



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

Wednesday, January 8, 2020
WELL WORK PERMIT
Horizontal 6A / New Drill

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

Re: Permit approval for SHR 37 DHSM
47-095-02667-00-00

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

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

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: SHR 37 DHSM
Farm Name: CNX GAS COMPANY
U.S. WELL NUMBER: 47-095-02667-00-00
Horizontal 6A New Drill
Date Issued: 1/8/2020

Promoting a healthy environment.

PERMIT CONDITIONS

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

CONDITIONS

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

API Number: _____

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

WW-6B
(04/15)

API NO. 47- 4709502667
OPERATOR WELL NO. SHR37DHSM
Well Pad Name: SHR37

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

1) Well Operator: CNX Gas Company, LLC 494458046 Tyler Centerville West Union
Operator ID County District Quadrangle

2) Operator's Well Number: SHR37DHSM Well Pad Name: SHR37

3) Farm Name/Surface Owner: CNX Gas Company LLC Public Road Access: Duckworth Ridge Road

4) Elevation, current ground: 828' Elevation, proposed post-construction: 828'

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

(b) If Gas Shallow X Deep _____
Horizontal X _____

*Yes
10/29/2019*

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Target formation is Marcellus Shale @ 6290'-6337' TVD, 47' thick, expected formation pressure ~4000 psi

8) Proposed Total Vertical Depth: 6302'

9) Formation at Total Vertical Depth: Marcellus Shale (will not penetrate Onondaga)

10) Proposed Total Measured Depth: 18,439' ✓

11) Proposed Horizontal Leg Length: 11,376'

12) Approximate Fresh Water Strata Depths: 92', 126', 144', 148', 150', 176', 220' ✓

13) Method to Determine Fresh Water Depths: Offset water well information

14) Approximate Saltwater Depths: 1748', 2458'

15) Approximate Coal Seam Depths: No mineable coal seams; trace @ 154', 526', 618', 955', 992', 1044'

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

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

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

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WW-6B
(04/15)

4709502667
API NO. 47- _____
OPERATOR WELL NO. SHR37DHSM
Well Pad Name: SHR37

18)

CASING AND TUBING PROGRAM

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	20	New	L/S	<94.0	100	100	96 / CTS
Fresh Water	13.375	New	J-55	54.5	400	400	278 / CTS
Coal	13.375	New	J-55	54.5	400	400	278/CTS
Intermediate	9.625	New	J-55	36.0	2600	2600	834 / CTS
Production	5.5	New	P-110	20.0	18,439	18,439 ✓	3743 / TOC @ 2100'
Tubing	2.375	New	J-55	4.7		TBD	N/A
Liners	N/A						

JCS
10/29/2019

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
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	14340	~11000 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:				

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WW-6B
(10/14)

API NO. 47- _____
OPERATOR WELL NO. SHR37DHSM
Well Pad Name: SHR37

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 casing. Note that there are no known mineable coal seams in this area. 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 SOBMs. 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 ~11,000 psi and max anticipated treating pump rate is ~100 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 PBSD. 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): 8.5

JEB
10/29/2019

22) Area to be disturbed for well pad only, less access road (acres): 8

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 Class H with dry blend and/or liquid additives including retarder, suspension agent, gas block, defoamer, fluid loss control, extender, dispersant, anti-settling agent. Actual cement blends may vary slightly depending upon cementing service company utilized.

25) Proposed borehole conditioning procedures:

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

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*Note: Attach additional sheets as needed.

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SHR37 Cement Additives

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 Class H 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.

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DRILLING WELL PLAN
SHR-37D-HSM (Marcellus HZ)
Marcellus Shale Horizontal
Tyler County, WV

Ground Elevation			SHR-37D-HSM SHL			N 313593.43, E 1619463.85 (NAD27)				
Azimuth			SHR-37D-HSM LP			N 314153.03, E 1617490.25 (NAD27)				
828 GL Elevation			SHR-37D-HSM BHL			N 324909.76, E 1613787.02 (NAD27)				
341°										
	HOLE	CASING	GEOLOGY	MD	TVD	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
	24"	20" L/S	Conductor	100	100	AIR	To Surface	N/A	N/A	Stabilize surface fill/soil
	17-1/2"	13-3/8" 54.5# J-55 BTC	Shallowest Fresh Water		92	AIR / FW Mist	15.6 ppg Class A + 1% to 3% CaCl2 + 1/4 pps Flake 20% OH Excess Yield = 1.19 TOC @ surface	Centralize every other joint from shoe to surface Bow spring centralizers	Ensure the hole is clean at section TD	Set through fresh water zones Cemented to surface No known mineable coal seams
			Deepest Fresh Water		220					
			Fresh Water Casing	400	400					
	12-1/4"	9-5/8" 36.0# J-55 LTC	No mineable coal zones		N/A	AIR / Soap	15.6 ppg Class A + 0% to 2% CaCl2 + 1/4 pps Flake 20% OH Excess Yield = 1.19 TOC @ surface	Centralize every 3rd joint from shoe to surface Bow spring centralizers	Soap the hole as needed and ensure the hole is clean at section TD	Set through potential salt water zones Cemented to surface Casing to be set below the Big Injun and Berea and into Devonian Shale
			Big Lime		1683					
			Big Injun		1748					
			Price		1888					
			Weir		2018					
			Berea		2238					
			Gordon		2458					
	Intermediate Casing	2600	2600							
	8-3/4" Tangent	5-1/2" 20.0# P-110 VAR	Warren		3153	AIR	15.0 ppg Class A or H with additives (retarder, suspension agent, gas block, defoamer, fluid loss, extender, etc.)	Centralize every joint from shoe to TOC	Once at TD, circulate at max flowrate with max rotation until shakers clean-up (typically requires multiple bottoms-up)	Note: Actual centralizer placement may be changed due to hole conditions
			Benson		4733					
Alexander				4978						
Cashaqua				5978						
Middlesex				6083						
West River				6123						
Burkett				6193						
Tully				6223						
Hamilton				6243						
Marcellus				6261						
Production Casing	18439	6302			12.0-12.8 ppg SOBMM	10% OH Excess Yield = 1.10 TOC @ >= 500' above 9-5/8" shoe	Single-piece/rigid bow centralizers	Once on bottom with casing, circulate a minimum of one hole volume prior to pumping cement	Note: Actual cement blends may vary slightly depending upon service company utilized	
LP @ +/- 6302' TVD			8-3/4" x 8-1/2" Hole - Cemented Long String			+/- 11376' Lateral			TD @ +/- 6302' TVD	
5-1/2" 20.0# VA-EP-P110-NY VAR (115-125 MYS, 95% RBW, API Modified BTC)										

90B
10/29/2019

Wade,

No wells have been drilled on this Pad as of now so we do not have any new confirmed depths or completion reports. The water depths are based on a study we had completed that took the local water depths from our pre-drill sampling and iterated to our site location, an additional buffer was added to be conservative.

See attached.

Let me know if you require anything else.

-Ray

From: Stansberry, Wade A [<mailto:Wade.A.Stansberry@wv.gov>]
Sent: Wednesday, December 11, 2019 1:19 PM
To: Hoon, Raymond <RaymondHoon@cnx.com>; Rhodes, Jacob K <Jacob.K.Rhodes@wv.gov>
Cc: Weigand, Sarah <sarahweigand@cnx.com>; Zachwieja, Becky <BeckyZachwieja@cnx.com>; Simmons, Walter G <Walter.G.Simmons@wv.gov>; Kees, Kelly L <Kelly.L.Kees@wv.gov>; Adkins, Laura L <Laura.L.Adkins@wv.gov>
Subject: RE: [EXTERNAL] RE: SHR37 Permit applications

Ray,

I have a question about the approximate water strata depths. On the 95-02588, the depths were given 137' & 247' for freshwater.

I'm just wondering if you are pulling the new depths from well records in the area or if you got the new water depth approximations from drilling?

Whichever one, could you send me an API # or #s of the nearby/offset wells you used or the completion report of 95-02588 to have that entered each of the SHR 37 applications.

Everything looks good in terms of the WW-6B and the casing plan.

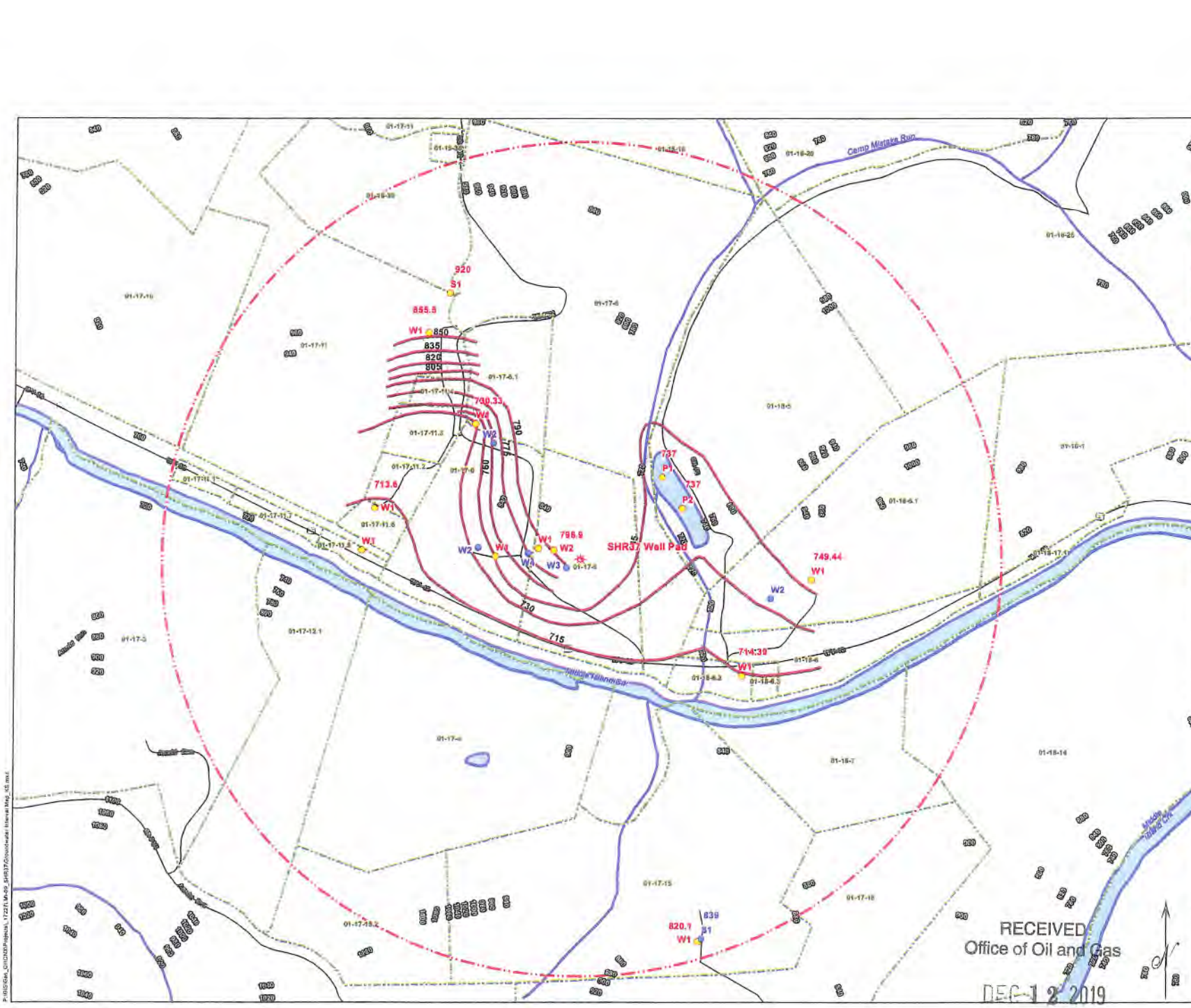
Thank you,

Wade A. Stansberry
Environmental Resources Specialist 3
West Virginia Department of Environmental Protection
Office of Oil & Gas
601 57th St. SE
Charleston, WV 25304
(304) 926-0499 ext. 1653
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LEGEND

- SHR37 Well Pad Location
- 2500' Buffer
- Parcel Boundary
- Road
- Stream
- Groundwater Contours

Known Water Supplies

- Sampled Source
- Inventoried, Not Sampled

Scale:
0 500 1,000
Feet
1 in = 500 ft

Map References:
 • 7.5 minute quadrangle: West Union, WV
 • Service Layer Credits: Esri, HERE, DeLorme, Mapbox, OpenStreetMap contributors

Notes:
 • This drawing is the property of CNX Resources Corporation and contains information that is proprietary and confidential in nature. It may not be copied or otherwise reproduced in whole or in part without prior written consent.

Groundwater Interval Map

SHR37 Gas Well Pad

Centerville District,
Tyler County, WV

Project #: 17-227-09

Prepared for:

199 Johnson Road
Building 2, Suite 101
Houston, PA 15342
Office: (724) 746-5200
Fax: (724) 746-5603
www.moody-s.com

Drawn by:	IDW	Date:	12/28/20
Checked by:	CS	Revision:	

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National Flood Hazard Layer FIRMeTte



39°21'27.98"N



USGS The National Map: Orthoimagery. Data refreshed October, 2017.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

39°21'0.15"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone I</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes, <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **12/19/2018 at 11:31:08 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



SHR37 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 SHR37 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.

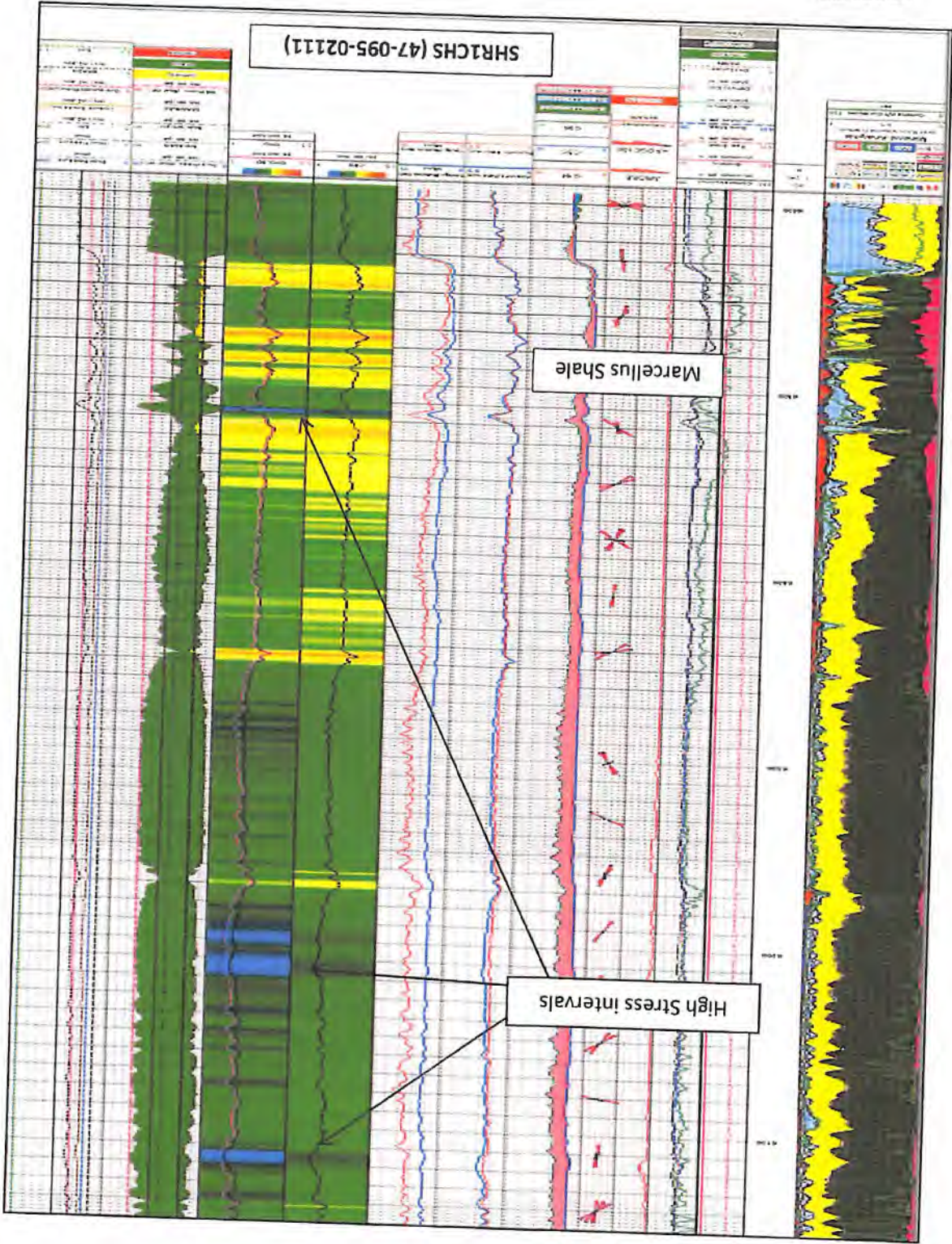
The current hypothesis for SOG Communication is that Marcellus frac fluids and pressure intersect and migrate up a nearby fault that acts as a conduit for upward migration and intersection with high permeability reservoirs of the Alexander and Benson. Both of these reservoirs are primarily depleted, 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.

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SHR37 Pad Frac SOG Review / CRSD Review Tuesday, March 12, 2019
 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.

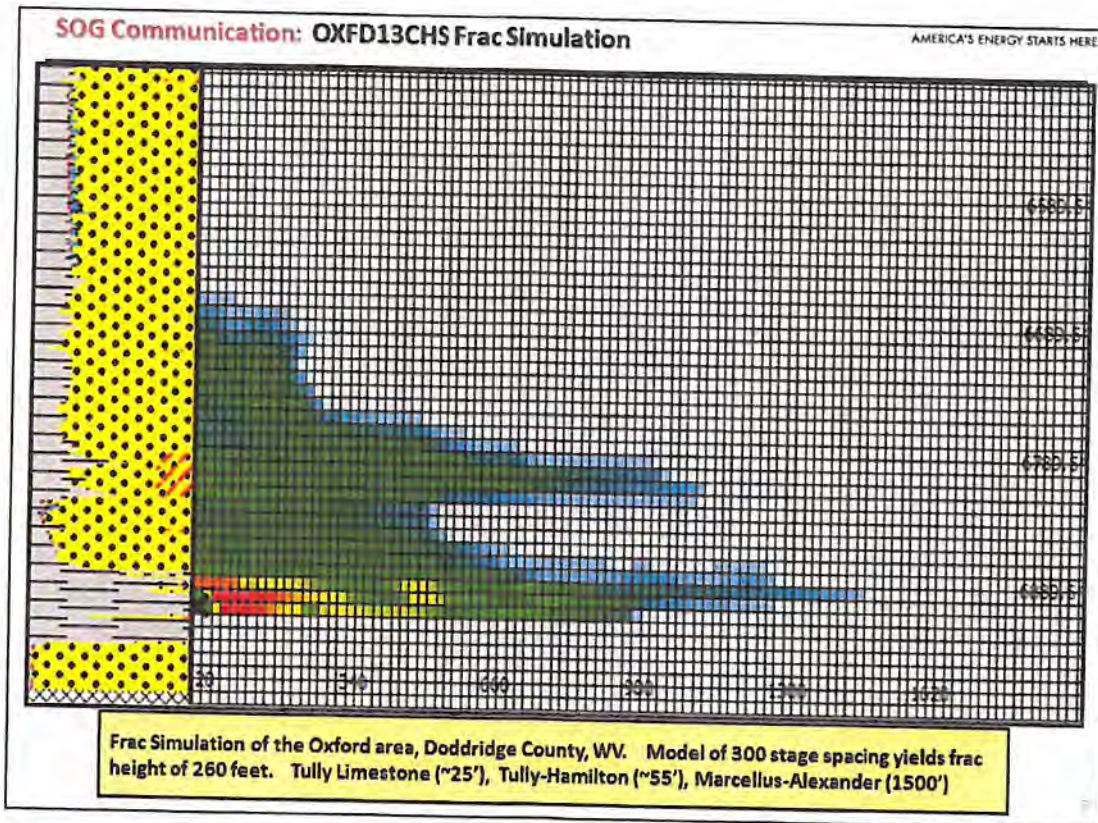


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Figure 2. Stratigraphic intervals of high stress should serve as adequate frac barriers for a Marcellus frac. The frac modeling example below is from the Oxford area of western Doddridge County, where the Marcellus and adjacent shallower shales are 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.



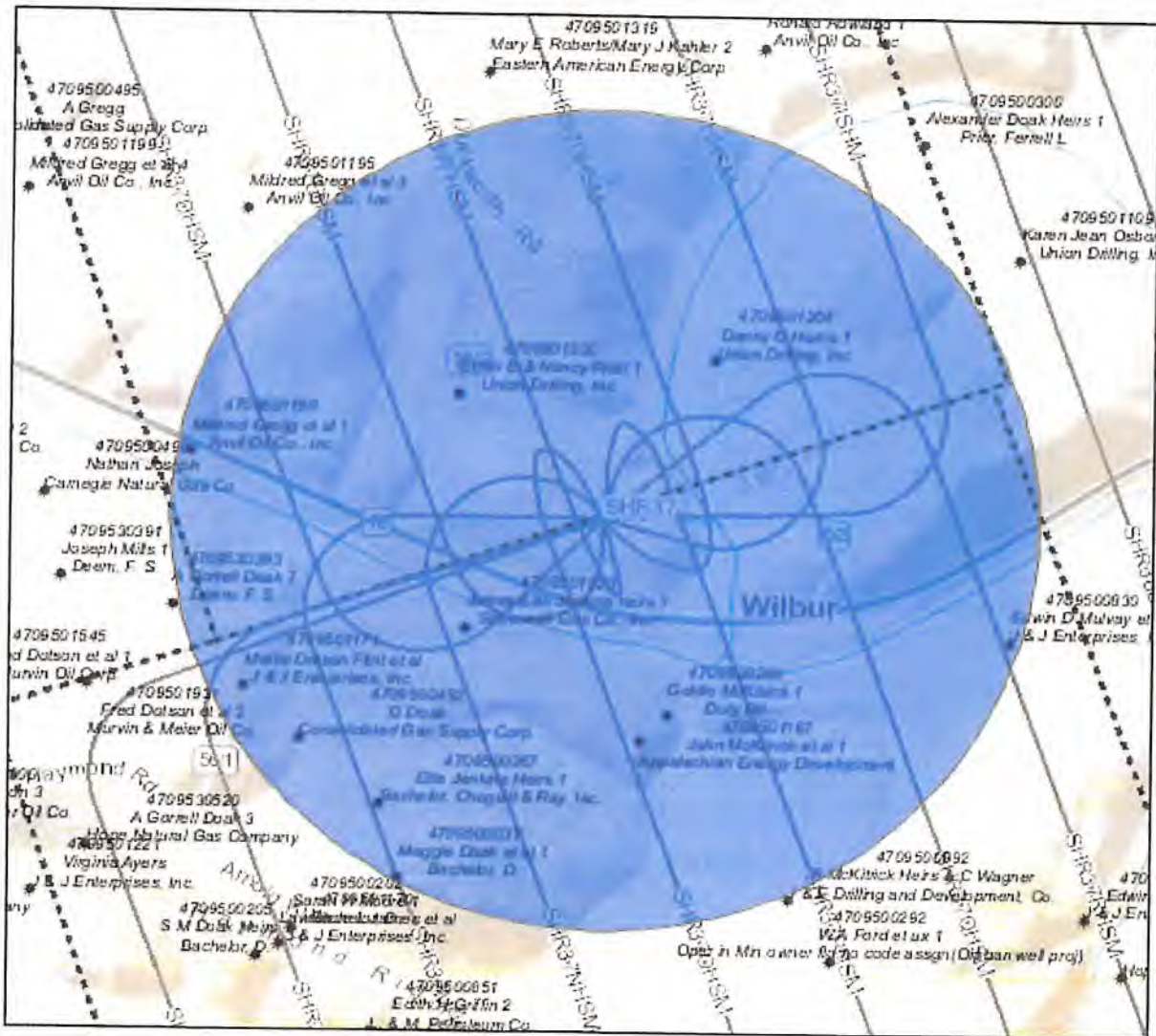
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Figure 3. All wells within a 2640' buffer around the SHR37 pad center have been reviewed and listed below.

