

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 SHR38QHSM 47-095-02652-00-00

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: SHR38QHSM

Farm Name: JAMES E. ASH ET AL

U.S. WELL NUMBER: 47-095-02652-00-00

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.

CO	N	m	П	T	\cap 1	VC
\sim	-					

- 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.



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

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 Windish Donates of C

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

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, 47-095-02650, 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."

WW-6B (04/15)

API NO. 47- 095 -		
OPERATOR WELL	NO.	SHR38QHSM
Well Pad Name:	SHR38	}

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

1) Well Operator: CN	IX Gas Co	mpany, LLC	494458046	Tyler	Centervill	West Union
-			Operator ID	County	District	Quadrangle
2) Operator's Well Nu	mber: SHF	R38QHSM	Well Pad	Name: SHR	38	
3) Farm Name/Surface	Owner: A	sh	Public Roa	d Access: Duc	kworth Rid	lge Road 58/2
4) Elevation, current g	round: 1	026' EI	evation, proposed	post-constructi	on: 1012'	
5) Well Type (a) Ga	s	X Oil _	Unde	erground Storag	ge	
Other						· · · · · · · · · · · · · · · · · · ·
(b)If G	as Shall	owX	Deep	-		
	Horiz	ontal X				YCB
6) Existing Pad: Yes or	r No	Yes				<i>8</i> /23/2019
7) Proposed Target For Target formation is N		•	-	_		
			, , , , , , , , , , , , , , , , , , ,	Spooted formati	J. Picagaic	.000 poi
8) Proposed Total Vert			Shale (will not pe	enetrate Onon	daga)	
9) Formation at Total \	•		o riale (Will flot pe		daga/	
10) Proposed Total Me	easured Dep					
11) Proposed Horizont	tal Leg Leng	gth: 6163'				. <u></u>
12) Approximate Fresh	h Water Stra	ata Depths:	85', 180', 225'			
13) Method to Determi	ine Fresh W	ater Depths:	Offset water well in	nformation col	lected durir	ng predrill samplin
14) Approximate Saltv	water Depth	s: 1932'				
15) Approximate Coal	Seam Dept	hs: No known	mineable coal se	ams; 430'-432	2', 480'-482) ¹
16) Approximate Dept	h to Possib	le Void (coal m	ine, karst, other):	None anticipat	ted	
17) Does Proposed we directly overlying or a			ms Yes	No		x
(a) If Yes, provide M	line Info:	Name:			··	
		Depth:				RECEIVED
		Seam:				Office of Oil and Ga
		Owner:				AUG 27 2019
						WV Department of Environmental Protect

WW-6B (04/15)

API NO. 47095	
OPERATOR WELL NO	SHR38QHSM
Well Pad Name: SHR	38

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	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	13181	13181	2424 / TOC @ 2100'
Tubing	2.375	New	J-55	4.7		TBD	N/A
Liners	N/A						



TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	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:			RECE Office of Oi	VED Land Gas

AUG 27 2019

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

API NO. 47- 095 -	
OPERATOR WELL NO. SHR38QHSM	_
Well Pad Name: SHR38	

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.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 15.57
- 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 voluntation of one hole voluntation of one hole voluntation of one hole voluntation.

AUG 27 2019

WV Department of Environmental Protection

*Note: Attach additional sheets as needed.

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

RECEIVED
Office of Oil and Gas

JUL 24 2019

WV Department of Environmental Protection



DRILLING WELL PLAN

SHR-38Q-HSM (Marcellus HZ) Marcellus Shale Horizontal

Tules County MA

	1							Tyler Co	unty, WV		
				3	SH	R-38Q-H	ISM SHL	N 320	239.03, E 1622467	.65 (NAD27)	
Ground Elevation	1	012 GL E	levation		SHR-38Q-HSM LP			N 320737.2, E 1623187.85 (NAD27) N 326564.53, E 1621181.34 (NAD27)			
Azimuth		341°			SH	R-38Q-H	ISM BHL				
		1000	GEOLOGY	MD	TVD	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS	
WELLBORE DIAGRAM	HOLE	CASING	GEOLOGY	MU	IVL	MOD	GEMENT	CENTRALIZERS	CONDITIONING		
	24*	20" L/S	Conductor	80	80	AIR	To Surface	N/A	N/A	Stabilize surface filVsoil	
			Shallowest Fresh Water		85						
			Deepest Fresh Water		225		15.6 ppg Class A + 1% to 3% CaCl2	Centralize every other		Set through fresh water zone	
1001 1004 1		13-3/8" 54.5#	Washington Coal		430	AIR/	+ 1/4 pps Flake	joint from shoe to surface	Ensure the hole is clean at	Set through coal zones Cemented to surface	
	17-1/2*	J-55 BTC	Red Beds		432	FW Mist	20% OH Excess Yield = 1.19	surace	section TD		
			Waynesburg Coal		580		TOC @ surface	Bow spring centralizers		No known mineable coal sean	
DB1 1991			FW / Coal Casing	600	500						
			Big Lime		1867		100000			Set through potential salt water	
		9-5/8* 36.0#	Big Injun		1932		15.6 ppg Class A + 0% to 2% CaCl2 + 1/4 pps Flake	Centralize every 3rd joint from shoe to surface	Soap the hole as needed and ensure the nois is clean	zones Cemented to surface	
101 100			Price		2072	AIR/					
101 101	12-1/4"	J-55 LTC	Weir	2232 Soar	Soap 20% OH Excess Yield = 1.19	Suriace	at section TD	Casing to be set below the Bi			
1991 1991			Berea 2422 TOC @ surface Box	Bow spring centralizers		Injun and Berea and into Devonia Shale					
104 119			Intermediate Casing	2600	2600					States	
711			Gordon		2642						
10 10			Warren		3337						
	8-3/4"		Benson		4917	15.0 ppg Class A or H		Once at TD, circulate at max flowrate with max rotation	Note: Actual centralizer placement		
	Tangent		Alexander 51	5162	AIR	with additives (retarder,					
			Cashaqua		6162		suspension agent, gas block, defoamer, fluid	Centralize every joint	until shakers clean-up (typically requires multiple	Note: Actual centralizer placement may be changed due to hole conditions Note: Actual cement blends may vary slightly depending upon service company utilized	
		5-1/2" 20.0#	Middlesex		6267		loss, extender, etc.)	from shoe to TOC	bottoms-up)		
		P-110CY BPN	West River		6307		10% OH Excess	Single-piece/rigid bow	Once on bottom with casing,		
			Burkett		6377		Yield = 1.10	centralizers	circulate a minimum of one		
	8-1/2* Curve	1	Tully		6407	12.0-12.8	TOC @ >= 500' above		hole volume prior to pumping cement		
V M	& Lateral		Hamilton	- 1	6428	ppg SOBM	9-5/8" shoe		pompany content		
			Marcellus		6447						
11 11	4		Production Casing	13181	6480						

WV Department of Environmental Protection

27 2019



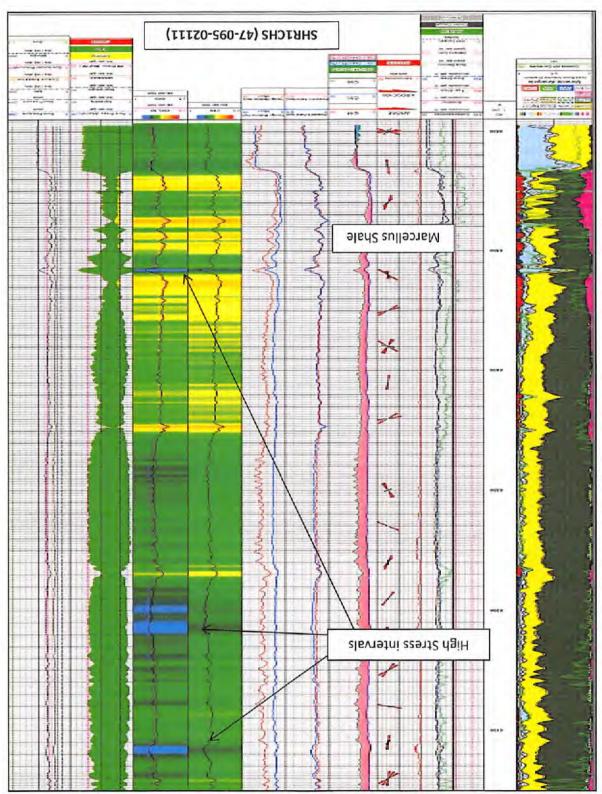
SHR38 Pad Frac - SOG Review

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.

898096015



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.

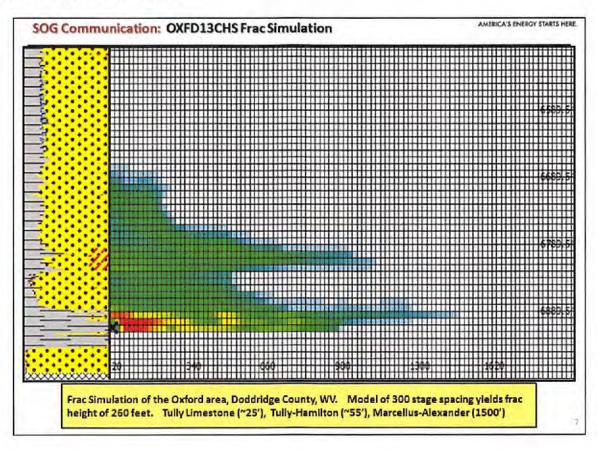




Figure 3. All wells within 500' buffer around the SHR38 pad have been reviewed and listed below.

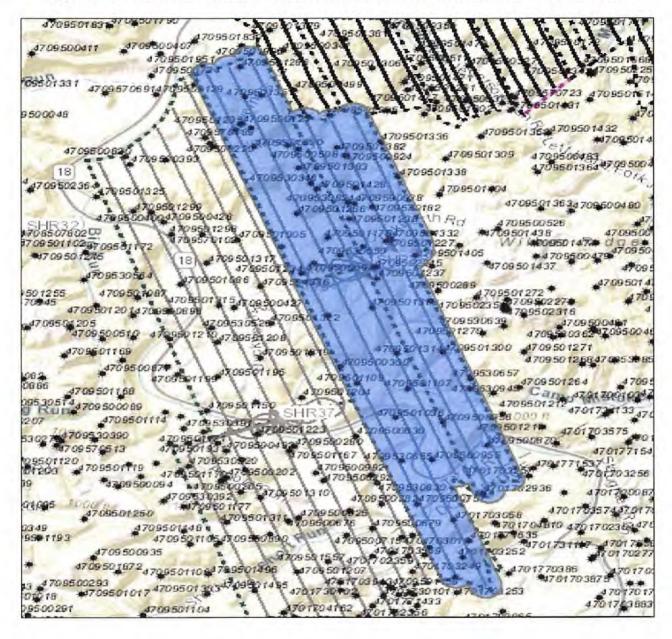




Figure 4. All wells within 500' buffer around the SHR38 pad have been reviewed and listed below.

