type	lbs/acre	Seed Type	lbs/acre
Orchard Grass	25	Orchard Grass	25
Birdsfoot Trefoil	15	Birdsfoot Trefoil	15
Ladino Clover	10	Ladino Clover	10
Maps(s) of road, location, pit a provided). If water from the pit increage, of the land application	t will be land applied, inc n area	d application (unless engineered plans include dimensions (L x W x D) of the pit, a	cluding this info have been and dimensions (L x W), and a
Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve	t will be land applied, inc n area	clude dimensions (L x W x D) of the pit, $\epsilon$	cluding this info have been and dimensions (L x W), and a
Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	t will be land applied, inc n area	clude dimensions (L x W x D) of the pit, $\epsilon$	cluding this info have been and dimensions (L x W), and a
Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	t will be land applied, inc n area	clude dimensions (L x W x D) of the pit, $\epsilon$	cluding this info have been and dimensions (L x W), and a
Maps(s) of road, location, pit a provided). If water from the pit creage, of the land application chotocopied section of involve plan Approved by:	t will be land applied, inc n area	clude dimensions (L x W x D) of the pit, $\epsilon$	cluding this info have been and dimensions (L x W), and a
Maps(s) of road, location, pit a provided). If water from the pit creage, of the land application chotocopied section of involve plan Approved by:	t will be land applied, inc n area	clude dimensions (L x W x D) of the pit, $\epsilon$	eluding this info have been and dimensions (L x W), and a recommendation of the second
Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	t will be land applied, inc n area	clude dimensions (L x W x D) of the pit, $\epsilon$	and dimensions (L x W), and a
Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	t will be land applied, inc n area	clude dimensions (L x W x D) of the pit, $\epsilon$	RECEIVE
Attach: Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involved Plan Approved by:  Comments:	t will be land applied, inch area.  ed 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, $\epsilon$	RECEIVE Office of Oil an  WV Departmental Properties

California					HSI	APPR	OVED NON-IIAZ	ARDOLS W	ASTE DISI	POSALE	CHITTE	5 (version 0)	5-23-2016	)		
Linding   Linding   Ling   L		Vaste)		Gas Spec	dfic Waste 2	treams				Other Accepte	d Waste Stream	ms				
		Location								Sludge						Contact Information
Charlesten				X	X			X	X	X		X		30000	School of Balls	
Darwille				Х	X		х	X	X	X		×			¥-	1
Combern   History Regional   De Story   De				X	х		X	X	X	X		X	X		Ÿ	1
Section   Discon   L   X   X   X   X   X   X   X   X   X			IL	P.55							-	-	-			
Pircy Rock Island   Past Moline   II.					X		X	X	X	X	X	X	x			1
Seed County							X		X	X						1
						1-10-5		X	X	X	X	X				t
LaSalle						1000	X	X	X	X	X	X		-1		
Activate   Activate						2		X	X	X	X	X				317-921-1667 or 480-627-2700
Invincement									X	- X	X			1		
Average   Aver									X	X		X				
Commit   C								X	X	X	F- 300	X				1
A									X	X	X	X	X	X		1
Semon Valicy   Frankford   KY   X   X   X   X   X   X   X   X   X									X	х	X	X	X			1
Internal   Invine									X	X	X	X	X			1
Preen Valley   Rush   KY   X   X   X   X   X   X   X   X   X									X	X	X	X	X			1
Derrote Run   Bellefontaine   OH						3			X	X	X	X	X		X	1
Selectorance   Sele				X	X			X	X	X	X	X	X	X	X	
County   C								X	X	X	The second	X	X			
Cellina				1				χ		х	X	X		August Cont.		
Celina   OR								X				X	х		X	
Construice   Construint   Con				1	1	10000			X	X		X				
Suntry   Get Landinity   East Sprata   OH   X   X   X   X   X   X   X   X   X								X	X	x		100000000000000000000000000000000000000	X	X		lack Palarma:
Committee   Comm				X	X				X							The state of the s
PA						the same of	X	Х	X	X			X			
Imperial   PA								X	X	X	X	X	C 100 100 100 100 100 100 100 100 100 10	The same of the sa		CEII: 550-806-9560
Constitute   PA					(200			X	X	X	X	X	1000			
Lawrenceville							X	X		X	X	X	x			Barbara Harsanye:
Ing and Univers					-		X	Х	X	X		X		2000000		work: 330-536-8013 x 120
							X	X	X	X	X					cell: 330-423-7267
According Hurricane WV X X X X X X X X X X X X X X X X X X	Property and American was property and				And the second	460.00	X	X	X	X						
Short Creek Wheeling Short Creek WV X X X X X X X X				British D		1	X	X	X	X						
				X	X	Page 1	X	X	X	X						

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A aste Management Gas Specific Waste Streams industrial Landfills					Other Accepted Waste Streams								400042000			
Landfill Location		Drill *	Waste	Weste Brine	Contaminated Soli (Including Petroleum)	Construction & Demolition Waste	Industrial Waste	Studge	Frishle Arbeston	Non-Friable Asbestos	Process Waste	Selidification Services	Municipal Solid Waste	Contact Information		
Arden Landfill		PA		X		X	X	X	X			Х	X	X		
South Hills (Armoni		PA	X	X			X	X	X			х	X	X	I	
Celly Run	Elizabeth	PA	X	Х	Market 1	X	X	X	X			X	X	х		
Valley Landfill		PA	X	X		X	X	X	X	X	X	X	X	X		
Evergreen Landfill	Blairsville	PA	X	X		X	X	X						X	Scott Allen: 412-604-2256	
Charleston Landfill Karawha Comm	Charleston	wv	x	X		×	x	x	x	1-00		х		X	3100 AMER. 412 007 2230	
Mendowfill Landfill	Bridgeport	WV	X	X		X	X	X	X	X	X	х	X	X		
Continuentera Landfill	Parkersburg	WV	X	X	-	X	X	X	X			X	X	X		
S&S Grading Landfill	Clarksburg	WV	X	X	-	X	X	X	X	-		X		X		
American Landfill	Waynesburg	OH	X	X		X	X	X	X	X	X	X	X	X	1 To	
Suburban RDF	Glenford	OH	X	X		X	X	X	X	X	X	X	X		Patty Landol: 262-532-8001	
Coshocton Landfill***	Conhecton	OH	X	X		X		X						X	John Miller: 1-800-963-4776	
Mahorine Landfill	New Springfield	OH	N	X		X	- 5	X			X	X		X	2. A. Arca 20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	
Additional Landfills			4,000	ific Waste		6-1-1-1-1-			Other Accepte	d Waste Stream	Add to the control		To-nun		Coatset Information	
Landfill	Location		Drift* Cettings	Waste Liners	Waste Brine	(Including Petroleum)	Construction & Demolition Waste	Industrial Waste	Sludge	Friable Asbeston	Non-Friable Asbestos	Process Waste	Services	Municipal Solid Waste		
Westmoreland Waste (WWLC Group)	111 Conner Lane, Belle Vernon, PA 15012	PA	х	x		x	х	x	x	x	x		x		Mike Horne: 412-552-4427 Mark Thomas: 724-929-7694	
MAX Environmental	200 Max Drive, Bulger, PA 15019	PA	x	x		×	x	x	x				x	x	Carl Spadare: 412-343-4900	
MAX Environmental Yukon Facility	233 MAX Lane Yukon PA 1:698	PΛ	X	х		x	x	x	x				x	х	cell: 412-445-9789	
Apex Sanitary landfill  Apex Environmental	11 County Road 78 Amsterdam, Ohio 43903	OH	x	×		x	x	x	x				x	x	Joe Teterick: 740-275-2887 foct a cls-company.com	
Rumpke, Mt. Sterling Rumpke Consolidated	30 Larison Rd. Jeffersonville, KY 40337	KY	х	х		x	x	x		x	х			x	Carl Walter; 513-623-2471	
Laurel Ridge Landfill	3612 B State Highway	KY	x	x		x	x	х	-	x	x	х		x	Bruce Crouch: Work: 606-864-7996	
Waste Connections of KY	552 I Pk. KY 40740	177	1.5											-	Cell: 606-219-0261	

X

X

x

X

X

x

**	Ohio "TENORM" - requires Radium 226/228 analysis by load before leaving the well pad. Solid waste landfills in Ohio can only accept TENORM wante with combined concentration less than 5 piccouries per gram above the natural background level.
***	Accepts drilling wastes but profile for disposal is not currently completed.
X	Waste stream accepted by facility.

X

X

X

Waste stream is not or may not be accepted by facility. Contact facility directly to verify waste streams accepted.

Now PADEP rules regarding "TENORM" testing requirement are pending. Notes:

x

x

X

x

Advanced Disposal

Cnestnut Valley 1184 McClellandtown

15458

Rd, McClellandtown, PA

Greentree Landfill; 635

Toby Rd.; Kersey, PA Mosteller Landfill; 7035 Glades Pike Rd.;

Someret, PA

\* Drill Cuttings include frac sand for the purpose of this table (Contact facility directly to verify waste streams accepted).

x

x

x

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x

X

x

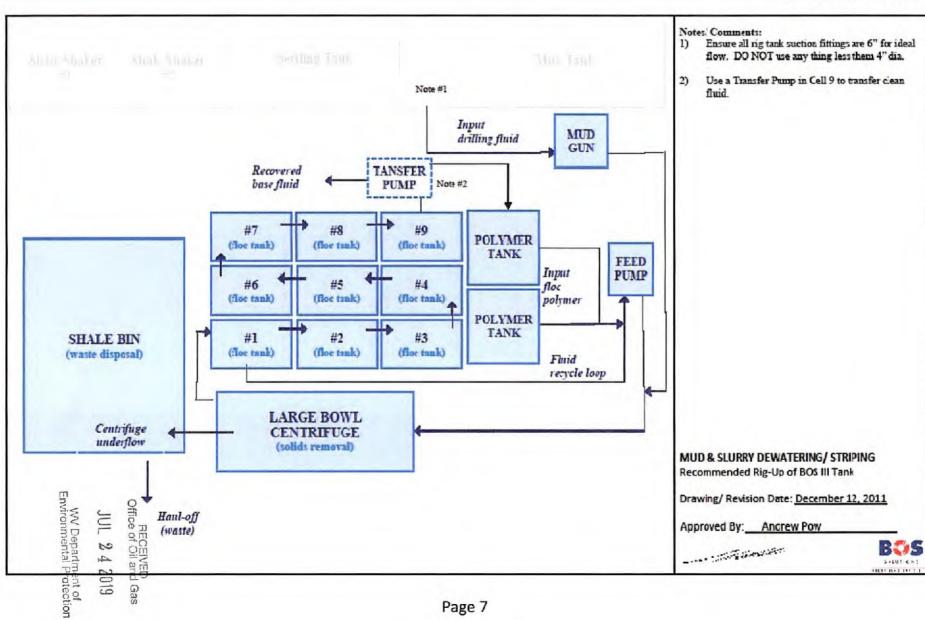
Tony Labenne 6184 Route 219, Brockway, PA 15824 814-590-9906

OCT 01 2019

WV Department of Environmental Protection

### FLOW CHART MUD AND SLURRY DEWATERING RECOMMENDED RIG UP





Page 7



## Site Safety Plan for Well SHR38KHSM **CNX Gas Company, LLC.**



Office of Oil and Gas

JUL 2 4 2019

WV Department of Environmental Protection

### **Approval Sheet**

The Office of Oil and Gas and the Oil and Gas Conservation Commission have set forth minimum requirements for necessary equipment and procedures that must be addressed in a Safety Plan ("Plan") and shall be submitted and approved prior to drilling a deep well. A deep well shall be any well which meets the definition as provided for in Chapter 22C, Article 9 of the West Virginia Code.