API	STATE	COUNTY	LATITUDE	LONGITUDE	OPERATOR	STATUS	WELL NAME	WELL_NO	PLUG_DATE	TD	FMTD	ELEVATION	FIELD_NAME	COMMENTS
4709500492	WV	Tyler	39.34947695	-80.85201064	Consolidated Gas Supply Corp.	Gas	G Doak			1916	Squaw	862	Unnamed	Ground Level
4709500992	WV	Tyler	39.34683572	-80.84205087	J & E Drilling and Development, Co.	Gas	R McKittrick Heirs & C Wagner			5014	Benson	960	Wilbur	Ground Level
4709501200	WV	Tyler	39.35527799	-80.84883673	Union Drilling, Inc.	Gas	Elden E & Nancy Pratt	1		4927	Benson	833	Wilbur	Ground Level
4709500280	WV	Tyler	39.34991182	-80.84453982	Duty Oil	Dry	Goldie McKittrick	1	5/22/1958	945	1st Cow Rn/Moundsvle	818	Wilbur	Ground Level
4709501167	WV	Tyler	39.34947693	-80.8450996	Appalachian Energy Development	Gas	John McKittrick et al	1		4966	Benson	818	Wilbur	Ground Level
4709510393	WV	Tyler	39.35169904	-80.85462599	Deem, F. S.	Gas	A Gorrell Doak	7		2110	Big Injun (undiff)	1082	Stanley	Ground Level
4709500037	WV	Tyler	39.34715688	-80.84995569	Bachelor, D.	Dry	Maggie Doak et al	1	10/4/1935	1193	1st Cow Rn/Moundsvle	1109	Wilbur	Ground Level
4709501204	WV	Tyler	39.3558579	-80.84360685	Union Drilling, Inc.	Gas	Danny C Harris	1		4919	Benson	778	Wilbur	Field Topo Map
4709500287	WV	Tyler	39.34838191	-80.85035268	Bachelor, Chogull & Ray, Inc.	Dry	Ellis Jenkins Heirs	1	4/11/1958	1103	1st Cow Rn/Moundsvle	1096	Wilbur	Ground Level
4709501223	WV	Tyler	39.35136192	-80.84964871	Stonewall Gas Co., Inc.	Gas	James Ellis Jenkins heirs	1		4954	Benson	830	Wilbur	Ground Level
4709501171	WV	Tyler	39.35034699	-80.85131162	J & J Enterprises, Inc.	Gas	Mattie Dotson Flint et al			5469	Alexander	948	Wilbur	Ground Level
4709500830	WV	Tyler	39.35118671	-80.83757998	J & J Enterprises, Inc.	Gas	Edwin D Mulvey et ux			5136	Alexander	800	Wilbur	Ground Level
4709501150	WV	Tyler	39.35426208	-80.85425861	Anvil Oil Co., Inc.	Gas	Mildred Gregg et al	1		4755	Benson	719	Wilbur	Ground Level



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SHR37 Pad Frac SOG Review / CRSD Review Tuesday, March 12, 2019

Figure 4. All wells within a 500' buffer around the SHR37 pad have been reviewed and listed below. Pink highlights mean that no data exists for the well.

API	STATE	COUNTY	LATITUDE	LONGITUDE	OPERATOR	STATUS	WELL NAME	WELL NO	PLUG DATE	TO	FMTD	ELEVATION	COMMENTS
4709501442	WV	Tyler	39.53517	-80.8356774		Canceled Permit				0		804	
4709570103	WV	Tyler	39.5755024	-80.8548387	Carnegie Natural Gas Co	Gas	Leure Conewey	1		0		755	Ground Level
4701708482	WV	Doddridge	39.53517	-80.8356774		Canceled Permit				0		804	
4701771455	WV	Doddridge	39.5308663	-80.83576	Hope Natural Gas Company	not available	Elias Thombs			0		871	
4701704576	WV	Doddridge	39.5185292	-80.8958069	----- unknown -----	not available	McKendry Dotson 1			0		958	
4709580890	WV	Tyler	39.535578	-80.8529416	Hope Natural Gas Company	not available	Robert Doak	1		0		1116	Spirit Level
4701771456	WV	Doddridge	39.5369733	-80.8299341	----- unknown -----	not available	McCutchan-Haines 1			0		930	
4709500044	WV	Tyler	39.5651758	-80.8587597	----- unknown -----	not available	B S Smith	1		0		816	Ground Level
4701704186	WV	Doddridge	39.5257924	-80.8413618	Ritchie Petroleum Corp.	not available	Brake Samuel 1			0		1081	
4701771447	WV	Doddridge	39.5211421	-80.833284	Hope Natural Gas Company	not available	Lawrence James			0		883	
4701701082	WV	Doddridge	39.5202022	-80.834267	Prior, Ferrell L DBA Prior Oil Company	not available	W H Pigott 1			0		930	
4701771448	WV	Doddridge	39.5207062	-80.8366799	----- unknown -----	not available	S Yeater			0		751	
4701703945	WV	Doddridge	39.53517	-80.8336774		not available				0		804	
4701771435	WV	Doddridge	39.5372654	-80.83952	Hope Natural Gas Company	not available	Wagner			0		746	
4709501160	WV	Tyler	39.5281125	-80.8464057	Hope Construction & Refining	not available	E M Jackson	7		0		1115	Ground Level
4701771458	WV	Doddridge	39.5301405	-80.833294	----- unknown -----	not available	B Henderson 3			0		762	
4701771429	WV	Doddridge	39.5252054	-80.840267	----- unknown -----	not available	Cisco Dotson			0		989	
4701771427	WV	Doddridge	39.5282082	-80.8378269	Oper in Min. owner fid. no code assign(Orphan well proj)	not available	Mary Montgomery 1			0		790	
4709502292	WV	Tyler	39.5459127	-80.8411859	Oper in Min. owner fid. no code assign(Orphan well proj)	not available	W A Ford et ux	1		0		841	Spirit Level
4701771428	WV	Doddridge	39.5257864	-80.8411738	----- unknown -----	not available	Cisco Dotson 1			0		1040	
4701708402	WV	Doddridge	39.53517	-80.8356774		not available				0		804	
4701780835	WV	Doddridge	39.5211419	-80.8400528	----- unknown -----	not available	S Yeater			0		786	
4709502485	WV	Tyler	39.53517	-80.8356774		not available				0		804	
4701704398	WV	Doddridge	39.53517	-80.8356774		not available				0		804	
4701771425	WV	Doddridge	39.5228854	-80.8487868	----- unknown -----	not available	Arlington Dotson 2			0		819	
4709501159	WV	Tyler	39.53317	-80.8356774		not available				0		804	
4701703945	WV	Doddridge	39.53317	-80.8336774		not available				0		804	
4701790182	WV	Doddridge	39.5189645	-80.8421958	Philadelphia Oil Co	not available	F Dotson			0		840	
4701771434	WV	Doddridge	39.5327524	-80.8393059	Hope Natural Gas Company	not available	Wagner			0		884	
4709501158	WV	Tyler	39.5286925	-80.8481207	Hope Construction & Refining	not available	E M Jackson	5		0		1187	Spirit Level
4701771451	WV	Doddridge	39.5285605	-80.8445558	----- unknown -----	not available	Alfred Dotson 1			0		1087	
4701703944	WV	Doddridge	39.53517	-80.8356774		not available				0		804	
4708505470	WV	Ritchie	39.53517	-80.8356774		not available				0		804	
4709500280	WV	Tyler	39.5499116	-80.8445398	Duty Oil	Dry	Goidie McKittrick	1	9/22/1958	845	1st Cow Rn/Moundsville	816	Ground Level
4709500715	WV	Tyler	39.5385255	-80.8387489	Industrial Gas Associates	Dry	W Paul McCutchan	5	abandoned	948	Lo Frprt 5s/Frprt 6s	760	Ground Level
4708500102	WV	Tyler	39.5462759	-80.8521136	Bachelor, D	Dry	Sarah M Moore	1	8/14/1951	1096	1st Cow Rn/Moundsville	1084	Ground Level
4709500205	WV	Tyler	39.5458049	-80.8528876	Bachelor, D	Dry	S M Doak heirs	1	11/29/1951	1100	Mehong 6s/Big Dunk	1036	Ground Level
4709500267	WV	Tyler	39.5483819	-80.8503527	Bachelor, Chogull & Ray, inc	Dry	Ellis Jenkins heirs	1	4/9/1958	1103	1st Cow Rn/Moundsville	1088	Ground Level
4708500087	WV	Tyler	39.5471569	-80.8499557	Bachelor, D	Dry	Maggie Doak et al	1	11/4/1935	1193	1st Cow Rn/Moundsville	1109	Field Topo Map
4701701070	WV	Doddridge	39.5210802	-80.8390949	Prior, Ferrell L DBA Prior Oil Company	Oil	D Gerner 1			1792	Big injun fund(FF)	728	Ground Level
47017050056	WV	Doddridge	39.5356704	-80.83464	Hope Natural Gas Company	Gas	Austin Doak			1900	Big injun fund(FF)	759	Ground Level
4709500300	WV	Tyler	39.5596158	-80.839415	Prior, Ferrell L	Gas	Alexander Doak heirs	1		1856	Big injun fund(FF)	785	Ground Level
4701700014	WV	Doddridge	39.5218924	-80.8457888	Prior, Ferrell L	Oil and Gas	Arthur Yeater	2		1845	Big injun fund(FF)	775	Ground Level
4709500188	WV	Tyler	39.5354627	-80.8472267	Oper in Min. owner fid. no code assign(Orphan well proj)	Gas	Dele Ash	1		1849	Big injun fund(FF)	857	Ground Level
4701701082	WV	Doddridge	39.5212513	-80.8412958	Hickman, Charles L	Dry w/ O&G show	Arlington Dotson Hrs 5		1964	1865	Big injun fund(FF)	780	Ground Level
4701750101	WV	Doddridge	39.5320285	-80.83484	Deem, F. S.	Oil and Gas	Henderson Walton	1		1880	Big injun fund(FF)	802	Ground Level
4701790443	WV	Doddridge	39.5183863	-80.8426678	Clifton Oil & Gas	Oil and Gas	McKendry Dotson	1		1882	Big injun fund(FF)	820	Ground Level
4709500393	WV	Tyler	39.557067	-80.8628425	Mann Drilling	Oil	H S Smith & Ash	1		1900	Big injun fund(FF)	805	Ground Level

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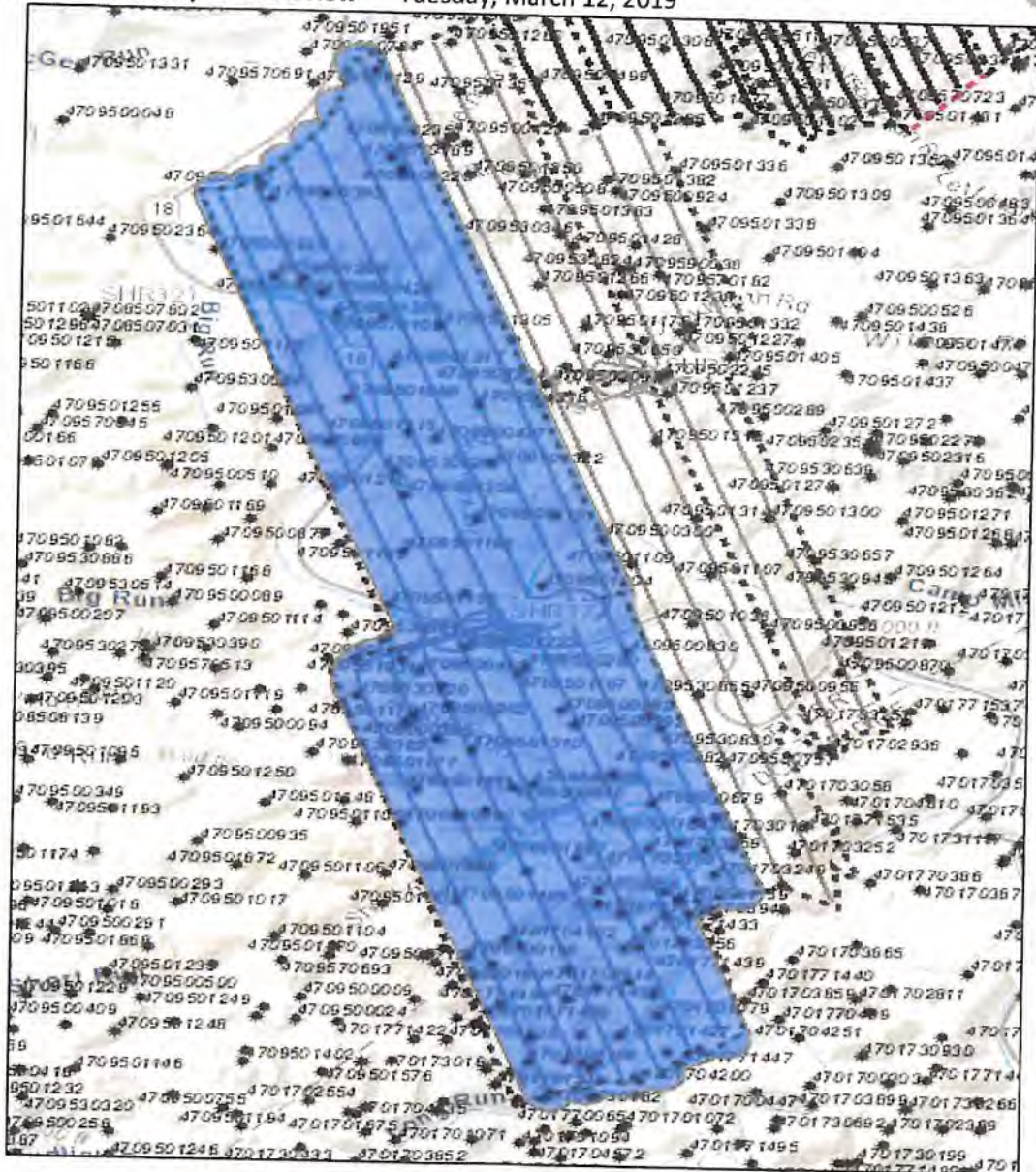
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470950189	WV	Tyler	39.5969136	-80.9544647	Philadelphia Company, The	Gas	W N Moore		1901	Big Injun (und/ff)	860	Ground Level
4709500492	WV	Tyler	39.549477	-80.8520106	Consolidated Gas Supply Corp.	Gas	G Doak		1916	Squaw	862	Ground Level
4701700304	WV	Doddridge	39.5321788	-80.833933	P & M Oil Co.	Dry w/ O&G Show	Harley Teikinton	1	1916	Big Injun (und/ff)	863	Ground Level
4709500526	WV	Tyler	39.5641701	-80.8939826	Pittsburgh & WV Gas	Gas w/ Oil Show	Heeh & Laura Duckworth	2	1923	Big Injun (und/ff)	868	Ground Level
4701700160	WV	Doddridge	39.5324633	-80.8314891	Hope Natural Gas Company	Gas	E A Hendershot		1930	Big Injun (und/ff)	870	Ground Level
4701791184	WV	Doddridge	39.5266565	-80.8293059	Hickman, Charles L.	Oil and Gas	Cisco Dotson	1	1973	Big Injun (und/ff)	861	Ground Level
4701790277	WV	Doddridge	39.5272426	-80.8478967	Hope Construction & Refining	Oil w/ Gas Show	Austin Doak		1978	Squaw	898	Ground Level
4701701065	WV	Doddridge	39.5185932	-80.8393839	Prior, Ferrell L DBA Prior Oil Company	Oil w/ Gas Show	W H Pigott Hrs 1		1985	Big Injun (und/ff)	1010	Ground Level
4701790102	WV	Doddridge	39.5320284	-80.8376279	Deem, F. S.	Oil and Gas	Okey Washburn		1987	Big Injun (und/ff)	826	Barometer
4709500428	WV	Tyler	39.5767876	-80.8591176	Warren Drilling Co. (John R. Warren)	Gas w/ Oil Show	Lewis Maxwell Heirs	1	1010	Big Injun (und/ff)	1083	Ground Level
4709500510	WV	Tyler	39.547639	-80.8583085	Hope Natural Gas Company	Gas w/ Oil Show	Dale Ash	1	2052	Weir	720	Ground Level
4709500893	WV	Tyler	39.551699	-80.8546266	Deem, F. S.	Gas	A Gorrell Doak	5	2105	Big Injun (und/ff)	1072	Ground Level
4701702855	WV	Doddridge	39.5366394	-80.8318811	Industrial Gas Associates	Oil and Gas	L G Hamner 1		2110	Big Injun (und/ff)	1081	Ground Level
4701702556	WV	Doddridge	39.5284574	-80.8375199	Industrial Gas Associates	Oil and Gas	N Shepherd 1		2300	Weir	918	Ground Level
4709500679	WV	Tyler	39.5402015	-80.835689	Industrial Gas Associates	Oil and Gas	Hattie Bradford	2	2305	Weir	920	Ground Level
4701702524	WV	Doddridge	39.5170163	-80.8370789	Industrial Gas Associates	Oil and Gas	Paul James 1		2315	Weir	780	Ground Level
4709500851	WV	Tyler	39.5445459	-80.8505147	L. B. M. Petroleum Co.	Gas	Edith H Griffin	2	2390	Weir	1000	Ground Level
4709500676	WV	Tyler	39.5411227	-80.8452058	Industrial Gas Associates	Oil and Gas	Paul McCutchen	1	2465	Beres 3s	1020	Ground Level
4709500800	WV	Tyler	39.5423278	-80.8383759	Hope Natural Gas Company	Gas	W P Bradford		2466	Fifty-foot	850	Ground Level
4709501931	WV	Tyler	39.5503471	-80.8563066	Murvin & Meier Oil Co.	Dry w/ Gas Show	Fred Dotson et al	2	2485	Gentz	862	Ground Level
4701701079	WV	Doddridge	39.5246812	-80.834829	Prior, Ferrell L DBA Prior Oil Company	Dry	Elizabeth Thomas 1		2521	Beres 5s	968	Kelly Eushing
4709500220	WV	Tyler	39.5861746	-80.8599307	Oper in Min. owner fid.no code assign(Orphan well proj)	Dry w/ O&G Show	Okey R & Ore Nelson Moore	1	2553	Big Injun (und/ff)	771	Ground Level
4709500400	WV	Tyler	39.5778476	-80.8604265	Quaker State Oil Refining Co.	Dry w/ O&G Show	Dale Ash Jr	1	2605	Gordon	752	Ground Level
4709500830	WV	Tyler	39.5456086	-80.835201	Hope Natural Gas Company	Gas	William Smith		2610	Weir	816	Ground Level
4709500813	WV	Tyler	39.5661544	-80.8585335	L. B. M. Petroleum Co.	Gas w/ Oil Show	Frank Dillon	1	2821	Fifth	745	Ground Level
4709501150	WV	Tyler	39.5542621	-80.8542536	Anvil Oil Co., Inc	Gas	Mildred Gregg et al	1	3400	Warren First	810	Ground Level
4709501298	WV	Tyler	39.5753365	-80.8581838	Coastal Corp. The	Gas	Randell & Dorette Ash	1	4795	Benson	719	Ground Level
4709501817	WV	Tyler	39.5718094	-80.8542587	Coastal Corp. The	Gas	Duane & Sandra Clark	8	4858	Benson	729	Ground Level
4709501167	WV	Tyler	39.5494768	-80.8450998	Appalachian Energy Development	Gas	John McKittrick et al	1	4859	Benson	737	Ground Level
4709501204	WV	Tyler	39.5628183	-80.8583655	Anvil Oil Co., Inc	Gas	David Gregg et al	6	4866	Benson	815	Ground Level
4709501210	WV	Tyler	39.558579	-80.8456069	Union Drilling, Inc	Gas	Danny C Harris	1	4892	Benson	748	Ground Level
4709501304	WV	Tyler	39.5738402	-80.8458519	Coastal Corp. The	Gas	Duane Clark et al	1	4919	Benson	778	Ground Level
4709501299	WV	Tyler	39.5780926	-80.8624815	Coastal Corp. The	Gas w/ Oil Show	Ralph Ash et al	2	4925	Benson	758	Ground Level
4709501200	WV	Tyler	39.555178	-80.8488907	Union Drilling, Inc	Gas	Elden E & Nancy Prett	1	4927	Benson	727	Ground Level
4701703558	WV	Doddridge	39.5366604	-80.835761	Stonewall Gas Co., Inc	Gas	Char Stinespring		4927	Benson	833	Ground Level
4709501233	WV	Tyler	39.5513619	-80.8486487	Stonewall Gas Co., Inc	Gas	James Ellis Jenkins heirs	1	4951	Benson	850	Ground Level
4709501316	WV	Tyler	39.5680543	-80.8482798	Eastern American Energy Corp.	Gas	Mary E Roberts/Mary J Kahler	5	4954	Benson	860	Ground Level
4709501335	WV	Tyler	39.5857786	-80.8537017	DAC, Inc.	Gas	Marc A Massullo et al	1	4954	Benson	868	Ground Level
4709501324	WV	Tyler	39.561078	-80.8426739	Anvil Oil Co., Inc	Gas	Ronald Rowland	1	4955	Benson	877	Ground Level
									5020	Benson	865	Ground Level

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API Number 47 - _____ - _____
Operator's Well No. SHR37DHSM

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name CNX Gas Company, LLC OP Code 494458046

Watershed (HUC 10) Headwaters Middle Island Creek Quadrangle West Union

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

Will a pit be used? Yes 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, 47-097-01514, 47-097-01613, 34-013-2-0609)
- Reuse (at API Number Pens3 and Pens21 wells API TBD)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain No Pits)

JEB
10/29/2019

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

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Vertical: air from spu3/surface to curve kick-off point (KOP). Horizontal: synthetic oil-based mud (SOBM) from curve KOP to lateral TD

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

Additives to be used in drilling medium? Bactericide, Polymers, and Weighting Agents

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Land Application of soil conductor cuttings only, all other cuttings will be taken to an approved Landfill

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

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

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

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

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

Company Official Signature *Sarah Weigand*
Company Official (Typed Name) Sarah Weigand
Company Official Title Manager Upstream Permitting

Subscribed and sworn before me this 23rd day of Oct, 2019
Jacob C Young Notary Public

My commission expires 6/4/2022

Commonwealth of Pennsylvania - Notary Seal
JACOB C YOUNG - Notary Public
Washington County
My Commission Expires Jun 4, 2022
Commission Number 1333900

CNX Gas Company, LLC

Proposed Revegetation Treatment: Acres Disturbed 15.57 Prevegetation pH 6.5

Lime according to pH test Tons/acre or to correct to pH 7.0

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch hay or straw @ 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
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

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *[Signature]*

Comments: _____

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Title: Oil & Gas Inspector

Date: 10/29/2019

Field Reviewed? () Yes () No



Sarah Weigand
Manager Upstream Permitting
Work: 724-485-3244
Email: sarahweigand@cnx.com

CNX Center
1000 CONSOL Energy Drive
Canonsburg, PA 15317-6506
724-485-4000

West Virginia Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Dear Sir or Madam:

Pursuant to West Virginia Code §22-6A-8(g2), CNX Gas Company, LLC is requesting an approval from the office to land apply cuttings associated with the drilling of the conductor (unconsolidated materials) on location for pad SHR37. CNX Gas Company, LLC is the surface landowner of parcel 01-17-0005 in Tyler County and therefore consents to this method.