API	STATE	COUNTY	LATITUDE	LONGITUDE OPERATOR	STATUS	WELL_NAME	WELL NO	TD	FMTD	ELEVATION
4701702351	WV	Doddridge	39,33791934	-80,82944913 Ritchie Petroleum Corp	Oil and Gas	L G Hammer 2		2396	Weir	990
4701702452	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	1	5500	Alexander	1092
4701703586	WV	Doddridge	39.37483806	-80.83367761 Consol Gas	Not Drilled	Never Drilled (Canceled)		not drilled	not drilled	960
4701771437	WV	Doddridge	39.33435122	-E0.82657418	not available	McCutchan-Haines			P	1135
4701771535	WV	Doddridge	39.33871526	-80.82489324	not available	N A Joseph				977
4709500097	wv	Tyler	39.37191314	-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	1	1952	Squaw	873
4709500123	WV	Tyler	39.38858257	-80 85033279 J A & M Oil and Gas	Oil w/ Gas Show	D D Davis	3	1883	Big injun (undiff)	803
4709500208	WV	Tyler	39.39188259	-80 84805585 Unknown	Dry w/ O&G Show	Frank H Ash	1	7109	Price Fm & equivs	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 Moore		1900	Big Injun (undiff)	867
4709500757	wv	Tyler	39.34307445	-80 83071912 Allied Energy	Oil and Gas	Delmer Mulvay	1	2209	Berea Ss	760
4709500870	WV	Tyler	39.35004941	-80.B2286032 Greylock Conventional LLC	Gas	Izetta B Gamer	6	4901	Benson	790
4709500875	wv	Tyler	39.36557401	-80.84080595 Triad Hunter	Gas	Jacob L Dillinn	1	2387	Berea Ss	975
4709500924	WV	Tyler	39.38475329	-80.83893904 Greylock Conventional LLC	Gas	W Paul McCutchen	+		Alexander	735
4709500955	WV	Tyler	39.3483235	-80.82911817 Greylock Conventional LLC	Gas	Jay & Mary Collins		5279	Alexander	883
4709500956	WV	Tyler	39.35286655		Gas	Jay & Mary Collins			Alexander	1028
4709501036	wv	Tyler	39.35339266	THE RESERVE THE PROPERTY OF TH	Gas	Edwin D Mulvay et ux		5177	Bensan	763
4709501101	WV	Tyler	39.37483806		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	-80.82472829 Alliance Petroleum	Gas	Karen Jane Osborne	1	5240	Alexander	978
4709501109	-	Tyler	39.35759781	-80.837443 Alliance Petroleum	Gas	Karen Jean Osborne	- 2		Alexander	943
4709501178	wv	Tylet	39.37483806		Not Drilled	Never Drilled (Canceled)			not drilled	960
4709501206	wv	Tyler	39.37483806		Not Drilled	Never Drilled (Canceled)			oot drilled	960
4709501226		Tyler	39.3728251	-80.839312 Alliance Petroleum	Dry	Verna O Ash	1		Bensan	1013
4709501227	_	Tyler	39.37456504		Gas w/ Oil Show	Verna O Ash	2		Bensan	986
4709501234	_	Tyler	39.37064915		Gas	Jam'es E Ash	1		Benson	909
4709501235	_	Tyler	39.38838857		Gas	Geneva Fouts Bullman	1		Bensan	812
4709501237	_	Tyler	39.37005898		Gas	Verna D Ash	3		Bensan	1029
4709501238	_	Tyler	39.37722216		Gas	Edna Dillon	1		Bensan	957
4709501254	-	Tyler	39.36731382		Gas	Charles Lee Cumberledge	1		Bensan	1018
470950126	V.	Tyler	39.37780228	-80.8441709 Alliance Petroleum	Dry	David A Preston	1		Benson	747
470950126	iv	Tyler	39.3808472		Gas	Lawrence Mercer	1		Bensan	850
470950128:	-	Tyler	39.38592343	-80.8452929 Alliance Petroleum	Gas	Bruce & Verpnica Smith	1		Benson	863
4709501285	-	Tyler	39 38954841		Gas	James C Ferrell	1		Bensan	1032
4709501286	_		39.39534969				1		Bensan	826
4709501200	_	Tyler		-80.8505278 Schultz Run Gas Company	Gas w/ Oil Show	Robert H Tennant	2		Bensan	
	-	Tyler	39,36122369		Gas	John R Pratt	1			949
4709501304	_	Tyler	39.37384024			Duane Clark et al	- 1		Benson	758
4709501312	-	Tyler	39.37483806		Not Drilled	Never Drilled (Canceled)	-		not drilled	960
4709501314		Tyler	39.36107879		Gas	Charles Daughtery et al	3		Benson	926
4709501318	_	Tyler	39.36658893	80.83576207 Greylock Conventional LC	Gas Net Dellled	Charles Daughtery et al	1		Benson	1012
4709501332		Tyler	39.37483806		Not Drilled	Never Drilled (Canceled)			nat drilled	960
4709501336		Tyler		-80.83482814 Alliance Petroleum	Gas	Elmer Cecii	1		Benson	956
4709501338		Tyler		-80.83277518 Alliance Petroleum	Gas	Timothy N Ingoglia	1		Bensan	949
4709501350		Tyler		-80.84902981 Alliance Petroleum	Gas	Ryan J Lind et ux	1	_	Bensan	785
4709501351		Tyler	39.39172362		Gas	Robert H Tennant	2		Benson	924
4709501382		Tyler		-80.83968703 Alliance Petroleum	Gas	Matthew Ash	3		Benson	1049
4709501383		Tyler		-80.84398492 Alliance Petroleum	Gas	Matthew Ash	4		Benson	1027
4709501405		Tyler	39.37282494		Gas	Conrad Costilow	1-A		Sig Injun (undiff)	976
4709501428		Tyler		-80.84192896 Alliance Petroleum	Gas	Lawrence Mercer Hrs	5		Bensan	893
4709501486		Tyler		-80,83520209 Drilling Appaachian Corp	Dry	Verna O Ash	4	-	Big Injun (undiff)	1036
4709501951	_	Tyler	39.39563978		Gas w/ Oil Show	Donna Marie Vandine	2		Marcellus Sh	728
4709502245	_	Tyler		-80.83562008 Noble		J E Ash et al	SHROBL		net drilled	1019
4709530346		Tyler	39,38142731		Gas	Lucretta Mercer	. 2		Squaw	954
4709530650		Tyler		-80.83688306	Gas	P P Doak			Big Injun (undiff)	972
4709530657	_	Tyler	39.35807958		Gas	A U Dayis	- 1		Big injun (undiff)	885
4709530824	_	Tyler		-80,83856504	Gas	Lawrence Mercer	1		Squaw	738
4709530855	_	Tyler		-80.83255109	Gas	Wm Smith			Big Injun (undiff)	763
		Pro Ame	30 37//0/1717	-80.84080697	Gas	Martin M Grove	1	2010	Big injun (undiff)	903
4709530887	_	Tyler								
	WV	Tyler Tyler	39.37864113		not available	John Mercer	1		Big injun (undiff)	770 774

WW-9 (4/16)

API Number 47 - 095 - 03653 Operator's Well No. SHR38 QHSIY

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 Co.	de 494458046
Watershed (HUC 10) Headwaters Middle Island Creek Quadrangle West Univ	on
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work Will a pit be used? Yes No V	? Yes No No
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 Underground Injection (UIC Permit Number 47-001-00561, 47-0) Reuse (at API Number SHR37 wells API TBD Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain No Pits	97-01514, 47-097-01613, 34-013-2-0609)
Will closed loop system be used? If so, describe: Yes	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil bas	
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	atic oil-based mud (SOBM) from curve KOP to lateral TD
Additives to be used in drilling medium? Bactericide, Polymers, and Weighting Agents	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Loganization	cuties only All other with to an apostaved longiful
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawd	ust) N/A
-Landfill or offsite name/permit number? See attached.	
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cutting. West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection where it was properly disposed.	
I certify that I understand and agree to the terms and conditions of the GENERA on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environment of the permit are enforceable by law. Violations of any term or condition of law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familia application form and all attachments thereto and that, based on my inquiry of those obtaining the information, I believe that the information is true, accurate, and complet penalties for submitting false information, including the possibility of fine or imprisonment.	onmental Protection. I understand that the the general permit and/or other applicable or with the information submitted on this individuals immediately responsible for e. I am aware that there are significan
Company Official Signature Cruber Stubent	Office of Oil and Gas
Company Official (Typed Name) Erika Whetstone	OCT 01 2019
Company Official Title Manager - Permitting	0C1 VI 2013
27th 1 C 4	WV Department of Environmental Protection
Subscribed and sworn before me this 1 th day of Sept	20 Commonwealth of Pennsylvania - Notary Seal
	Sora M. Micoli, Notary Public Notary Public Washington County My commission expires March 11, 2023
My commission expires 03/11/7.023	Commission number 1288863 Member, Pennsylvania Association of Notaries

CNX Gas Company, LLC Proposed Revegetation Treatment: Acres Disturbed 15.57 Lime according to pH test Tons/acre or to correct to pH 7. Fertilizer type 10-20-20 Fertilizer amount 500 lbs/ac	cre	6.5
Fertilizer type 10-20-20	cre	
Fertilizer amount 500 lbs/ac		
Mulch hay or straw @ 2 Tons/acre		
Seed M	<u>lixtures</u>	
Temporary	Perman	ent
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
Photocopied section of involved 7.5' topographic sheet.		
Plan Approved by:		
Comments:		
		RECEIVED Office of Oil and Gas
		OCT 01 2019
		WV Department of Environmental Protecti
Title:	Date:	

Disclaimer: Vendors have been appoved for the below category by ENV. UPDATED AGREEMENT with MSCM MUST BE CONFIRMED.

	epublic Services (Allied Waste) Gas Specific Waste Streams					Other Accepted Waste Streams						- transmir					
Landfill	Location		Location		Drill *	Waste	Waste	Centaminated Soil	Construction & Demolition Waste	Industrial	Sludge	Friable	Non-Frinble Asbestos	Process	Selidification	Municipal Solid Waste	Contact Information
CLean County	Bloomington	IL.	X	X		X	X	X	X	X	X	X		X			
RC/Coles County	Charleston	IL	X	X		X	X	X	X	X	X	X		X			
rickyard Disposal	Danville	IL.	X	X		X	X	X	X	X	X	X		X			
outhern Illinois Regional	De Soto	IL												X			
se County	Dixon	IL.	X	X		Х	X	X	X	X	X	X		X			
pper Rock Island	East Moline	IL	X	X	A STATE OF	X	X	X	X	X	X	х		X			
load County	Greensville	IL.	X	X	N	X	X	X	X	X	X	х		X			
licois	Hoopeston	IL.	X	X	Fy	X	X	X	X	X	X	Х		X			
andComp	LaSalle	IL	X	X	Section 2	X	X	X	X	X	X	X		Х	317-921-1667 or 480-627-2700		
itchfield-Hillsboro	Litchfield	IL.	X	X	V	X	X	X	X	X	X	X	1	X	1-800-634-0215		
nyirontech	Morris	IL.	X	X		X	X	X	х	X	X	X	Carried Street	X			
ivingsion	Pontiac	IL.	X	X	1	Х	X	X	Х	100000000000000000000000000000000000000	X	X	A COLUMN	X			
cxtna	Roxana	IL	X	X		X	X	X	X	X	X	X	X	X			
angamon Valley	Springfield	IL.	X	X		X	X	X	X	X	X	X		x			
lenson Valley	Frankfort	KY	Х	X	TO STATE OF	X	X	X	X	X	X	x		X	4		
luc Ridge	Irvine	KY		X	The second	X	X	X	X	X	X	X		X			
forehead	Morehead	KY		X		Х	X	X	X	X	X	X		X	1		
iroen Valley	Rosh	KY	х	X	District Property	X	X	X	X	X	X	X	X	X			
herokee Run	Bellefontaine	OH	5 THE 1			X	X	X	X	THE REST	X	X		X			
Villiams County	Bryan	OH				X	X	X	X	X	X	X		X			
ounty Environmental	Carry	OH				X	X	X			X	X	1000	X			
elina	Celina	OH				X	X	X	X		X	X		X			
Carbon-Limestone**	Lowellville	OH	X	X		Х	X	X	X	0 - 0 - 0	A COLUMN	X	X	X	Jack Palermo:		
ountywide Landfill**	East Syarta	OH	X	X		X	X	X				2000		X	work: 330-536-8013		
orain County	Oberlin	OH				X	X	X	X	1 1 2 -	Secretary and	X		X	cell: 330-806-9660		
akland Marsh	Shilob	OH			1		X	X	X	X	X		Marine Control	X	1		
mperial	Imperial	PA	- 3			X	X	X	X	X	X			X	Barbara Harsanye		
conesto _i n	Morgantown	PA				X	X		X	X	X	х		X			
rpaswick.	Lawrenocville	VA				X	X	X	X	X	X	X		X	work: 330-536-8013 x 120		
ing and Queen	Little Plymouth	VA				X	X	X	X	X	X	X	Year and the second	X	cell: 330-423-7267		
old Dominion	Richmond	VA			1	X	X	X	X	X	X	X		X			
ycamore	Hurricane	WV			1	X	X	X	X	Branch Co.	1	X		X			
hort Creek	Wheeling (Short Creek)	TN		Х	-	X	X	X	X			X	The second	X			

RECEIVED
Office of Oil and Gas
OCT 0 1 2019
WV Department of
Environmental Protection

Waste Vizne gement Industrial Landfills			Gas Spec	ille Waste	Streams	10000000			ther Accepted	d Waste Stream	nt				Contact Information
Landfill	Location		Drill *	Waste	Waste Brine	Contaminated Sell (Including Petroleum)	Construction & Demolition Waste	Industrial Weste	Studge	Friable Asbratos	Non-Frizble Asbestos	Process Waste	Solidification Services	Municipal Solid Waste	Contact Information
rden Landfill		PA		X		X	X	X	X		(Fig. 6) Calculus	X	X	X	
South Hills (Armoni)	South Park	PA	X	X			X	X	X		I Common	X	X	X	
Kelly Run	Elizabeth	PA	X	X	1	X	X	X	X	I STATE OF		Х	X	X	
Valley Landfill	Irwin	PA	X	X		X	X	X	X	X	X	X	X	X	
Evergreen Landfill	Blairsville	PA	Х	X	Pate Of	X	X	X						X	Scott Allen: 412-604-2256
Charleston Landfill Kanawha County	Charleston	wv	х	x		x	x	x	x			х		x	
deadowfill Landfill	Bridgeport	WY	X	X	District to	X	X	X	X	X	X	X	X	X	
orthwestern Landfill	Parkersburg	WV		X	and the	X	X	X	X			Х	X	X	
S&S Gradin: Landfill	Clarksburg	WY		Х		X	X	X	X			х		X	
American Landfill	Waynesburg	OH	X	X	0	X	X	X	X	X	X	X	X	X	
Suborban RDF	Glenford	OH	X	X	The same	X	X	X	X	X	X	X	X		Patty Landolt 262-532-8001
Coshocton Lundfill***	Coshocton	OH	X	X		X	X	X						X	John Miller: 1-800-963-4776
Mahoning Landfill	New Springfield	Offi	N.	X		X	X	X			X	_ X		X	
Landfill	Location		Drill* Waste Waste		Contaminated Soil	Construction & Demolition Waste	Industrial Waste			Non-Frinble Asbestos	Process Waste	Solidification Services	Municipal Solid Waste	Contact Information	
	-	_	Cuttings	Liners	Brine	(Including Petroleum)	Demolition Waste	Waste		Aspestos	Asbestos	** 255C	Services		Mike Home: 412-552-4427
Westmoreland Waste (WWLC Group)	III Conner Lane, Belle Vernon, PA 15012	PA	x	x		x	х	x	x	x	x		x	х	Mark Thomas: 724-929-7694
MAX Environmental Butger Facility	200 Max Drive, Bulger, PA 15010	PA	x	x		x	x	x	x				x	x	Carl Spadaro: 4 2-343-4900
MAX Environmental Yukon Facility	233 MAX Lane Yukon PA 1:698	PA	x	x		x	х	x	x				x	x	cell: 412-445-9789
Apex Sanitary landfill Area Environmental	II County Road 78 Amsterdam, Ohio 43903	OH	x	x		x	x	x	x				x	x	Joe Teterick: 740-275-2887 Joer a els-company.com
Rumpke, Mt. Sterling	30 Larison Rd, Jeffersonville, KY 40337	KY	x	х		×	x	х		x	x		1	x	Carl Walter: 513-623-2471
Rameke Consolidated) Laurel Ridge Landfill	3612 E State Highway	KY	x	x		x	x	x		x	x	х		x	Bruce Cruuch: Work: 606-864-7996 Cell: 606-219-0261
Waste Connections of KY	Chestnat Valley 1184 McClellandtown Rd, McClellandtown, PA	PA	x	x		х	x	x	x					x	
Advanced Disposal	Greenwee Landfill; 63S Toby Rd.; Kersey, PA	PA	x	x		x	x	x	x					х	Tony Laberine 6184 Route 219, Brockway, PA 15824 814-590-9906
	Mostoller Landfill; 7035 Glades Pike Rd.; Somesset, PA	PA	x	×		x	x	x	x					x	