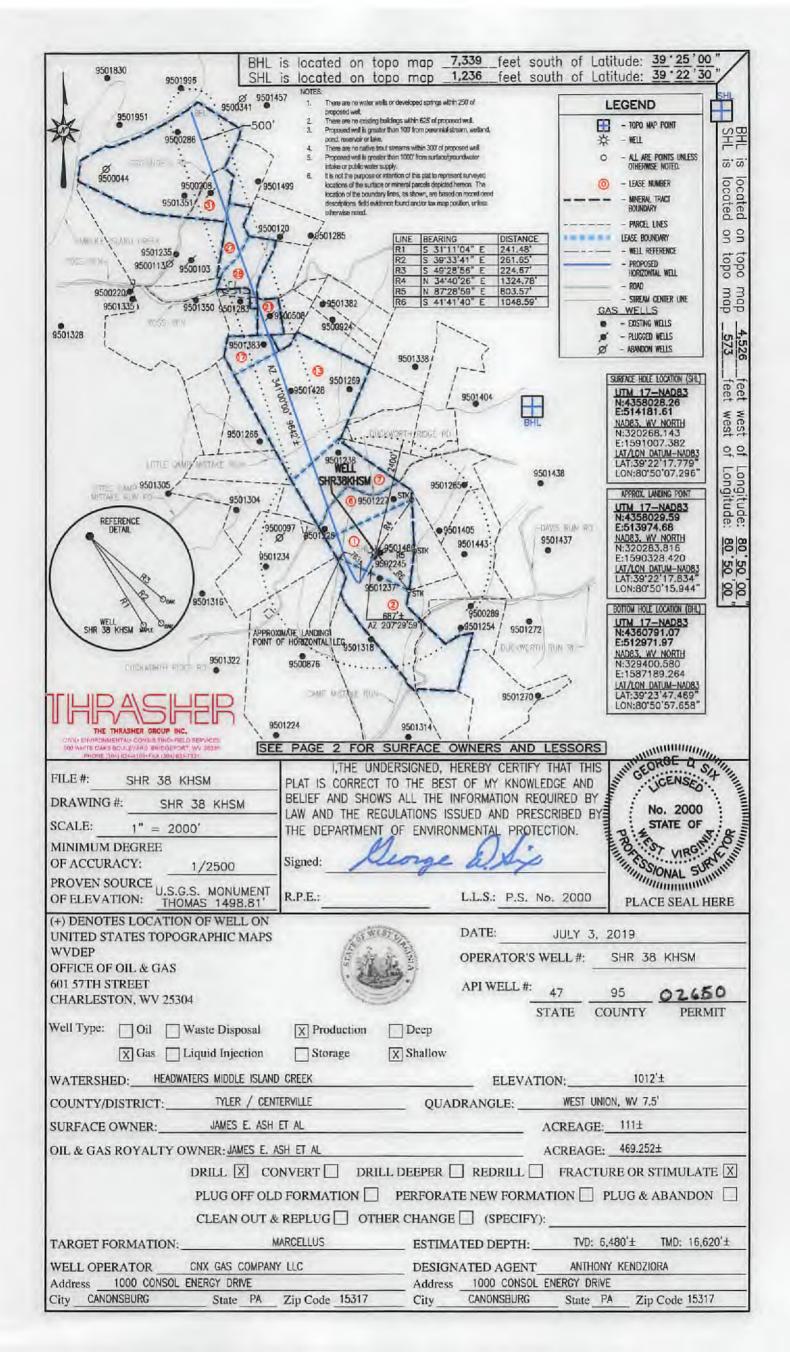
A site specific Safety Plan must be submitted with each deep well application or no later than one week prior to spudding. Approved Plans shall be maintained and available at the drilling rig at all times.

The Office of Oil and Gas must approve all changes and modifications to previously approved plans.

This plan has met the requirements of the Policy Statement Deep Well Drilling Procedures and Site Safety Plan Requirements as set forth by:

West Virginia Division of Env	ironmental Protectio	n, Office of Oil a	nd Gas	
And				
West Virginia Oil and Gas Co	nservation Commissi	on.		
Approved this day	of month		20	_ by
		Date:		
		Date:		

05-18-4 01-12-10 RHA 01-12-21 01-13-7 05-18-24 01-12-23 01-13-7 05-21-9 Lat: 39.37487 Mistake Long: -80.835738 N: 14298425.0547 01-15-4 E: 1686835.25673 Access Entrance: Duckworth Rd Wilbur McElroy Mbu 15-6 Lat: 39,372871 Long: -80.835639 N: 14298425.0547 01-15 E: 1686864:37197 01:18-19.1 W 01-16-19 01-16-10 Sp 01-15-11 1-15-10 01-16-14 Tyler Centerville SHR38 Du Duckworth Rd Lat:39.371371 01-15-15 Long: 80.835364 N:14297879.1319 E:1686943.13757 01-16-20 01-16-23 01-15-19 WAT-01-16-26 E 01-17-10 01-18-5 01-18-1 01-16 01-18-1 01-17-11 01-18-1 7401-18:15 01-17-3-01-17-3 01-17-3 Legend 1,000 000 RECE □ Feetice of Oi and Gas 1 inch = 1,500 feet ===: Access Road Wellbore Prepared By: GISJUL 2 2019 Original Date: 5/8/2018 Surface Parcel X Access Points ment Jopographic Well Map Well Pad Approved By: GISVV Depar Environmenta Revision Date: 5/8/2018 Offic SHR38 Sp 1,500 Foot Buffer JUL 2 4 2019 This map is property of CNX Land Resources Inc. and contains St 2,500 Foot Buffer information that is proprietary and confidential in nature W and may not be copied or reproduced without prior written consent. 1 Mile Buffer WV Department of Environmental Protection © Copyright CNX Land Resources Inc. 2011