The wells planned to be drilled on this pad are:

SHR37DHSM
SHR37EHSM
SHR37FHSM
SHR37GHSM
SHR37HHSM
SHR37IHSM
SHR37KHSM
SHR37LHSM
SHR37MHSM
SHR37NHSM
SHR37OHSM (API 47-095-02588)
SHR37PHSM
SHR37QHSM
SHR37RHSM

Sincerely,

A handwritten signature in blue ink that reads 'Sarah Weigand'. The signature is written in a cursive, flowing style.

Sarah Weigand

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CNX RESOURCES CORPORATION - HSE APPROVED ELEVATED NORM/TENORM TSD* FACILITIES**

TENORM Transfer/ Treatment/Downblending Facility	Location		Accepted Waste Streams	Contact Information
Austin Master Services - Treatment, Downblending, and Transfer Facility	Martins Ferry Facility	OH	Non-radioactive material, low level radioactive material, (NORM/TENORM), and high level TENORM material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab.	Office: 740-609-3800 Jack Bement CEO Austin Master Services LLC 355 Circle of Progress Pottstown PA, 19464 Ph:(585) 704-2744 Fax: 484 624-5506
Belmont Solids Control				
Buckeye Solids, Recycling, and Lab Facility	64054 Wintergreen Rd Lore City, Ohio 43725	OH	Non-radioactive material, low level radioactive material, (NORM/TENORM), and high level TENORM material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab.	Bill Dawson 740-591-4393 bill@buckeyebtrmc.com Billing Address: 64054 Wintergreen Rd Lore City, Ohio 43725
Ground Tech LLC	240 Sinter Court, Youngstown, OH 44510	OH	Non-radioactive material, low level radioactive material (NORM/TENORM), and high level TENORM material handling, storage, and transport. (TENORM downblending of low level TENORM material (≤ 85 pCi) on-site. High level TENORM (< 85 pCi) materials will be directed to Austin Master Services in Martins Ferry, Ohio by Ground Tech).	Office: (330) 270-9900 Larry Chamberlain 330-398-5919 lchamberlain@iwc-inc.com
Mud Masters LLC	64054 Wintergreen Rd Lore City, Ohio 43725	OH	Non-radioactive material, low level radioactive material (NORM/TENORM), and high level TENORM material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab. Non-radioactive material & radioactive material handling (NORM/TENORM), solids separation, material downblending, tank cleaning, radiological sampling/testing analysis/lab. Liquid/semi-solids treatment and separation for waste disposal.	Tom Meinert 740-255-0357 heavymudmasters@gmail.com Billing Address: 739 Southgate Pkwy, Cambridge, Ohio 43725
PETTA Enterprises LLC	38 Technology Dr Triadelphia, WV 26059	WV	Non-radioactive material, low level radioactive material (NORM/TENORM) material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab. Non-radioactive material & radioactive material handling (NORM/TENORM), solids separation, material downblending, tank cleaning, radiological sampling/testing analysis/lab. Liquid/semi-solids treatment and separation for waste disposal.	Office: 740-341-6396 Kylie Feldner PETTA Enterprises Sales Representative 614-477-1368
	713 North Third Street, Cambridge	OH		
Pressure Tech	7675 East Pike Norwich, Ohio 43767	OH	Non-TENORM wastes including cement water and oil or water based drilling mud only. Are not to accept waste that is known to have elevated levels of TENORM or compressor station water.	Bob Orr: 614-648-8898
Secur - Bens Run Facility	160 Industrial Park Road, Friendly, WV 26146	WV	Non-radioactive material, low level radioactive material, (NORM/TENORM), and high level TENORM material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab.	Melissa Adams 740-502-6039 melissa.adams@securllc.com

*NORM/TENORM = Naturally Occurring Radioactive Material /Technologically Enhanced Naturally Occurring Radioactive Material

**TSD = Treatment, Storage, and Disposal Facility

Note: Contact the CNX - HSE Department when any hazardous water or material containing elevated NORM/TENORM is encountered to review proper handling, disposal requirements, and capabilities of approved facilities.

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CNX RESOURCES CORPORATION - HSE APPROVED HAZARDOUS WASTE DISPOSAL FACILITIES

Hazardous Disposal Facility			Accepted Waste Streams	Contact Information
Disposal Facility	Location			
Waste Management	Model City	NY	RCRA/TSCA Waste, PCB Transformers & Capacitors, PCB Soil/Debris, Non-Hazardous Wastes, Asbestos Waste, Solidification Services	Linda Davie: 716-286-0365 or 716-754-8231 or 800-963-4776

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CNX RESOURCES CORPORATION - HSE APPROVED NON-HAZARDOUS WASTE DISPOSAL FACILITIES

Republic Services (Allied Waste) Industrial Landfills		Gas Specific Waste Streams			Other Accepted Waste Streams									Contact Information
Landfill	Location	Drill * Cuttings	Waste Liners	Waste Brine	Contaminated Soil (Including Petroleum)	Construction & Demolition Waste	Industrial Waste	Sludge	Friable Asbestos	Non-Friable Asbestos	Process Waste	Solidification Services	Municipal Solid Waste	
Republic Services - Benson VA	Frankfort	KY	X	X		X	X	X	X	X	X		X	
Republic Services - Blue Ridge	Irvine	KY	X	X		X	X	X	X	X	X		X	
Republic Services - Morehead	Morehead	KY	X	X		X	X	X	X	X	X		X	
Republic Services - Green Valley	Rush	KY	X	X		X	X	X	X	X	X	X	X	
Republic Services - Carbon-Li	Lowellville	OH	X	X		X	X	X	X	X	X	X	X	
Republic Services - Imperial	Imperial	PA				X	X	X	X	X	X	X	X	
Republic Services - Brunswick	Lawrenceville	VA				X	X	X	X	X	X	X	X	
Republic Services - King and	Little Plymouth	VA				X	X	X	X	X	X	X	X	
Republic Services - Old Dominion	Richmond	VA				X	X	X	X	X	X	X	X	
Republic Services - Sycamore	Hurricane	WV				X	X	X	X	X	X	X	X	
Republic Services - Short Creek	Wheeling (Short Creek)	WV	X	X		X	X	X	X	X	X	X	X	
WM - Arden Landfill	Washington	PA	X	X		X	X	X	X	X	X	X	X	
WM - South Hills (Armoni)	South Park	PA	X	X		X	X	X	X	X	X	X	X	
WM - Kelly Run	Elizabeth	PA	X	X		X	X	X	X	X	X	X	X	
WM - Valley Landfill	Irwin	PA	X	X		X	X	X	X	X	X	X	X	
WM - Evergreen Landfill	Blairsville	PA	X	X		X	X	X	X	X	X	X	X	
WM - Meadowsfill Landfill	Bridgeport	WV	X	X		X	X	X	X	X	X	X	X	
WM - Northwestern Landfill	Parkersburg	WV	X	X		X	X	X	X	X	X	X	X	
WM - S&S Grading Landfill	Clarksburg	WV	X	X		X	X	X	X	X	X	X	X	
WM - American Landfill	Waynesburg	OH	X	X		X	X	X	X	X	X	X	X	
WM - Suburban RDF	Glenford	OH	X	X		X	X	X	X	X	X	X	X	
WM - Mahoning Landfill	New Springfield	OH	X	X		X	X	X	X	X	X	X	X	
Noble Environmental Landfill (Former Westmoreland Waste)	111 Conner Lane, Belle Vernon, PA 15012	PA	X	X		X	X	X	X	X	X	X	X	
MAX Environmental (Bulger Facility)	Bulger, PA 15019	PA	X	X		X	X	X	X	X	X	X	X	
Apex Sanitary landfill (Apex Environmental)	11 County Road 78, Amsterdam, Ohio 43903	OH	X	X		X	X	X	X	X	X	X	X	
Rumpke, Mt. Sterling (Rumpke Consolidated)	30 Larison Rd, Jeffersonville, KY 40337	KY	X	X		X	X	X	X	X	X	X	X	
Laurel Ridge Landfill (Waste Connections of KY)	3612 E State Highway 552, Lily, KY 40740	KY	X	X		X	X	X	X	X	X	X	X	
Advanced Disposal - Chestnut Valley LF	Chestnut Valley, 1184 McClellandtown Rd, McClellandtown, PA 15458	PA	X	X		X	X	X	X	X	X	X	X	
Advanced Disposal - Greentree LF	Greentree Landfill, 635 Toby Rd., Kersey, PA	PA	X	X		X	X	X	X	X	X	X	X	

** Ohio "TENORM" - requires Radium 226/228 analysis by load before leaving the well pad. Solid waste landfills in Ohio can only accept TENORM waste with combined concentration less than 5 picocuries per gram above the natural background level.
 *** Accepts drilling wastes 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.
 Notes: * Drill Cuttings include frac sand for the purpose of this table (Contact facility directly to verify waste streams accepted).

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CNX RESOURCES CORPORATION - HSE APPROVED BRINE WATER INJECTION & RECYCLING FACILITIES

Unconventional or Conventional Brine/Produced Fluid Water Disposal					Accepted Waste Streams	Contact Information
Company Name	Permit	Location	Coordinates			
Buckeye Brine Injection Facility	34-031-27177-00-00	23986 Airport Road, Coshocton, OH 43812	OH	40.301051 -81.851189	Brine (Produced Water)	Bill Dawson 740-591-4393 bill@buckeyebrine.com
	34-031-27178-00-00					
	34-031-27241-00-00					
CNX Resources Corporation (CNX Gas)	VAS2D960BBUC	Buchanan Co.	VA	-	CNX Owned UIC SWIWs: Frac water, brine, produced water	Contact Ops Groups
	VAS2D930BBUC	Buchanan Co.	VA	-		
	VAS2D926BBUC	Buchanan Co.	VA	-		
	VAS2D970BRUS	Russell Co.	VA	-		
	34-013-2-0609 UIC #609	Barnsville, Bellmont Co.	OH	-		
Camp Creek Disposal Services, Inc. (Gas Field Services, Inc.)	UIC: UIC2D0550319 API: 47-055-00319	200 Camp Creek Road. Camp Creek, WV 25820	WV	37.495138 -81.105161	Class II injection fluids that are in connection with conventional oil or gas production and may be commingled with waste waters from gas plants unless those waters are classified as hazardous wastes at the time of injection.	Zachery Reed zacheryr4@yahoo.com PO Box 555, Rosedale, VA 24280 Phone: (276) 880-2323
Cambrian Well Services - Kemble (Orr Petroleum Corporation)	34-119-2-8780	Zanesville, Muskingum County, Perry Township	OH	39.974954 -81.845389	Brine (Produced Water)	Bob Orr 740-796-6495 614-648-8898 orropetro@gmail.com
Central Environmental Services	34-009-2-3821	Troy Township, Athens County, Ohio	OH	39.226075 -81.761403	Brine (Produced Water)	Jeff Harper 304-893-9978 Jeff Harper jharper@centralenvironmentalservices.com
	34-009-2-3823			39.234815 -81.757167		
	34-009-2-3824			39.235082 -81.748312		
DeepRock Disposal Solutions	Issued: 9/24/2015	2341 State Route 821, Building 11C, Marietta, OH 45750	OH	39.426278 -81.502379	Brine (Produced Water)	Wes Mossor General Manager DeepRock Disposal Solutions LLC Office: 740.371.5078 ext. 206 Cell: 304.588.0936
	Issued: 12/21/2105			39.425172 -81.507900		
	Issued: 12/21/2015			39.429867 -81.511020		
Environmental Energy Services LLC (Force, Inc.) - Pattison 1-D	34-119-2-8803	Muskingum County, Perry Township	OH	39.973643 -81.825727	Brine (Produced Water)	Bryan Force Mobile: 412.289.0069 Office: 724.465.9399 bforce@forceincorporated.com or Bob Orr 740-796-6495 614-648-8898 orropetro@gmail.com

EGO Water Solutions LLC - Mozena	34-157-2-5511	5367 E. State Street, Newcomerstown, OH 43832	OH	40.283293 -81.578068	Brine (Produced Water)	Michael Chapin: Ph. 740-763-3966 Cell 740-403-9664 tantrumr@aol.com Robert Schenken Director Business Development HydroEdge Solutions Wisconsin White Sand rschenken@hydroedgesolutions.com Cell 412.295.3614
Greene County Water Treatment, Inc.	WMGR123SW010	401 Jefferson Rd. Waynesburg, PA 15370	PA		Oil and Gas Fluids with minimal oil and solids present	Gary Carpenter 267-246-6176 JRBGCarpenter@aol.com
Hydro Recovery	WMGR123SW019	572 Route 18 Burgettstown, PA 15021	PA		Oil and Gas Fluids with minimal oil and solids present	Ashley Cromley 570-394-4450 Ashley.cromley@hydrorecoverylp.com
Nuverra	34-059-2-4445-00 34-059-2-4473-00 34-119-2-8776-00	64036 Wintergreen Road, Lore City, Ohio 43755	OH		Oil and Gas Fluids with any amount of oil and solids	Rob Bealko 304-291-0383 Office 304-282-8814 Cell rob.bealko@nuverra.com
Reserved Environmental Services (RES)	WMGR123SW005	1119 Old Route 119 South Mt. Pleasant, PA 15666	PA		Oil and Gas Fluids with minimal oil and solids present	Matt Kicinski 814-574-9701 mkicinski@reswater.com
Secur - Bens Run Facility	Regis Number: 483100	160 Industrial Park Road, Friendly, WV 26146	WV		Oil and Gas Fluids with any amount of oil and solids	Melissa Adams 740-502-6039
ShaleLogix LLC	34-007-21847	5035 State Rt. 46, Jefferson, OH 44047 (Ashtabula County, New Lyme Township)	OH	41.613214 -80.782835	Brine (Produced Water)	Michael Alvetro cell: 330-307-5303
Silcor Oilfield Services, Inc.	34-059-24202	Cambridge, OH	OH	39.993615 -81.572975	Brine (Produced Water)	Matt Brewer HydroEdge Solutions mbrewer@hydroedgesolutions.com (412) 439-7866
Fluid Recovery Services	NPDES - PA0095273	931 Bells Mills Rd. Josephine, PA 15750	PA	40.482410 -79.171193	Approved for treatment of conventional brine (produced water) only. (Not approved for unconventional waste	Jim Donovan 724.746.5300 x227 donovanj@fluidrecovery.com
	NPDES - PA0095443	5035 U.S. Route 110 West, Creeside, PA 15732	PA		Approved for treatment of conventional brine (produced water) only. (Not approved for unconventional waste	Jim Donovan 724.746.5300 x227 donovanj@fluidrecovery.com
	NPDES - PA0101508	5148 Rt. 322, Franklin, PA 16323	PA	41.373037 -79.798620	Approved for treatment of conventional brine (produced water) only. (Not approved for unconventional waste	Jim Donovan 724.746.5300 x227 donovanj@fluidrecovery.com

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CNX RESOURCES CORPORATION - HSE APPROVED TREATMENT & RECYCLING FACILITIES				
Specialty Recycling			Waste Services Provided	Contacts
Company Name	Location			
Enviro Clean Services, Inc.	515 Industrial Blvd., Wooster, OH 44691	OH	Non-hazardous wastewater, transportation, treatment and disposal facility. Also offer transportation and solidification services.	Rishi Bhanot Director of Operations 330-264-8080 (O) rishi.bhanot@etcoh.com www.etcoh.com
Ergon - Marietta Terminal	35020 OH Route 7, Newport, OH 45768	OH	Oil purchaser and transportation.	Keith Britton, Purchasing: 330-284-4343 Tom Leyda, Transportation: 800-846-2550
Everclear of Ohio	3700 Oakwood Ave., Austintown, OH 44515	OH	Approved for non-haz water treatment of oil & water mix, oil, oil filters, and antifreeze only.	330-792-2120 www.everclearoil.com
Heritage-Crystal Clean, LLC	Multiple Locations in Most States	Multi, State	Approved for non-haz water treatment of oil & water mix. Also offer transportation and solidification services. Capable of other types of waste disposal and handling with prior Environmental and Supply Chain approval.	Paul Reddington Heritage Crystal Clean, LLC 304.904.5020 paul.reddington@crystal-clean.com
Necessary Oil Co.	Main Office - 1300 Georgia Avenue Bristol, TN 37620-4048	TN	Approved for non-haz water treatment of oil & water mix, oil, oil filters, and antifreeze only. Also offer transportation services.	Local Phone 764-4533 Toll-Free 800-764-4533 Fax 423-764-2175
	Fleet Trucking Management NTC Acquisition Company - PO Box 875 Bristol, VA 24201	VA		
	Purchasing - Virginia (Roanoke Metro) Norfolk & Western Avenue Cloverdale, VA 24077	VA		
	Drum Services, Processing & Fleet Trucking - 111 East Mary St., Bristol, VA 24201	VA		
	Solids Processing - 215 North Industrial Drive Industrial Park Bristol, TN 37620	TN		
Petromax, Ltd.	301 Prestley Avenue, Carnegie, PA 15106	PA	Approved for lubricants, coolants, pipeline pressure fluids, transmission fluids, oil, and oily water. PA Residual Waste Processing and Transfer Facility Permit # 301294 PA DEP Facility ID 30-23918 NPDES Stormwater Permit # PAR706105 EPA ID # PAD982684458 CWT Discharge Permit # P2-0102	Adam Hall 412-279-9040 412-276-2011 Fax: 412-279-9041 Cell: 412-554-0233 ahall@petromaxltd.com
Spirit Services, Inc.	15801 Lockwood Road, Williamsport, MD 21795	Multi, State	Approved for non-haz water treatment of oil & water mix. Also offer transportation and solidification services. Capable of other types of waste disposal and handling with prior Environmental and Supply Chain approval.	1-866-670-9034 Joe Staton: 717-360-7916 Office: 301-223-1251 Fax: 301-223-1253 jstaton@spiritservices.com
Valicor Environmental Services LLC (Formerly United Wastewater)	401 Industrial Drive, Franklin, OH 45005	OH	Approved for non-haz water treatment of oil & water mix, oil, oil filters, and antifreeze only.	Corporate Number: 734-442-2353 www.valicor.com or Steve Atkinson 937-746-7944 304-522-8028 SAtkinson@valicor.com
	1045 Reed Dr, Monroe, OH 45050	OH		
	515 N. 8th Ave, Huntington, WV 25201	WV		
	11807 Reading Rd, Cincinnati, OH 45241	OH		

Note: Facilities approved for disposal/treatment of oily water mixtures only unless otherwise indicated.

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CNX RESOURCES CORPORATION - HSE APPROVED ALTERNATIVE MUNICIPAL SOLID WASTE LANDFILLS				
Landfill	Location		Municipal Solid Waste	Contact Information
Cumberland Plateau Regional Authority - Buchanan County	Buchanan County	VA	X	They transfer municipal waste to Advanced Disposal – Tennessee Landfill Eco Safe MSW Landfill (See above)
Tazewell County (TC) Landfill 2475 Lynn Hollow Rd, North Tazewell, VA 24630	Route 649 Gratton, VA 24651	VA	X	(276) 988-4003 or Chris Hurley: 276-988-4310 or Megan Hurley mhurely@tazewellcounty.org (276)-988-1200
Buchanan County Landfill	Oakwood, VA 24631	VA	X	Customer Service: (276) 498-4403

Note: Waste Management and Republic Services landfills should be utilized instead of these Municipal Solid Waste Landfills when possible.