••	Ohio "TENORM" - requires Radium 225/228 analysis by load before leaving the well park. Solid waste landfills in Ohio can only accept TENORM waste with combined concentration less than 5 procuries per gram above the natural background level.
***	Accepts drilling waster but profile for disposal is not currently completed.
X	Waste stream accepted by facility.
	Waste stream is not or may not be accepted by facility. Contact facility directly to verify waste streams accepted.

New PADEP rules regarding "TENORM" testing requirement are pending.

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

Notes:

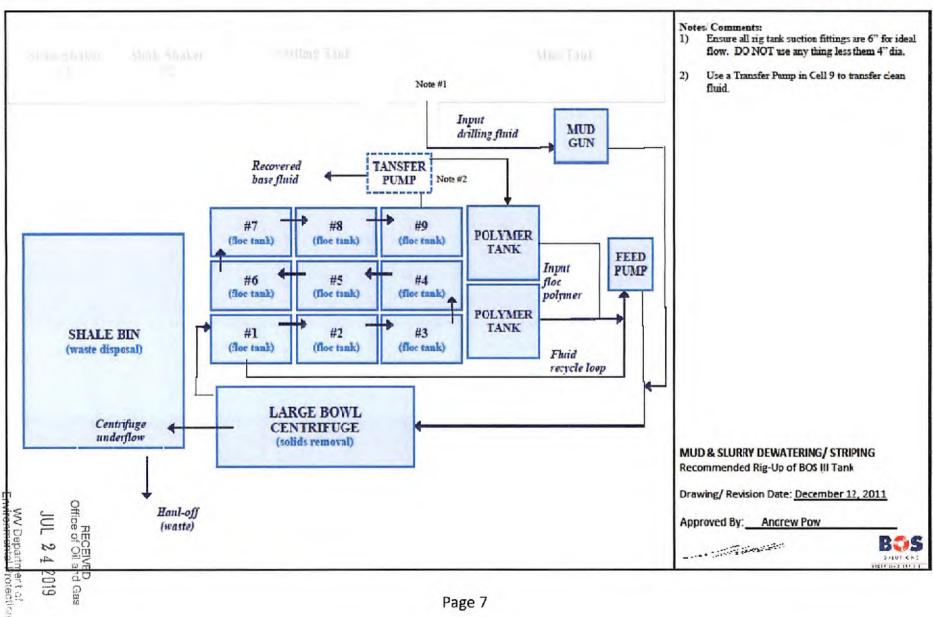
RECEIVED
Office of Oil and Gas

CC 0 L 2019

WV Department of Environmental Protection

FLOW CHART MUD AND SLURRY DEWATERING RECOMMENDED RIG UP





0

丁

0

N

0

CSI N



Site Safety Plan for Well SHR38QHSM CNX Gas Company, LLC.



JUL 2 4 2019

Department of 1

Approval Sheet

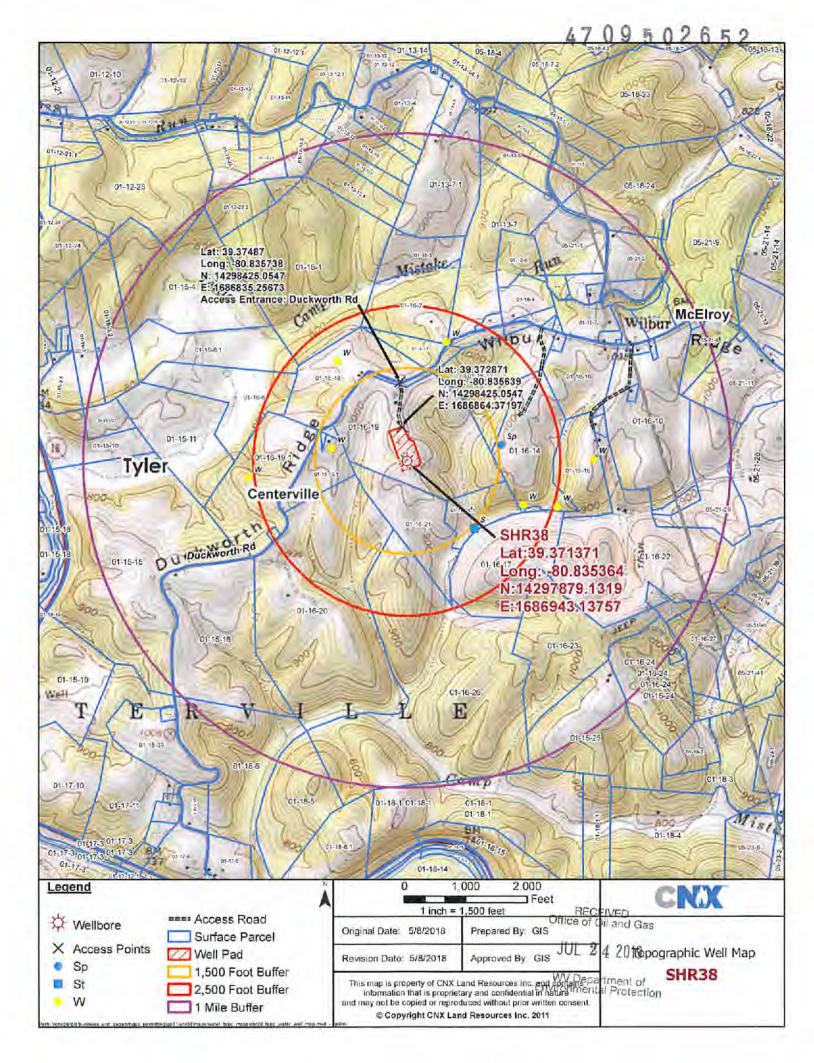
The Office of Oil and Gas and the Oil and Gas Conservation Commission have set forth minimum requirements for necessary equipment and procedures that must be addressed in a Safety Plan ("Plan") and shall be submitted and approved prior to drilling a deep well. A deep well shall be any well which meets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

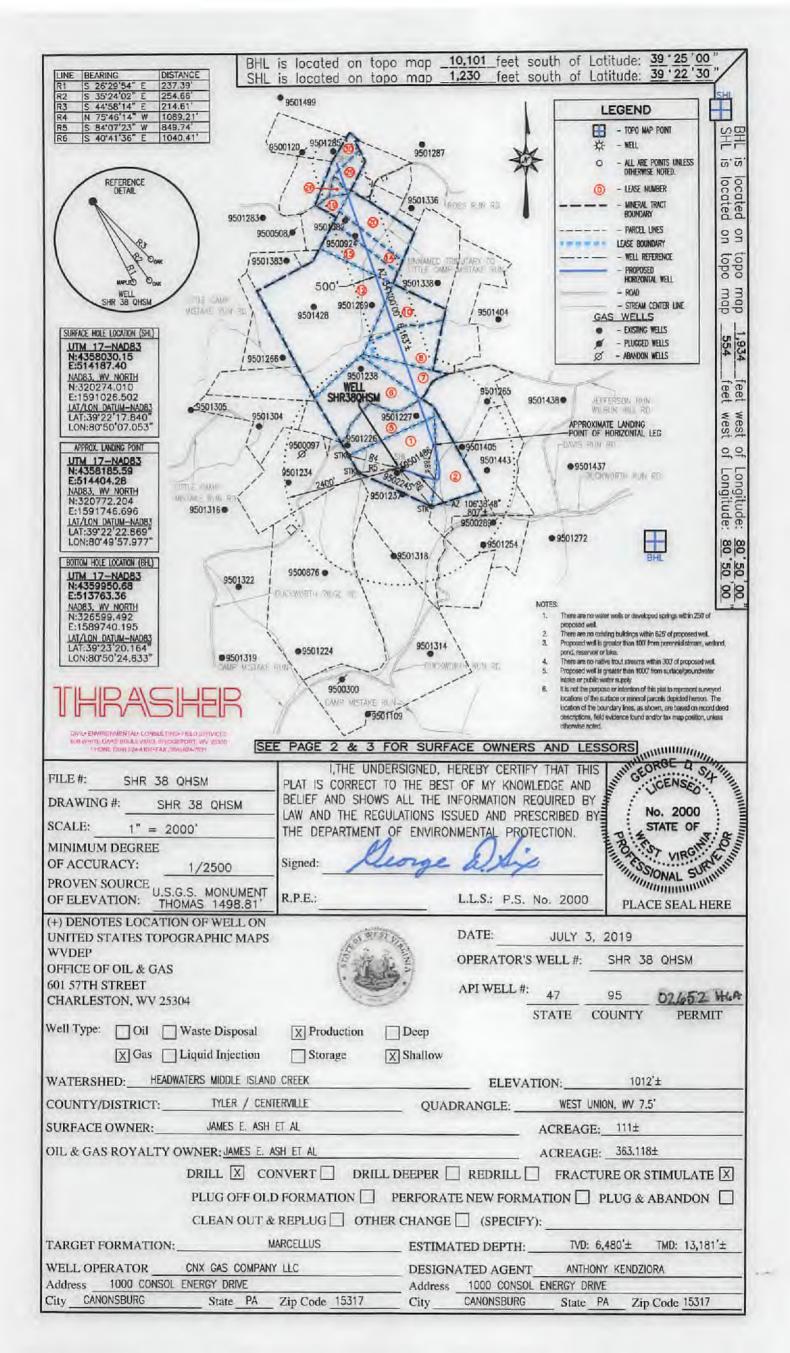
A site specific Safety Plan must be submitted with each deep well application or no later than one week prior to spudding. Approved Plans shall be maintained and available at the drilling rig at all times.

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 En	vironmental Protectio	n, Office of Oil an	nd Gas	
West Virginia Oil and Gas Co	onservation Commissi	on.		
Approved this day	of month		, 20	_ by
		Date:		
		Date:		