## SHR 38 KHSM PAGE 2 OF 2

1	SURFACE OWNER JAMES E. ASH ET AL	LESSOR VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH,	DIST-TM/PAR P/0 1-15/19
	5110	BESSIE HAUGHT AND HAROLD WARNER	
		ERNEST G. SECKMAN AND O. JOANNE SECKMAN	
2	JOHN R ANDERS II	JOHN MICHAEL LEONIAN	1-16/21
-	Contraction in	JOSEPH ROBERT LEONIAN	10/2/
		MARGO L. KIEHL AND CHARLES F. KIEHL, W/H	
		BERDINA ROSE AND NORMAN W. ROSE, W/H	
		PHILLIP LEONIAN, AKA PHILLIP MARSHALL LEONIAN MARION RAY BACHELOR, AKA MARION R. BACHELOR	
		AND GLORIA JEAN BACHELOR, H/W	
		RITA G. JARVIS	
		MIKE ROSS, INC. I. L. MORRIS	
		JO ELLEN HARPER DAY	
		MARY LEE LILLY	
	JAMES E. ASH ET AL  JOHN R. ANDERS, II  JAMES E. ASH ET AL	JOHN FULTON LEONIAN	
		NILA ASH SAYLOR REVOCABLE TRUST, BY JOSEPH F. SILEK, JR	
		BAILEY ANN MILLS	
		WILLIAM PAUL HARPER DAVID PAUL LOCOCO	
		MARY LYNNE SLATTERY, FKA MARY LYNNE LOCOCO	
		DONALD VINCENT LOCOCO	
		ROSE MARIE VANHEUVELN	
1 JAI 2 JO 3 JAI 7 DIA 13 KEN		THERESA LEE ROBERTSON  MARTHA SUE MUZIO, FKA MARTHA SUE LOCOCO	
		MICHELLE LOCOCO BUSHMIRE, FKA MICHELLE LUCRETIA BUSHMIRE	
		ELIZABETH FLORENCE LOCOCO	
		BRC APPALACHIAN MINERALS I, LLC	
		BRC APPALACHIAN MINERALS I, LLC	
6	JAMES E, ASH ET AL	VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH,	P/0 1-16/1
		BESSIE HAUGHT AND HAROLD WARNER	
		RALPH E. PHILLIPS AND VELINDA PHILLIPS H/W	
7	DIANA L. BOGER	EDNA DILLON	P/0 1-16/1
	The second secon	SAMUEL DAVID DILLON AND DONNA L. DILLON, H/W	
, y		HOWARD D. SPURLOCK AND MARIAN E. SPURLOCK, H/W EDITH M. DOAK	
		PEARL G. MCINTYRE	
		PAUL MCINTYRE	
		KERMIT MCINTYRE AND RUTH MCINTYRE, H/W SHEILA L. GUY	
		EDITH W. MCINTYRE	
3	KENNETH G. WRIGHT TRUST, KENNETH G. WRIGHT-TRUSTEE		1-16/1
		AND FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER N. MERCER AND GLORIA MERCER, H/W	
		DELORES ROSSI	
		LUTHER ROGERS AND ANITA ROGERS, H/W	
		MARIE MERCER HARLEY EDWIN SPENCER AND ALICE RUTH SPENCER, H/W	
		THE KENNETH G. WRIGHT TRUST, DATED 12/21/2010,	
		BY KENNETH G. WRIGHT, TRUSTEE	
7	KENNETH G. WRIGHT TRUST, KENNETH G. WRIGHT-TRUSTEE		1-12/22.2
		AND FRANKLIN L MERCER, ATTORNEY-IN-FACT FOR ROGER N. MERCER AND GLORIA MERCER, H/W	
		DELORES ROSSI	
		ANITA ROGERS AND LUTHER ROGERS, W/H	
		MARIE MERCER THE KENNETH G. WRIGHT TRUST, DATED DECEMBER 21, 2010.	
		BY KENNETH G. WRIGHT, TRUSTEE	
		CONRAD E. COSTILOW	
		SHELBY ROGERS GEORGE, A/K/A SHELBY R. GEORGE PATRICIA LEMLEY AND MELVIN LEMLEY, W/H	
		PATRICIA CIAFARDO AND JOSEPH J. CIAFARDO, W/H	
		BRADLEY EISIMINGER AND SHIRLEY EISIMINGER,	
		GARY W. GEORGE, SR. (INDIVIDUALLY), AND	
		GARY W. GEORGE, SR. (INDIVIDUALLY), AND	
		BETH ANN MADDEN (INDIVIDUALLY) AND BETH ANN	
		MADDEN (REMAINDER INTEREST OF FRANCE M. GEORGE)	
		FRANCES M. GEORGE, A/K/A FRANCES MOORE GEORGE VIRGINIA H. LEMASTERS FAMILY TRUST, BY D. LARRY LEMASTERS, TRUSTEE	
		LINDA SUE GEORGE COEN, F/K/A, LINDA SUE GEORGE	
		DONALD ROBERT GEORGE	
		DONALD EDWARD GEORGE, JR. AND DARLYN J. GEORGE, H/W LULA MAE JOHNSON, BY HER ATTORNEY-IN-FACT, SANDRA LEE HARMAN	
		GREGORY C. NICHOLSON	
		KIMBERLY ANN SHAMBLIN, A/K/A KIMBERLY A. ROUSH	
		AND GREGORY S. ROUSH, W/H WILLIAM E. NICHOLSON	
		CYNTHIA ANN ZONTS AND ROBERT FRANCIS ZONTS, W/H	
		DEBORAH A. WAYCHOFF, F/K/A DEBORAH ANN COLE	
	13	BRENDA COLE	
		JAMES HENRY COLE MIKUEL ANN PARRISH	
		DONNA PARRISH A/K/A DONNA RAHALL	The state of the s
		WILLIAM MICHAEL PARRISH AND CYNTHIA PARRISH, H/W	
1	LAWRENCE DEAN MOORF	WILLIAM MICHAEL PARRISH AND CYNTHIA PARRISH, H/W CHRISTINA R. LORENCE, F/K/A CHRISTINA R. COLE	
7	LAWRENCE DEAN MOORE THOMAS VAN DE BUNT	WILLIAM MICHAEL PARRISH AND CYNTHIA PARRISH, H/W CHRISTINA R. LORENCE, F/K/A CHRISTINA R. COLE ROBERT L UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W JAMES C. FERRELL AND LA JETTA FERRELL, H/W	1-12/22
7	THOMAS VAN DE BUNT LAWRENCE DEAN MOORE AND JULIE ANN MARKLE	WILLIAM MICHAEL PARRISH AND CYNTHIA PARRISH, H/W CHRISTINA R. LORENCE, F/K/A CHRISTINA R. COLE ROBERT L UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W JAMES C. FERRELL AND LA JETTA FERRELL, H/W	1-12/22 1-12/12 1-12/13
27	THOMAS VAN DE BUNT	WILLIAM MICHAEL PARRISH AND CYNTHIA PARRISH, H/W CHRISTINA R. LORENCE, F/K/A CHRISTINA R. COLE ROBERT L UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W JAMES C. FERRELL AND LA JETTA FERRELL, H/W	1-12/22

SURFACE HOLE LOCATION (SHL) UTM 17—NAD83 N:4358028,26 E:514181.61 NAD83. W. NORTH N:320268.143 E:1591007.382 LAT/LON DATUM-NAD83 LAT:39'22'17.779" LON:80'50'07.296"

APPROX. LANDING POINT

UTM 17—NAD83
N:4358029.59
E:513974.68
NAD83, W. NORTH
N:320283.816
E:1590328.420
LAT/LON DATUM-NAD83
LAT:39'22'17.834"
LON:80'50'15.944"

BOTTOM HOLE LOCATION (BHL) BOTTOM HOLE LOCATION (BH.)

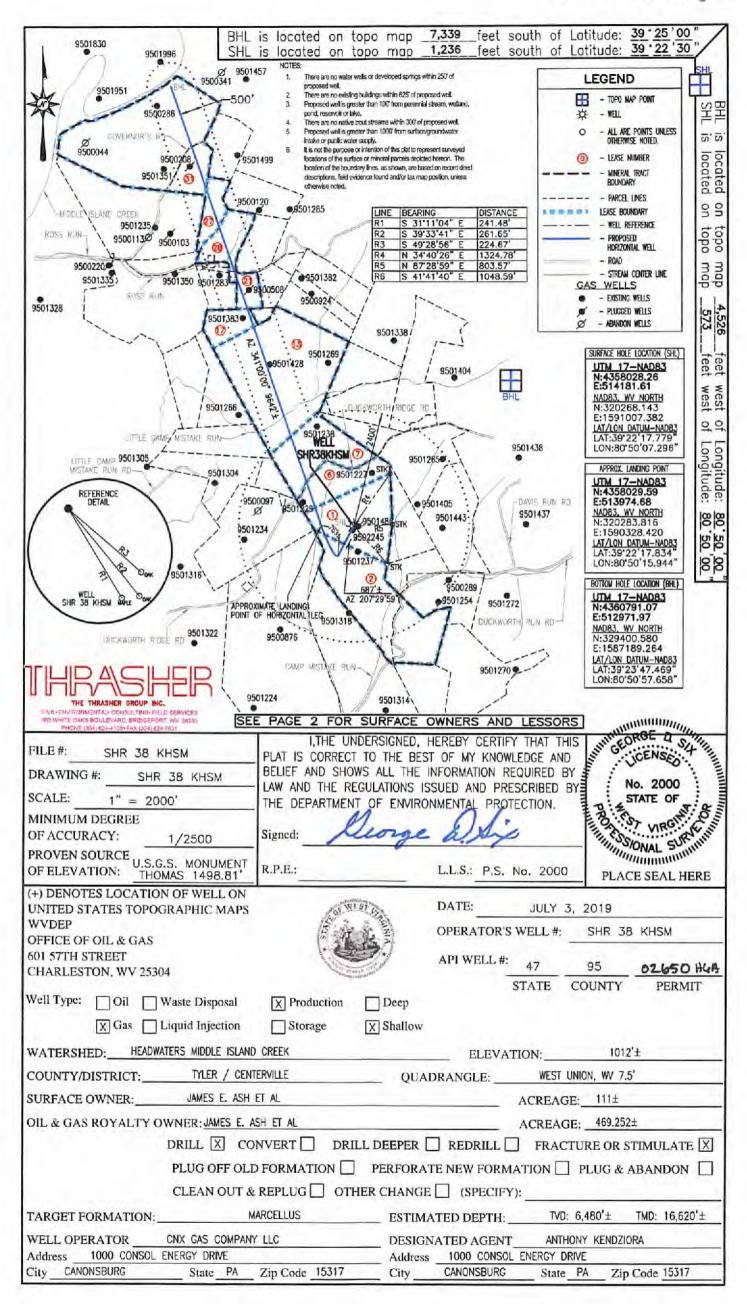
LTM 17-NAD83
N:4360791.07
E:512971.97
NAD83. W. NORTH
N:329400.580
E:1587189.264
LAT/LON DATUM-NAD83
LAT:39'23'47.469"
LON:80'50'57.658"