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CNX RESOURCES CORPORATION - HSE APPROVED SOLID WASTE RECYCLING & BENEFICIAL USE FACILITIES

Specialty Recycling			Waste Services Provided	Contacts
Company Name	Location			
JaSar Recycling, Inc.	183 Edgeworth Ave. East Palestine, OH 44413	OH	Recycle a full range of commodities including liners, fibers, plastics (#1-#7), glass, paper, ferrous metals and non-ferrous metals.	(330) 426-2538 [inquiries] (330) 426-6243 [sales] sales@jasarrecycling.com
Ultra-Poly Corporation	Berwick, PA; Portland, PA; transfer facility in Weirton, WV	PA	Polyethylene and polypropylene oil and gas waste plastic (liners, etc.).	Joe Barcelona jbarcelona@untra-poly.com 412-495-5962

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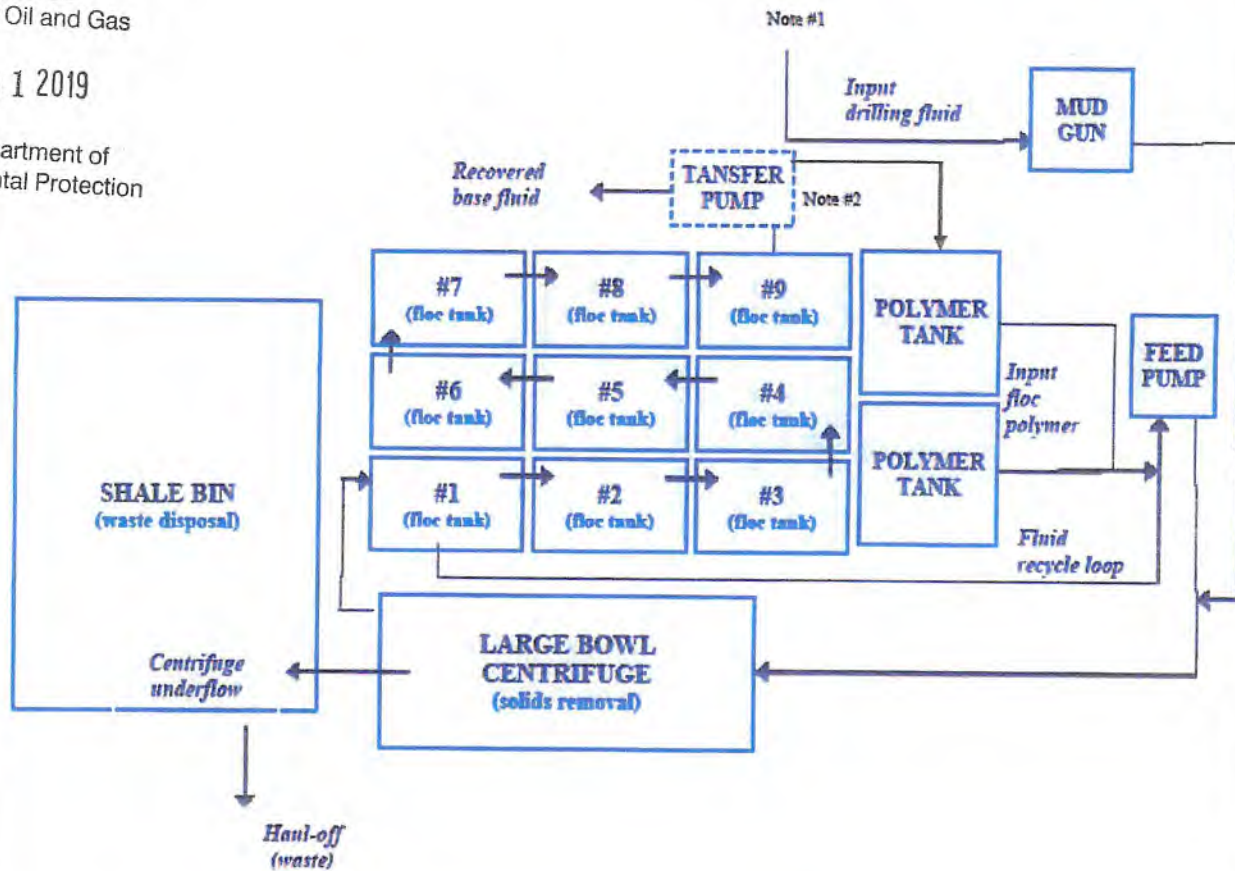
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FLOW CHART MUD AND SLURRY DEWATERING RECOMMENDED RIG UP



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Notes/ Comments:

- 1) Ensure all rig tank suction fittings are 6" for ideal flow. DO NOT use anything less than 4" dia.
- 2) Use a Transfer Pump in Cell 9 to transfer clean fluid.

MUD & SLURRY DEWATERING/ STRIPING
Recommended Rig-Up of BOS III Tank

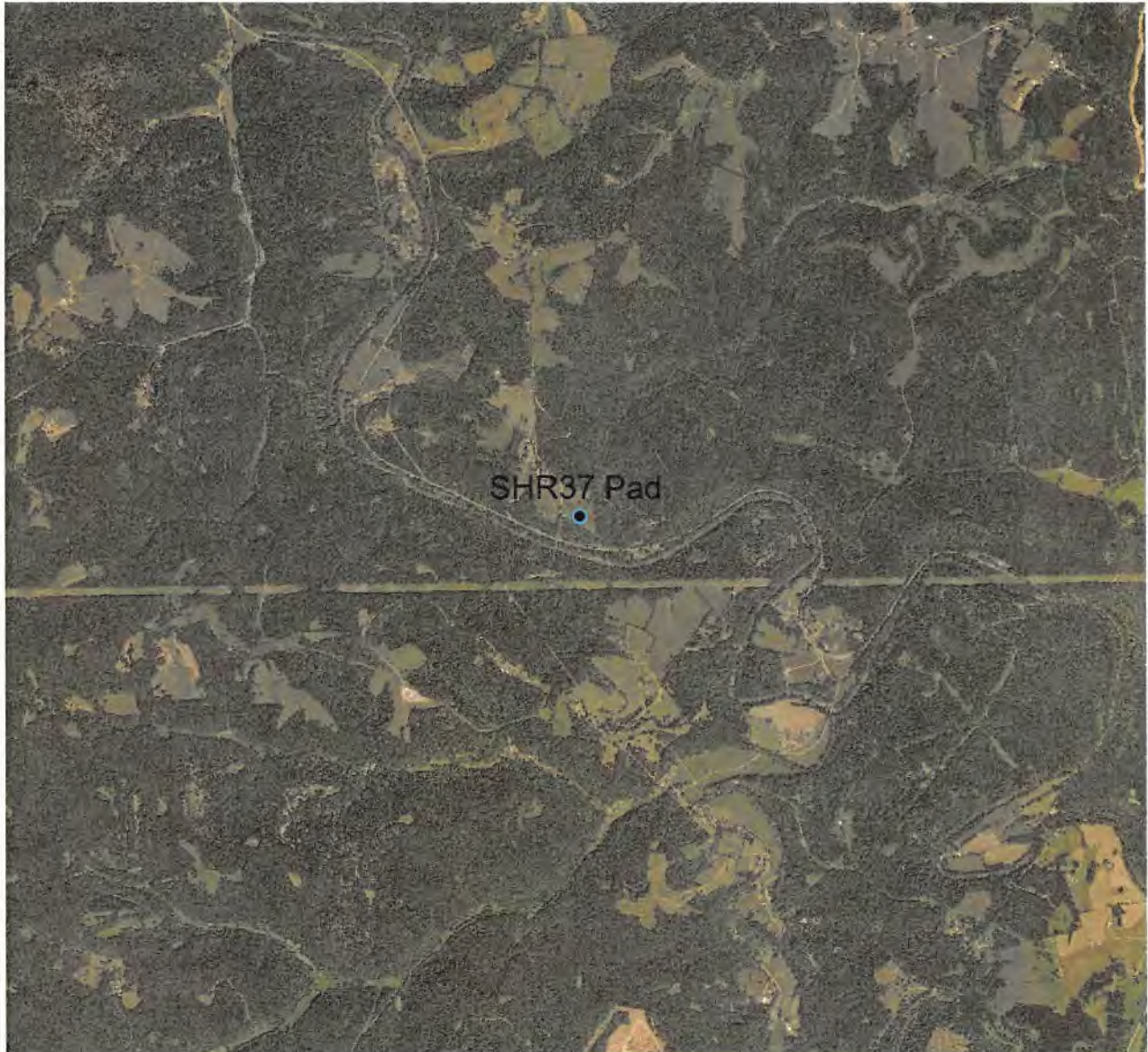
Drawing/ Revision Date: December 12, 2011

Approved By: Andrew Pow

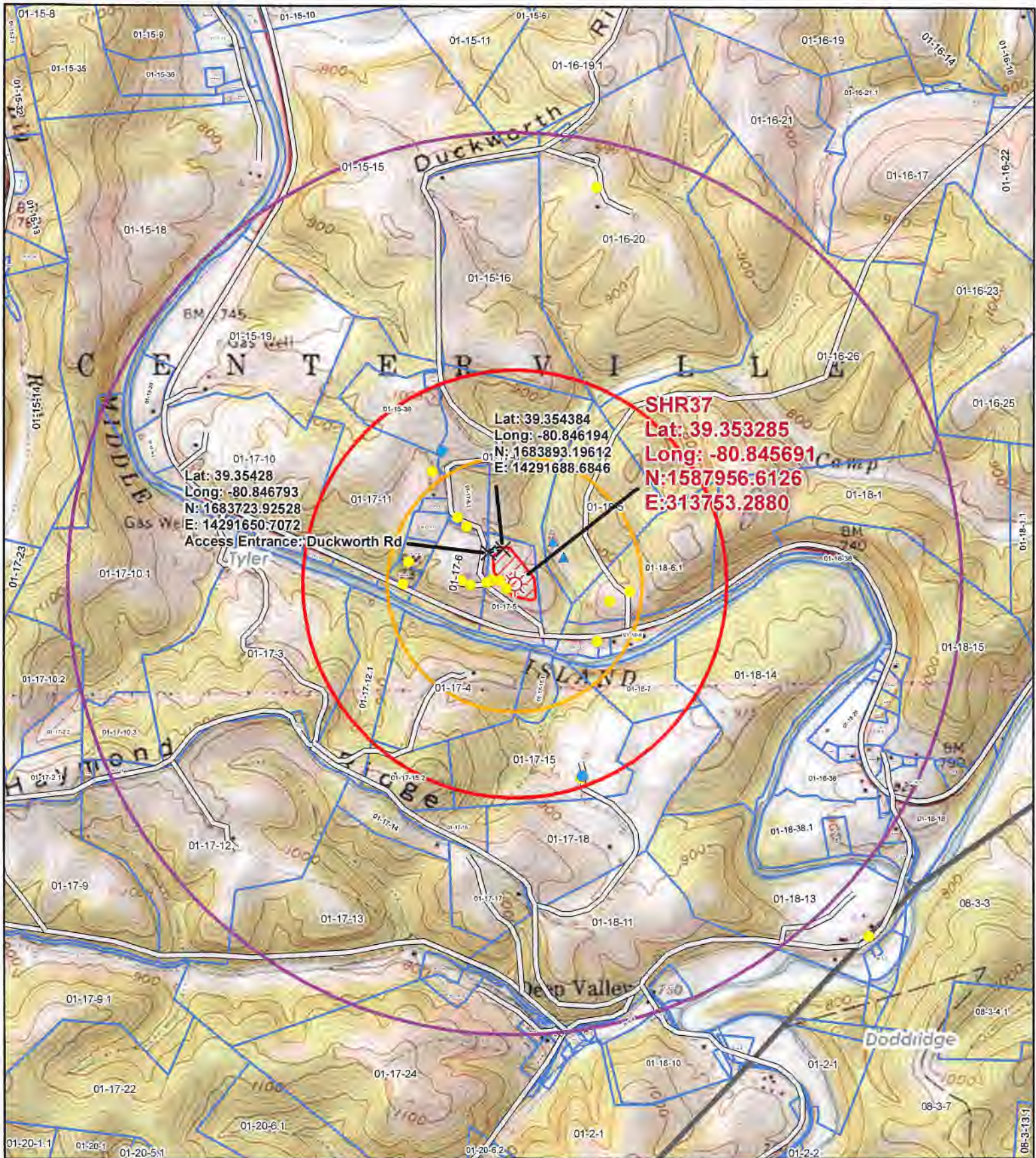




**Site Safety Plan for Wells SHR37DHSM
CNX Gas Company, LLC.**



*JCB
10/29/2019*



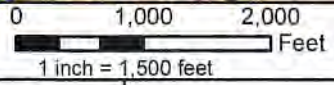
01-17-10
 Lat: 39.35428
 Long: -80.846793
 N: 1683723.92528
 E: 14291650.7072
 Access Entrance: Duckworth Rd

Lat: 39.354384
 Long: -80.846194
 N: 1683893.19612
 E: 14291688.6846

SHR37
 Lat: 39.353285
 Long: -80.845691
 N: 1587956.6126
 E: 313753.2880

Legend

- ▲ Pond
- Spring
- Well
- ☼ Wellbore
- ✕ Access Points
- == Access Road
- ◻ 1 Mile Buffer
- ◻ 2,500 Foot Buffer
- ◻ 1,500 Foot Buffer
- ◻ Surface Parcel
- ◻ Well Pad



Original Date: 12/14/2018	Prepared By: GIS
Revision Date: 12/14/2018	Approved By: GIS

Topographic Well Map
SHR37

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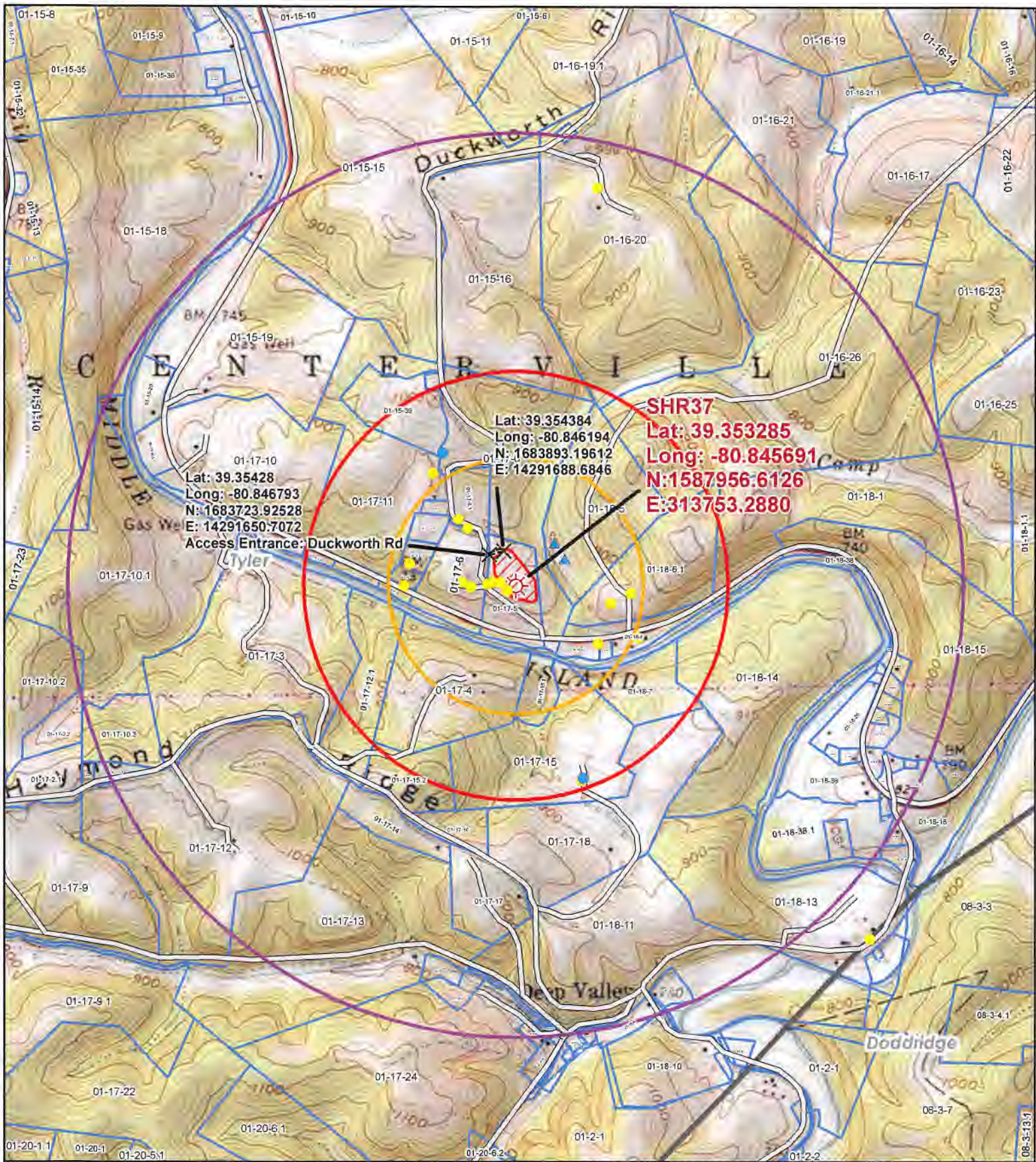
Landowners within 1 mile

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Tax ID	Owner as shown on Tyler Co. Tax Site	Property Address	Property City	Property State	Property Zip Code	Owner Phone Number (Best Found)
01-17-10.7	No Results Shown on Tax Site for this Parcel		ALMA	WV	26320	
01-17-31.4	No Results Shown on Tax Site for this Parcel		PENNSBORO	WV	26415	
01-18-9	Arnolds Creek Christian Church	ARNOLDS CRK	PENNSBORO	WV	26415	(304) 455-4348
01-17-13	George W. Ash	ROUTE 56/2	ALMA	WV	26320	(304) 873-2060
01-16-19.1	James E. Ash	ROUTE 58/2	ALMA	WV	26320	304-758-2498
01-17-4	Samuel V. Ash Denise Rule c/o Samuel Ash	M I C 184 DUCKWORTH RIDGE RD	ALMA	WV	26320	(973) 402-9625
01-17-5	CNX Gas Company LLC	ROUTE 56/1	ALMA	WV	26320	724-485-4000
01-17-15.2	Shirley J. Bembrly	ROUTE 56/1	ALMA	WV	26320	(304) 758-4459
01-18-26.1	Everett Carmichael	MIC STATE ROUTE 18	ALMA	WV	26320	(304) 223-6454 (304) 280-8755
01-18-24.1	Everett Carmichael	M I C	ALMA	WV	26320	duplicate
01-18-25	Everett Carmichael	ROUTE 18	ALMA	WV	26320	duplicate
01-15-20	Sandra Sue Clark	8859 MIDDLE ISLAND RD	ALMA	WV	26320	(304) 758-2226
01-17-10.1	Sandra Sue Clark	ROUTE 74/1	ALMA	WV	26320	duplicate
01-17-10.2	Sandra Sue Clark	ROUTE 74/1	ALMA	WV	26320	duplicate
01-17-10.3	Sandra Sue Clark	ROUTE 56/1	ALMA	WV	26320	duplicate
01-17-10.5	Sandra Sue Clark	ROUTE 56/1	ALMA	WV	26320	duplicate
01-17-12	CNG Transmission Corporation	ROUTE 56/1	ALMA	WV	26320	(304) 889-3142
01-18-22	Jay Glenn Collins et al c/o Nina Molnar	M I C	ALMA	WV	26320	(304) 873-1935 Nina
01-18-15	Mary Monnie Collins Delverna McKiterict	M I C	ALMA	WV	26320	(304) 527-2794
01-17-15.1	Ryan & Carrie L. Davis	473 GARDEN WAY	ALMA	WV	26320	(910) 245-4750 - Carrie
01-18-7	Ryan & Carrie L. Davis	473 GARDEN WAY	ALMA	WV	26320	duplicate
01-17-15	Ryan & Carrie L. Davis	ROUTE 74/1	ALMA	WV	26320	duplicate
01-18-33	Madelene K. Doll	ROUTE 18	ALMA	WV	26320	(304) 873-1897
01-18-31	Fred M. Dotson Jr.		ALMA	WV	26320	(540) 937-5997
01-18-38	Fred M. Dotson Jr. & Linnea B. Dotson	MIC	ALMA	WV	26320	duplicate
01-18-1	Fred M. Dotson Jr.	ROUTE 52/1	ALMA	WV	26320	duplicate
01-17-3	Kevin O. Dotson et al	ROUTE 56/1	ALMA	WV	26320	(904) 591-8276
01-18-24	Joseph J. Duff	ROUTE 18	ALMA	WV	26320	304-494-8501
01-18-27	Joseph J. Duff	M I C	ALMA	WV	26320	duplicate
01-17-14	Anita K. Elkins & Mark B. Gooch	ROUTE 56/1	ALMA	WV	26320	(540) 672-0969