SHR 38 QHSM PAGE 2 OF 3

,	SURFACE OWNER	LESSOR	DIST-TM/PA
5	JAMES E. ASH ET AL	VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH, BESSIE HAUGHT AND HAROLD WARNER	P/0 1-16/1
a		ERNEST G. SECKMAN AND O. JOANNE SECKMAN	
		RALPH E. PHILLIPS AND VELINDA PHILLIPS H/W	-
2	JAMES E. ASH ET AL	VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH,	P/0 1-16/19
	State Li Feli El Fe	BESSIE HAUGHT AND HAROLD WARNER	.,
		ERNEST G. SECKMAN AND O. JOANNE SECKMAN	
		RALPH E. PHILLIPS AND VELINDA PHILLIPS H/W	
		MARTHA SUE MUZIO, F/K/A MARTHA SUE LOCOCO	
		MARY LYNNE SLATTERY, F/K/A MARY LYNNE LOCOCO	
		RITA G. JARVIS	
		JO ELLEN HARPER DAY	
		WILLIAM PAUL HARPER	
		MARION R. BACHELOR AND GLORIA JEAN BACHELOR, H/W	
		BERDINA ROSE AND NORMAN W. ROSE, W/H DAVID PAUL LOCOCO	
		ELIZABETH FLORENCE LOCOCO	
		MARY LEE ULLY	
		MICHELLE LOCOCO BUSHMIRE, F/K/A	
		MICHELLE LUCRETIA BUSHMIRE	
		DONALD VINCENT LOCOCO	
		MARGO KIEHL	
		JOHN MICHAEL LEONIAN	
		JOHN FULTON LEONIAN	
		JEFFREY TODD HEFLIN	-
		JASON S. HEFLIN AND JESSICA L. HEFLIN, H/W	
		NILA ASH SAYLOR REVOCABLE TRUST, BY	
		JOSEPH F. SILEK, JR., TRUSTEE PHILLIP LEONIAN, A/K/A PHILLIP MARSHALL LEONIAN	2
		ROBERT LEONIAN A/K/A JOSEPH ROBERT LEONIAN	
		BAILEY ANN MILLS	
		ARMEN LEONIAN, A/K/A ARMEN LANHAM LEONIAN	
		THERESA LEE ROBERTSON	
		ROSE MARIE VANHEUVLEN	
		COMMONWEALTH ENERGY, INC. A/K/A COMMONWEALTH	
		ENERGY	- 1
6	DIANA L. BOGER	EDNA DILLON	P/0 1-16/1
		SAMUEL DAVID DILLON AND DONNA L DILLON, H/W	
		HOWARD D. SPURLOCK AND MARIAN E. SPURLOCK, H/W	
		PEARL G. MCINTYRE	
		PAUL MCINTYRE	
		KERMIT MCINTYRE AND RUTH MCINTYRE, H/W	1
		SHEILA L. GUY	
		EDITH W. MCINTYRE	
7	WILLIAM D. & MARY C. DANIELS	GARY W. AND DEBRA J. DAVIS	1-16/2.1
	The state of the s	RUBY N. SPENCER AND FRED A. NICHOLS AND	Carry Serve
		LAURA L. NICHOLS, H/W	
		IRO NICHOLS	
		MONA WRIGHT	
		RALPH SHERWOOD WANDA SCHAUER	
		CONRAD COSTILOW	
В	WILLIAM D. & MARY C. DANIELS	WILLIAM N. DANIELS AND MARY C. DANIELS, H/W	P/0 1-16/2
	ERIC A. SNYDER	BOUNTY MINERALS, LLC	1-16/3
	KENNETH G. WRIGHT KENNETH G. WRIGHT,	FRANKLIN L. MERCER AND RUTH L. MERCER, H/W AND	
	TRUSTEE	FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER	1
		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	
4	KENNETH G. WRIGHT TRUST C/O KENNETH G.	FRANKLIN L. MERCER AND RUTH L. MERCER, H/W AND	1-13/135
-	WRIGHT	FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER	10/10.0
		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	
		FORREST JENKINS AND EVA JENKINS, H/W, FOREST	
		JENKINS, ATTORNEY-IN-FACT FOR THE FOLLOWING:	
		CARL JENKINS, BETTY JENKINS, STELLA DEAN JENKINS,	
		ZETTA ASH, ALICE HAUGHT AND THOMAS HAUGHT	
		CARL JENKINS AND BETTY JENKINS, H/W	
		STELLA DEAN JENKINS	
		ALICE HAUGHT	
		ALFRED COTTRILL, INDIVIDUALLY AND AS ATTORNEY-IN-	
		FACT FOR RENNA FOX	
		BARBARA BALLOU BAKER	
		KAYVONNE PASULKA	
		CHARLES H. BALLOU AND LOIS M. BALLOU, H/W STEVEN E. BALLOU AND LINDA M. BALLOU, H/W	

SURFACE HOLE LOCATION (SHL) SURFACE HOLE LOCATION (SHL)

UTM 17-NADB3
N:4358030.15
E:514187.40
NADB3, WV NORTH
N:320274.010
E:1591026.502
LAT/LON DATUM-NADB3
LAT:39'22'17.840"
LON:80'50'07.053"

APPROX. LANDING POINT APPROX. LANDING POINT

UTM 17—NAD83
N:4358185.59
E:514404.28
NAD83. WY. NORTH
N:320772.204
E:1591746.696
LAT/LON DATUM-NAD83
LAT:39'22'22.869"
LON:80'49'57.977"

BOTTOM HOLE LOCATION (BHL) BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83
N:4359950.68
E:513763.36
NAD83, W. NORTH
N:326599.492
E:1589740.195
LAT/LON DATUM-NAD83
LAT:39'23'20.164"
LON:80'50'24.633"



JULY 3, 2019

API WELL#: 47

SHR 38 QHSM PAGE 3 OF 3

	SURFACE OWNER	LESSOR	DIST-TM/PAR
15	KENNETH G. WRIGHT KENNETH G. WRIGHT, TRUSTEE	FRANKLIN L. MERCER AND RUTH L. MERCER, H/W AND FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER N. MERCER AND GLORIA MERCER, H/W	1-13/13.4
		DELORES ROSSI	
		LUTHER ROGERS AND ANITA ROGERS, H/W	
		MARIE MERCER	
		HARLEY EDWIN SPENCER AND ALICE RUTH SPENCER, H/W	1
		FORREST JENKINS AND EVA JENKINS, H/W, FOREST JENKINS, ATTORNEY-IN-FACT FOR THE FOLLOWING: CARL JENKINS,	
		BETTY JENKINS, STELLA DEAN JENKINS, ZETTA ASH.	
		ALICE HAUGHT AND THOMAS HAUGHT	
		ZETTA F. ASH	-
		CARL JENKINS AND BETTY JENKINS, H/W	-
		STELLA DEAN JENKINS	
		ALICE HAUGHT	
		ALFRED COTTRILL, INDIMIDUALLY AND AS ATTORNEY-IN-FACT	
		FOR RENNA FOX	
		BARBARA BALLOU BAKER	
		KAYVONNE PASULKA	
		CHARLES H. BALLOU AND LOIS M. BALLOU, H/W	
		STEVEN E. BALLOU AND LINDA M. BALLOU, H/W	
9	PATRICK D. & DONNA S. LIPSCOMB	ROBERT L. UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W	1-13/12.3
20	MATTHEW ASH	FRANKLIN L. MERCER & RUTH L. MERCER, H/W AND	1-13/13
		FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER N.	1
		MERCER AND GLORIA MERCER, H/W	
		DELORES ROSSI	
		LUTHER ROGERS AND ANITA ROGERS, H/W	
		MARIE MERCER	
		HARLEY EDWIN SPENCER AND ALICE RUTH SPENCE, H/W	
		FORREST JENKINS AND EVA JENKINS, H/W, FORREST JENKINS,	
		ATTORNEY-IN-FACT FOR THE FOLLOWING: CARL JENKINS,	
		BETTY JENKINS, STELLA DEAN JENKINS, ZETTA ASH,	
		ALICE HAUGHT AND THOMAS HAUGHT	
		ZETTA F. ASH	
		CARL JENKINS AND BETTY JENKINS, H/W	
		STELLA DEAN JENKINS	1
		ALICE HAUGHT	
		ALFRED COTTRILL, INDIMIDUALLY AND AS ATTORNEY-IN-FACT	1
		FOR RENNA FOX	
		BARBARA BALLOU BAKER	1
		KAYVONNE PASULKA	1
		CHARLES H. BALLOU AND LOIS M. BALLOU, H/W	
		STEVEN E. BALLOU AND LINDA M. BALLOU, H/W	L.
26	WILLIAM B. AND JULIE A. MARKLE	ROBERT L. UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W	1-13/12.2
	ONA M. QUELLHORST	ROBERT L. UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W	P/0 1-13/12
	THOMAS VAN DE BUNT	1	P/0 1-13/12.
30		JUDY S. WETZEL, FKA JUDY THACKER	P/0 1-13/12.
•	THOMAS THE BELLEVILLE	MARY FRANCES CARPENTER	
		JANICE J. WAGENER, FIXA, JANICE L. MAY	1
		ROY DEAN ASH	1
		LARRY J. MCCAW AND JOETTE B. MCCAW, H/W	
		JAMES F. BRAMHALL	
		KITTY MIESIAK, F/K/A KITTY BOND	1
		The state of the s	1
		BETTY E. MORRISON	-
		COLLEEN J. PATRICK	-
		EVELYN J. LINMILLE	
		MARYLYN M. SMITH, F/K/A, MARYLYN J. SMITH	
		MARC P. WISE MICHAEL D. WISE	

SURFACE HOLE LOCATION (SHL) SUBRACE HOLE LOXAION (SHL)

UTM 17—NADB.3

N:4358030.15

E:514187.40

NADB.3, WV. NORTH

N:320274.010

E:1591026.502

LAT/AON DATUM—NADB.3

LAT:39'22'17.840"

LON:80'50'07.053"

APPROX. LANDING POINT UTM 17-NAD83 N:4358185.59 E:514404.28 NAD83, W. NORTH N:320772.204 E:1591746.696 LAT/LON DATUM-NAD83 LAT:39'22'22.869" LON:80'49'57.977" BOTTOM HOLE LOCATION (BHL) DITION HOLE LOCATION (BHL)

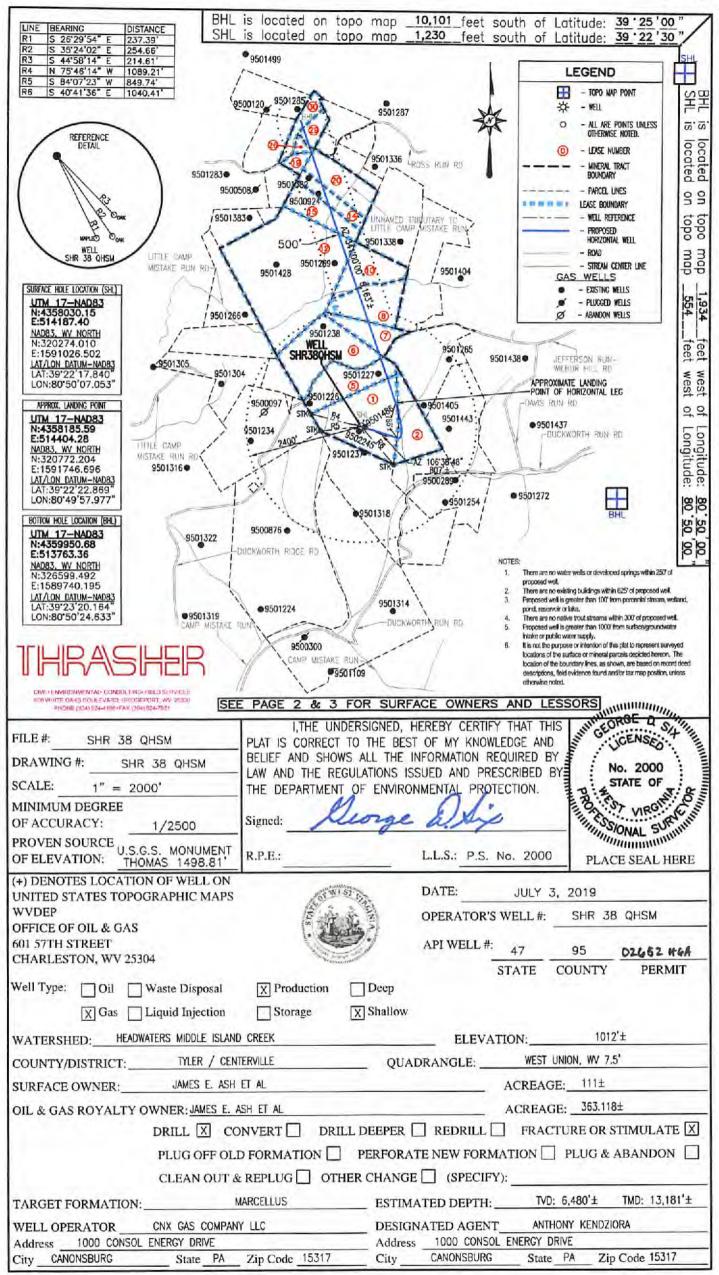
UTM 17—NAD83
N:435995.68
E:513763.36
NAD83, WY NORTH
N:326599.492
E:1589740.195
LAT/LON DATUM-NAD83
LAT:39'23'20.164"
LON:80'50'24.633"