API WELL#: 47

02660

STATE COUNTY PERMIT



## SHR 38 KHSM PAGE 2 OF 2

1	SURFACE OWNER	LESSOR VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH,	DIST-TM/PAI
1	JAMES E. ASH ET AL	BESSIE HAUGHT AND HAROLD WARNER	1-10/1
		ERNEST G. SECKMAN AND O. JOANNE SECKMAN	
2	IDUN R ANDERS II	RALPH E. PHILLIPS AND VELINDA PHILLIPS H/W	1-16/21
2	JOHN R. ANDERS, II	JOHN MICHAEL LEONIAN JOSEPH ROBERT LEONIAN	1-10/21
		MARGO L. KIEHL AND CHARLES F. KIEHL, W/H	
		BERDINA ROSE AND NORMAN W. ROSE, W/H	
		PHILLIP LEONIAN, AKA PHILLIP MARSHALL LEONIAN MARION RAY BACHELOR, AKA MARION R. BACHELOR	
		AND GLORIA JEAN BACHELOR, H/W	
		RITA G. JARVIS	
		MIKE ROSS, INC.	
		I. L. MORRIS	
		JO ELLEN HARPER DAY MARY LEE LILLY	
		ARMEN LEONIAN, AKA ARMEN LANHAM LEONIAN	
		JOHN FULTON LEONIAN	
		NILA ASH SAYLOR REVOCABLE TRUST, BY JOSEPH F. SILEK, JR	
		BAILEY ANN MILLS WILLIAM PAUL HARPER	
		DAVID PAUL LOCOCO	
		MARY LYNNE SLATTERY, FKA MARY LYNNE LOCOCO	
		DONALD VINCENT LOCOCO	
		ROSE MARIE VANHEUVELN THERESA LEE ROBERTSON	
		MARTHA SUE MUZIO, FKA MARTHA SUE LOCOCO	
		MICHELLE LOCOCO BUSHMIRE, FKA MICHELLE LUCRETIA BUSHMIRE	
		ELIZABETH FLORENCE LOCOCO	
		RALPH E. PHILLIPS AND VELINDA PHILLIPS, H/W	
		BRC APPALACHIAN MINERALS I, LLC BRC APPALACHIAN MINERALS I, LLC	
5	JAMES E. ASH ET AL	VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH,	P/0 1-16/1
		BESSIE HAUGHT AND HAROLD WARNER	100
		ERNEST G. SECKMAN AND O. JOANNE SECKMAN	
7	DIANA L. BOGER	RALPH E. PHILLIPS AND VELINDA PHILLIPS H/W EDNA DILLON	P/0 1-15/1
		SAMUEL DAVID DILLON AND DONNA L. DILLON, H/W	1
		HOWARD D. SPURLOCK AND MARIAN E. SPURLOCK, H/W	
		PEARL G. MCINTYRE	
		PAUL MCINTYRE	
	KERMIT MCINTYRE AND RUTH MCINTYRE, H/W		
		SHEILA L. GUY	
3	KENNETH G. WRIGHT TRUST, KENNETH G. WRIGHT-TRUSTEE	EDITH W. MCINTYRE  FRANKLIN I MERCER AND RUTH I MERCER H/W	1-16/1
-	REMEN 6. MOON MOSI, REMEN 6. MAGNI-MOSICE	AND FRANKLIN L. MERCER, ATTORNEY-IN-FACT	1-10/1
		FOR ROGER N. MERCER AND GLORIA MERCER, H/W	
		DELORES ROSSI	
		LUTHER ROGERS AND ANITA ROGERS, H/W MARIE MERCER	
		HARLEY EDWIN SPENCER AND ALICE RUTH SPENCER, H/W	
		THE KENNETH G. WRIGHT TRUST, DATED 12/21/2010,	
7	KENNETH G. WRIGHT TRUST, KENNETH G. WRIGHT-TRUSTEE	BY KENNETH G. WRIGHT, TRUSTEE FRANKLIN L. MERCER AND RUTH MERCER, H/W	1 10/000
•	REGILETT G. MINOTE TRUST, REPREST G. MINOTE-TRUSTEE	AND FRANKLIN L. MERCER, ATTORNEY-IN-FACT	1-12/22.2
		FOR ROGER N. MERCER AND GLORIA MERCER, H/W	
		DELORES ROSSI	
		ANITA ROGERS AND LUTHER ROGERS, W/H MARIE MERCER	
		THE KENNETH G. WRIGHT TRUST, DATED DECEMBER 21, 2010,	
		BY KENNETH G. WRIGHT, TRUSTEE	
		CONRAD E. COSTILOW	
		SHELBY ROGERS GEORGE, A/K/A SHELBY R. GEORGE PATRICIA LEMLEY AND MELVIN LEMLEY, W/H	
		PATRICIA CIAFARDO AND JOSEPH J. CIAFARDO, W/H	
		BRADLEY EISIMINGER AND SHIRLEY EISIMINGER,	
		F/K/A SHIRLEY GEORGE GARY W. GEORGE, SR. (INDIVIDUALLY), AND	
		GARY W. GEORGE, SR. (INDIVIDUALLY), AND	
		BETH ANN MADDEN (INDIVIDUALLY) AND BETH ANN	
		MADDEN (REMAINDER INTEREST OF FRANCE M. GEORGE)	
		FRANCES M. GEORGE, A/K/A FRANCES MOORE GEORGE VIRGINIA H. LEMASTERS FAMILY TRUST, BY D. LARRY LEMASTERS, TRUSTEE	
		UNDA SUE GEORGE COEN, F/K/A, LINDA SUE GEORGE	
	[] 21	DONALD ROBERT GEORGE	
		DONALD EDWARD GEORGE, JR. AND DARLYN J. GEORGE, H/W	
		LULA MAE JOHNSON, BY HER ATTORNEY-BI-FACT, SANDRA LEE HARMAN GREGORY C. NICHOLSON	
		KIMBERLY ANN SHAMBLIN, A/K/A KIMBERLY A. ROUSH	
		AND GREGORY S. ROUSH, W/H	
		WILLIAM E. NICHOLSON	
		CYNTHIA ANN ZONTS AND ROBERT FRANCIS ZONTS, W/H DEBORAH A. WAYCHOFF, F/K/A DEBORAH ANN COLE	
		BRENDA COLE	
		JAMES HENRY COLE	
		MIKUEL ANN PARRISH	
		DONNA PARRISH A/K/A DONNA RAHALL WILLIAM MICHAEL PARRISH AND CYNTHIA PARRISH, H/W	
		CHRISTINA R. LORENCE, F/K/A CHRISTINA R. COLE	
	LAWRENCE DEAN MOORE	ROBERT L UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W	
	THOMAS VAN DE BUNT LAWRENCE DEAN MOORE AND JULIE ANN MARKLE	JAMES C. FERRELL AND LA JETTA FERRELL, H/W	1-12/12
			1-12/13.2
	LAWRENCE DEAN MOORE		12/10.2
	JEFFREY J. AND KAY A. HEIKENFELD  JAMES F. AND PATRICIA A. WOODS	ROBERT H. TENNANT, A SINGLE MAN AND	1-12/11 1-12/11.1

SURFACE HOLE LOCATION (SHL)

UTM 17—NAD83
N:4358028,26
E:514181.61
NAD83, WY NORTH
N:320268.143
E:1591007.382
LAT/LON DATUM—NAD83
LAT:39'22'17.779"
LON:80'50'07.296"

APPROX. LANDING POINT

UTM 17—NAD83
N:4358029.59
E:513974.68
NAD83, W NORTH
N:320283.816
E:1590328.420
LAT/LON DATUM—NAD83
LAT:39'22'17.834"
LON:80'50'15.944"

BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83
N:4360791.07
E:512971.97
NAD83, WY NORTH
N:329400.580
E:1587189.264
LAT/LON DATUM-NAD83
LAT:39\*23\*47.469\*
LON:80\*50\*57.658\*



THE THRASHER GROUP INC.

HOS WHITE DAKS BOULEVARD, BRIDGEPORT, WV 28330

API WELL #;

9.

02650 HEA

STATE

COUNTY

PERMIT

WW-6A1 (5/13)

Operator's Well No.	SHR38KHSM	

### 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
rameer	Crantor, Decion, etc.	3,411,441, 1241,441	110 / 1111	

### SEE ATTACHEL

### 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: Office of Oil and Gas

- 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

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

> Well Operator: CNX GAS COMPANY LLC By: ERIKA WHETSTONE Its: PERMITTING MANAGER

#### Attachment - Form WW-64-1 for SHR 38 KHSM

Tract ID	Tax Map & Parcel	Title Opinion QL5 #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
	1 17 10	258998000	Verna O. Ash, James E. Ash and Thelma B. Ash, Bessie Haught and Harold Warner, Ernest G. Seckman and O. Joanne Seckman	Drilling Appalachian Corporation	Not less than 1/8	269/571
.1	1-16-19	258998000	Ralph E. Phillips and Velinda Phillips, h/w	Drilling Appalachian Corporation	Not less than 1/8	271/101
				Dominion Appalachian Development Properties.		
			Drilling Appalachian Corporation	LLC	Assignment	322/190
			Dominion Appalachian Development Properties, ILC	CONSOL Gas Appalachian Development Properties LLC	Merger	384/191
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc.	Merger	384/191
			CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191
			CONSOL Gas Company	CNX Gas Company LLC	Merger	384/191
			CNX Gas Company LLC Noble Energy Inc.	Noble Energy Inc CNX Gas Company LLC	50% Assignment 50% Assignment	388/285 542/134
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
Tract ID	Tax Map &	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
2	1-16-21	288768000	John Michael Leonian	CNX Gas Company, LLC	Not less than 1/8	406/84
			Joseph Robert Leonian	CNX Gas Company, LLC	Not less than 1/8	406/89
			Margo L. Kiehl and Charles F. Kiehl, w/h Berdina Rose and Norman W. Rose, w/h	CNX Gas Company, LLC CNX Gas Company, LLC	Not less than 1/8	409/229 406/94
			CNX Gas Company, LLC	Noble Energy, Inc.	Not less than 1/8 Assignment	447/738
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	550/273
			and the same of th	0.04		440.4447
			Phillip Leonian, aka Phillip Marshall Leonian  Marion Ray Bachelor, aka Marion R. Bachelor and Gloria Jean Bachelor,	Noble Energy, Inc.	Not less than 1/8	465/276
			h/w	Noble Energy, Inc.	Not less than 1/8	449/543
			Rita G. Jarvis	Noble Energy, Inc.	Not less than 1/8	449/539
			Mike Ross, Inc.	Noble Energy, Inc.	Not less than 1/8	480/849
			I. L. Morris Jo Ellen Harper Day	Noble Energy, Inc. Noble Energy, Inc.	Not less than 1/8 Not less than 1/8	480/821 452/692
			Mary Lee Lilly	Noble Energy, Inc.	Not less than 1/8	458/755
			Armen Leonian, aka Armen Lanham Leonian	Noble Energy, Inc.	Not less than 1/8	465/249
			John Fulton Leonian	Noble Energy, Inc.	Not less than 1/8	458/757
			Nila Ash Saylor Revocable Trust, by Joseph F. Silek, Jr Bailey Ann Mills	Noble Energy, Inc. Noble Energy, Inc.	Not less than 1/8 Not less than 1/8	465/266 453/527
			William Paul Harper	Noble Energy, Inc.	Not less than 1/8	449/535
			David Paul Lococo	Nable Energy, Inc.	Not less than 1/8	449/497
			Mary Lynne Slattery, fka Mary Lynne Lococo  Donald Vincent Lococo	Noble Energy, Inc. Noble Energy, Inc.	Not less than 1/8 Not less than 1/8	452/702 453/635
			Rose Marie VanHeuveln	Noble Energy, Inc.	Not less than 1/8	526/567
			Theresa Lee Robertson	Noble Energy, Inc.	Not less than 1/8	471/678
			Martha Sue Muzio, fka Martha Sue Lococo	Noble Energy, Inc.	Not less than 1/8	449/541
			Michelle Lococo Bushmire, fla Michelle Lucretia Bushmire Elizabeth Florence Lococo	Noble Energy, Inc. Noble Energy, Inc.	Not less than 1/8 Not less than 1/8	453/523 453/624
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	473/216
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	493/223
			Noble Energy, Inc.	CNX Gas Company, LLC CNX Gas Company, LLC	Assignment	499/447
			Noble Energy, Inc. Noble Energy, Inc.	CNX Gas Company, LLC	Assignment Assignment	513/299 542/147
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	549/529
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	550/273
			Ralph E. Phillips and Velinda Phillips, h/w	Noble Energy, inc.	Not less than 1/8	492/300
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	513/299
			Noble Energy, Inc.	HG Energy II Appalachia, LLC	Assignment	570/96
			HG Energy II Appalachia, ILC	CNX Gas Company, U.C.	Assignment	624/236
			BRC Appalachian Minerals I, LLC	BRC Working Interest Company	Not less than 1/8	369/300
			BRC Appalachian Minerals I, LLC	BRC Working Interest Company	Not less than 1/8	369/648
			BRC Working Interest Company Chesapeake Appalachia, ILC	Chesapeake Appalachia, LLC SWN Production Company, LLC	Assignment	369/784
			Chesapeake Appalachia, LLC	State USA Onshore Properties, LLC	Assignment	465/463 378/764
			SWN Production Company, LLC. Statoil USA Onshore Properties, Inc.	Noble Energy, Inc and CNX Gas Company, LLC	Assignment	518/207
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	550/273
Tract ID	Tax Map &	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
	Parcel	Q15 #				
Б	1-16-19	258998000	Verna O. Ash, James E. Ash and Thelma B. Ash, Bessie Haught and Harold Warner, Ernest G. Seckman and O. Joanne Seckman	Drilling Appalachian Corporation	Not less than 1/8	269/571
-	1.10.13	230330000	Ralph E. Phillips and Velinda Phillips, h/w	Drilling Appalachian Corporation	Not less than 1/8	271/103
				Dominion Appalachian Development Properties,		
			Drilling Appalachian Corporation	tic	Assignment	322/190
			Dominion Appalachian Development Properties, LLC	CONSOL Gas Appalachian Development Properties LLC	Merger	384/191
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc. DER REC	ENTER Merger	384/191
			CONSOL Gas Reserves Inc.	CONSOL Gas Company Office of	Oil and Greger	384/191
			CONSOL Gas Company CNX Gas Company LLC	CNX Gas Company LLC Noble Energy Inc.	50% Assignment	384/191 388/286
			Noble Energy Inc.	CNX Gas Company LLC JUL 2	50% Assignment 4 20 Sept Assignment	542/134
			Noble Energy Inc.	CNX Gas Company LLC	4 CU Anignment	550/273
	Tax Map &	Title Opinion		MAZE	Revelty  Revelty	1
Tract ID	Parcel	QL5#	Grantor, Lessor, etc	Grantee, Lessee File Opposite	ment of Boyelty	Book/Page
7	1-16-18	288609000	Edna Dillon	Drilling Appalachian Corporation	Profest less than 1/8	271/604
			Samuel David Dillon and Donna L. Dillon, h/w Howard D. Spuriock and Marian E. Spuriock, h/w	Drilling Appalachian Corporation Drilling Appalachian Corporation	Not less than 1/8 Not less than 1/8	273/276 273/97
			Edith M. Doak	Drilling Appalachian Corporation	Not less than 1/8	273/93
			Pearl G. McIntyre	Drilling Appalachian Corporation	Not less than 1/8	273/95
			Paul McIntyre	Drilling Appalachian Corporation	Not less than 1/8	273/112
			Kermit McIntyre and Ruth McIntyre, h/w Sheila L. Guy	Drilling Appalachian Corporation Drilling Appalachian Corporation	Not less than 1/B Not less than 1/B	273/110 273/274
			Edith W. McIntyre	Drilling Appalachian Corporation	Not less than 1/8	271/608
			The second secon		COLUMN STREET, ST.	2.77