01-18-6	Federal Home Loan Mortgage Corp Harry R. & Vonda K. Galloop	ROUTE 18	ALMA	WV	26320	(703) 903-2000
01-17-16	Jason A. & Kandace R. Glasscock	ROUTE 56/1	ALMA	WV	26320	(304) 387-1941
01-17-10	Danny & Patricia Harris	15127 MIDDLE ISLAND RD	ALMA	WV	26320	(304) 758-4975
01-18-6.1	Danny & Patricia Harris	ROUTE 18	ALMA	WV	26320	(304) 873-1540
01-18-5	Danny & Patricia Harris	MISTAKE CP	ALMA	WV	26320	duplicate
01-18-36	Michael T. Headley	ROUTE 18	ALMA	WV	26320	(304) 873-1746
01-18-37	T.L. & Howard Headley	M I C DEEP VALLEY-RT 18 JUNCTI	ALMA	WV	26320	(304) 873-1410
01-17-24.1	Ronald & Frances Hurst	SHORT R	PENNSBORO	WV	26415	(304) 873-3565
01-17-13.1	Ronald & Frances Hurst	ROUTE 56	PENNSBORO	WV	26415	duplicate
01-15-18	John Jacenkiw Sr. & Tina B. Jacenkiw John Jacenkiw Jr. & Candice R. Jacenkiw	ROUTE 18/10	ALMA	WV	26320	(304) 758-4554
01-15-15	Mary J. Kahler (Life) c/o James Bagley	N R ROBERTS RUN	ALMA	WV	26320	304-758-2498
01-15-16	Mary J. Kahler (Life) c/o James Bagley	ROUTE 58/2	ALMA	WV	26320	duplicate
01-17-28	John G. Kelley	ROUTE 56	PENNSBORO	WV	26415	(304) 873-1837
01-17-31	Kevin L. Kelley	ROUTE 56	PENNSBORO	WV	26415	(304) 873-1567
01-17-30	Kevin L. & Lynne A. Kelley	3004 SHORT RUN RD	PENNSBORO	WV	26415	duplicate
01-17-31.1	Kevin L. & Lynne E. Kelley	ROUTE 56	PENNSBORO	WV	26415	duplicate
01-18-28	Phil Koontz Leonard Tracy H. & Crystal D. Mann	M I C R 18 DEEP INTERSE VLY	ALMA	WV	26320	(336) 237-9905
01-17-17	Robert C. & Christina J. Mason	ROUTE 56/1	ALMA	WV	26320	(304) 349-5741
01-18-38.2	Ralph Paul & Ida May McCutchan	MIC	ALMA	WV	26320	304-873-2947
01-18-11.1	Ralph Paul & Ida May McCutchan	ROUTE 56	ALMA	WV	26320	(304) 873-1889
01-18-11	Ralph Paul McCutchan (Life)	ROUTE 56	ALMA	WV	26320	duplicate
01-17-2.2	Roy Alfred Meredith	ROUTE 74/1	ALMA	WV	26320	(304) 863-3658
01-17-24	Jeffrey Allen Milligan	ROUTE 56/2	PENNSBORO	WV	26415	(678) 776-2215
01-18-20	Jon M. Montgomery	M I C	ALMA	WV	26320	(740) 595-3271
01-15-14	George Moore et al c/o Linda Lou Moore	ROUTE 74	ALMA	WV	26320	(304) 758-2258
01-18-13	Edwin D. & Patricia L. Mulvay	3665 SHORT RUN RD	ALMA	WV	26320	304-873-2467
01-18-14	Edwin D. & Patricia L. Mulvay	3665 SHORT RUN RD	ALMA	WV	26320	duplicate
01-18-18	Edwin D. & Patricia L. Mulvay	ROUTE 18	ALMA	WV	26320	duplicate
01-17-18	Harlond D. & Myra R. Mulvay	ROUTE 74/1	ALMA	WV	26320	(304) 873-2084
01-17-11.3	Wayne C. & Ronda Mumbauer	DUCKWORTH RIDGE RD	ALMA	WV	26320	(304) 758-4393
01-17-11.4	Wayne C. & Ronda Mumbauer	DUCKWORTH RIDGE RD	ALMA	WV	26320	duplicate

01-18-29	Jacob Myer Jerry D. & Christina D. Myer	ROUTE 18	ALMA	WV	26320	(304) 873-1755
01-18-26	Jerry D. & Christina D. Myer	HC 74 BOX 40	ALMA	WV	26320	(304) 873-1755
01-18-26.2	Myer	ROUTE 18	ALMA	WV	26320	duplicate
01-17-27	Clifton Nicholson et al	ROUTE 56	PENNSBORO	WV	26415	304-855-6189
01-18-38.1	Thomas R. & Sharon L. Nutter	MIC	ALMA	WV	26320	(304) 873-1642
01-18-35	Thomas R. & Sharon L. Nutter	DEEP VLY	ALMA	WV	26320	duplicate
01-18-6.3	Franklin D. & Wanda L. Parsons		ALMA	WV	26320	(304) 873-3043
01-17-11.6	Forrest G. Powell	M I C	ALMA	WV	26320	(304) 873-1819
01-15-38	Elden L. Pratt & Christine Lasure	ROUTE 58/2	ALMA	WV	26320	304-758-2354
01-17-11	Elden L. Pratt; Dean Rodney & Timothy Ray Pratt	MIDDLE CREEK IS	ALMA	WV	26320	(304) 758-2272
01-17-11.2	Rodney D. Pratt	JOSEPH MLS	ALMA	WV	26320	(304) 758-2513
01-15-39	Timothy R. Pratt	HC 69 BOX 9A	ALMA	WV	26320	(304) 758-2272
01-15-19	David J. Price	ROUTE 18	ALMA	WV	26320	(304) 349-4666
01-18-6.2	Riki Nicole Riley	ROUTE 18	ALMA	WV	26320	(304) 873-3840
01-16-20.1	Ronald & Reva Rowland	B C M	ALMA	WV	26320	(304) 873-1272
01-16-20	Ronald & Reva Rowland	ROUTE 58/2	ALMA	WV	26320	duplicate
01-17-6.1	Ronald & Reva Rowland	M I C	ALMA	WV	26320	duplicate
01-17-2.4	Andrew E. Smith	ROUTE 74/1	ALMA	WV	26320	301-967-4078
01-17-11.1	Thomas D. Snyder II & Connie S. Snyder	NR JOSEPHS MLS	ALMA	WV	26320	(215) 885-7069
01-17-10.6	George F. & Kathleen S. Sprowls	MIDDLE ISLAND CRK	ALMA	WV	26320	(304) 367-1000
01-17-11.5	State of West Virginia William L. & Kelly F.	M I C	ALMA	WV	26320	n/a
01-18-8	Stringham	ROUTE 56	PENNSBORO	WV	26415	(304) 873-1370
01-18-32	Kevin Douglas Swisher	ROUTE 18	ALMA	WV	26320	(304) 370-2113
01-16-26	D. Ralph Thacker & Maurice J. Carlisle UNKNOWN OWNER 000001	20021 THACKER DR	ALMA	WV	26320	(304) 432-4441 (304) 416-2770 (304) 432- 7616
01-18-17.1	The Tax Site listed no owner for this parcel	ROUTE 18	ALMA	WV	26320	n/a
01-17-12.2	James R. Underwood Sr. & James R. Jr. & Mitzie Johnson		ALMA	WV	26320	(304) 863-8136
01-17-12.1	James R. Underwood Sr. & James R. Jr. & Mitzie Johnson	ROUTE 56/1	ALMA	WV	26320	duplicate
01-18-23	Clifford A. & Toby A. Weekley	M I C	ALMA	WV	26320	(304-873-1770
01-18-30	James C. & Patricia L. Williams	ROUTE 18	ALMA	WV	26320	570-568-0029
01-17-11.7	Roger L. & Marjorie P. Williams	16207 MIDDLE ISLAND RD	ALMA	WV	26320	(304) 776-7293
01-17-6	Gail Williamson	MIDDLE CREEK IS	ALMA	WV	26320	(304) 873-1954

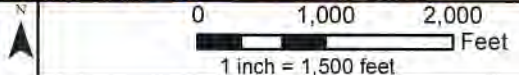


Lat: 39.35428
 Long: -80.846194
 N: 1683893.19612
 E: 14291688.6846
 Access Entrance: Duckworth Rd

SHR37
 Lat: 39.353285
 Long: -80.845691
 N: 1587956.6126
 E: 313753.2880

Legend

- ▲ Pond
- Spring
- Well
- ☼ Wellbore
- ✕ Access Points
- == Access Road
- ▭ 1 Mile Buffer
- ▭ 2,500 Foot Buffer
- ▭ 1,500 Foot Buffer
- ▭ Surface Parcel
- ▭ Well Pad



Original Date: 12/14/2018 Prepared By: GIS
 Revision Date: 12/14/2018 Approved By: GIS

Topographic Well Map
SHR37

This map is property of CNX Land Resources Inc. and contains information that is proprietary and confidential in nature and may not be copied or reproduced without prior written consent.
 © Copyright CNX Land Resources Inc. 2011

BHL is located on topo map 11,867 feet south of Latitude: 39° 25' 00"
 SHL is located on topo map 7,920 feet south of Latitude: 39° 22' 30"

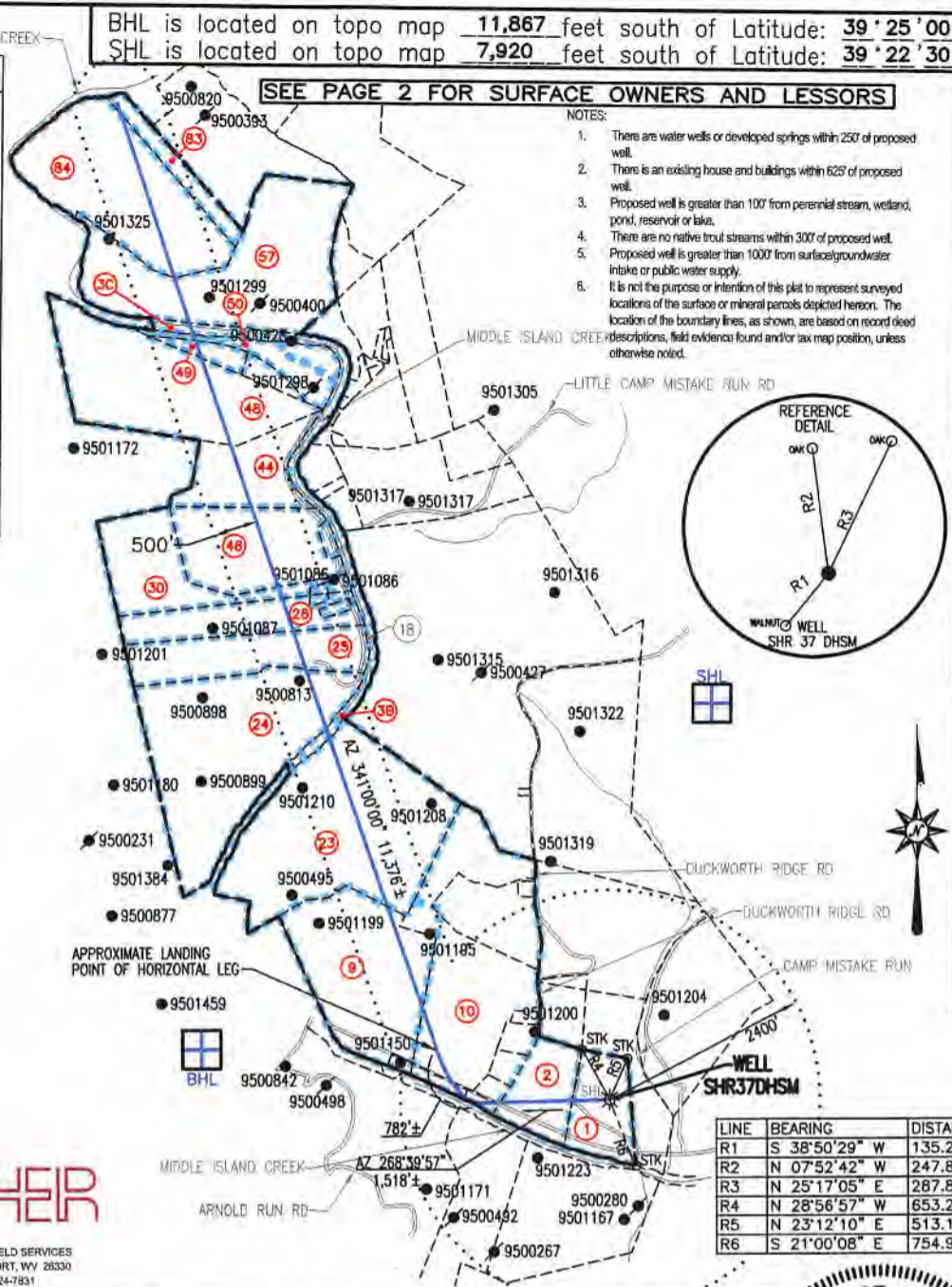
SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- LEASE NUMBER
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- LEASE BOUNDARY
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE

GAS WELLS

- EXISTING WELLS
- PLUGGED WELLS
- ABANDON WELLS



BHL is located on topo map 9,303 feet west of Longitude: 80° 50' 00"
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SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
 N:4355990.26
 E:513306.08
 NAD83, WV NORTH
 N:313628.321
 E:1588022.705
 LAT/LON DATUM-NAD83
 LAT:39°21'11.719"
 LON:80°50'44.033"

APPROX. LANDING POINT
UTM 17-NAD83
 N:4356150.69
 E:512701.97
 NAD83, WV NORTH
 N:314187.870
 E:1586049.114
 LAT/LON DATUM-NAD83
 LAT:39°21'16.956"
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BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
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 E:511519.09
 NAD83, WV NORTH
 N:324944.523
 E:1582345.889
 LAT/LON DATUM-NAD83
 LAT:39°23'02.708"
 LON:80°51'58.487"

LINE	BEARING	DISTANCE
R1	S 38°50'29" W	135.25'
R2	N 07°52'42" W	247.84'
R3	N 25°17'05" E	287.89'
R4	N 28°56'57" W	653.25'
R5	N 23°12'10" E	513.11'
R6	S 21°00'08" E	754.97'

THRASHER

CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 25330
 PHONE (304) 624-4108 • FAX (304) 624-7831

FILE #: SHR 37 DHSM
 DRAWING #: SHR 37 DHSM
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: George D. Six
 R.P.E.: _____ L.L.S.: P.S. No. 2000

GEORGE D. SIX
LICENSED
No. 2000
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR

PLACE SEAL HERE

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



DATE: OCTOBER 22, 2019
 OPERATOR'S WELL #: SHR 37 DHSM
 API WELL #: 47 95 02667 H&A
 STATE COUNTY PERMIT

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

WATERSHED: HEADWATERS MIDDLE ISLAND CREEK ELEVATION: 828.57'±
 COUNTY/DISTRICT: TYLER / CENTERVILLE QUADRANGLE: WEST UNION, WV 7.5'
 SURFACE OWNER: CNX GAS COMPANY ACREAGE: 18±
 OIL & GAS ROYALTY OWNER: ELEANOR V. & DEAN A. EARNHEART, ET AL ACREAGE: 720.525±

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

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,302'± TMD: 18,439'±
 WELL OPERATOR CNX GAS COMPANY LLC DESIGNATED AGENT ANTHONY KENDZIORA
 Address 1000 CONSOL ENERGY DRIVE Address 1000 CONSOL ENERGY DRIVE
 City CANONSBURG State PA Zip Code 15317 City CANONSBURG State PA Zip Code 15317

Handwritten: 9/23/19, 10/29/2019

SHR 37 DHSM

PAGE 2 OF 2

	SURFACE OWNER	LESSOR	DIST-TM/PAR
1	CNX GAS COMPANY	ELEANOR V. EARNHEART AND DEAN A. EARNHEART, W/H CLELLA BOICE, WIDOW LUELLA I. MCCONNELL, WIDOW AGNES GODWIN, WIDOW NANCY P. MCCLAIN AND RALPH E. MCCLAIN, W/H GEORGIA P. SNYDER, DIVORCED BRADIE PIPES AND GOLDIE PIPES, H/W PURSIE PIPES AND NORMA J. PIPES, H/W DOROTHY BELLE WELLS AND BYRON WELLS, W/H MYRNA MORGAN AND DAVID MORGAN, H/W	1-17/5
2	GAIL WILLIAMSON	ELEANOR V. EARNHEART AND DEAN A. EARNHEART, W/H CLELLA BOICE, WIDOW LUELLA I. MCCONNELL, WIDOW AGNES GODWIN, WIDOW NANCY P. MCCLAIN AND RALPH E. MCCLAIN, W/H GEORGIA P. SNYDER, DIVORCED BRADIE PIPES AND GOLDIE PIPES, H/W PURSIE PIPES AND NORMA J. PIPES, H/W DOROTHY BELLE WELLS AND BYRON WELLS, W/H MYRNA MORGAN AND DAVID MORGAN, W/H REVA ROWLAND AND RONALD ROYCE ROWLAND	1-17/6
3B	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	MIDDLE ISLAND CREEK
3C	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	MIDDLE ISLAND CREEK
9	JASON A. & KANDACE R. MIDDLE GEORGE F. & KATHLEEN S. SPROWLS	VIOLET GREGG, ET AL COLUMBIA I. COLLINS ANTHONY STEPHANO ELIZABETH BRYCE TROSCHE, A/K/A, BRYCE PRIBBLE TROSCHE AND CARL TROSCHE, W/H	1-17/10 1-17/10.6
10	ELDEN L. PRATT & CHRISTINE LEASURE TIMOTHY R. PRATT ELDEN L., RODNEY DEAN & TIMOTHY RAY PRATT THOMAS D. II & CONNIE S. SNYDER ROGNEY D. PRATT WAYNE C. & RHONDA G. MUMBAUER WAYNE C. & RHONDA G. MUMBAUER STATE OF WEST VIRGINIA FORREST G. POWELL ROGER L. & MARJORIE P. WILLIAMS JASON L. & REBECCA M. PRATT	ARTIS HOPE JACK PARKER, ATTORNEY-IN-FACT FOR COLEN C. JACK	1-15/38 1-15/39 1-17/11 1-17/11.1 1-17/11.2 1-17/11.3 1-17/11.4 1-17/11.5 1-17/11.6 1-17/11.7 1-17/11.8
23	DAVID J. PRICE	AMANDA GREGG, ET AL	1-15/19
24	JOHN SR., & TINA B. JACENKIW	RALPH J. WESTFALL AND SHIRLEY A. WESTFALL, H/W NANCY B. WESTFALL	P/O 1-15/18
25			
26	JAMIE M. FERGUSON & MICHAEL NEELEY	THELMA FERGUSON, ET AL	P/O 1-15/35
30	DONALD FERGUSON		P/O 1-15/36
44	EUGENE W. & LESLIE BENNETT JOHN JR., & TANYA LYNN JACENKIW	BARBARA ANN PARKER, FORMERLY BARBARA ANN FERGUSON BETTY SUE EAKLE, FORMERLY, BETTY SUE FERGUSON AND HOWARD EAKLE, SR., W/H PATRICIA ANN GORDON, FORMERLY PATRICIA ANN FERGUSON DONALD L. SECKMAN AND DORA OLIVE SECKMAN, H/W HUGH EDWIN FERGUSON MARY ELIZABETH DEARTH, FORMERLY MARY ELIZABETH FERGUSON ROGER L. FERGUSON DONALD FERGUSON VIRGINIA LYNN FERGUSON, WIDOW OF JAMES FERGUSON MELVIN EUGENE FERGUSON AND SANDRA K. FERGUSON, H/W LEE ROY FERGUSON AND TRACY FERGUSON, H/W ROSEMARY DAVIS, FORMERLY ROSEMARY FERGUSON RICHARD O. FERGUSON, JR. RONALD H. WOODBURN MARGARET E. OLEXA BARBARA R. NELSON, F/K/A RENEE F. COLLINSWORTH, F/K/A RENEE MERRICK JAMES E. ULLOM WILLIAM STEVEN MORRIS JOHN ANDREW MORRIS DEBRA G. KYLE DAVID D. HULL	1-15/9 1-15-9.1
46	EUGENE W. & LESLIE BENNETT LORETTA L. HAUGHT HERBERT L. & DIXIE S. BUCKLEY	DONALD L. SECKMAN AND DORA OLIVE SECKMAN, H/W ROGER L. FERGUSON MELVIN EUGENE FERGUSON AND SANDRA K. FERGUSON, H/W LEE ROY FERGUSON AND TRACY FERGUSON, H/W RICHARD O. FERGUSON, JR. RONALD H. WOODBURN MARGARET E. OLEXA JAMES E. ULLOM WILLIAM STEVEN MORRIS JOHN ANDREW MORRIS DEBRA G. KYLE DAVID D. HULL	1-15/9 1-15/9.2 1-15/9.3
48	CONRAD E. COSTILOW	CONRAD E. COSTILOW ANN LENZ DENLINGER, F/K/A, ANN HOKMAN LENZ DENLINGER, F/K/A, ANN HOKMAN LENZ	1-15/8
49	RITA M. SHEPHERD	ERNEST LANTZ RITA MARIE SHEPHERD	1-15/2.2
50	ROBERT W. GRAHAM WILLIAM C. HENTHORN	ERNEST LANTZ RONALD LEE ASH RALPH ARNOLD ASH RANDALL DALE ASH AND DORETTA LYNN ASH	1-15/2 1-15/2.4
57	ROBERT W. GRAHAM	ERNEST LANTZ RONALD LEE ASH RALPH ARNOLD ASH RANDALL DALE ASH AND DORETTA LYNN ASH	1-15/2
83	ROBERT C. & JAMES L. SINCLAIR	SANDRA L. SPENCE BARBARA J. DRUCHNIAK PATTY L. BUTERBAUGH RICHARD B. SMITH	P/O 1-12/19
84			

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4355990.26
E:513306.08
NAD83_WV NORTH
N:313628.321
E:1588022.705
LAT/LON DATUM-NAD83
LAT:39°21'11.719"
LON:80°50'44.033"

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LAT/LON DATUM-NAD83
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N:4359408.89
E:511519.09
NAD83_WV NORTH
N:324944.523
E:1582345.889
LAT/LON DATUM-NAD83
LAT:39°23'02.708"
LON:80°51'58.487"

API WELL #: 47 95 02667 H4A
STATE COUNTY PERMIT

OCTOBER 22, 2019

THRASHER

CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (304) 624-4108 • FAX (304) 624-7831

BHL is located on topo map 11,867 feet south of Latitude: 39°25'00"
 SHL is located on topo map 7,920 feet south of Latitude: 39°22'30"

SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

NOTES:

1. There are water wells or developed springs within 250' of proposed well.
2. There is an existing house and buildings within 825' of proposed well.
3. Proposed well is greater than 100' from perennial stream, welland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

BHL is located on topo map 9,303 feet west of Longitude: 80°50'00"
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- ALL ARE POINTS UNLESS OTHERWISE NOTED.
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- LEASE BOUNDARY
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- ROAD
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- EXISTING WELLS
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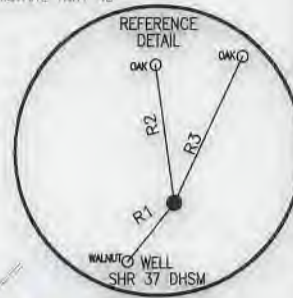
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FILE #: SHR 37 DHSM
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Signed: George D. Six
 R.P.E.: _____ L.L.S.: P.S. No. 2000



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

DATE: OCTOBER 22, 2019
 OPERATOR'S WELL #: SHR 37 DHSM
 API WELL #: 47 95 02667
 STATE COUNTY PERMIT

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

WATERSHED: HEADWATERS MIDDLE ISLAND CREEK ELEVATION: 828.57'±
 COUNTY/DISTRICT: TYLER / CENTERVILLE QUADRANGLE: WEST UNION, WV 7.5'
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DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

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 City CANONSBURG State PA Zip Code 15317 City CANONSBURG State PA Zip Code 15317