JULY 3, 2019

API WELL#: 47

STATE COUNTY PERMIT



SHR 38 QHSM PAGE 2 OF 3

	SURFACE OWNER	LESSOR	DIST-TM/PAR				
1	JAMES E. ASH ET AL	VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH,	P/0 1-16/19				
5		BESSIE HAUGHT AND HAROLD WARNER					
		ERNEST G. SECKMAN AND O. JOANNE SECKMAN					
2	IAUFO E ACIL ET AL	RALPH E. PHILLIPS AND VELINDA PHILLIPS H/W	5/5 1 10/10				
2	JAMES E. ASH ET AL	VERNA O. ASH, JAMES E. ASH AND THELMA B. ASH,	P/0 1-16/19				
		BESSIE HAUGHT AND HAROLD WARNER					
		RALPH E. PHILLIPS AND VELINDA PHILLIPS H/W	-				
		MARTHA SUE MUZIO, F/K/A MARTHA SUE LOCOCO					
		MARY LYNNE SLATTERY, F/K/A MARY LYNNE LOCOCO					
		RITA G. JARMS					
		JO ELLEN HARPER DAY					
		WILLIAM PAUL HARPER					
		MARION R. BACHELOR AND GLORIA JEAN BACHELOR, H/W					
		BERDINA ROSE AND NORMAN W. ROSE, W/H					
		DAVID PAUL LOCOCO					
		ELIZABETH FLORENCE LOCOCO					
		MARY LEE LILLY					
		MICHELLE LOCOCO BUSHMIRE, F/K/A					
		MICHELLE LUCRETIA BUSHMIRE					
		DONALD VINCENT LOCOCO MARGO KIEHL					
		JOHN MICHAEL LEONIAN					
		JOHN FULTON LEONIAN					
		JEFFREY TODD HEFLIN					
		JASON S. HEFLIN AND JESSICA L. HEFLIN, H/W					
		NILA ASH SAYLOR REVOCABLE TRUST, BY					
		JOSEPH F. SILEK, JR., TRUSTEE					
		PHILLIP LEONIAN, A/K/A PHILLIP MARSHALL LEONIAN					
		ROBERT LEONIAN A/K/A JOSEPH ROBERT LEONIAN					
		BAILEY ANN MILLS					
		ARMEN LEONIAN, A/K/A ARMEN LANHAM LEONIAN					
		THERESA LEE ROBERTSON ROSE MARIE VANHEUVLEN					
		COMMONWEALTH ENERGY, INC. A/K/A COMMONWEALTH					
		ENERGY					
;	DIANA L. BOGER	EDNA DILLON	P/0 1-16/18				
,	DIATA E. BUSEN	SAMUEL DAVID DILLON AND DONNA L. DILLON, H/W	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
		HOWARD D. SPURLOCK AND MARIAN E. SPURLOCK, H/W					
		EDITH M. DOAK	1				
		PEARL G. MCINTYRE	1				
		PAUL MCINTYRE					
		KERMIT MCINTYRE AND RUTH MCINTYRE, H/W					
		SHEILA L. GUY					
		EDITH W. MCINTYRE					
7	WILLIAM D. & MARY C. DANIELS	GARY W. AND DEBRA J. DAVIS	1-16/2.1				
		RUBY N. SPENCER AND FRED A. NICHOLS AND					
		IRO NICHOLS, H/W					
		MONA WRIGHT					
		RALPH SHERWOOD	1				
		WANDA SCHAUER					
		CONRAD COSTILOW					
3	WILLIAM D. & MARY C. DANIELS	WILLIAM N. DANIELS AND MARY C. DANIELS, H/W	P/0 1-16/2				
_	ERIC A. SNYDER	BOUNTY MINERALS, LLC	1-16/3				
2	KENNETH G. WRIGHT KENNETH G. WRIGHT,	FRANKLIN L. MERCER AND RUTH L. MERCER, H/W AND	1-16/1				
ń	TRUSTEE	FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER	11-1-1				
		N. MERCER AND GLORIA MERCER, H/W	4				
		DELORES ROSSI					
		LUTHER ROGERS AND ANITA ROGERS, H/W	1				
		MARIE MERCER					
		HARLEY EDWIN SPENCER AND ALICE RUTH SPENCER, H/W THE KENNETH G. WRIGHT TRUST, DATED 12/21/2010,	1				
		BY KENNETH G. WRIGHT TRUSTEE					
4	KENNETH G. WRIGHT TRUST C/O KENNETH G.	FRANKLIN L. MERCER AND RUTH L. MERCER, H/W AND	1-13/13.5				
*	WRIGHT	FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER	7.5				
		N. MERCER AND GLORIA MERCER, H/W					
		DELORES ROSSI					
		LUTHER ROGERS AND ANITA ROGERS, H/W	1				
		MARIE MERCER	4				
		HARLEY EDWIN SPENCER AND ALICE RUTH SPENCER, H/W	4				
		FORREST JENKINS AND EVA JENKINS, H/W, FOREST					
		JENKINS, ATTORNEY-IN-FACT FOR THE FOLLOWING:					
	U. T	CARL JENKINS, BETTY JENKINS, STELLA DEAN JENKINS, ZETTA ASH, ALICE HAUGHT AND THOMAS HAUGHT					
			1				
		ZETTA F. ASH CARL JENKINS AND BETTY JENKINS, H/W	1				
		STELLA DEAN JENKINS	1				
		ALICE HAUGHT	1				
		ALFRED COTTRILL, INDIMIDUALLY AND AS ATTORNEY-IN-	1				
	I .	FACT FOR RENNA FOX					
			1				
		BARBARA BALLOU BAKER	al .				
		BARBARA BALLOU BAKER KAYVONNE PASULKA					

SURFACE HOLE LOCATION (SHL) UTM 17-NAD83 N:4358030.15 E:514187.40 NAD83, WY NORTH N:320274.010 E:1591025.502 LAT/LON DATUM-NAD83 LAT:39'22'17.840" LON:80'50'07.053"

APPROX. LANDING POINT APROX. DADING POINT
UTM 17—NAD83
N:4358185.59
E:514404.28
NAD83, WY NORTH
N:320772.204
E:1591746.696
LAI/LON DATUM—NAD83
LAT:39*22'22.869"
LON:80*49*57.977"

BOTTOM HOLE LOCATION (BHL) UTM 17-MADB3
N:4359950.68
E:513763.36
NADB3, WY NORTH
N:326599.492
E:1589740.195
LAT/LON DATUM-NADB3
LAT:39'23'20.164"
LON:80'50'24.633"



JULY 3, 2019

API WELL #:

02652 HAR

47

95

SHR 38 QHSM PAGE 3 OF 3

_	SURFACE OWNER	LESSOR	DIST-TM/PAR					
15	KENNETH G. WRIGHT KENNETH G. WRIGHT,	FRANKLIN L. MERCER AND RUTH L. MERCER, H/W AND	1-13/13.4					
	TRUSTEE	FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER N.	100000000000000000000000000000000000000					
		MERCER AND GLORIA MERCER, H/W						
		DELORES ROSSI	1					
		LUTHER ROGERS AND ANITA ROGERS, H/W	1					
		MARIE MERCER						
		HARLEY EDWIN SPENCER AND ALICE RUTH SPENCER, H/W	1					
		FORREST JENKINS AND EVA JENKINS, H/W. FOREST JENKINS,						
		ATTORNEY-IN-FACT FOR THE FOLLOWING: CARL JENKINS,						
		BETTY JENKINS, STELLA DEAN JENKINS, ZETTA ASH,						
		ALICE HAUGHT AND THOMAS HAUGHT						
		ZETTA F. ASH						
		CARL JENKINS AND BETTY JENKINS, H/W						
		STELLA DEAN JENKINS						
		ALICE HAUGHT						
		ALFRED COTTRILL, INDMIDUALLY AND AS ATTORNEY-IN-FACT						
		FOR RENNA FOX						
		BARBARA BALLOU BAKER						
		KAYYONNE PASULKA						
		CHARLES H. BALLOU AND LOIS M. BALLOU, H/W						
		STEVEN E. BALLOU AND LINDA M. BALLOU, H/W						
19	PATRICK D. & DONNA S. LIPSCOMB	ROBERT L. UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W	1-13/12.3					
20	MATTHEW ASH	FRANKLIN L. MERCER & RUTH L. MERCER, H/W AND	1-13/13					
	and the same of th	FRANKLIN L. MERCER, ATTORNEY-IN-FACT FOR ROGER N.						
		MERCER AND GLORIA MERCER, H/W						
		DELORES ROSSI						
		LUTHER ROGERS AND ANITA ROGERS, H/W	1					
		MARIE MERCER						
		HARLEY EDWIN SPENCER AND ALICE RUTH SPENCE, H/W	1					
		FORREST JENKINS AND EVA JENKINS, H/W, FORREST JENKINS,						
		ATTORNEY-IN-FACT FOR THE FOLLOWING: CARL JENKINS,						
		[- [- [- [- [- [- [- [-						
		BETTY JENKINS, STELLA DEAN JENKINS, ZETTA ASH,						
		ALICE HAUGHT AND THOMAS HAUGHT						
		ZETTA F. ASH						
		CARL JENKINS AND BETTY JENKINS, H/W						
		STELLA DEAN JENKINS						
		ALICE HAUGHT	1					
		ALFRED COTTRILL, INDIMIDUALLY AND AS ATTORNEY-IN-FACT						
		FOR RENNA FOX						
		BARBARA BALLOU BAKER	1					
		KAYVONNE PASULKA						
		CHARLES H. BALLOU AND LOIS M. BALLOU, H/W						
		STEVEN E. BALLOU AND LINDA M. BALLOU, H/W						
26	WILLIAM B. AND JULIE A. MARKLE	ROBERT L. UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W	1-13/12.2					
29	ONA M. QUELLHORST	ROBERT L. UNDERWOOD AND VICTORIA M. UNDERWOOD, H/W	P/0 1-13/12					
	THOMAS VAN DE BUNT		P/0 1-13/12.					
30	THOMAS VAN DE BUNT	JUDY S. WETZEL, FKA JUDY THACKER	P/O 1-13/12.					
1	Control of the state of the sta	MARY FRANCES CARPENTER						
		JANICE J. WAGENER, FKA, JANICE L. MAY						
		ROY DEAN ASH						
		LARRY J. MCCAW AND JOETTE B. MCCAW, H/W	1					
		JAMES F. BRAMHALL						
		KITTY MIESIAK, F/K/A KITTY BOND	1					
		BETTY E. MORRISON	1					
			1					
		COLLEEN J. PATRICK	-					
		EVELYN J. LINVILLE	-					
		MARYLYN M. SMITH, F/K/A, MARYLYN J. SMITH	-					
		MARC P. WISE						
		MICHAEL D. WISE						

SURFACE HOLE LOCATION (SHL)

UTM 17—NAD83

N:4358030.15
E:514187.40

NAD83, W NORTH

N:320274.010
E:1591026.502

LAT/LON DATUM—NAD83

LAT:39'22'17.840"
LON:80'50'07.053"

APPROX. LANDING POINT

UTM. 17—NAD83

N:4358185.59
E:514404.28

NAD83, WY NORTH
N:320772.204
E:1591745.696

LAT/LON DATUM—NAD83
LAT:39*22*22.869*
LON:80*49*57,977*

BOTTON HOLE LOCATION (SH.)

UTM 17—NADB3
N:4359950.68
E:513763.36
NADB3, WY NORTH
N:326599.492
E:1589740.195
LAT/LON DATUM—NADB3
LAT:39'23'20.164"
LON:80'50'24.633"



JULY 3, 2019

API WELL #:

95

02452 HGA

WW-6A1 (5/13)

Operator's Well No.	SHR38QHSM

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

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

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

Lease Name or Number

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

SEE 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:

- 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

RECEIVED Office of Oil and Gas

JUL 2 4 2019

WV Department of Environmental Protection

na 1701 41

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-6A-1 for SHR 38 QHSM

March Marc	Total ID	Tax Map &	Title Opinion	Company Company	Granden between the	Paualtu	Book/Page
March Marc	Tract ID	Parcel	CILS #	Grantor, Lessor, etc Verna O. Ash, James E. Ash and Theima B. Ash, Bessle Haught and Harold	Grantee, Lessee, etc	Royalty	BOOK/FARE
Description Section	1	1-16-19	258998000	3. 이렇게 있는 경우 그렇게 다른 10를 맞는 말로 하다면 하는 성도를 하고 있다. 경우 경우 기업으로 모르는 기업으로 보다 하는 경우 기업으로 보다 하는 것이다.	Drilling Appalachian Corporation		269/571 271/103
Description				Onling Appalachien Corporation	LC	Assignment	322/190
COUNTS OF AN Expendable Concessor (County of Expendable County) County of Expendable Coun				Dominion Annalachian Development Properties, 140		Mervet	384/191
CRINIC CES IN PROPERTY 134 CRIC CES CES CES CES CES CES CES CES CES CE				이렇게 있어 TO IN INCOME IN INCOME TO A MAN HOLD IN A MAN HOLD IN INCOME IN A MAN HOLD			384/191
Pare					CONSOL Gas Company		384/191
				CONSOL Gas Company	CNX Gas Company LLC	Merger	384/191
						Carried Annual Control of the Contro	388/286
					The state of the s		542/134 550/273
Verm C. Adv. James C. Adv. Section of Color Section	Tract ID			Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
Design gestabelhate copyration Fig. 19-19 September 19-20 Sep					Drilling Appalachian Corporation	545 5 46	50.00
Deling Appallables Compression Soluble Forces, Inc. Soluble Serger, Inc. Soluble Se	2	1-16-19	288769000				269/571 271/103
							476/580
Marths Sue Musils (FAL Marths Sue Locke) Miller Farm States (FAL Marths Sue Musils (FAL Marths Sue Locke) Miller Farm States (FAL Marths Sue Musils (FAL Marths Sue Locke) Miller Farm States (FAL Marths Sue Musils (FAL Marths Sue Locke) Miller Farm States (FAL Marths Sue Musils (FAL Marths Sue Locke) Miller Farm States (FAL Marths Sue Musils (FAL Marths Sue Locke) Miller Farm States (FAL Marths Sue Musils (FAL Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Miller Farm States (FAL Marths Sue Marths Sue Locke) Marth States (FAL Marths Sue							542/134
Mary Lymes Battering, Mark Marris Lymes (Area) Marris Lymes (Section, Marris Land 178 444				Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	550/273
March Marc							449/754
							449/752
							449/750 449/748
Marie Mari							449/744
Mary Lee Life						The control of the co	449/746
				Berdina Rose and Norman W. Rose, w/h	Noble Energy, Inc.	Not less than 1/8	452/700
May to call by May to call by May to call by Main to core Bashmine, (In/A, Mideal Luoreila Bashmine Moles Energy Inc. Moles Energy I					700 700 700 700 700 700 700 700 700 700		449/499
Michael success barbmins, Inf./s., Michael success barbmins, Inf. State Stat							453/545
							453/519 453/521
Margo Rich Margo Rich Margo Rich Margo Rich Mobile Intergy, Inc. Notites than 1/8 458							453/637
							458/759
				John Michael Leonian		Not less than 1/8	458/765
							458/747
Nile Ach Sugler Revocable Trout by Javospin F. Sillek Jr., Trouble Noble Energy, Inc. Notice test than 1/8 455							465/252
Public placeming Any Ar Whill by Anabrabil Localian Noble Energy, Inc. Notice stam 1/8 455							465/254 465/264
Robert Lecolate, 3 (A. J. Suseph Robert) Lecolate, 9 (A. J. Suseph Rober							465/581
Armen Leolains, Aff-/A Armen Lashem Leolains Accidence Accid							465/606
Theresis Left Bubertson Noble Energy, Inc. Not less than 1/4 338 886 Maria Vanieurlean Noble Energy, Inc. Not less than 1/4 338							462/553
							465/583
Noble Designation Design							471/696 526/367
Noble Energy, Inc. Noble Energy,							480/837
Noble Energy, Inc. Noble Energy In							473/216
Noble Energy, Inc. Noble Energy,							493/223
Noble Entragy, Inc. CNX Gas Company, LLC Assignment 5-25				Noble Energy, Inc.		Assignment	499/447
Noble Energy, Inc.							513/299
Noble Lessy, Inc. ChX Gas Company, LLC Assignment Sept							542/147 549/529
Parcel Parcel CLS Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Harold Verna O, Ash, James E, Ash and Thefina B, Ash, Ressie Haught and Thefina B, As					Control of the Contro		550/273
Verma O. Ash, James E. Ash and Theims B. Ash, Bessie Haught and Harold Warner, Ernest G. Seckman and O. Joanne Seckman Drilling Appalachian Corporation Not less than 1/8 259.	Total III	Tax Map &	Title Opinion	Parametrian in	Colonia Israel and	Povelov	Book/Page
Section Sect	Tractio		QL5 #			POXMIX	BOOK/Fete
Dominion Appalachian Cereporation Drilling Appalachian Corporation CONSOL Gas Appalachian Development Froperties, LLC CONSOL Gas Appalachian Development Froperties, LLC CONSOL Gas Appalachian Development Froperties, LLC CONSOL Gas Appalachian Development Froperties LLC CONSOL Gas Company LC Noble Energy Inc. Noble Energy Inc.	5	1-16-19	258998000			Not less than 1/8	269/571
Defiling Appalachian Corporation LEC CONSOL Gas Appalachian Development CONSOL Gas Appalachian Development CONSOL Gas Appalachian Development CONSOL Gas Appalachian Development Properties LLC Properties LLC CONSOL Gas Reserves Inc. CONSOL Gas Reserves Inc. CONSOL Gas Reserves Inc. CONSOL Gas Company Merger 384 CONSOL Gas Company CON				Ralph E. Phillips and Velinda Phillips, h/w		Not less than 1/8	271/103
Deminion Appalachian Development Properties, LLC CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Represe Inc. CONSOL Gas Company CNX Gas Company CNX Gas Company CNX Gas Company CNX Gas Company LLC Noble Energy Inc.				Drilling Appalachian Corporation	LIC	Assignment	322/190
CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Company CONSOL Gas Reserves Inc.				Dominion Appalachian Development Properties, U.C.		Merger	384/191
CONSOL Gas Company CNK Gas Com							384/191
CNX Gas Company LLC Noble Energy Inc. Noble Ener				CONSOL Gas Reserves Inc.	CONSOL Gas Company	Merger	384/191
Noble Energy Inc. Noble Energy							384/191
Tract ID Tax Map 8							388/296 542/134
Parcel Parcel GUS # Grantos, tessor, etc Grantos, etc				The state of the s			550/273
Parcel Parcel GUS # Grantos, tessor, etc Grantos, etc		Tax Man &	Title Opinion		Activities and antique		in the land
Samuel David Dillon and Donna L. Dillon, h/w Howard D. Spurlock and Marian E. Spurlock, h/w Edith M. Dosk Belth M. Dosk Drilling Appalachian Corporation Not less than 1/8 Pearl G. McIntyre Paul McIntyre Pull McIntyre Pulling Appalachian Corporation Not less than 1/8 Pearl G. McIntyre Pulling Appalachian Corporation Not less than 1/8 Paul McIntyre Pulling Appalachian Corporation Not less than 1/8 Paul McIntyre and Ruth McIntyre, h/w Drilling Appalachian Corporation Not less than 1/8 Pulling A	Tract ID			Grantor, Lessor, etc			Book/Page
Howard D. Spurlock and Marian E. Spurlock, h/w Edith M. Doals Pearl G. McIntyre Pearl G. McIntyre Paul McIntyre Paul McIntyre Politing Appalachian Corporation Politing Appalachian Development Properties, Politing Appalachian Development Properties, Politing Appalachian Development Properties, Politing Appalachian Development Properties, LUC Properties LUC	6	1-16-18	288509000				271/604
Edith M. Doak Pearl G. McIntyre Paul McIntyr							273/276 273/97
Pearl G. McIntyre Drilling Appalachian Corporation Not less than 3/8 225							273/93
Paul McIntyre Drilling Appalachian Corporation Not less than 1/8 273 Kermit McIntyre and Ruth McIntyre, h/w Drilling Appalachian Corporation Not less than 1/8 273 Shella L. Guy Drilling Appalachian Corporation Not less than 1/8 273 Edith W. McIntyre Drilling Appalachian Corporation Not less than 1/8 273 Drilling Appalachian Corporation Not less than 1/8 273 Drilling Appalachian Corporation Not less than 1/8 273 Dominion Appalachian Development Properties, LLC CONSOL Gas Appalachian Development Properties, LLC Properties LLC Properties LLC Merger 364 CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc. Merger 384 CONSOL Gas Reparachian Development Properties LLC CONSOL Gas Reserves Inc. Merger 384 CONSOL Gas Company CNX Gas Company Merger 384 CNX Gas Company LLC Noble Energy Inc. S056 Assignment 385							273/95
Shella L. Guy Edith W. McIntyre Drilling Appalachian Corporation Drilling Appalachian Corporation Drilling Appalachian Corporation Drilling Appalachian Corporation UC Consol Gas Appalachian Development Dominion Appalachian Development Properties, LLC Dominion Appalachian Development Properties, LLC Properties LLC CONSOL Gas Appalachian Development CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc. CONSOL Gas Reserves Inc. CONSOL Gas Company Merger Server CONSOL Gas Company Merger Server Serv				Paul McIntyre			273/112
Edith W. McIntyre Drilling Appalachian Corporation Drilling Appalachian Corporation Drilling Appalachian Corporation LLC CONSOL Gas Appalachian Development Dominion Appalachian Development Properties, LLC CONSOL Gas Appalachian Development Dominion Appalachian Development Properties, LLC Properties LLC CONSOL Gas Reserves Inc. CONSOL Gas Reserves Inc. CONSOL Gas Reserves Inc. CONSOL Gas Reserves Inc. CONSOL Gas Company CONSOL G							273/110
Dominion Appalachian Development Properties, LLC Assignment. 322 CONSOL Gas Appalachian Development Dominion Appalachian Development Properties, LLC Properties LLC Properties LLC CONSOL Gas Reserves Inc. Merger 384 CONSOL Gas Company LLC NNS Gas Company CNX Gas Company CNX Gas Company LLC SUX Assignment 384 CNX Gas Company LLC Noble Energy Inc. SUX Assignment 388							273/274 271/608
CONSOL Gas Appalachian Development Properties, LLC Properties LLC Properties LLC AMerger 384 CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc. Merger 384 CONSOL Gas Reserves Inc. CONSOL Gas Reserves Inc. Merger 384 CONSOL Gas Company LLC Merger 384 CNX Gas Company LLC Merger 384 CNX Gas Company LLC Noble Energy Inc. S056 Assignment 388				count w. McIntyre	Dominion Appalachian Development Properties,	0.0000000000000000000000000000000000000	
Dominion Appalachian Development Properties, LLC Properties LLC Merger 364 COMSOL Gas Appalachian Development Properties LLC COMSOL Gas Reserves Inc. Merger 364 COMSOL Gas Reserves Inc. COMSOL Gas Company Merger 384 COMSOL Gas Company LLC Merger 384 CNX Gas Company LLC Noble Energy Inc. Store Assignment 388				Drilling Appalachian Corporation		Assignment	322/190
CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc. Merger 384 CONSOL Gas Reserves Inc. CONSOL Gas Company Merger 384 CONSOL Gas Company CNX Gas Company LLC Merger 384 CNX Gas Company LLC Noble Energy Inc. SU% Assignment 388				Dominion Appalachian Development Properties, LLC		Merger	364/191
CONSIGE Company LLC Merger 384 CNX Gas Company LLC Noble Energy Inc. 50% Assignment 388				CONSOL Gas Appalachian Development Properties LLC		Merger	384/191
CNX Gas Company LLC Noble Energy Inc. SU% Assignment 388							384/191
							384/191 388/286
The state of the s				1 Lagrange 1 and 1 and 2			542/134
							550/273

20f5

			Drilling Appalachian Corporation	Antero Resources Corporation	Assignment	421/138
				CNX Gas Company LLC		425/701
			Antero Resources Corporation Noble Energy Inc.	Noble Energy, Inc. CNX Gas Company LLC	Assignment Assignment	427/564 550/273
			Hoose will by me.	CIEN Gas Company LLC	Assignment	350,273
Tract ID		Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
7	<u>Parcel</u> 1-16-2.1	<u>QLS #</u> 258992000	Gary W. and Debra J. Davis	Drilling Appalachian Corporation	Not less than 1/8	272/218
•	1-10-2-1	230332000	Ruby N. Spencer and Fred A. Nichols and Laura L. Nichols, h/w	Drilling Appalachian Corporation	Not less than 1/8	272/210
			Iro Nichols	Drilling Appelechian Corporation	Not less than 1/8	272/208
			Mona Wright	Drilling Appalachian Corporation	Not less than 1/8	272/238
			Raiph Sherwood	Drilling Appalachian Corporation	Not less than 1/8 Not less than 1/8	272/236 272/295
			Wanda Schauer Drilling Appalachian Corporation	Drilling Appelachian Corporation Antero Resources Corporation	Assignment	272/295 421/130
				CNX Gas Company LLC		425/701
			Antero Resources Corporation	Noble Energy, Inc.	Assignment	427/564
			Noble Energy Inc.	CNX Gas Company LLC	50% Assignment	513/299
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
			Conrad Costillow	Noble Energy, Inc.	Not less than 1/8	485/168
			Noble Energy Inc.	CNX Gas Company LLC	50% Assignment	513/299
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
T	Tax Map &	Title Opinion		G	S the	n 1 /n
Tract ID	Parcel	QLS#	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
8	1-16-2	258987000	William N. Daniels and Mary C. Daniels, h/w	Noble Energy, Inc.	Not less than 1/8	449/537
			Noble Energy Inc. Noble Energy Inc.	CNX Gas Company LLC CNX Gas Company LLC	50% Assignment Assignment	473/216 550/273
			Noble Ellergy Inc.	CAN des company LLC	Assignment	330/2/3
Tract ID	Tax Map &	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
10	<u>Parcel</u> 1-16-3	OLS#	Bounty Minerals, LLC	CNX Gas Company LLC	Not less than 1/8	643/61
10	1-10-3	250155000	bourry minerals, LLC	CHA Gas Company LLC	NOT less than 1/o	643/61
Tract ID	Tax Map &	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
HILL	<u>Parcel</u>	QLS#		3(4)(13)(13)(13)(13)	NATE OF THE PARTY	Personal
			Franklin L. Mercer and Ruth L. Mercer, h/w and Franklin L. Mercer,			
12	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 1/8	273/426
			Luther Rogers and Anita Rogers, h/w Marie Mercer	Anvil Oil Company Anvil Oil Company	Not less than 1/8 Not less than 1/8	273/424 273/422
			Harley Edwin Spencer and Alice Ruth Spencer, h/w	Anvil Oil Company	Not less than 1/8	271/645
			Anvil Oil Company	Dominion Appalachian Development, Inc.	Assignment	323/383
			Dominion Appalachian Development, Inc.	Dominion Appalachian Development, LLC	Name Change	wvsos
			Deminion Association Development HC	CONSOL Gas Appalachian Development	*******	384/191
			Dominion Appalachian Development, LLC CONSOL Gas Appalachian Development Properties LLC	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,			
			Trustee	Noble Energy, Inc.	Not less than 1/8	492/302
			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
11441.10	Parcel	<u>015#</u>	G. 311.01, 12.100, 14.12		HEIMIE	<u> </u>
			Franklin L. Mercer and Ruth L. Mercer, h/w and Franklin L. Mercer,			
14	1-13-13.5	259040000	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 1/8	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
			Forrest Jenkins and Eva Jenkins, h/w, Forrest Jenkins, Attorney-in-Fact			
			for the following: Carl Jenkins, Betty Jenkins, Stella Dezn Jenkins, Zetta			
			Ash, Alice Haught and Thomas Haught	Anvil Oil Company	Not less than 1/8	274/244
			Zetta F. Ash Carl Jenkins and Betty Jenkins, h/w	Anvil Oil Company Anvil Oil Company	Not less than 1/8 Not less than 1/8	275/331 275/488
			Stella Dean Jenkins	Anvil Oil Company	Not less than 1/8	275/486
			Alice Haught	Anvil Oil Company	Not less than 1/8	275/484
			Affred Cottrill, individually and as Attorney-in-Fact for Renna Fox	Anvil Oil Company	Not less than 1/8	274/242 323/383
			Anvil Oil Company Dominion Appalachian Development, Inc.	Dominion Appalachian Development, Inc. Dominion Appalachian Development, LLC	Assignment Name Change	WVSOS
				CONSOL Gas Appalachian Development, LLC	Wend Gas	
			Dominion Appalachian Development, LLC	SUPPORTER ITE Office OF	Merger	384/191
			CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc.	CONSOL Gas Reserves Inc. CONSOL Gas Company	Merger A 2010 Merger	384/191 384/191
			CONSOL Gas Company	CNX Gas Company LLC 2	4 2019 Merger Merger 50% Assignment	384/191
			CNX Gas Company LLC	Noble Energy Inc.	50% Assignment	388/286
			Noble Energy Inc.	CNX Gas Company LLC	partment of Assignment of Assi	550/273
			Barbara Bailou Baker	Noble Energy, Inc. W Del	partment of chion intal Protection Not less than 1/8	520/431
			Kayvonne Pasulka	Noble Energy, Inc. Environment	Not less than 1/8	520/411
			Charles H. Ballou and Lois M. Ballou, h/w	Noble Energy, Inc.	Not less than 1/8	524/369 524/222
			Steven E. Ballou and Linda M. Ballou, h/w Noble Energy, Inc.	Noble Energy, Inc. CNX Gas Company, LLC	Not less than 1/8 Assignment	5 34/272 542/147
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
	Tau 44	Title O-1-1-				
Tract (D	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, stc	Grantee, Lessee, etc	Royalty	Book/Page
15	1-13-13.4	259030000	Franklin L. Mercer and Ruth L. Mercer, h/w and Franklin L. Mercer, 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 1/8	273/426
			Luther Rogers and Anita Rogers, h/w	Anvil Oil Company	Not less than 1/8	273/424
			Marie Mercer	Anvil Oil Company	Not less than 1/8	273/422
			Harley Edwin Spencer and Alice Ruth Spencer, h/w	Anvil Oil Company	Not less than 1/8	271/645