20f4

			Drilling Appalachian Corporation	Dominion Appalachian Development P	Properties, Assignment	322/190	
			Enting Apparation Corporation	CONSOL Gas Appalachian Developmen		244470	
			Dominion Appalachian Development Properties, LLC	Properties LLC	Merger	384/191	
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc.	Merger	384/191	
			CONSOL Gas Reserves Inc. CONSOL Gas Company	CONSOL Gas Company CNX Gas Company LLC	Merger	384/191 384/191	
			CNX Gas Company LLC	Noble Energy Inc.	Merger 50% Assignment	388/786	
			Noble Energy Inc.	CNX Gas Company LLC	50% Assignment	542/134	
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273	
			Drilling Appalachian Corporation	Antero Resources Corporation	Assignment	421/138	
			Angles Resources was confined	CNX Gas Company LLC Noble Energy, Inc.	Assignment	425/701 427/564	
			Antero Resources Corporation Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273	
	Same	Santana	14.5				
Tract ID	Parcel	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page	
			Franklin L. Mercer and Ruth L. Mercer, h/w and Franklin L. Mercer,				
13	1-16-1	258983000	Attorney-in-Fact for Roger N. Mercer and Gloria Mercer, h/w	Anvil Oil Company	Not less than 1/8	273/506	
			Delores Rossi	Anvil Oil Company	Not less than 1/B	273/426	
			Luther Rogers and Anita Rogers, h/w	Anvil Oil Company	Not less than 1/8	273/424	
			Marie Mercer Harley Edwin Spencer and Alice Ruth Spencer, h/w	Anvil Oil Company Anvil Oil Company	Not less than 1/8 Not less than 1/8	273/422 271/645	
			Anvil Oil Company	Dominion Appalachian Development, I		373/383	
			Dominion Appalachian Development, Inc.	Dominion Appalachian Development, L		WVSO5	
			No. 1 to 1	CONSOL Gas Appalachian Developmen		200000	
			Dominion Appalachian Development, LC CONSOL Gas Appalachian Development Properties UC	Properties LLC CONSOL Gas Reserves Inc.	Merger Merger	384/191 384/191	
			CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191	
			CONSOL Gas Company	CNX Gas Company LLC	Merger	384/191	
			CNX Gas Company LLC	Noble Energy Inc.	50% Assignment	388/286	
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273	
			The Kenneth G. Wright Trust, dated 12/21/2010, by Kenneth G. Wright,	and the second			1
			Trustee Noble Energy Inc.	Noble Energy, Inc. ENX Gas Company LLC	Not less than 1/8 Assignment	492/302 / 550/273	
	Tau \$400 P	Title Opinion					
TractID	Parcel	QLS#	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	
72	100000	2000000	Franklin L. Mercer and Ruth Mercer, h/w and Franklin L. Mercer as	2752-2	E. 15. 1.3. + \$2.	1325	
17	1-12-22.2	259032000	Attorney-in-Fact for Roger N. Mercer and Gloria Mercer, h/w Delores Rossi	Anvil Oil Company Anvil Oil Company	Not less than 1/8 Not less than 1/8	273/506 273/426	
			Anita Rogers and Luther Rogers, w/h	Anvil Oil Company	Not less than 1/8	273/424	
			Marie Mercer	Anvil Oil Company	Not less than 1/8	273/422	
			Anvil Oil Company	Dominion Appalachian Development, I		323/383	
			Dominion Appalachian Development, Inc.	Dominion Appalachian Development, 1	The state of the s	WV505	
			Dominion Appalachian Development, LLC	CONSOL Gas Appalachian Development Properties LLC	Merger	384/191	
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc.	Merger	384/191	
			CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191	
			CONSUL Gas Company	CNX Gas Company LLC	Merger	384/191	
			CNX Gas Company LLC	Noble Energy Inc.	50% Assignment	388/286	/
			Nable Energy Inc.	CNX Gas Company LLC	Assignment	550/273	
			The Kenneth G. Wright Trust, dated December 21, 2010, by Kenneth G.				
			Wright, Trustee	Noble Energy Inc.	Not less than 1/8	492/304	
			Conrad E. Costilow  Shelby Rogers George, a/k/a Shelby R. George	Noble Energy Inc. Noble Energy Inc.	Not less than 1/8 Not less than 1/8	513/212 524/360	
			Patricia Lemley and Melvin Lemley, w/h	Moble Energy Inc.	Not less than 1/8	524/367	
			Patricia Ciafardo and Joseph J. Ciafardo, w/h	Noble Energy Inc.	Not less than 1/8	524/358	
			Bradley Eisiminger and Shirley Eisiminger, f/k/a Shirley George	Noble Energy Inc.	Not less than 1/II	538/499	
			Gary W. George, Sr. (Individually), and Gary W. George, Sr. (Remainder Interest of Frances M. George)	Noble Energy Inc.	Not less than 1/8	524/363	
			Beth Ann Medden (Individually) and Beth Ann Medden (Remainder Interest of France M. George)	No. 1. Company	Not less than 1/8	531/118	
			Frances M. George, a/k/a Frances Moore George	Noble Energy Inc. Noble Energy Inc.	Not less than 1/8	543/570	
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273	
			Virginia H. LeMasters Family Trust, by D. Larry LeMasters, Trustee	Noble Energy Inc.	Not less than 1/8	552/91	
			Noble Energy Inc	HG Energy II Appalachia, LLC	Assignment	570/96	
			HG Energy II Appalachia, LLC	CNX Gas Company LLC	Assignment		
						990/020	
			Linda Sue George Coen, f/k/s, Linda Sue George  Donald Robert George	CNX Gas Company LLC CNX Gas Company LLC	Not less than 1/8 Not less than 1/8	628/647 626/188	
			Donald Edward George, Jr. and Dorlyn J. Geroge, h/w	CNX Gas Company LLC	Not less than 1/8	626/193	
			Lula Mae Johnson, by her Attorney-in-Fact, Sandra Lee Harman	CNX Gas Company LLC	Not less than 1/8	639/328	
			Gregory C. Nicholson Kimberly Ann Shamblin, a/k/a Kimberly A. Roush and Gregory S. Roush,	CNX Gas Company LLC	Not less than 1/8	640/688	
			w/h	CNX Gas Company LLC	Not less than 1/8	640/693	
			William E. Nicholson	CNX Gas Company LLC	Not less than 1/8	645/242	
			Cynthia Ann Zonts and Robert Francis Zonts, w/h	CNX Gas Company LLC	Not less than 1/B	Recording in progress.  Copy attached.	
			Deborah A. Waychoff, f/k/a Deborah Ann Cole	CNX Gas Company LLC	Not less than 1/8	Recording in progress.  Copy attached.	
					Not less than 1/8	Recording in progress.  Copy attached.	
			Brenda Cole	CNX Gas Company LLC		Recording in progress.	
			James Henry Cole	CNX Gas Company LLC	Not less than 1/8	Copy attached.  Recording in progress.	
			Mikuel Ann Parrish	CNX Gas Company LLC	Not less than 1/B	Copy attached. Recording in progress.	
			Donna Parrish a/k/a Donna Rahali	CNX Gas Company LLC	Not less than 1/8	Copy attached.	
			William Michael Parrish and Cynthia Parrish, It/w Christina R. Lorence, If/k/a Christina R. Cole	CNX Gas Company LLC CNX Gas Company LLC	PRECEIVENT less than 1/8 Diffice of Oil and Gae	649/62 649/83	