SHR 37 DHSM

PAGE 2 OF 2

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9	JASON A. & KANDACE R. MIDDLE GEORGE F. & KATHLEEN S. SPROWLS	VIOLET GREGG, ET AL COLUMBIA I. COLLINS ANTHONY STEPHANO ELIZABETH BRYCE TROSC. A/K/A, BRYCE PRIBBLE TROSC AND CARL TROSC, W/H	1-17/10 1-17/10.6
10	ELDEN L. PRATT & CHRISTINE LEASURE TIMOTHY R. PRATT ELDEN L., RODNEY DEAN & TIMOTHY RAY PRATT THOMAS D. II & CONNIE S. SNYDER ROGNEY D. PRATT WAYNE C. & RHONDA G. MUMBAUER WAYNE C. & RHONDA G. MUMBAUER STATE OF WEST VIRGINIA FORREST G. POWELL ROGER L. & MARJORIE P. WILLIAMS JASON L. & REBECCA M. PRATT	ARTIS HOPE JACK PARKER, ATTORNEY-IN-FACT FOR COLEN C. JACK	1-15/38 1-15/39 1-17/11 1-17/11.1 1-17/11.2 1-17/11.3 1-17/11.4 1-17/11.5 1-17/11.6 1-17/11.7 1-17/11.8
23	DAVID J. PRICE	AMANDA GREGG, ET AL	1-15/19
24	JOHN SR., & TINA B. JACENKIW	RALPH J. WESTFALL AND SHIRLEY A. WESTFALL, H/W NANCY B. WESTFALL	P/O 1-15/18
25			
26	JAMIE M. FERGUSON & MICHAEL NEELEY	THELMA FERGUSON, ET AL	P/O 1-15/35
30	DONALD FERGUSON		P/O 1-15/36
44	EUGENE W. & LESLIE BENNETT JOHN JR., & TANYA LYNN JACENKIW	BARBARA ANN PARKER, FORMERLY BARBARA ANN FERGUSON BETTY SUE EAKLE, FORMERLY, BETTY SUE FERGUSON AND HOWARD EAKLE, SR., W/H PATRICIA ANN GORDON, FORMERLY PATRICIA ANN FERGUSON DONALD L. SECKMAN AND DORA OLIVE SECKMAN, H/W HUGH EDWIN FERGUSON MARY ELIZABETH DEARTH, FORMERLY MARY ELIZABETH FERGUSON ROGER L. FERGUSON DONALD FERGUSON VIRGINIA LYNN FERGUSON, WIDOW OF JAMES FERGUSON MELVIN EUGENE FERGUSON AND SANDRA K. FERGUSON, H/W LEE ROY FERGUSON AND TRACY FERGUSON, H/W ROSEMARY DAVIS, FORMERLY ROSEMARY FERGUSON RICHARD O. FERGUSON, JR. RONALD H. WOODBURN MARGARET E. OLEXA BARBARA R. NELSON, F/K/A RENEE F. COLLINSWORTH, F/K/A RENEE MERRICK JAMES E. ULLOM WILLIAM STEVEN MORRIS JOHN ANDREW MORRIS DEBRA G. KYLE DAVID D. HULL	1-15/9 1-15-9.1
46	EUGENE W. & LESLIE BENNETT LORETTA L. HAUGHT HERBERT L. & DIXIE S. BUCKLEY	DONALD L. SECKMAN AND DORA OLIVE SECKMAN, H/W ROGER L. FERGUSON MELVIN EUGENE FERGUSON AND SANDRA K. FERGUSON, H/W LEE ROY FERGUSON AND TRACY FERGUSON, H/W RICHARD O. FERGUSON, JR. RONALD H. WOODBURN MARGARET E. OLEXA JAMES E. ULLOM WILLIAM STEVEN MORRIS JOHN ANDREW MORRIS DEBRA G. KYLE DAVID D. HULL	1-15/9 1-15/9.2 1-15/9.3
48	CONRAD E. COSTILOW	CONRAD E. COSTILOW ANN LENZ DENLINGER, F/K/A, ANN HOKMAN LENZ DENLINGER, F/K/A, ANN HOKMAN LENZ	1-15/8
49	RITA M. SHEPHERD	ERNEST LANTZ RITA MARIE SHEPHERD	1-15/2.2
50	ROBERT W. GRAHAM WILLIAM C. HENTHORN	ERNEST LANTZ RONALD LEE ASH RALPH ARNOLD ASH RANDALL DALE ASH AND DORETTA LYNN ASH	1-15/2 1-15/2.4
57	ROBERT W. GRAHAM	ERNEST LANTZ RONALD LEE ASH RALPH ARNOLD ASH RANDALL DALE ASH AND DORETTA LYNN ASH	1-15/2
83	ROBERT C. & JAMES L. SINCLAIR	SANDRA L. SPENCE	P/O 1-12/19
84		BARBARA J. DRUCHNIAK PATTY L. BUTERBAUGH RICHARD B. SMITH	

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4355990.26
E:513306.08
NAD83, WV NORTH
N:313628.321
E:1588022.705
LAT/LON DATUM-NAD83
LAT:39°21'11.719"
LON:80°50'44.033"

APPROX. LANDING POINT
UTM 17-NAD83
N:4356150.69
E:512701.97
NAD83, WV NORTH
N:314187.870
E:1586049.114
LAT/LON DATUM-NAD83
LAT:39°21'16.956"
LON:80°51'09.263"

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
N:4359408.89
E:511519.09
NAD83, WV NORTH
N:324944.523
E:1582345.889
LAT/LON DATUM-NAD83
LAT:39°23'02.708"
LON:80°51'58.487"

API WELL #: 47 95 02667 HGA
STATE COUNTY PERMIT

OCTOBER 22, 2019



WW-6A1
(5/13)

Operator's Well No. SHR37DHSM

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

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

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

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

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

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

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

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

Well Operator: CNX Gas Company, LLC
 By: Sarah Weigand *Sarah Weigand*
 Its: Manager Upstream Permitting

Attachment - Form WW-6A-1 for SHR37DHSM

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>			
1	1-17-5	269278000	Eleanor V. Earnheart and Dean A. Earnheart, w/h	Sefco Enterprises, Inc.	Not less than 1/8	267/74			
			Clella Boice, widow	Sefco Enterprises, Inc.	Not less than 1/8	267/76			
			Luella I. McConnell, widow	Sefco Enterprises, Inc.	Not less than 1/8	267/78			
			Agnes Godwin, widow	Sefco Enterprises, Inc.	Not less than 1/8	267/80			
			Nancy P. McClain and Ralph E. McClain, w/h	Sefco Enterprises, Inc.	Not less than 1/8	267/82			
			Georgia P. Snyder, divorced	Sefco Enterprises, Inc.	Not less than 1/8	267/84			
			Bradie Pipes and Goldie Pipes, his wife	Sefco Enterprises, Inc.	Not less than 1/8	267/86			
			Pursie Pipes and Norma J. Pipes, husband and wife	Sefco Enterprises, Inc.	Not less than 1/8	267/88			
			Dorothy Belle Wells and Byron Wells, her husband	Sefco Enterprises, Inc.	Not less than 1/8	267/90			
			Myrna Morgan and David Morgan, her husband	Sefco Enterprises, Inc.	Not less than 1/8	267/640			
			Sefco Enterprises, Inc.	Eastern American Energy Corporation	Assignment	285/650			
			Eastern American Energy Corporation	Seneca-Upshur Petroleum, Inc.	Assignment	354/757			
			Seneca-Upshur Petroleum, Inc.	Seneca-Upshur Petroleum, LLC	Assignment	381/540			
			Seneca-Upshur Petroleum, LLC	Antero Resources Appalachian Corporation	Assignment	402/132			
			Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	WVSOS			
			Antero Resources Corporation	CNX Gas Company, LLC		425/701			
			Noble Energy, Inc.	Noble Energy Inc.	Assignment	427/564			
				CNX Gas Company, LLC	Assignment	550/273			
			2	1-17-6	266300000	Eleanor V. Earnheart and Dean A. Earnheart, w/h	Sefco Enterprises, Inc.	Not less than 1/8	267/74
						Clella Boice, widow	Sefco Enterprises, Inc.	Not less than 1/8	267/76
Luella I. McConnell, widow	Sefco Enterprises, Inc.	Not less than 1/8				267/78			
Agnes Godwin, widow	Sefco Enterprises, Inc.	Not less than 1/8				267/80			
Nancy P. McClain and Ralph E. McClain, w/h	Sefco Enterprises, Inc.	Not less than 1/8				267/82			
Georgia P. Snyder, divorced	Sefco Enterprises, Inc.	Not less than 1/8				267/84			
Bradie Pipes and Goldie Pipes, his wife	Sefco Enterprises, Inc.	Not less than 1/8				267/86			
Pursie Pipes and Norma J. Pipes, husband and wife	Sefco Enterprises, Inc.	Not less than 1/8				267/88			
Dorothy Belle Wells and Byron Wells, her husband	Sefco Enterprises, Inc.	Not less than 1/8				267/90			
Myrna Morgan and David Morgan, her husband	Sefco Enterprises, Inc.	Not less than 1/8				267/640			
Sefco Enterprises, Inc.	Eastern American Energy Corporation	Assignment				285/650			
Eastern American Energy Corporation	Seneca-Upshur Petroleum, Inc.	Assignment				354/757			
Seneca-Upshur Petroleum, Inc.	Seneca-Upshur Petroleum, LLC	Assignment				381/540			
Seneca-Upshur Petroleum, LLC	Antero Resources Appalachian Corporation	Assignment				402/132			
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change				WVSOS			
Antero Resources Corporation	CNX Gas Company, LLC					425/701			
Noble Energy, Inc.	Noble Energy Inc.	Assignment				427/564			
	CNX Gas Company, LLC	Assignment				550/273			
	Reva Rowland and Ronald Royce Rowland	CNX Gas Company, LLC				Not less than 1/8	661/312		

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<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
3B	Middle Island Creek	N/A	West Virginia Division of Natural Resources Antero Resources Corporation	Antero Resources Corporation CNX Gas Company, LLC	Not less than 1/8 Affidavit of Agreement	553/295 624/332 See Attached

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
3C	Middle Island Creek	N/A	West Virginia Division of Natural Resources Antero Resources Corporation	Antero Resources Corporation CNX Gas Company, LLC	Not less than 1/8 Affidavit of Agreement	553/295 624/332 See Attached

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
9	1-17-10 1-17-10.6	271726000	Violet Gregg, et al James F. Doan Appalachian Energy Development Anvil Oil Co., Inc Anvil Oil & Gas Co., Inc Dominion Appalachian Development Properties, L.L.C. CNX Gas Company, LLC Noble Energy, Inc.	James F. Doan Appalachian Energy Development Anvil Oil Co., Inc Anvil Oil & Gas Co., Inc Dominion Appalachian Development, Inc. CNX Gas Company, LLC Noble Energy, Inc. CNX Gas Company, LLC	Not less than 1/8 Assignment Assignment Name Change Assignment Merger Assignment Assignment	254/243 254/246 256/386 WVSOS 323/383 384/191 388/286 550/273
			Columbia I. Collins Anvil Oil Co., Inc Anvil Oil & Gas Co., Inc Dominion Appalachian Development Properties, L.L.C. CNX Gas Company, LLC Noble Energy, Inc.	Anvil Oil Co., Inc Anvil Oil & Gas Co., Inc Dominion Appalachian Development, Inc. CNX Gas Company, LLC Noble Energy, Inc. CNX Gas Company, LLC	Not less than 1/8 Name Change Assignment Merger Assignment Assignment	256/383 WVSOS 323/383 384/191 388/286 550/273
			Anthony Stephano Elizabeth Bryce Trosch. a/k/a, Bryce Pribble Trosch and Carl Trosch, w/h Noble Energy, Inc. Noble Energy, Inc.	Noble Energy, Inc. Noble Energy, Inc. CNX Gas Company, LLC CNX Gas Company, LLC	Not less than 1/8 Not less than 1/8 Assignment Assignment	520/374 520/322 542/147 550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
10	1-15-38 1-15-39 1-17-11 1-17-11.1 through 11.8	263403000	Artis Hope Jack Parker, Attorney-In-Fact for Colen C. Jack J&J Enterprises Eastern American Energy Corporation Seneca-Upshur Petroleum, Inc. Seneca-Upshur Petroleum, LLC Antero Resources Appalachian Corporation	J&J Enterprises Eastern American Energy Corporation Seneca-Upshur Petroleum, Inc. Seneca-Upshur Petroleum, LLC Antero Resources Appalachian Corporation Antero Resources Corporation	Not less than 1/8 Assignment Assignment Assignment Assignment Name Change	257/620 282/296 354/757 381/540 402/132 WVSOS

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Antero Resources Corporation
Noble Energy, Inc.

CNX Gas Company, LLC
Noble Energy Inc.
CNX Gas Company, LLC

Assignment 425/701
Assignment 550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>
23	1-15-19	271972000	Amanda Gregg, et al Hope Natural Gas Company Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Dominion Transmission, Inc. CONSOL Energy Holdings LLC XVI CNX Gas Company, LLC Noble Energy, Inc.

<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
Hope Natural Gas Company	Not less than 1/8	81/137
Consolidated Gas Supply Corporation	Deed	169/26
Consolidated Gas Transmission Corporation	Assignment	249/287
CNG Transmission Corporation	Name Change	WVSOS
Dominion Transmission, Inc.	Name Change	WVSOS
CONSOL Energy Holdings LLC XVI	Assignment	374/187
CNX Gas Company, LLC	Merger	384/191
Noble Energy, Inc.	Assignment	388/286
CNX Gas Company, LLC	Assignment	550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>
24	1-15-18	265334000	Ralph J. Westfall and Shirley A. Westfall, h/w Royal Resources Corporation L & M Associates, Inc. Anvil Oil Co., Inc Anvil Oil & Gas Co., Inc Dominion Appalachian Development, Inc. Dominion Appalachian Development, LLC CNX Gas Company, LLC Noble Energy, Inc.

<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
Royal Resources Corporation	Not less than 1/8	200/111
L & M Associates, Inc.	Assignment	223/176
Anvil Oil Co., Inc	Assignment	267/16
Anvil Oil & Gas Co., Inc	Name Change	WVSOS
Dominion Appalachian Development, Inc.	Assignment	323/383
Dominion Appalachian Development, LLC	Name Change	WVSOS
CNX Gas Company, LLC	Merger	9/206
Noble Energy, Inc.	Assignment	388/286
CNX Gas Company, LLC	Assignment	550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>
25	1-15-18	265334000	Nancy B. Westfall Antero Resources Corporation

<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
Antero Resources Corporation	Not less than 1/8	635/676
CNX Gas Company, LLC	Affidavit of Agreement	668/368 See Attached

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS #</u>	<u>Grantor, Lessor, etc</u>
26	1-15-35 1-15-36	266296000	Thelma Ferguson, et al Kepco, Inc. Kepco, Inc.

<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
Kepco, Inc.	Not less than 1/8	249/171
New Jersey Natural Resources Company	Assignment	253/694
Eastern Pennsylvania Exploration Company	Assignment	256/262
J&J Enterprises, Inc.		
Equitable Resources Energy Company		
Eastern Pennsylvania Exploration Company		
New Jersey Natural Resources Company	Assignment	308/119
Eastern American Energy Corporation	Assignment	282/296
Eastern American Energy Corporation	Assignment	302/582
EnerVest East Limited Partnership	Assignment	313/145
EnerVest East Limited Partnership	Assignment	314/302
		336/751
EnerVest East Limited Partnership	Assignment	371/528

Kepco, Inc.
J&J Enterprises
Eastern Pennsylvania Exploration Company
Equitable Resources Energy Company
New Jersey Natural Resources Company

Eastern American Energy Corporation

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EnerVest East Limited Partnership
 The Houston Exploration Company
 Seneca-Upshur Petroleum, Inc.
 Seneca-Upshur Petroleum, LLC
 Antero Resources Appalachian Corporation

 Antero Resources Corporation
 Noble Energy, Inc.

The Houston Exploration Company
 Seneca-Upshur Petroleum, Inc.
 Seneca-Upshur Petroleum, LLC
 Antero Resources Appalachian Corporation
 Antero Resources Corporation
 CNX Gas Company, LLC
 Noble Energy Inc.
 CNX Gas Company, LLC

Assignment 342/160
 Assignment 344/158
 Assignment 381/540
 Assignment 402/132
 Name Change WVSOS
 425/701
 Assignment 427/564
 Assignment 550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
30	1-15-35 1-15-36	266296000	Thelma Ferguson, et al Kepco, Inc. Kepco, Inc.	Kepco, Inc. New Jersey Natural Resources Company Eastern Pennsylvania Exploration Company J&J Enterprises, Inc. Equitable Resources Energy Company Eastern Pennsylvania Exploration Company New Jersey Natural Resources Company	Not less than 1/8 Assignment Assignment Assignment Assignment Assignment	249/171 253/694 256/262 308/119 282/296 302/582 313/145 314/302 336/751
			Kepco, Inc. J&J Enterprises Eastern Pennsylvania Exploration Company Equitable Resources Energy Company New Jersey Natural Resources Company	New Jersey Natural Resources Company Eastern American Energy Corporation Eastern American Energy Corporation EnerVest East Limited Partnership EnerVest East Limited Partnership	Assignment Assignment Assignment Assignment	371/528 342/160 344/158 381/540 402/132 WVSOS 425/701
			Eastern American Energy Corporation EnerVest East Limited Partnership The Houston Exploration Company Seneca-Upshur Petroleum, Inc. Seneca-Upshur Petroleum, LLC Antero Resources Appalachian Corporation	EnerVest East Limited Partnership The Houston Exploration Company Seneca-Upshur Petroleum, Inc. Seneca-Upshur Petroleum, LLC Antero Resources Appalachian Corporation Antero Resources Corporation CNX Gas Company, LLC Noble Energy Inc. CNX Gas Company, LLC	Assignment Assignment Assignment Assignment Name Change Assignment Assignment	427/564 550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
44	1-15-9 1-15-9.1	263456000	Barbara Ann Parker, formerly Barbara Ann Ferguson Betty Sue Eakle, formerly, Betty Sue Ferguson and Howard Eakle, Sr., w/h Patricia Ann Gordon, formerly Patricia Ann Ferguson Donald L. Seckman and Dora Olive Seckman, h/w Hugh Edwin Ferguson	Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation	Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8	466/781 466/783 466/779 466/792 466/787
			Mary Elizabeth Dearth, formerly Mary Elizabeth Ferguson Roger L. Ferguson Donald Ferguson Virginia Lynn Ferguson, widow of James Ferguson Melvin Eugene Ferguson and Sandra K. Ferguson, h/w	Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation	Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8	466/785 466/777 466/789 467/652 467/648

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Lee Roy Ferguson and Tracy Ferguson, h/w
Rosemary Davis, formerly Rosemary Ferguson
Richard O. Ferguson, Jr.

Antero Resources Corporation
Noble Energy, Inc.

Ronald H. Woodburn
Sancho Oil and Gas Company

Antero Resources Corporation
Noble Energy, Inc.

Margaret E. Olexa

Ronald H. Woodburn
Sancho Oil and Gas Company

Ronald H. Woodburn
Sancho Oil and Gas Company

Antero Resources Corporation
Noble Energy, Inc.

Barbara R. Nelson, f/k/a Renee F. Collinsworth, f/k/a Renee Merrick
James E. Ullom
William Steven Morris
John Andrew Morris
Debra G. Kyle
David D. Hull
Antero Resources Corporation

Antero Resources Corporation
Antero Resources Corporation
Antero Resources Corporation
CNX Gas Company, LLC
Noble Energy Inc.
CNX Gas Company, LLC

Sancho Oil and Gas Company
Antero Resources Corporation
CNX Gas Company, LLC
Noble Energy Inc.
CNX Gas Company, LLC

Ronald H. Woodburn

Sancho Oil and Gas Company
Ronald H. Woodburn

Sancho Oil and Gas Company
Antero Resources Corporation
CNX Gas Company, LLC
Noble Energy Inc.
CNX Gas Company, LLC

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Antero Resources Corporation
CNX Gas Company, LLC

Not less than 1/8 467/650
Not less than 1/8 467/646
Not less than 1/8 476/171

Assignment 503/754
Assignment 550/273

Not less than 1/8 435/414
Not less than 1/8 455/643
Assignment 498/605

Assignment 503/754
Assignment 550/273

Not less than 1/8 377/13
428/104
Assignment 429/204
Assignment 435/228
435/229

Assignment 455/706
Assignment 498/605

Assignment 503/754
Assignment 550/273

Not less than 1/8 635/821
Not less than 1/8 661/259
Not less than 1/8 652/362
Not less than 1/8 648/76
Not less than 1/8 645/36
Not less than 1/8 645/589

Affidavit of Agreement 668/368 See Attached

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
46	1-15-9 1-15-9.2 1-15-9.3	263456000	Donald L. Seckman and Dora Olive Seckman, h/w Roger L. Ferguson Melvin Eugene Ferguson and Sandra K. Ferguson, h/w Lee Roy Ferguson and Tracy Ferguson, h/w Richard O. Ferguson, Jr. Antero Resources Corporation Noble Energy, Inc. Ronald H. Woodburn	Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation CNX Gas Company, LLC Noble Energy Inc. CNX Gas Company, LLC Sancho Oil and Gas Company	Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8 Not less than 1/8 Assignment Assignment Not less than 1/8	466/792 466/777 467/648 467/650 476/171 503/754 550/273 435/414 455/643

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Sancho Oil and Gas Company	Antero Resources Corporation	Assignment	498/605
Antero Resources Corporation	CNX Gas Company, LLC	Assignment	503/754
Noble Energy, Inc.	Noble Energy Inc.	Assignment	550/273
Margaret E. Olexa	Ronald H. Woodburn	Not less than 1/8	377/13
Ronald H. Woodburn	Sancho Oil and Gas Company	Assignment	428/104
Sancho Oil and Gas Company	Ronald H. Woodburn	Assignment	429/204
Ronald H. Woodburn	Sancho Oil and Gas Company	Assignment	435/228
Sancho Oil and Gas Company	Antero Resources Corporation	Assignment	435/229
Antero Resources Corporation	Antero Resources Corporation	Assignment	455/706
Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	498/605
Antero Resources Corporation	Noble Energy Inc.	Assignment	503/754
Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	550/273
James E. Ullom	Antero Resources Corporation	Not less than 1/8	661/259
William Steven Morris	Antero Resources Corporation	Not less than 1/8	652/362
John Andrew Morris	Antero Resources Corporation	Not less than 1/8	648/76
Debra G. Kyle	Antero Resources Corporation	Not less than 1/8	645/36
David D. Hull	Antero Resources Corporation	Not less than 1/8	645/589
Antero Resources Corporation	CNX Gas Company, LLC	Affidavit of Agreement	668/368 <i>See Attached</i>