3×15

			CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc. CONSOL Gas Company CNY Gas Company CNY Gas Company LLC Noble Energy Inc.	CONSOL Gas Reserves Inc. CONSOL Gas Company CNX Gas Company LLC Noble Energy Inc. CNX Gas Company LLC	Merger Merger Merger Merger Ojl and Gamassignment Assignment	384/191 384/191 384/191 388/286 550/273
			Anvil Oil Company Cominion Appalachian Development, Inc. Cominion Appalachian Development, LLC.	Dominion Appalachian Development, Inc. Dominion Appalachian Development, LLC CONSGL Gas Appalachian Development Properties LLC	Assignment Name Change Merger	323/383 WVSOS 384/191
	- 4-26.6	***************************************	Drilling Appalachian Corporation	Justin L. Henderson d/b/a Anvil Oil Company	Assignment	277/195 277/226 278/323
Tract ID	<u>Parcel</u> 1-13-12.2	7itle Opinion QLS # 288612000	Grantor, Lessor, etc Robert L. Underwood and Victoria M. Underwood, h/w	Grantee, Lesser, etc. Drilling Appalachian Corporation	Royalty Not less than 1/8	275/388 277/685
	Tay May 6	Title Deletes	Noble Energy Inc.	CNX Gas Company, LLC CNX Gas Company LLC	Assignment Assignment	542/147 550/273
			Barbara Ballou Baker Kayvonne Pasulka Charles H. Ballou and Lois M. Ballou, h/w Steven E. Ballou and Linda M. Ballou, h/w	Noble Energy, Inc. Noble Energy, Inc. Noble Energy, Inc. Noble Energy, Inc.	Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8	520/431 520/411 524/369 534/272
			CONSOL Gas Company CNX Gas Company LLC Noble Energy Inc.	CNX Gas Company LLC Noble Energy Inc. CNX Gas Company LLC	Merger 50% Assignment Assignment	384/191 388/286 550/273
			Bominion Appalachian Development, LLC CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc.	CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc. CONSOL Gas Company	Merger Merger Merger	384/191 384/191 384/191
			Alke Haught Alked Cottnil, individually and as Attorney-in-Fact for Renna Fox Anvil Oil Company Dominion Appalachian Development, Inc.	Anvil Oil Company Anvil Oil Company Dominion Appalachian Development, Inc. Dominion Appalachian Development, LLC	Not less than 1/8 Not less than 1/8 Assignment Name Change	275/484 274/242 323/383 WV\$OS
			for the following: Carl Jenkins, Betty Jenkins, Stella Dean Jenkins, Zetta Ash, Alice Haught and Thomas Haught Zetta F. Ash Carl Jenkins and Betty Jenkins, h/w Stella Dean Jenkins	Anvil Oil Company Anvil Oil Company Anvil Oil Company Anvil Oil Company	Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8	274/244 275/331 275/488 275/486
			Luther Rogers and Anita Rogers, h/w Marie Mercer Harley Edwin Spencer and Alice Ruth Spencer, h/w Forrest Jenkins and Eva Jenkins, h/w, Forrest Jenkins, Attorney-in-Fact	Anvil Oil Company Anvil Oil Company Anvil Oil Company	Not less than 1/8 Not less than 1/8 Not less than 1/8	273/424 273/422 271/645
20	1-13-13	259041000	Franklin L. Mercer and Ruth L. Mercer, h/w and Franklin L. Mercer, 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
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
			CONSOL Gas Company CNX Gas Company LLC Noble Energy Inc	CNX Gas Company LLC Noble Energy Inc. CNX Gas Company LLC	Merger 50% Assignment Assignment	384/191 388/285 550/273
			Dominion Appalachian Development, LLC CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc.	CONSOL Gas Appalachian Development Properties 11C CONSOL Gas Reserves Inc. CONSOL Gas Company	Merger Merger Merger	384/191 384/191 384/191
			Drilling Appalachian Corporation Anvil Oil Company Dominion Appalachian Development, inc.	Justin L. Henderson d/b/s Anvil Oil Company Dominion Appalachian Development, Inc. Dominion Appalachian Development, LLC	Assignment Assignment Name Change	277/225 278/323 323/383 WVSCS
19	Parcel 1-13-12.3	QLS# 288612000	Robert L. Underwood and Victoria M. Underwood, h/w	Drilling Appalachian Corporation	Not less than 1/8	275/388 277/685 277/195
Tract ID.	Tax Map &	Title Opinion	Noble Energy Inc. Grantor, Lessor, etc	ENX Gas Company LLC Grantee, Lessee, etc	Assignment Royalty	550/273 Book/Page
			Barbara Ballou Baker Kayvonne Pasulka Charles H. Ballou and Lois M. Ballou, h/w Steven E. Ballou and Linda M. Ballou, h/w Noble Energy, Inc.	Noble Energy, Inc. Noble Energy, Inc. Noble Energy, Inc. Noble Energy, Inc. CNX Gas Company, LLC	Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8 Assignment	520/415 520/407 524/371 534/276 542/147
			CONSOL Gas Reserves Inc. CONSOL Gas Company CNX Gas Company LLC Noble Energy Inc.	CDNSQL Gas Company CNX Gas Company LLC Noble Energy Inc. CNX Gas Company LLC	Merger Merger 50% Assignment Assignment	384/191 384/191 388/286 550/273
			Dominion Appalachian Development, Inc. Dominion Appalachian Development, ILC. CONSOL Gas Appalachian Development Properties ILC.	Dominion Appalachian Development, LLC CONSOL Gas Appalachian Development Properties LLC CONSOL Gas Reserves Inc.	Name Change Merger Merger	WVSGS 384/191 384/191
			Stella Dean Jenkins Alice Haught Alired Cottrill, individually and as Attorney-in-Fact for Renna Fox Anvil Oil Company	Anvil Oil Company Anvil Oil Company Anvil Oil Company Anvil Oil Company Dominion Appalachian Development, Inc.	Not less than 1/8 Not less than 1/8 Not less than 1/8 Assignment	275/486 275/484 274/242 323/383
			Forrest Jenkins and Eva Jenkins, h/w, Forrest Jenkins, Attorney-in-Fact for the following: Carl Jenkins, Betty Jenkins, Stella Dean Jenkins, Zetta Ash, Alice Haught and Thomas Haught Zetta F. Ash Carl Jenkins and Betty Jenkins, h/w	Anvil Oil Company Anvil Oil Company Anvil Oil Company	Not less than 1/8 Not less than 1/8 Not less than 1/8	274/244 275/331 275/488

JUL 2 4 2019

WV Department of Environmental Protection

Tract ID	Tax Map & Parcel	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
**	1-13-12	******			20.00	275/388
29	1-13-12.2	288612000	Robert L. Underwood and Victoria M. Underwood, h/w	Drilling Appalachian Corporation	Not less than 1/8	277/685
						277/195
			Carlot Ca			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	WVSOS
				CGN5OL 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
Tract ID	Tax Map &	Title Opinion	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
	Parcel	QLS#			No. of Land State	
30	1-13-12.1	288512000	Judy S. Wetzel, fka Judy Thacker	Noble Energy, Inc.	Not less than 1/8	452/694
			Mary Frances Carpenter	Noble Energy, Inc.	Not less than 1/8	452/696
			Janice J. Wagener, fka, Janice L. May	Noble Energy, Inc.	Not less than 1/8	452/698
			Roy Dean Ash	Noble Energy, Inc.	Not less than 1/8	453/537
			Larry J. McCaw and Joette B. McCaw, h/w	Noble Energy, Inc.	Not less than 1/8	453/533
			James F. Bramhall	Noble Energy, Inc.	Not less than 1/8	453/515
			Kitty Miesiak, f/k/a Kitty Bond	Noble Energy, Inc.	Not less than 1/8	453/517
			Betty E. Morrison	Noble Energy, Inc.	Not less than 1/8	453/641
			Noble Energy Inc.	CNX Gas Company LLC	50% Assignment	549/529
			Noble Energy Inc.	CNX Gas Company LLC	Assignment	550/273
			Colleen J. Patrick	CNX Gas Company LLC	Not less than 1/8	602/664
			Evelyn J. Linville	CNX Gas Company LLC	Not less than 1/8	599/810
			Marylyn M. Smith, f/k/e, Marylyn J. Smith	CNX Gas Company LLC	Not less than 1/8	599/801
			Marc P. Wise	CNX Gas Company LLC	Not less than 1/8	599/796
			Michael D. Wise	CNX Gas Company LLC	Not less than 1/8	599/791

RECEIVED Office of Oil and Gas

JUL 2 4 2019

WV Department of Environmental Protection



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 57th 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 ErikaWhetstone@cnx.com.

Sincerely,

Erika Whetstone Permitting Manager

> RECEIVED 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: 7/23/19		A	API No. 4	7- 095 -	
1/ 1/		Operator's Well No. SHR38QHSM				
			Well Pad Name; SHR38			
Notice has h	peen given:					
	ne provisions in West Virginia Co	de 8 22-6A	the Operator has provide	ded the rea	mired parties w	ith the Notice Forms listed
below for the	tract of land as follows:	3 22 01	, ine operator has provi		quireu parties /	in the Frence Forms have
State:	WEST VIRGINIA		F	Easting:	514187.4010	
County:	TYLER			Northing:	4358030.1500	
District:	CENTERVILLE		Public Road Acces		DUCKWORTH R	DGE ROAD
Quadrangle:	WEST UNION		Generally used far	m name:	ASH	
Watershed:	MIDDLE ISLAND CREEK		-			
requirements Virginia Code of this article	surface owner notice of entry to of subsection (b), section sixted as \$22-6A-11(b), the applicant shave been completed by the appl West Virginia Code § 22-6A, the rator has properly served the requirements.	en of this a all tender p icant.	article were waived in vorcof of and certify to the	vriting by e secretary	the surface ow that the notice	ner; and Pursuant to West
	ECK ALL THAT APPLY	uned partie	es with the following.			OOG OFFICE USE ONLY
☐ I. NO	TICE OF SEISMIC ACTIVITY		NOTICE NOT REQUIRE MIC ACTIVITY WAS			☐ RECEIVED/ NOT REQUIRED
☐ 2. NO	TICE OF ENTRY FOR PLAT SU	JRVEY or	■ NO PLAT SURVE	Y WAS C	ONDUCTED	☐ RECEIVED
■ 3. NO	TICE OF INTENT TO DRILL	NOT	NOTICE NOT REQUIRI ICE OF ENTRY FOR PI CONDUCTED or		CALL CONTRACTOR OF THE PARTY OF	☐ RECEIVED/ NOT REQUIRED
			WRITTEN WAIVER B (PLEASE ATTACH)	Y SURFA	CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION	NC				☐ RECEIVED
■ 5. PU	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 affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

WW-6AC SHR38QHSM (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 By: **ERIKA WHETSTONE** Facsimile:

Its: PERMITTING MANAGER

Telephone: 724-485-4035 Address: 1000 CONSOL ENERGY DRIVE

CANONSBURG PA 15370

Email: ERIKAWHETSTONE@CNX.COM

NOTARY SEAL

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

Notary Public

My Commission Expires

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.