Office of Oil and Gas

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Environment of Frederical Projection

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Tract ID	Tax Map & Parcel	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
	Paicei	COLUMN TO SERVICE SERV				275/388
21	1-12-22	288612000	Robert L. Underwood and Victoria M. Underwood, h/w	Drilling Appalachian Corporation	Not less than 1/8	277/685
7						277/195
						277/226
			Drilling Appalachian Corporation	Justin L. Henderson d/b/a Anvil Oil Company	Assignment	278/323
			Anvil Oil Company	Dominion Appalachian Development, Inc.	Assignment.	323/383
			Dominion Appalachian Development, Inc.	Dominion Appalachian Development, LLC	Name Change	wysos
			Darming Traparation Date Spring Ind	CONSOL Gas Appalachian Development		
			Dominion Appalachian Development, LLC	Properties LLC	Merger	384/191
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc.	Merger	364/191
			CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191
			CONSOL Gas Company	CNX Gas Company LLC	Merger	384/191
			CNX Gas Company LLC	Noble Energy Inc.	50% Assignment	388/286
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
					12000000	
Tract ID	Tax Map & Parcel	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc.	Royalty	Book/Page
27	1-12-12	258996000	James C. Ferrell and La Jetta Ferrell, h/w	Anvil Oil Company	Not less than 1/8	267/428
		40.00	Anvil Oil Company	Dominion Appalachian Development, Inc.	Assignment	323/383
			Dominion Appalachian Development, Inc.	Dominion Appalachian Development, LLC	Name Change	WV505
			Out in the guide that is a terretain of the second	CONSOL Gas Appalachian Development	113112	4,43,44
			Dominion Appalachian Development, LLC	Properties LLC	Merger	384/191
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc.	Merger	384/191
			CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191
			CONSOL Gas Company	CNX Gas Company LLC	Merger	384/191
			CNX Gas Company LLC	Noble Energy Inc.	50% Assignment	388/285
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
			TOOK ENGINE	esti da cempiny ecc	HJ/gimikiti	2004.13
Tract ID	Tax Map & Parcel	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
	1-12-13		4.7041.5			
28	1-12-13.2	258984000	Mary J. Moore	Chesterfield Energy Corporation	Not less than 1/8	270/27
			Chesterfield Energy Corporation	Anvil Oil Company	Assignment	277/69
			Anvil Oil Company	Dominion Appalachian Development, Inc.	Assignment	323/383
			Dominion Appalachian Development, Inc.	Dominion Appalachian Development, LLC	Name Change	WVSDS
				CONSOL Gas Appalachian Development		
			Dominion Appalachian Development, LLC	Properties LLC	Merger	384/191
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc.	Merger	384/191
			CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191
			CONSOL Gas Company	CNX Gas Company LLC	Merger	384/191
			CNX Gas Company LLC	Noble Energy Inc.	50% Assignment	388/286
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
	Tax Map &	Title Opinion		V	4.74	
Tract ID	Parcel	QL5#	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
31	1-12-11	242020000	Patrick Control of the Control of th	and one	Not less than 1/8	acatro.
31	1-12-11.1	243936000	Robert H. Tennant, a single man and Opal V. Tennant, a widow	Anvil Oil Company Apvil 1989-3 Joint Venture	The state of the s	267/56
			Justin L. Henderson d/b/a Anvil Oil Company	Contract States Contract Contr	Assignment	284/107
			Anvil 1989-3 Joint Venture	Dominion Appalachian Development, Inc.	Assignment	329/855
			Anvil Oil Company	Dominion Appalachian Development, Inc.	Assignment	323/383
			Dominion Appalachian Development, Inc.	Dominion Appalachian Development, U.C.	Name Change	WV505
			Actual and an arrangement of the contract of	CONSOL Gas Appalachian Development	11-7	******
			Dominion Appalachian Development, LLC	Properties LLC	Merger	384/191
			CONSOL Gas Appalachian Development Properties LLC	CONSOL Gas Reserves Inc.	Merger	384/191
			CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191
			CONSOL Gas Company	CNX Gas Company LLC	Merger	384/191
			CNX Gas Company LLC	Noble Energy Inc.	50% Assignment	388/286
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273

Office of Cil and Gas

JUL 2 4 2019

WV Department of Environmental Protection

4044



Erika Whetstone Permitting Manager 1000 Consol Energy Dr. Canonsburg, PA 15317 (724) 485-4035

West Virginia Department of Environmental Protection Office of Oil & Gas 601 57<sup>th</sup> Street, SE Charlestown, WV 25304-2345

RE: Road Letter - SHR38 Well Pad Drilling 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.

If any further information or correspondence is required, please contact me at (724) 485-4035 or <a href="mailto:ErikaWhetstone@cnx.com">ErikaWhetstone@cnx.com</a>.

Sincerely,

Erika Whetstone Permitting Manager

Office of Oil and Gas

JUL 2 4 2019

WV Department of Environmental Protection

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

Date of Notic	ce Certification: 7/25/19	API No. 4	7- 095 -		
Date of Fiotis	et certification.		Operator's Well No. SHR38KHSM Well Pad Name: SHR38		
Notice has l	been given:				
		22-6A, the Operator has provided the re	quired parties v	with the Notice Forms listed	
below for the	tract of land as follows:				
State:	WEST VIRGINIA	UTM NAD 83 Easting:	514181.6060		
County:	TYLER	Nortning:	4358028.2650		
District:	CENTERVILLE	Public Road Access:	DUCKWORTH R	RIDGE ROAD	
Quadrangle:	WEST UNION	Generally used farm name:	ASH		
Watershed:	MIDDLE ISLAND CREEK				
information r of giving the requirements Virginia Code of this article Pursuant to that the Ope	equired by subsections (b) and (c), so surface owner notice of entry to su of subsection (b), section sixteen of e § 22-6A-11(b), the applicant shall the have been completed by the applicant	erator has attached proof to this Notice	equirement was ten of this arti the surface ov that the notice	deemed satisfied as a result icle six-a; or (iii) the notice wner; and Pursuant to West	
		All with the second		O.O.	
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BECA SEISMIC ACTIVITY WAS CONDUC		RECEIVED/ NOT REQUIRED	
☐ 2. NO	TICE OF ENTRY FOR PLAT SURV	YEY or  NO PLAT SURVEY WAS O	CONDUCTED	☐ RECEIVED	
■ 3, NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED BECANOTICE OF ENTRY FOR PLAT SUR WAS CONDUCTED or		RECEIVED/ NOT REQUIRED	
		WRITTEN WAIVER BY SURFA (PLEASE ATTACH)	ACE OWNER		
■ 4. NO	TICE OF PLANNED OPERATION			☐ RECEIVED	
■ 5. PUE	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 affidavition of Service, the return receipt card or other postal receipt for certified mailing.

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SHR38KHSM WW-6AC (1/12)

### Certification of Notice is hereby given:

THEREFORE, I ERIKA WHETSTONE , 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 DRIVE By: **ERIKA WHETSTONE** CANONSBURG PA 15370 Its: PERMITTING MANAGER Facsimile: Telephone: Email: 724-485-4035 ERIKAWHEISTONE@CNX.COM Commonwealth of Pennisylvania Allotary Seal Lori L. Walker, Notary Public Greene County Notary Public My commission expires February 23, 2023 Commission number 1260781 My Commission Expire Member, Pennsylvania Association of Notaries

### 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 <a href="deepprivacyofficer@wv.gov">deepprivacyofficer@wv.gov</a>.

API NO. 47-0950
OPERATOR WELL NO. SHR38KHSM)
Well Pad Name: SHR38

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

Notice Time Requirem	ent: notice shall be prov	ided no later than the filing date of permit application.
Date of Notice: 7/23	Date Permit Applica	tion Filed: 7/23/19
Notice of:		
PERMIT FOR AN	y $\square$ CERTIF	ICATE OF APPROVAL FOR THE
WELL WORK	A Transfer of the state of the	RUCTION OF AN IMPOUNDMENT OR PIT
Delivery method pursu	ant to West Virginia C	ode § 22-6A-10(b)
☐ PERSONAL	REGISTERED	✓ METHOD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION
registered mail or by any sediment control plan registered mail or by any sediment control plan register surface of the tract or oil and gas leasehold beind described in the erosion a operator or lessee, in the more coal seams; (4) The well work, if the surface impoundment or pit as dehave a water well, spring provide water for consumproposed well work active subsection (b) of this secretords of the sheriff requiprovision of this article to Code R. § 35-8-5.7.a register.	method of delivery that required by section seven of a which the well is or is proposed by the tract of land on a cover of record of the stract is to be used for the prescribed in section nine of or water supply source loop to be the proposed by the prop	poundment or pit as required by this article shall deliver, by personal service or by quires a receipt or signature confirmation, copies of the application, the erosion and this article, and the well plat to each of the following persons: (1) The owners of record of apposed to be located; (2) The owners of record of the surface tract or tracts overlying the sed well work, if the surface tract is to be used for roads or other land disturbance as submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, which the well proposed to be drilled is located [sic] is known to be underlain by one or urface tract or tracts overlying the oil and gas leasehold being developed by the proposed placement, construction, enlargement, alteration, repair, removal or abandonment of any this article; (5) Any surface owner or water purveyor who is known to the applicant to cated within one thousand five hundred feet of the center of the well pad which is used to stic animals; and (6) The operator of any natural gas storage field within which the lift more than three tenants in common or other co-owners of interests described in ands, the applicant may serve the documents required upon the person described in the suant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any tien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. rator shall also provided the Well Site Safety Plan ("WSSP") to the surface owner and any not water testing as provided in section 15 of this rule.
☑ Application Notice	☑ WSSP Notice ☑ E&	S Plan Notice Well Plat Notice is hereby provided to:
SURFACE OWNER(	s)	☐ COAL OWNER OR LESSEE
Name: SEE ATTACHED Address:		Name: SEE ATTACHED Address:
Address.		Addiess.
Name:		☐ COAL OPERATOR
Address:		
D STIDE A CE OWNIED/	s) (Road and/or Other Di	Address:
<del></del>		
Address:		AND/OR WATER PURVEYOR(s)
		Name: SEE ATTACHED
Address:		
		☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
	s) (Impoundments or Pits	
Name:	11.11.11.11.11.11.11.11.11.11.11.11.11.	Address:
Address:		
		*Please attach additional forms if necessary Office of Oil and Gas