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
48	1-15-8	263456000	Conrad E. Costilow Ann Lenz Denlinger, f/k/a, Ann Hokman Lenz Denlinger, f/k/a, Ann Hokman Lenz	Antero Resources Corporation	Not less than 1/8	505/644
			Antero Resources Corporation Noble Energy, Inc. HG Energy II Appalachia, LLC Antero Resources Corporation	Antero Resources Corporation CNX Gas Company, LLC Noble Energy Inc. HG Energy II Appalachia, LLC Antero Resources Corporation CNX Gas Company, LLC	Assignment Assignment Assignment Affidavit of Agreement	546/770 570/96 667/1 668/368 <i>See Attached</i>

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
49	1-15-2.2	269288000	Ernest Lantz The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation	The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation Antero Resources Corporation CNX Gas Company, LLC Noble Energy Inc. CNX Gas Company, LLC	Not less than 1/8 Merger Deed Merger Merger Assignment Name Change Assignment Assignment	279/244 WVSOS 301/416 8/580 WVSOS 416/465 WVSOS 468/769 550/273
			Antero Resources Corporation Noble Energy, Inc.	CNX Gas Company LLC	Not less than 1/8	2/289

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<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
50	1-15-2 1-15-2.4	279175000	Ernest Lantz Ronald Lee Ash Ralph Arnold Ash Randall Dale Ash and Doretta Lynn Ash The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation Antero Resources Corporation Noble Energy, Inc.	The Coastal Corporation The Coastal Corporation The Coastal Corporation The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation Antero Resources Corporation CNX Gas Company, LLC 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 Merger Deed Merger Merger Assignment Name Change Assignment Assignment	279/244 278/554 278/556 278/558 WVSOS 301/416 8/580 WVSOS 416/465 WVSOS 468/769 550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
57	1-15-2	279175000	Ernest Lantz Ronald Lee Ash Ralph Arnold Ash Randall Dale Ash and Doretta Lynn Ash The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation Antero Resources Corporation Noble Energy, Inc.	The Coastal Corporation The Coastal Corporation The Coastal Corporation The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation Antero Resources Corporation CNX Gas Company, LLC 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 Merger Deed Merger Merger Assignment Name Change Assignment Assignment	279/244 278/554 278/556 278/558 WVSOS 301/416 8/580 WVSOS 416/465 WVSOS 468/769 550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
83	1-12-19	266284000	Sandra L. Spence Barbara J. Druchniak Patty L. Buterbaugh Richard B. Smith Antero Resources Corporation Noble Energy, Inc.	Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation CNX Gas Company, LLC 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 Assignment	444/333 444/335 444/337 444/339 468/769 550/273

<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
84	1-12-19	266284000	Sandra L. Spence Barbara J. Druchniak Patty L. Buterbaugh	Antero Resources Corporation Antero Resources Corporation Antero Resources Corporation	Not less than 1/8 Not less than 1/8 Not less than 1/8	444/333 444/335 444/337

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<u>Tract ID</u>	<u>Tax Map & Parcel</u>	<u>Title Opinion QLS</u> #	<u>Grantor, Lessor, etc</u>	<u>Grantee, Lessee, etc</u>	<u>Royalty</u>	<u>Book/Page</u>
50	1-15-2 1-15-2.4	279175000	Ernest Lantz Ronald Lee Ash Ralph Arnold Ash Randall Dale Ash and Doretta Lynn Ash The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation Antero Resources Corporation Noble Energy, Inc.	The Coastal Corporation The Coastal Corporation The Coastal Corporation The Coastal Corporation Pardee Gas Company Pardee Exploration Company Pardee Resources Group, Inc. Pardee Minerals, LLC Antero Resources Appalachian Corporation Antero Resources Corporation CNX Gas Company, LLC 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 Merger Deed Merger Merger Assignment Name Change Assignment Assignment	279/244 278/554 278/556 278/558 WVSOS 301/416 8/580 WVSOS 416/465 WVSOS 468/769 550/273

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4709502667

Richard B. Smith

Antero Resources Corporation
Noble Energy, Inc.

Antero Resources Corporation
CNX Gas Company, LLC
Noble Energy Inc.
CNX Gas Company, LLC

Not less than 1/8

Assignment
Assignment

444/339

468/769
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Nail A Archer II
TYLER County 10:37:49 AM
Instrument No 1203635
Date Recorded 10/16/2019
Document Type AFF
Pages Recorded 4
Book-Page 668-368
Recording Fee \$5.00
Additional \$6.00

AFFIDAVIT OF AGREEMENT

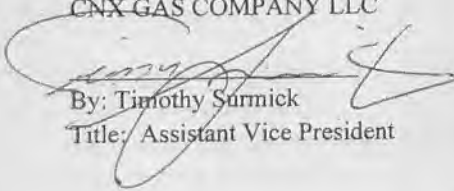
THIS AFFIDAVIT OF AGREEMENT (the "*Affidavit*") is executed to provide notice of a written Agreement dated October 14, 2019 (the "*Agreement*"), between Antero Resources Corporation, a Delaware corporation, whose address is 1615 Wynkoop Street, Denver, Colorado 80202 ("*Antero*"), and CNX Gas Company LLC, a Virginia limited liability company whose address is 1000 CONSOL Energy Drive Suite 400, Canonsburg, Pennsylvania 15317 ("*CNX*"). CNX and Antero are to be known collectively as the "*Parties*."

WHEREAS, pursuant to the provisions contained in the Agreement, Antero has agreed to assign to CNX all of its right, title and interest in and to certain tracts or portions of those oil and gas leases situate in Tyler County, West Virginia as more particularly described on Exhibit "A," attached hereto (the "*Leases*").

WHEREAS, closing of the transaction contemplated by the Agreement is expected to occur on or before March 31, 2020. Upon closing of the transaction by the Parties, Antero will execute and place of record an Assignment, Bill of Sale and Conveyance to CNX of its right, title and interest in and to the Leases, pursuant to the terms and conditions set out in the Agreement (the "*Assignment*"). In the event that Antero does not assign the entirety of the Leases to CNX by the Assignment, then Antero will retain title to any of the Leases not specifically assigned or conveyed therein. Once the Assignment is placed of record, it shall supersede this Affidavit.

CNX acknowledges that it is contractually bound by the terms and conditions contained in the Agreement. CNX has hereby executed this Affidavit as of the date of acknowledgment below, but this Affidavit is effective as of October 14, 2019.

CNX GAS COMPANY LLC


By: Timothy Sarmick
Title: Assistant Vice President

[Acknowledgment page follows]

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CORPORATE ACKNOWLEDGMENT

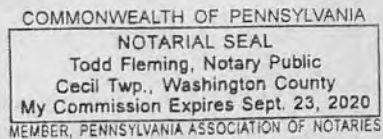
STATE OF PENNSYLVANIA)
COUNTY OF WASHINGTON)

I, Todd Fleming, a notary public of said county do certify that Timothy Surmick, appearing herein in his capacity as Assistant Vice President for CNX Gas Company LLC, who signed the writing above, bearing date the 14 day of October, 2019, has this day in my said county, before me, acknowledged the said writing to be the act and deed of said corporation.

My commission expires: September 23, 2020

Todd Fleming
Notary Public

[SEAL]



This document prepared by:
CNX Gas Company LLC
1000 CONSOL Energy Drive Suite 400
Canonsburg, Pennsylvania 15317

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Exhibit "A"

<u>Lessor</u>	<u>Lease Date</u>	<u>Book/Page</u>	<u>Lease Gross Acres</u>	<u>County</u>	<u>District</u>	<u>Conveyed Legal Description</u>
Nancy B. Westfall	2/18/2019	635/676	26	Tyler	Centerville	P/O 1-15-18 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>
Conrad E. Costilow	8/19/2015	505/644	56.75	Tyler	Centerville	P/O 1-15-8 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>
Ann Lenz Denlinger, f/k/a, Ann Hokman Lenz Denlinger, f/k/a, Ann Hokman Lenz	1/13/2016	525/375	79.75	Tyler	Centerville	P/O 1-15-8 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>
Barbara R. Nelson, FKA Renee F. Collinsworth, FKA Renee Merrick	2/13/2019	635/821	42.50	Tyler	Centerville	P/O 1-15-8, P/O 1-15-9, 1-15-9.1 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>
James E. Ullom	7/2/2019	661/259	99.50	Tyler	Centerville	P/O 1-15-8, P/O 1-15-9, 1-15-9.1, 1-15-9.2, 1-15-9.3, 1-15-37 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>
William Steven Morris	3/1/2019	652/362	79.50	Tyler	Centerville	P/O 1-15-8, P/O 1-15-9, 1-15-9.1, 1-15-9.2, 1-15-9.3, 1-15-37 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>

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John Andrew Morris	2/15/2019	648/76	79.50	Tyler	Centerville	P/O 1-15-8, P/O 1-15-9, 1-15-9.1, 1-15-9.2, 1-15-9.3, 1-15-37 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>
Debra G. Kyle	2/21/2019	645/36	79.50	Tyler	Centerville	P/O 1-15-8, P/O 1-15-9, 1-15-9.1, 1-15-9.2, 1-15-9.3, 1-15-37 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>
David D. Hull	2/21/2019	645/589	79.50	Tyler	Centerville	P/O 1-15-8, P/O 1-15-9, 1-15-9.1, 1-15-9.2, 1-15-9.3, 1-15-37 <i>All portions of the lease lying outside of the Gabitalalek Unit filed at Book 652, Page 728</i>

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Execution Version

ASSIGNMENT AND CONVEYANCE OF OIL AND GAS LEASES

STATE OF WEST VIRGINIA)
)
) \$
COUNTIES OF TYLER, DODDRIDGE,)
AND MONONGALIA)

Neil A Archer II
TYLER County 10:54:23 AM
Instrument No 1192684
Date Recorded 01/14/2019
Document Type AOG
Pages Recorded 110
Book-Page 629-658
Recording Fee \$110.00
Additional \$17.00

ATTN: SWANN BLACKWELL
PERDORON ENERGY LLC
320 SOUTHVIEW DRIVE STE 400
BRIDGEPORT, WV 26330-4678

This Assignment and Conveyance of Oil and Gas Leases (this "Assignment"), dated December 19, 2018, but effective as of December 20, 2018 at 7:00 a.m. Central Time (the "Effective Time"), is made by Antero Resources Corporation, a Delaware corporation, whose address is 1615 Wynkoop Street, Denver, CO 80202 ("Assignor"), to CNX Gas Company LLC, a Virginia limited liability company, whose address is 1000 Consol Energy Drive, Canonsburg, PA 15317 ("Assignee"). Assignor and Assignee are sometimes referred to herein together as the "Parties" and individually as a "Party."

WHEREAS, Assignor owns an undivided working interest in the Leases (as defined below).

WHEREAS, Assignor desires to assign to Assignee, and Assignee desires to accept such assignment of, the Leasehold Rights (as defined below), as more particularly described in this Assignment.

NOW, THEREFORE, for and in consideration of Ten Dollars (\$10.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

Assignor does hereby GRANT, BARGAIN, TRANSFER, ASSIGN and CONVEY to Assignee 100% of Assignor's right, title and interest in and to the "Leasehold Rights", which means 100% of Assignor's collective right, title and interest in and to:

- i. the oil and gas leases described in more detail on Exhibit A – Part I, less and except the Retained Wellbores (as defined below) (the "Antero Leases"); and
- ii. the oil and gas leases described in more detail on Exhibit A – Part II, but limited to the partial tracts identified as the "Conveyed" tracts on those maps attached hereto as Exhibit A - Part III and described in the "Conveyed Legal" column listed on Exhibit A – Part II, and less and except the Retained Wellbores (the "Antero Partial Leases") (the Antero Leases and Antero Partial Lease are collectively referred to herein as the "Leases"). The sub-letter references listed on Exhibit A – Part III are not in sequential letter order, such exhibit was assigned sub-letters in order to match the references in the "Conveyed Legal" column listed on Exhibit A – Part II.

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US 5985901

Monongalia County
Carye L. Blaney, Clerk
Instrument 749303
01/28/2019 @ 02:29:09 PM
ASSIGNMENT
Book 139 @ Page 186
Pages Recorded 110
Recording Cost \$ 127.00

As used in this Assignment, “**Retained Wellbores**” means any and all oil and/or gas wells (i) owned in whole or in part by Assignor and (ii) located on the lands covered by the Leases (whether any such well is drilled to and/or completed in the formations covered by the Leasehold Rights or otherwise) as of or prior to the Effective Time, whether producing, operating, plugged, permanently abandoned, shut-in or temporarily abandoned and including, without limitation, those wells described in Exhibit B.

This Assignment is further made subject to the following:

1. **Assignment Subject to Trade Agreement.** This Assignment is made in accordance with and is subject to the terms, covenants and conditions contained in that certain Trade Agreement, dated September 19, 2018 by and between Assignor and Assignee (as the same may be amended from time to time, the “**Trade Agreement**”). In the event of a conflict between the provisions of the Trade Agreement and this Assignment, the provisions of the Trade Agreement shall control. The execution and delivery of this Assignment by Assignor, and the execution and acceptance of this Assignment by Assignee, shall not operate to release or impair any surviving rights or obligations of Assignor or Assignee under the Trade Agreement. Capitalized terms used but not otherwise defined in this Assignment shall have the respective meanings given to such terms in the Trade Agreement.
2. **Assumption of Liabilities.** Subject to the terms of the Trade Agreement, effective as of the Effective Time, Assignee hereby acknowledges, assumes, and agrees to assume, pay, perform, fulfill and discharge the CNX Assumed Liabilities.
3. **Special Warranty of Title.** Assignor (a) hereby warrants, and shall defend, title to the Leasehold Rights unto Assignee and its successors in interest against every person whomsoever lawfully claiming, or to claim the same or any part thereof by, through or under Assignor, but not otherwise, subject to the Permitted Encumbrances and (b) hereby subrogates Assignee to all covenants and warranties of title by third persons (other than Assignor) heretofore given or made to Assignor or its predecessors in title in respect of any of the Leasehold Rights.
4. **No Interference.** The Parties understand that Assignee may have future wells, pipelines and access roads located on or under the lands covered by the Leases in the vicinity of the Retained Wellbores, *provided* Assignee shall not unreasonably interfere with or impede the operation of the Retained Wellbores by Assignor under the Leases. Upon request by Assignee, Assignor may, at its sole option, permit Assignee the right to utilize any existing well pads and other surface facilities pertaining to the Retained Wellbores on such Leases. Should Assignee be granted such utilization rights, Assignee agrees to make repairs for any damage to and to share in the cost of maintenance of any shared facilities on a proportionate basis based on usage for so long as Assignee continues to share such facilities with Assignor.

5. **Surface Use.** To the extent that each Party is not restricted from granting such access, each Party shall have the right to use any access roads constructed by the other Party for the non-constructing Party's oil and gas operations related to its operations upon the Leases. The non-constructing Party shall indemnify the other Party from any claims, damages or injuries that arise from such non-constructing Party's or its representatives' or contractors' use of such access roads, and each Party, for so long as such access roads are used jointly by the Parties, shall (a) promptly repair any and all damages that such Party or its representatives or contractors may cause to such access roads; and (b) participate in the further maintenance of such access roads on a proportionate basis based on usage.
6. **Notice of Abandonment.** In the event that any Retained Wellbore on the lands covered by the Leases (or lands pooled therewith) is not capable of producing oil and/or gas in paying quantities and there are no other wells capable of production in paying quantities on the respective Lease (or lands pooled therewith), or a Retained Wellbore ceases to produce oil and/or gas in paying quantities and such well is the only well capable of production in paying quantities on the respective Lease (or lands pooled therewith) and Assignor owns an interest in such Retained Wellbore and (a) Assignor (i) is required to plug and abandon such Retained Wellbore pursuant to applicable Law or (ii) otherwise desires to plug and abandon such Retained Wellbore, or (b) such Retained Wellbore ceases to produce in paying quantities for more than ninety (90) days, then, in each such case, Assignor shall provide written notice (or if during the drilling of such well, oral notice) (any such notice, the "Abandonment Notice") to Assignee at least thirty (30) days (or, if during the drilling of such well, twenty-four (24) hours) prior to the anticipated plugging and abandonment of such well in order to permit Assignee the option, in its sole discretion, to take over operation of such well. In the event that Assignee desires to take over the operation of such well, then Assignee shall provide written notice (or, if during the drilling of such well, oral notice) (the "Take Over Notice") to Assignor within thirty (30) days (or, if during the drilling of such well, twenty-four (24) hours) of receiving such Abandonment Notice applicable thereto. Promptly following such receipt of such Take Over Notice, Assignor shall assign to Assignee, free and clear of all encumbrances created by Assignor, all of Assignor's right, title and interest in such well pursuant to a mutually agreeable form of assignment containing no warranties except for a special warranty of title by, through and under Assignor, but not otherwise. If Assignee takes over the operations of any such well, then Assignee agrees to plug and abandon such well and reclaim, restore and clean up the drillsite location associated therewith in accordance with all applicable rules, regulations and laws and the terms of the applicable Lease. If Assignee does not elect to take over the operations of such well within the time period specified, then Assignor agrees to plug and abandon such well and reclaim, restore and clean up the drillsite location associated therewith in accordance with all applicable rules, regulations and laws and the terms of the applicable Lease. All oral notices provided under this Section 6 shall be followed with written notice as soon as reasonably practicable. All written notices shall be mailed to the addresses for the Parties as reflected on the first page.

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7. **Disclaimers of Warranties and Representations.** EXCEPT AS EXPRESSLY REPRESENTED OTHERWISE IN SECTION VII OF THE TRADE AGREEMENT OR IN SECTION 3 OF THIS ASSIGNMENT, ASSIGNOR MAKES NO, AND HEREBY EXPRESSLY DISCLAIMS, ANY REPRESENTATION OR WARRANTY, EXPRESS, IMPLIED OR STATUTORY, INCLUDING AS TO (I) TITLE TO THE LEASES, (II) THE CONTENTS, CHARACTER OR NATURE OF ANY DESCRIPTIVE MEMORANDUM, OR ANY REPORT OF ANY PETROLEUM ENGINEERING CONSULTANT OF ASSIGNOR, OR ANY GEOLOGICAL OR SEISMIC DATA OR INTERPRETATION, RELATING TO THE LEASES, (III) THE QUANTITY, QUALITY OR RECOVERABILITY OF PETROLEUM SUBSTANCES IN OR FROM THE LEASES, (IV) THE EXISTENCE OF ANY PROSPECT, OR ANY RECOMPLETION, INFILL OR STEP-OUT DRILLING OPPORTUNITIES, (V) ANY ESTIMATES OF THE VALUE OF THE LEASES, (VI) THE PRODUCTION OF PETROLEUM SUBSTANCES FROM THE LEASES, OR ANY PRODUCTION OR DECLINE RATES, (VII) THE MAINTENANCE, REPAIR, CONDITION, QUALITY, SUITABILITY, DESIGN OR MARKETABILITY OF THE LEASES, (VIII) INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT, AND (IX) ANY OTHER MATERIALS OR INFORMATION THAT MAY HAVE BEEN MADE AVAILABLE OR COMMUNICATED TO ASSIGNEE OR ITS AFFILIATES, OR ITS OR THEIR RESPECTIVE EMPLOYEES, AGENTS, CONSULTANTS, REPRESENTATIVES OR ADVISORS IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED BY THIS ASSIGNMENT OR ANY DISCUSSION OR PRESENTATION RELATING THERETO, AND FURTHER DISCLAIM ANY REPRESENTATION OR WARRANTY, EXPRESS, IMPLIED, OR STATUTORY, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR CONFORMITY TO MODELS OR SAMPLES OF MATERIALS OR ANY EQUIPMENT, IT BEING EXPRESSLY UNDERSTOOD AND AGREED BY THE PARTIES THAT, EXCEPT AS EXPRESSLY REPRESENTED OTHERWISE IN SECTION VII OF THE TRADE AGREEMENT OR SECTION 3 OF THIS ASSIGNMENT, THE LEASEHOLD RIGHTS ARE BEING TRANSFERRED BY ASSIGNOR "AS IS, WHERE IS," WITH ALL FAULTS AND DEFECTS.
8. **Governing Law.** EXCEPT TO THE EXTENT THAT THE LAWS OF THE STATE OF WEST VIRGINIA ARE MANDATORILY APPLICABLE TO THIS ASSIGNMENT IN CONNECTION WITH THE CONVEYANCES OF PROPERTY INTERESTS INVOLVING REAL PROPERTY LOCATED IN THE STATE OF WEST VIRGINIA, THIS ASSIGNMENT SHALL BE GOVERNED BY, CONSTRUED, INTERPRETED AND APPLIED IN ACCORDANCE WITH THE LAWS OF THE STATE OF WEST VIRGINIA EXCLUDING ANY CHOICE OF LAW RULES WHICH WOULD REFER THE MATTER TO THE LAWS OF ANOTHER JURISDICTION. ANY DISPUTE, CONTROVERSY OR CLAIM ARISING OUT OF, RELATING TO OR IN CONNECTION WITH THIS ASSIGNMENT OR THE VALIDITY HEREOF,

SHALL BE FINALLY SETTLED IN ACCORDANCE WITH SECTION XILE OF THE TRADE AGREEMENT.

9. **Titles and Captions.** All Section titles or captions in this Assignment are for convenience only, shall not be deemed part of this Assignment and in no way define, limit, extend or describe the scope or intent of any provisions hereof. Except to the extent otherwise stated in this Assignment, references to "Sections" are to Sections of this Assignment, and references to "Exhibits" are to Exhibits attached to this Assignment, which are made a part hereof and incorporated herein for all purposes.
10. **Third Party Beneficiaries.** Nothing contained herein is intended or shall be deemed to create or confer any rights upon any third person not a party hereto, whether as a third party beneficiary or otherwise, except as expressly provided herein; nor shall anything contained herein be construed to create any partnership, agency, joint venture or like relationship between Assignee and Assignor.
11. **Further Assurances.** Assignor and Assignee agree to take such further actions and to execute, acknowledge and deliver all such further documents as are reasonably requested by the other Party for carrying out the purposes of this Assignment.
12. **Binding Effect.** This Assignment shall extend and inure to the benefit of Assignor and Assignee and their respective successors or assigns.
13. **Counterparts.** This Assignment may be executed in counterparts, each of which shall be deemed an original instrument, but all such counterparts together shall constitute but one agreement.

[Signature page follows.]

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IN WITNESS WHEREOF, the Parties have caused this Assignment to be effective as of the Effective Time.