RECEIVED Office of Oil and Gas

JUL 2 4 2019

WW-6A (9-13) API NO. 47. 695 0 9 % 0 2 6 5 2

OPERATOR WELL NO. SHR380HSM

Well Pad Name: SHR38

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

Notice Time Re	quirement: notice shall be pro	vided no later tha	n the filing date of permit application.
Date of Notice: Notice of:	7 23 19 Date Permit Applic	ation Filed: 7/2	-3/19
PERMIT F	OR ANY CERTIF	FICATE OF APP	ROVAL FOR THE
WELL WO			N IMPOUNDMENT OR PIT
Delivery metho	d pursuant to West Virginia (Code § 22-6A-10	(b)
☐ PERSONA	L REGISTERED	✓ METH	OD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL		PT OR SIGNATURE CONFIRMATION
registered mail or sediment control the surface of the oil and gas leaseled described in the eleoperator or lesses more coal seams; well work, if the impoundment or have a water well provide water for proposed well we subsection (b) of records of the she provision of this Code R. § 35-8-5	by any method of delivery that it plan required by section seven of tract on which the well is or is planted being developed by the properties of the event the tract of land on (4) The owners of record of the surface tract is to be used for the pit as described in section nine of spring or water supply source less consumption by humans or domork activity is to take place. (c)(1) this section hold interests in the eriff required to be maintained put article to the contrary, notice to a fact of the contrary.	requires a receipt of this article, and the roposed to be located well work, if a submitted pursual which the well presurface tract or tra- placement, constrainty of this article; (5) A pocated within one estic animals; and off more than three lands, the applicant ursuant to section en lien holder is not erator shall also pi	as required by this article shall deliver, by personal service or by a signature confirmation, copies of the application, the erosion and ne well plat to each of the following persons: (1) The owners of record of ted; (2) The owners of record of the surface tract or tracts overlying the the surface tract is to be used for roads or other land disturbance as not to subsection (c), section seven of this article; (3) The coal owner, coposed to be drilled is located [sic] is known to be underlain by one or concerning the oil and gas leasehold being developed by the proposed unction, enlargement, alteration, repair, removal or abandonment of any any surface owner or water purveyor who is known to the applicant to thousand five hundred feet of the center of the well pad which is used to (6) The operator of any natural gas storage field within which the elements in common or other co-owners of interests described in at may serve the documents required upon the person described in the eight, article one, chapter eleven-a of this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. rovide the Well Site Safety Plan ("WSSP") to the surface owner and any as provided in section 15 of this rule.
☑ Application ?	Notice WSSP Notice E	&S Plan Notice	☑ Well Plat Notice is hereby provided to:
SURFACE O			☐ COAL OWNER OR LESSEE
Name: SEE ATTAC Address:	CHED	-:	Name: SEE ATTACHED Address:
Address.			Trucios.
Name:			□ COAL OPERATOR
Address:			Name:
DELIBERCE	WNER(s) (Road and/or Other I	Vieturbonea)	Address:
	WNEK(S) (Road and/of Other L		SURFACE OWNER OF WATER WELL
Address:		=	AND/OR WATER PURVEYOR(s)
			Name: SEE ATTACHED
Name:			Address:
Address:		_	TORRESTOR OF INVALIDATION OF STREET
- alibert an an	anyon () (I) b	400	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
	WNER(s) (Impoundments or Pi		Name:
Address:		_	Address:
			*Please attach additional forms if necessary EIVED Office of Oil and Gas
			- 10

JUL 2 4 2019

API NO. 47-095

OPERATOR WELL NO. SHR380HSM

Well Pad Name: SHR38

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

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

WW-6A (8-13)

API NO. 47-095

OPERATOR WELL NO. SHR38QHSM

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:

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

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

JUL 2 4 2019

WW-6A (8-13) 47 09 5 02 6 5 2
API NO. 47-095 OPERATOR WELL NO. SHR38QHSM
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 http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

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

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

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

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

RECEIVED Office of Oil and Gas

JUL 2 4 2019

WW-6A (8-13)

API NO. 47-095

OPERATOR WELL NO. SHR38QHSM

Well Pad Name: SHR38

Notice is hereby given by:

Well Operator: CNX GAS COMPANY LLC Enhagt white Telephone: 724-485-4035

Email: ERIKAWHETSTONE@CNX.COM

Address: 1000 CONSOL ENERGY DRIVE

CANONSBURG, PA 15317

Facsimile:

Oil and Gas Privacy Notice:

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

Commonwealth of Pennsylvania - Notary Seal Lori L. Walker, Notary Public **Greene County**

My commission expires February 23, 2023 Commission number 1260781

Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this

My Commission Expires

Notary Public

RECEIVED
Office of Oil and Gas

JUL 2 4 2019

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

RECEIVED Office of Oil and Gas

JUL 2 4 2019

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

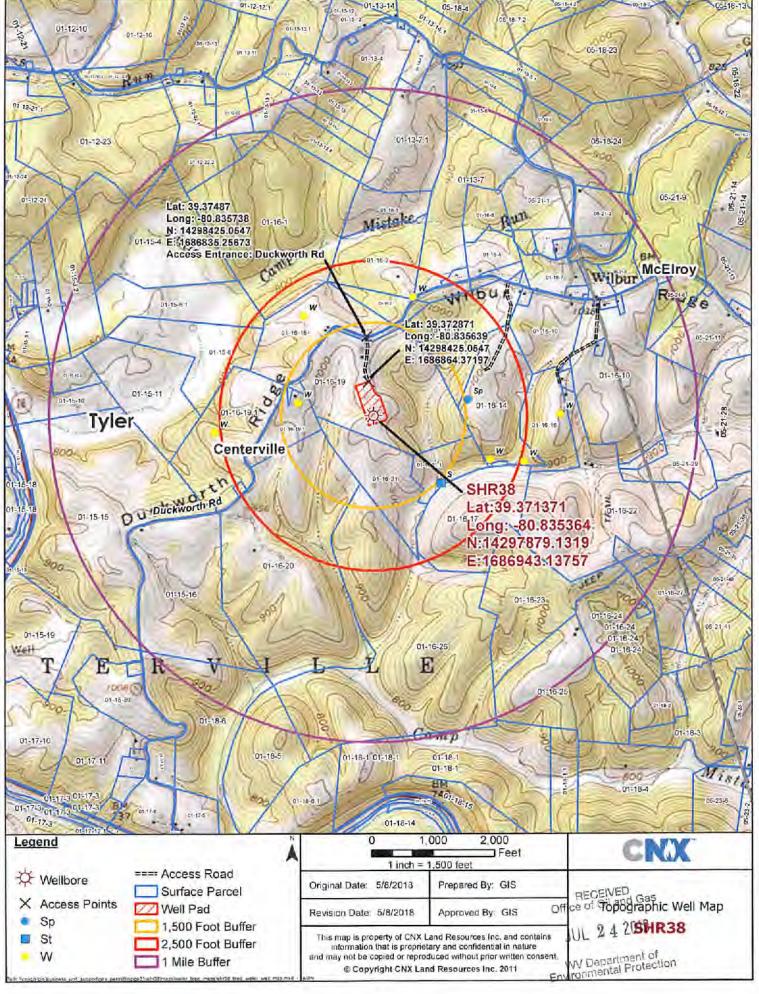
13310 MIDDLE ISLAND RD WEST UNION WV 26456

Office of Oil and Gas

JUL 2 4 2019

WW Department of Environmental Protection

47 09 5 0 2 6 5 2 05-18-24 05-21-9 05-21-14 Wilbur McElroy 05-21-11 01-01-16-14 01-15-23 01-16-24 D1-16-2 Mist 2,000



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

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

Notice Time Date of Not	Requirement: Notice shall be provided at loice: 7 23 19 Date Perm	east TEN (10) days prior to filing a it Application Filed:	permit application.		
Delivery me	thod pursuant to West Virginia Code § 22-	-6A-16(b)			
☐ HAND	■ CERTIFIED MAIL				
DELIV		ESTED			
70713					
receipt reque drilling a ho of this subse subsection n and if availa	W. Va. Code § 22-6A-16(b), at least ten days ested or hand delivery, give the surface owner rizontal well: <i>Provided</i> , That notice given protion as of the date the notice was provided to any be waived in writing by the surface owner ble, facsimile number and electronic mail addereby provided to the SURFACE OWN	r notice of its intent to enter upon the ursuant to subsection (a), section to the surface owner: <i>Provided, hower.</i> The notice, if required, shall includes of the operator and the operator	ne surface owner's land for the purpose of n of this article satisfies the requirements vever, That the notice requirements of this ude the name, address, telephone number,		
Name: SEE A		Name:			
Address:		Address:			
State: County: District: Quadrangle: Watershed:	WEST VIRGINIA TYLER CENTERVILLE WEST UNION MIDDLE ISLAND CREEK	UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:	514187.4010 4358030.1500 DUCKWORTH RIDGE ROAD ASH		
Pursuant to facsimile nu related to ho	e Shall Include: West Virginia Code § 22-6A-16(b), this no mber and electronic mail address of the operizontal drilling may be obtained from the § 157th Street, SE, Charleston, WV 25304 (30)	erator and the operator's authorize Secretary, at the WV Department of	ed representative. Additional information f Environmental Protection headquarters,		
	ereby given by:				
	OF: CNX GAS COMPANY LLC	Authorized Representative:	Transaction of the Control of the Co		
Address:	1000 CONSOL ENERGY DRIVE	Address:	1000 CONSOL ENERGY DRIVE		
CANONSBURG		CANONSBURG PA 15370	A. W. (200.17)		
Telephone:	724-485-4035	Telephone:	724-485-4035		
Email: Facsimile:	ERIKAWHETSTONE@CNX.COM	Email: Facsimile:	ERIKAWHETSTONE@CNX,COM		

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 deprivacvofficer@wv.gov.

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

RECEIVED Office of Oil and Gas

JUL 2 4 2019

Operator Well No. shaseOHsi2 6 5 2

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

		Requirement: notice shall be prov :: 7 23 19 Date Per		ter than the filing lication Filed:		application.
Deliv	ery meth	od pursuant to West Virginia C	ode § 22-	6A-16(c)		
	CERTIF	IED MAIL	□н	AND		
		N RECEIPT REQUESTED		ELIVERY		
returr the p requir drillind dama	n receipt relanned op red to be reg of a he ges to the he notices	requested or hand delivery, give the peration. The notice required by provided by subsection (b), section prizontal well; and (3) A propose surface affected by oil and gas on	e surface this subs n ten of th d surface perations t	owner whose land ection shall inclu- is article to a surfi- use and compens to the extent the da	will be used for de: (1) A copy ace owner whose ation agreement amages are com	ication, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the nt containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
(at the		by provided to the SURFACE O listed in the records of the sheriff		e of notice): Name:		
Addr	ess:			Address	:	
State: Coun Distri	ty:	he surface owner's land for the pur WEST VIRGINIA TYLER CENTERVILLE WEST UNION	rpose of c	UTM NAD 8	Easting: Northing:	514187.4010 4358030.1500 DUCKWORTH RIDGE ROAD
		MIDDLE ISLAND CREEK		Generally us	or turn name.	
Pursu to be horize surface inform	provided provided ontal well on affecte mation re quarters,	I by W. Va. Code § 22-6A-10(b) I; and (3) A proposed surface use Id by oil and gas operations to the lated to horizontal drilling may be	to a sur and comp e extent to be obtained	face owner whose pensation agreeme the damages are co ted from the Secret	land will be nt containing a compensable und ary, at the WV	code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the der article six-b of this chapter. Additional / Department of Environmental Protection or by visiting

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.

RECEIVED Office of Oil and Gas

JUL 2 4 2019

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

RECEIVED 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 57th Street, SE Charleston, WV 25304

Subject: DOH Permit for the SHR-38 Pad, Tyler County SHR38QHSM 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.

Yary K. Clayton

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Shannon Miller

CNX Gas Company LLC

CH, OM, D-6

File

RECEIVED Office of Oil and Gas

JUL 2 4 2019

<u>Proposed Additives to be used in Fracturing or Stimulations</u>

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

RECEIVED Office of Oil and Gas

JUL 2 4 2019



SITE AS-BUILT SHRL38 WELL SITE

CENTERVILLE DISTRICT CNX RESOURCES CORPORATION

NOTES: 1.) SURVEY DATA REFERENCE TO WASHO NORTH ZONE HORIZONTAL (NAD 83-2011) VERTICAL (NAVD 88) 2) TOPOGRAPHIC DATA - SURVEY DERIVED (83/88) - 2-FT. CONTOUR INTERVAL 3.) TOPOGRAPHIC PLAN BASED ON FIELD RUN SURVEY BY DIEFFENBAUCH & HRITZ, LLC ON AUGUST 12, 2019. LEGEND SURVEYED MAJOR CONTOUR SURVEYED MINOR CONTOUR ROADWAY **FENCELINE** OVERHEAD ELECTRIC UNDERGROUND ELECTRIC LINE SALT FENCE COMPOST FILTER SOCK DITCH FLOW LINE TREE LINE **GUY WIRE** GAS LINE MARKER TELEPHONE BOX (SIZE NOTED IN PLAN) WATER VALVE PACIACCESS ROAD ASPHALT ENTRACE

SAFETY BERM



WEST UNION QUAD

LOCATION MAP

PROJECT # 19016-030 AUGUST 2019 DIEFFENBAUCH & HRITZ, LLC

SHEET INDEX

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





9 40