JUL 2 4 2019

W Department of Environmental Protection

API NO. 47- 095
OPERATOR WELL NO. SHR38KHSM
Well Pad Name: SHR38

Carlotte Control

### 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 REGENTED Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/6H-of Oil and Gas and-gas/pages/default.aspx,

### Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any parting pent of water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six Protection 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 bundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, In its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

47 0 9 5 0 2 6 5 0

OPERATOR WELL NO. SHR38KHSM

Well Pad Name: SHR38

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

### Water Well Testing:

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

### Water Testing Laboratories:

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

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

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

### Written Comment:

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

RECEIVED
Office of Oil and Gas

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

JUL 2 4 2019

WV Department of Environmental Protection

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

API NO. 47-095 0 2 6 5 0

OPERATOR WELL NO. SHR38KHSM

Well Pad Name: SHR38

### 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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> 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

JUL 24 2019

WW Department of Environmental Protection

API NO. 47-096 0 9 5 0 2 6 5 0

OPERATOR WELL NO. SHR38KHSM

Well Pad Name: SHR38

Notice is hereby given by:	
Well Operator: CNX GAS COMPANY LLC Confidential Company LLC Com	Address: 1000 CONSOL ENERGY DRIVE
Telephone: 724-485-4035	CANONSBURG, PA 15317
Email: ERIKAWHETSTONE@CNX.COM	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 - Notary Seal Lori L. Walker, Notary Public Greene County My commission expires February 23, 2023 Commission number 1260781

Member, Pennsylvania Association of Notaries

Commonweath of ferns than a County of Constitution of Subscribed and sworn before me this 23th day of Notary Public

My Commission Expires 10 Cum 43, 20

Office of Oil and Gas

JUL 24 2019

Environmental Protection

Surface Owners:

Estate of James Eli Ash, c/o Robert Bruce Ash, Executor \	7717 Summerset Drive Apex, NC 27539
Bradley James Ash	2073 Duckworth Ridge Road Alma, WV 26320
Bryan Ervin Ash	8707 Middle Island Road Alma, WV 26320
Robert Bruce Ash \	7717 Summerset Drive Apex, NC 27539
William Brent Ash	102 Heather Court Saint Robert, MO 65584
Paula Marie Keplinger \	240 Conaway Run Road Alma, WV 26320
Pamela Kay Moore	2450 Stockton Road Frankfort, KY 40601
Becannray LLC	5042 Tyler Highway Sistersville, WV 26175
Nicole Eastham	34973 State Route 800 New Matamoras, OH 45767
Alexandria Fetty	34973 State Route 800 New Matamoras, OH 45767
Rachelle Hise	37559 State Route 7 Sardis, OH 43946
Potts Place LLC	353 Foundry Street New Martinsville, WV 26155
STS Enterprises LLC /	659 Jefferson Run Road Alma, WV 26320
Bessie Warner	771 McElroy Creek Road Alma, WV 26320

### **Coal Owners:**

Estate of James Eli Ash, c/o Robert Bruce Ash, Executor	7717 Summerset Drive Apex, NC 27539
Bradley James Ash	2073 Duckworth Ridge Road Alma, WV 26320
Bryan Ervin Ash	8707 Middle Island Road Alma, WV 26320
Robert Bruce Ash	7717 Summerset Drive Apex, NC 27539
William Brent Ash	102 Heather Court Saint Robert, MO 65584
Paula Marie Keplinger 🗸	240 Conaway Run Road Alma, WV 26320
Pamela Kay Moore	2450 Stockton Road Frankfort, KY 40601
Becannray LLC	5042 Tyler Highway Sistersville, WV 26175

Office of Oil and Gas

JUL 2 4 2019

WV Department of Environmental Protection

Nicole Eastham	34973 State Route 800 New Matamoras, OH 45767
Alexandria Fetty	34973 State Route 800 New Matamoras, OH 45767
Rachelle Hise	37559 State Route 7 Sardis, OH 43946
Potts Place LLC	353 Foundry Street New Martinsville, WV 26155
STS Enterprises LLC	659 Jefferson Run Road Alma, WV 26320
Bessie Warner	771 McElroy Creek Road Alma, WV 26320
Ralph E Phillips	6411 Veterans Highway New Martinsville, WV 26155

### Surface Owner of Water Well and/or Water Purveyor(s):

ASH, JAMES E 8707 MIDDLE ISLAND RD ALMA WV 26320

ANDERS, JOHN R II \
804 PETERS RUN RD WHEELING WV 26003

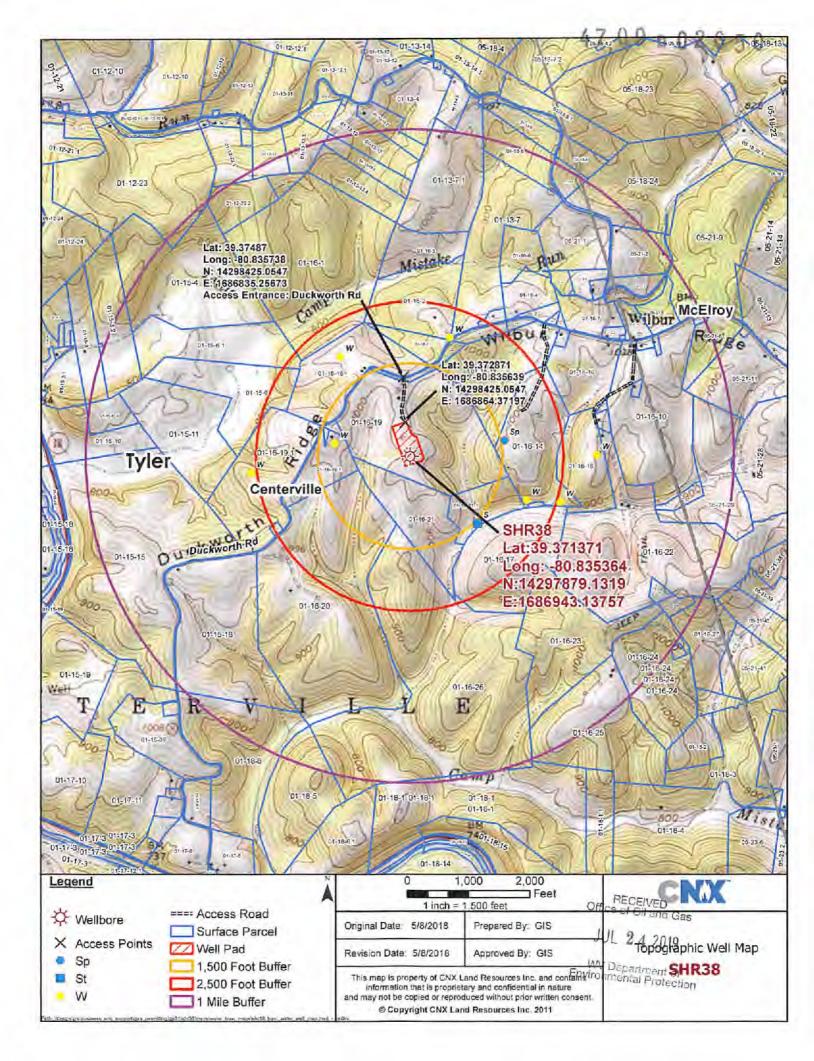
COSTILOW, CONRAD

13310 MIDDLE ISLAND RD WEST UNION WV 26456

Office of Oil and Gas

JUL 2 4 2019

WV Department of
Environmental Protection



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

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

	Requirement: Notice shall be provided ce: Date Po	at least TEN (10) days prior to filing a ermit Application Filed:	permit application.
Delivery me	thod pursuant to West Virginia Code §	22-6A-16(b)	
☐ HAND	CERTIFIED MAIL		
DELIVI	ERY RETURN RECEIPT RE	EQUESTED	
receipt reque drilling a hor of this subsec- subsection m	sted or hand delivery, give the surface ov- rizontal well: <i>Provided</i> , That notice give ction as of the date the notice was provide	wher notice of its intent to enter upon the pursuant to subsection (a), section to ed to the surface owner: <i>Provided, how wher.</i> The notice, if required, shall incl	an operator shall, by certified mail return ne surface owner's land for the purpose of an of this article satisfies the requirements wever, That the notice requirements of this ude the name, address, telephone number, or's authorized representative.
	reby provided to the SURFACE O		
Name: SEE AT	TACHED	Name:	
Address:		Address:	
the surface of State: County: District: Quadrangle: Watershed:	wner's land for the purpose of drilling a h WEST VIRGINIA TYLER CENTERVILLE WEST UNION MIDDLE ISLAND CREEK	Orizontal well on the tract of land as for Easting:  Output  Discrete the tract of land as for Easting:  Northing:  Public Road Access:  Generally used farm name:	DUCKWORTH RIDGE ROAD  ASH
This Notice Pursuant to facsimile nur related to ho	Shall Include: West Virginia Code § 22-6A-16(b), thi mber and electronic mail address of the rizontal drilling may be obtained from the	e operator and the operator's authorize the Secretary, at the WV Department o	ress, telephone number, and if available, ed representative. Additional information f Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Notice is he	ereby given by:		Office of Oil and Gas
Well Operato	DIT: CNX GAS COMPANY LLC	Authorized Representative:	ERIKA WHETSTONE
Address:	1000 CONSOL ENERGY DRIVE	Address:	1000 CONSOL ENERGY DRIVE 2 4 2019
CANONSBURG	PA 15370	CANONSBURG PA 15370	w WV Dena I
Telephone:	724-485-4035	Telephone:	724-485-4035 WV Department of Environmental Protection
Email:	ERIKAWHETSTONE@CNX.COM	Email:	ERIKAWHETSTONE@CNX.COM
Facsimile:		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.

Surface Owners:

Estate of James Eli Ash, c/o Robert Bruce Ash, Executo	7717 Summerset Drive Apex, NC 27539
Bradley James Ash	2073 Duckworth Ridge Road Alma, WV 26320
Bryan Ervin Ash	8707 Middle Island Road Alma, WV 26320
Robert Bruce Ash	7717 Summerset Drive Apex, NC 27539
William Brent Ash	102 Heather Court Saint Robert, MO 65584
Paula Marie Keplinger 🔍	240 Conaway Run Road Alma, WV 26320
Pamela Kay Moore \	2450 Stockton Road Frankfort, KY 40601
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Bessie Warner	771 McElroy Creek Road Alma, WV 26320

Office of Oil and Gas

JUL 2 4 2019

Operator Well No. SHRSSKHSM 6 5 0

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

Notice Time Date of Notic	Requirement: notice shall be proved:	vided no later than the filing date rmit Application Filed:	e of permit application.
Delivery met	hod pursuant to West Virginia (	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 the	requested or hand delivery, give to operation. The notice required by exprovided by subsection (b), section horizontal well; and (3) A propose the surface affected by oil and gas of	the surface owner whose land wi by this subsection shall include: on ten of this article to a surface and surface use and compensation operations to the extent the damage	permit application, an operator shall, by certified mail all be used for the drilling of a horizontal well notice of (1) A copy of this code section; (2) The information owner whose land will be used in conjunction with the on agreement containing an offer of compensation for ages are compensable under article six-b of this chapter. The address listed in the records of the sheriff at the time
Notice is her	eby provided to the SURFACE (	OWNER(s)	
	s listed in the records of the sheriff		
lat the addres		Name:	
Name: SEE AT	TACHED		
Name: SEE AT Address:  Notice is her	eby given:	Address:	ndersigned well operator has developed a planned
Name: SEE AT Address:  Notice is her Pursuant to W operation on State: County:	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pu WEST VIRGINIA TYLER	Address:  notice is hereby given that the usurpose of drilling a horizontal well and the UTM NAD 83	Ell on the tract of land as follows: Easting: 514181.6060 Northing: 4358028.2650
Name: SEE AT Address:  Notice is her Pursuant to W operation on State: County: District:	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pu WEST VIRGINIA TYLER CENTERVILLE	Address:  notice is hereby given that the usurpose of drilling a horizontal well by UTM NAD 83  Public Road Acce	Ell on the tract of land as follows:  Easting: 514181.6060  Northing: 4358028.2650  DUCKWORTH RIDGE ROAD
Name: SEE AT Address:  Notice is her Pursuant to W	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pu WEST VIRGINIA TYLER	Address:  notice is hereby given that the usurpose of drilling a horizontal well and the UTM NAD 83	Ell on the tract of land as follows:  Easting: 514181.6060  Northing: 4358028.2650  DUCKWORTH RIDGE ROAD
Name: SEE AT Address:  Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed:  This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters,	eby given:  /est Virginia Code § 22-6A-16(c), the surface owner's land for the property of the	Address:  notice is hereby given that the usurpose of drilling a horizontal western that the usurpose of drilling a horizontal western that the usurpose of drilling a horizontal western this notice shall include:  this notice shall include: (1)A control to a surface owner whose large and compensation agreement content the damages are complete obtained from the Secretary,	Ell on the tract of land as follows:  Easting: 514181.6060  Northing: 4358028.2650  DUCKWORTH RIDGE ROAD  ASH  The property of this code section: (2) The information required and will be used in conjunction with the drilling of a containing an offer of compensation for damages to the ensable under article six-b of this chapter. Additional
Name: SEE AT Address:  Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed:  This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters, gas/pages/def	eby given: //est Virginia Code § 22-6A-16(c), the surface owner's land for the property of the surface owner's land land can be surface of the late of	Address:  notice is hereby given that the usurpose of drilling a horizontal well urpose of drilling a horizontal well urpose	ell on the tract of land as follows:  Easting: 514181.6060  Northing: 4358028.2650  DUCKWORTH RIDGE ROAD  ASH  The properties of this code section: (2) The information required and will be used in conjunction with the drilling of a containing an offer of compensation for damages to the ensable under article six-b of this chapter. Additional at the WV Department of Environmental Protection 1-926-0450) or by visiting www.dep.wv.gov/oil-and-
Name: SEE AT' Address:  Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed:  This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters, gas/pages/def	eby given:  //est Virginia Code § 22-6A-16(c), the surface owner's land for the pure west virginia  TYLER  CENTERVILLE  WEST UNION  MIDDLE ISLAND CREEK  Shall Include: //est Virginia Code § 22-6A-16(c), ed by W. Va. Code § 22-6A-10(b) ell; and (3) A proposed surface use field by oil and gas operations to the lated to horizontal drilling may located at 601 57th Street, SE, iault.aspx.  r: CNX GAS COMPANY LLC	Address:  notice is hereby given that the usurpose of drilling a horizontal we use UTM NAD 83  Public Road According Generally used father than the surface owner whose large and compensation agreement compensation agreement compensation agreement compensation agreement compensation the Secretary, Charleston, WV 25304 (304)  Address: 100	ell on the tract of land as follows:  Easting: 514181.6060  Northing: 4358028.2650  ESS: DUCKWORTH RIDGE ROAD  ASH  The properties of this code section: (2) The information required and will be used in conjunction with the drilling of a containing an offer of compensation for damages to the ensable under article six-b of this chapter. Additional at the WV Department of Environmental Protection 1-926-0450) or by visiting www.dep.wv.gov/oil-and-1-926-0450) or by visiting www.dep.wv.gov/oil-and-1-926-0450 DEPARTMENT OF THE PROPERTY OF THE
Name: SEE AT Address:  Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed:  This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters, gas/pages/def	eby given: //est Virginia Code § 22-6A-16(c), the surface owner's land for the property of the surface owner's land land can be surface of the late of	Address:  notice is hereby given that the usurpose of drilling a horizontal we use UTM NAD 83  Public Road According Generally used father than the surface owner whose large and compensation agreement compensation agreement compensation agreement compensation agreement compensation the Secretary, Charleston, WV 25304 (304)  Address: 100	ell on the tract of land as follows:  Easting: 514181.6060  Northing: 4358028.2650  DUCKWORTH RIDGE ROAD  ASH  The properties of this code section: (2) The information required and will be used in conjunction with the drilling of a containing an offer of compensation for damages to the ensable under article six-b of this chapter. Additional at the WV Department of Environmental Protection 1-926-0450) or by visiting www.dep.wv.gov/oil-and-

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.

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Surface Owners:

Estate of James Eli Ash, c/o Robert Bruce Ash, Executor	7717 Summerset Drive Apex, NC 27539
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Bessie Warner	771 McElroy Creek Road Alma, WV 26320

Office of Oil and Gas

JUL 2 4 2019



### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

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

June 28, 2019

Byrd E. White, III Secretary of Transportation

Jimmy Wriston, P. E. Deputy Secretary/ Acting Commissioner

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

Subject: DOH Permit for the SHR-38 Pad, Tyler County SHR38KHSM Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0331 issued to CNX Gas Company LLC, for access to the State Road for a well site located off Tyler County Route 58/2 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE 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 October 1, 2018.

Gary K. Clayton

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator RECEIVED Office of Oil and Gas

JUL 2 4 2019

WV Department of Environmental Protection

Cc: Shannon Miller

CNX Gas Company LLC

CH, OM, D-6

File

### 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

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

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

Type: Ammonium chloride CAS: 12125-02-9

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

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

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Office of Oil and Gas

JUL 2 4 2019



### SITE AS-BUILT SHRL38 WELL SITE

# CENTERVILLE DISTRICT TYLER COUNTY, WEST VIRGINIA CNX RESOURCES CORPORATION

ENTRANCE ACCESS

### NOTES:

- SURVEY DATA REFERENCE TO WY-SPC NORTH ZONE HORIZONTAL (NAD 63-2011) VERTICAL (NAVD 68)
- TOPOGRAPHIC DATA SURVEY DERIVED (83/88) 2-FT. CONTOUR INTERVAL
- TOPOGRAPHIC PLAN BASED ON FIELD RUN SURVEY BY
   DIEFFENBAUCH & HRITZ LLC ON AUGUST 12, 2019

#### LEGEND

1640	SURVEYED MAJOR CONTOU SURVEYED MINOR CONTOU
	ROADWAY
-x-x-x-x-	FENCE LINE
CHF OHF	OVERHEAD ELECTRIC
-UE-UE-UC-	UNDERGROUND ELECTRIC
-G-G-G-G-	GASLINE
	SATFENCE
-ds-on-on-	COMPOST FILTER SOCK ISIZE NOTED IN PLANI
→ → →	DITCH FLOW LINE
	TREE LINE
O Pro	POWER POLE
Laur	GLY WIRE
GLM O	GAS LINE MARKER
Ø	TELEPHONE BOX
П	RISER (SIZE NOTED IN PLAN)
"H	WATER VALVE
	RIP-RAP
	PADIADCESS ROAD
ZZZZ	ASPHALTENTRACE

SAFETY BERM



REFERENCES: UNITED STATES GEOLOGICAL SURVEY 7.5 MINUTE SERIES - WEST UNION QUAD

LOCATION MAP

PROJECT # 19016-030 AUGUST 2019

DIEFFENBAUCH & HRITZ, LLC

#### SHEET INDEX

- 1 COVER SHEET
- 2-3 PLAN VIEW
- 4 MAIN ACCESS ROAD PLAN / PROFILE
- 5 SECOND ACCESS ROAD PLAN / PROFILE





SAC DIECKED NEP MITRIANS AUG. 201 SATE 1 MITRIANS THOUSE THO

& HRITZ LLC

IEFFENBAUCH & H

P NOLLY

ESOURCES CORPORATION CONSOLENERS PAINT

NERVILLE DISTRICT

ER SHEET

1 OF 6