ASSIGNOR:

ANTERO RESOURCES CORPORATION


By: 

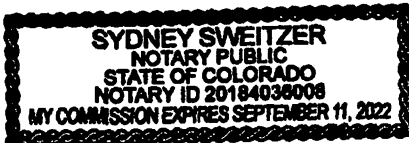
Name: Brian A. Kuhn
Title: Senior Vice President - Land

STATE OF COLORADO
COUNTY OF DENVER

BE IT KNOWN, that on this 19 day of December, 2018, before me, the undersigned authority, personally came and appeared Brian A. Kuhn appearing herein in his capacity as Senior Vice President - Land of Antero Resources Corporation, to me personally known to be the identical person whose name is subscribed to the foregoing instrument as the said officer of said corporation, and declared and acknowledged to me, Notary, that he executed the same on behalf of said corporation with full authority of its Board of Directors, and that the said instrument is the free act and deed of the said corporation and was executed for the uses, purposes and benefits therein expressed.


My Commission Expires: 9-11-22


NOTARY PUBLIC



ASSIGNEE:

CNX GAS COMPANY LLC

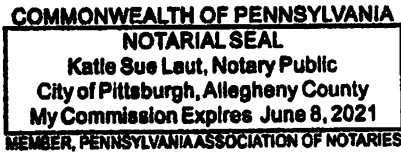
By: 
Name: Alexander J. Reyes
Title: Vice President

**COMMONWEALTH OF PENNSYLVANIA
COUNTY OF ALLEGHENY**

BE IT KNOWN, that on this 20th day of December, 2018, before me, the undersigned authority, personally came and appeared Alexander J. Reyes appearing herein in his capacity as Vice President of CNX Gas Company LLC, to me personally known to be the identical person whose name is subscribed to the foregoing instrument as the said officer of said limited liability company, and declared and acknowledged to me, Notary, that he executed the same on behalf of said limited liability company with full authority, and that the said instrument is the free act and deed of the said limited liability company and was executed for the uses, purposes and benefits therein expressed.

My Commission Expires: June 8, 2021


NOTARY PUBLIC



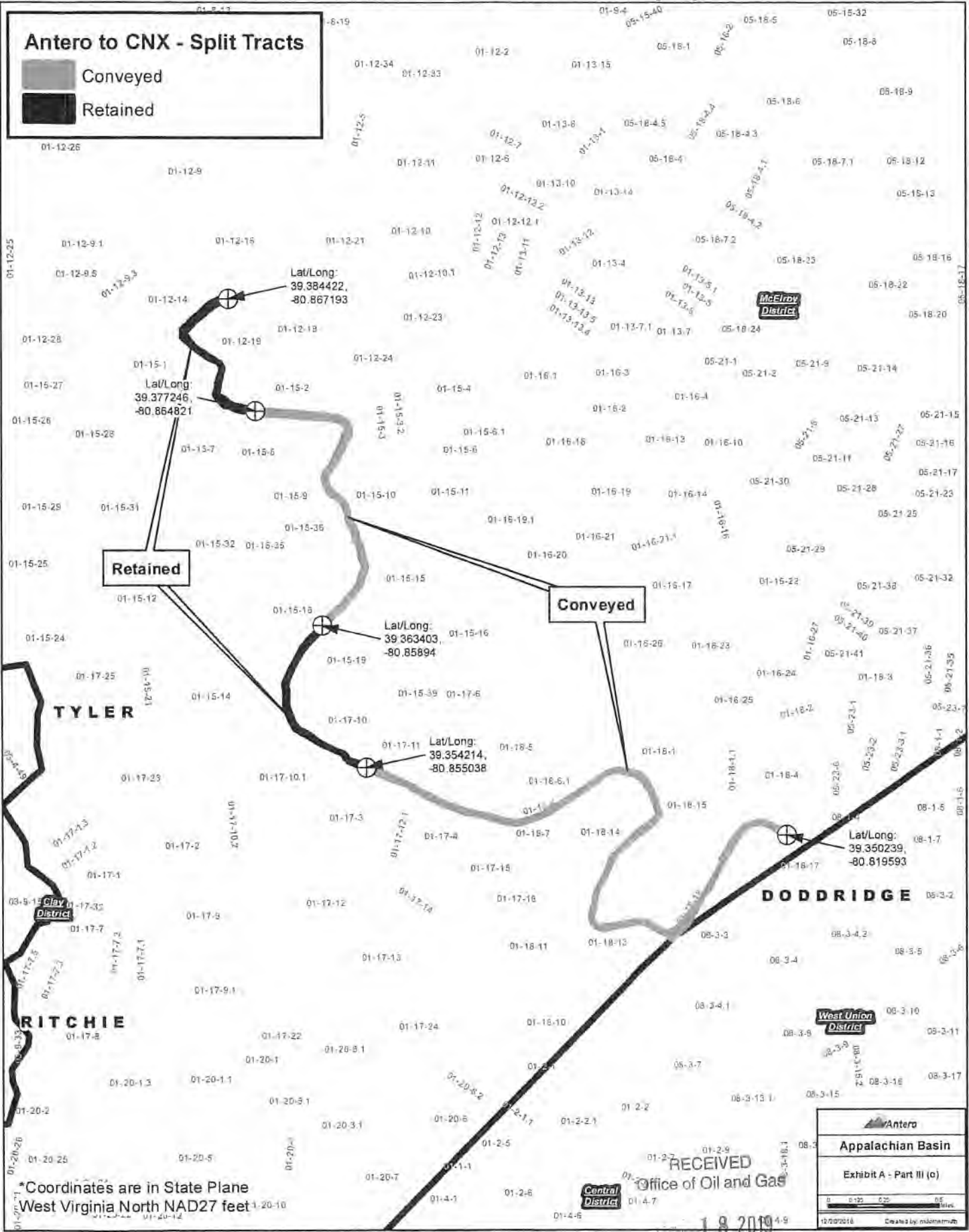
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Department of
Environmental Protection

								DOU, filed at Book 445, Page 663 (Doddridge County), and Book 565, Page 158 (Tyler County)	(Doddridge County), and Book 565, Page 158 (Tyler County)
20637	Tyler	Centerville	Horton, his wife, et al, Sam and Carol	3/7/1990	145.25000	287/325	1-20-6, 1-20-6.1, 1-20-6.2, 1-20-6.3, 1-20-6.4	1-20-6, p/o 1-20-6.1, 1-20-6.2, p/o 1-20-6.3, p/o 1-20-6.4 See Exhibit A - Part III (e) Those portions of this lease that fall outside of the Hawk Unit DOU, filed at Book 449, Page 520 (Doddridge County), and Book 570, Page 203 (Tyler County), the California Unit DOU, filed at Book 445, Page 663 (Doddridge County), and Book 565, Page 158 (Tyler County)	p/o 1-20-6.1, p/o 1-20-6.3, p/o 1-20-6.4 See Exhibit A - Part III (e) Those portions of this lease that fall inside of the Hawk Unit DOU, filed at Book 449, Page 520 (Doddridge County), and Book 570, Page 203 (Tyler County), the California Unit DOU, filed at Book 445, Page 663 (Doddridge County), and Book 565, Page 158 (Tyler County)
120957	Tyler	Centerville	West Virginia Division of Natural Resources	11/8/2016	64.78000	553/295	p/o Middle Island Creek	p/o Middle Island Creek See Exhibit A - Part III (o)	p/o Middle Island Creek See Exhibit A - Part III (o)

Exhibit A - Part III (o)



Antero to CNX - Split Tracts

- Conveyed
- Retained

Lat/Long:
39.384422,
-80.867193

Lat/Long:
39.377246,
-80.864821

Lat/Long:
39.363403,
-80.85894

Lat/Long:
39.354214,
-80.855038

Lat/Long:
39.350239,
-80.819593

*Coordinates are in State Plane West Virginia North NAD27 feet

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18 2019

Wade,

See attached request documents, let me know if you need anything else.

-Ray

From: McLane, John

Sent: Tuesday, December 17, 2019 5:58 PM

To: Hoon, Raymond <RaymondHoon@cnx.com>

Cc: Surmick, Tim <TimothySurmick@cnx.com>; Weigand, Sarah <sarahweigand@cnx.com>; O'Rourke, Sean E. <SeanOrourke@cnx.com>; Stanton, Brenton <BrentonStanton@cnx.com>

Subject: RE: [EXTERNAL] RE: SHR37 Permit applications

Ray –

See attached for updated 6A1's for the DHSM and EHSM laterals. Tracts 3A, 3B and 3C were updated with the recording information from the actual assignment from Antero to CNX in DB 629/658. I've attached the assignment in 629/658 for reference. The Antero/CNX in Affidavit of Agreement in 624/332 was listed by mistake. For tracts 25, 44, 45, 46 and 48 - I've attached a copy of the Affidavit of Agreement in 668/368 requested by the DNR. Lastly, for tract 49, updated the 6A1 to include the recording information for the Rita Marie Shepherd lease. See below.

95-02667

Tract ID

3B – 6A1 updated w/ actual assignment from Antero to CNX in 629/658

3C – 6A1 updated w/ actual assignment from Antero to CNX in 629/658

25 – "Affidavit of Agreement" in 668/368 attached

44 – "Affidavit of Agreement" in 668/368 attached

46 – "Affidavit of Agreement" in 668/368 attached

48 – "Affidavit of Agreement" in 668/368 attached

49 – 6A1 updated with recording information for CNX's lease with Rita Marie Shepherd

95-02668

Tract ID

3A – 6A1 updated w/ actual assignment from Antero to CNX in 629/658

3B – 6A1 updated w/ actual assignment from Antero to CNX in 629/658

3C – 6A1 updated w/ actual assignment from Antero to CNX in 629/658

25 – "Affidavit of Agreement" in 668/368 attached

44 – "Affidavit of Agreement" in 668/368 attached

45 – "Affidavit of Agreement" in 668/368 attached

46 – "Affidavit of Agreement" in 668/368 attached

48 – "Affidavit of Agreement" in 668/368 attached

Please let us know if anything further is needed.

Thanks,

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DEC 18 2019

WV Department of
Environmental Protection



1709502867

Sarah Weigand
Manager Upstream Permitting
Work: 724-485-3244
Email: SarahWeigand@cnx.com

CNX Center
1000 CONSOL Energy Drive
Canonsburg, PA 15317-6506
724-485-4000
cnx.com

September 26, 2019

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

RE: Road Letter – SHR37 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) 485-3244 or SarahWeigand@cnx.com.

Sincerely,

A handwritten signature in blue ink that reads 'Sarah Weigand'. The signature is fluid and cursive.

Sarah Weigand

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OCT 31 2019

WV Department of
Environmental Protection

WW-6AC
(1/12)

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

Date of Notice Certification: 10-30-14

API No. 47- _____
Operator's Well No. SHR37DHSM
Well Pad Name: SHR37

Notice has been given:

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>513306.076</u>
County: <u>Tyler</u>		Northing: <u>4355990.256</u>
District: <u>Centerville</u>	Public Road Access: <u>Duckworth Ridge Road (CR 58/2)</u>	
Quadrangle: <u>West Union</u>	Generally used farm name: <u>CNX</u>	
Watershed: <u>Headwaters Middle Island Creek</u>		

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY <input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED <input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED <input type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or <input checked="" type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) <input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION <input checked="" type="checkbox"/> 5. PUBLIC NOTICE <input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		OOG OFFICE USE ONLY <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED
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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.

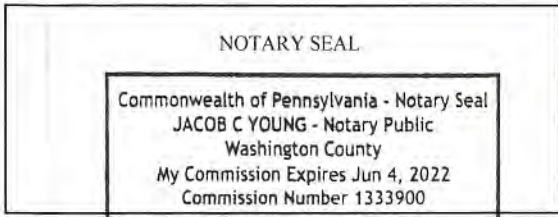
4709502867

WW-6AC
(1/12)

Certification of Notice is hereby given:

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

Well Operator:	CNX Gas Company, LLC	Address:	1000 Consol Energy Drive
By:	Sarah Weigand <u>Sarah Weigand</u>		Canonsburg, PA 15317
Its:	Manager Upstream Permitting	Facsimile:	
Telephone:	724-485-3244	Email:	SarahWeigand@CNX.com



Subscribed and sworn before me this 23rd day of October, 2019.

Jacob C Young Notary Public

My Commission Expires 6/4/2022

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.

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WV Department of
Environmental Protection

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

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

Date of Notice: 10/29/19 **Date Permit Application Filed:** 10/31/19

Notice of:

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

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

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

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

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

SURFACE OWNER(s)
 Name: CNX Gas Company LLC
 Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

COAL OWNER OR LESSEE
 Name: CNX Gas Company LLC
 Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

Name: _____
 Address: _____

COAL OPERATOR
 Name: _____
 Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: _____
 Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
 Name: See attached.
 Address: _____

Name: _____
 Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: _____
 Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
 Address: _____

*Please attach additional forms if necessary

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Department of
Environmental Protection

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, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

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

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OCT 31 2019

WV Department of
Environmental Protection

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

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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OCT 31 2019

WV Department of
Environmental Protection

WW-6A
(8-13)

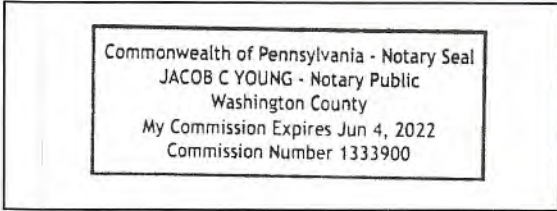
API NO. 47- 4709502667
OPERATOR WELL NO. SHR37DHSM
Well Pad Name: SHR37

Notice is hereby given by:

Well Operator: CNX Gas Company, LLC Address: 1000 Consol Energy Drive
Telephone: 724-485-3244 Canonsburg, PA 15317
Email: SarahWeigand@CNX.com *Sarah Weigand* Facsimile: _____

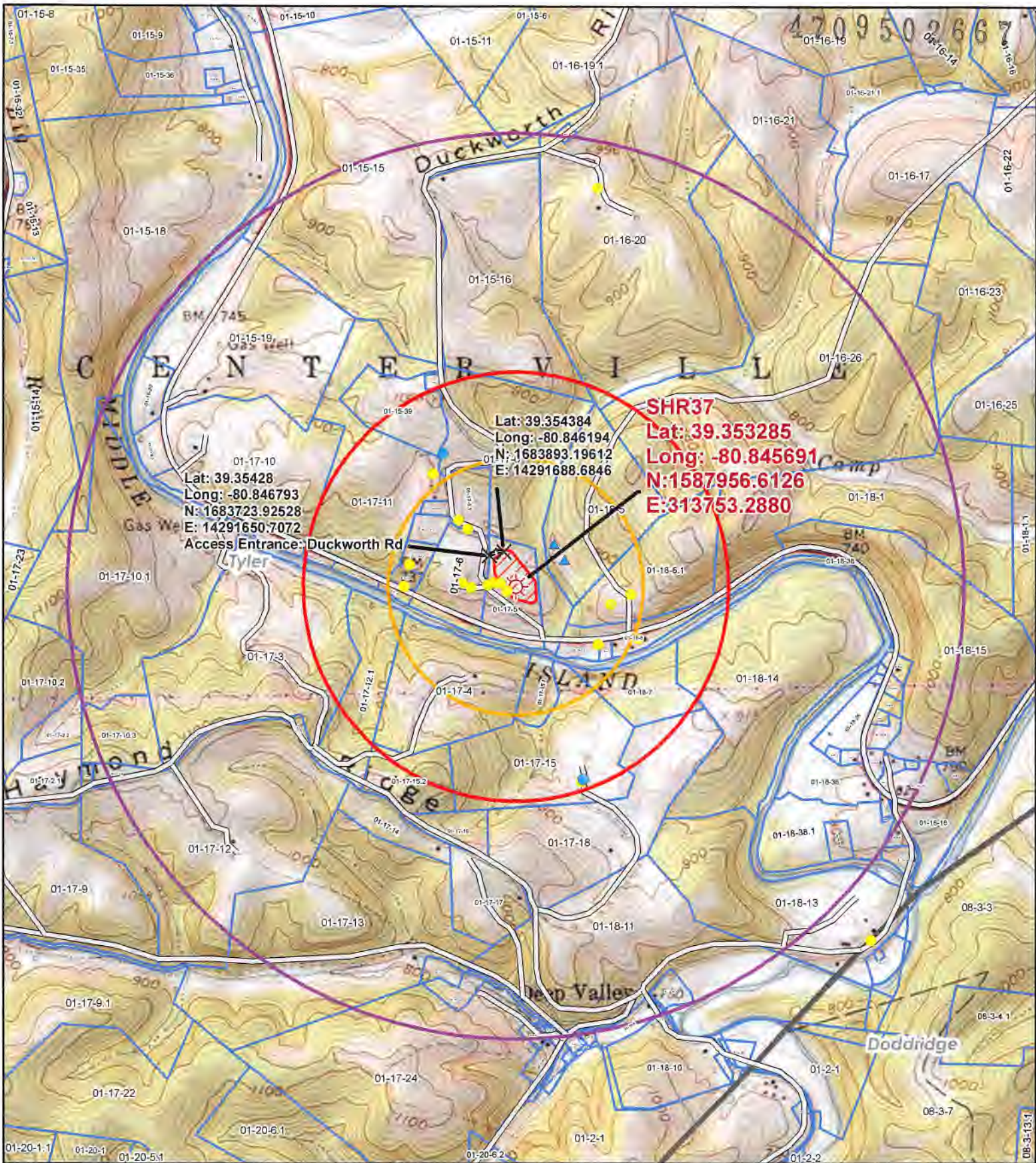
Oil and Gas Privacy Notice:

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.



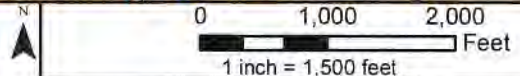
Subscribed and sworn before me this 23rd day of Oct, 2019.
Jacob C Young Notary Public
My Commission Expires 6/4/2022

RECEIVED
Office of Oil and Gas
OCT 31 2019
WV Department of
Environmental Protection



Legend

- ▲ Pond
- Spring
- Well
- ☼ Wellbore
- ✕ Access Points
- == Access Road
- ▭ 1 Mile Buffer
- ▭ 2,500 Foot Buffer
- ▭ 1,500 Foot Buffer
- ▭ Surface Parcel
- ▭ Well Pad



Original Date: 12/14/2018	Prepared By: GIS
Revision Date: 12/14/2018	Approved By: GIS

Topographic Well Map
SHR37

This map is property of CNX Land Resources Inc. and contains information that is proprietary and confidential in nature and may not be copied or reproduced without prior written consent.
© Copyright CNX Land Resources Inc. 2011

Path: \\erwin\gis\business_unit_support\gas_permits\gs31\shr37\topo_water_wells\shr37_topo_water_well_map.mxd - usDm

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

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

Date of Notice: 10/29/19 **Date Permit Application Filed:** 10/31/19

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

- CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED DELIVERY

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

Notice is hereby provided to the SURFACE OWNER(s)

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

Name: <u>CNX Gas Company LLC</u>	Name: _____
Address: <u>1000 Consol Energy Drive</u>	Address: _____
<u>Canonsburg, PA 15317</u>	_____

Notice is hereby given:

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>513306.076</u>
County: <u>Tyler</u>		Northing: <u>4355990.256</u>
District: <u>Centerville</u>	Public Road Access: <u>Duckworth Ridge Road (CR 58/2)</u>	
Quadrangle: <u>West Union</u>	Generally used farm name: <u>CNX</u>	
Watershed: <u>Headwaters Middle Island Creek</u>		

This Notice Shall Include:

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

Well Operator: <u>CNX Gas Company, LLC</u>	Address: <u>1000 Consol Energy Drive</u>
Telephone: <u>724-485-3244</u>	<u>Canonsburg, PA 15317</u>
Email: <u>SarahWeigand@CNX.com</u>	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.

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Office of Oil and Gas

OCT 31 2019

WV Department of
Environmental Protection



Sarah Weigand
Manager Upstream Permitting
Work: 724-485-3244
Email: SarahWeigand@cnx.com

CNX Center
1000 CONSOL Energy Drive
Canonsburg, PA 15317-6506
724-485-4000
cnx.com

October 4, 2019

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

RE: SHR37DHSM Waiver Request

To Whom It May Concern:

CNX Gas Company, LLC (CNX) as surface and coal owner of the SHR37DHSM drill tract hereby waives the right to receive the Notice of Intent to Drill. An executed Voluntary Statement of No Objection form has been included with this application.

If any further information or correspondence is required, please contact me at (724) 485-3244 or SarahWeigand@cnx.com.

Sincerely,

A handwritten signature in blue ink that reads 'Sarah Weigand'. The signature is written in a cursive, flowing style.

Sarah Weigand

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Office of Oil and Gas

OCT 31 2019

WV Department of
Environmental Protection

4709502667

WW-6RW
(1-12) CNX # 294099001

API NO. 47- _____
OPERATOR WELL NO. See Exhibit A. _____
Well Pad Name: SHR 37 _____

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL LOCATION RESTRICTION WAIVER

The well operator, CNX GAS COMPANY LLC is applying for a permit from the State of West Virginia to conduct oil or gas well work. Please be advised that well work permits are valid for twenty-four (24) months.

Well Location Restrictions

Pursuant to West Virginia Code § 22-6A-12(a), 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.

WAIVER

I, Timothy Surmick, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through ALL, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 513285.2620 m
County: Tyler UTM NAD 83 Northing: 4356027.9910 m
District: Centerville Public Road Access: Duckworth Ridge Road (CR 58/2)
Quadrangle: West Union Generally used farm name: CNX
Watershed: Headwaters Middle Island Creek

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials and I therefore waive all well site restrictions listed under West Virginia Code § 22-6A-12(a).

WELL SITE RESTRICTIONS BEING WAIVED

*Please check all that apply

- EXISTING WATER WELLS
- DEVELOPED SPRINGS
- DWELLINGS
- AGRICULTURAL BUILDINGS

FOR EXECUTION BY A NATURAL PERSON

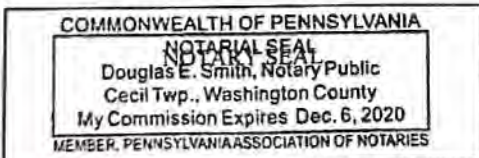
Signature: _____
Print Name: _____
Date: _____

FOR EXECUTION BY A CORPORATION, ETC.

Company: CNX Gas Company LLC
By: Timothy Surmick
Its: Assistant Vice President
Signature: _____
Date: 12/17/2018

Well Operator: CNX GAS COMPANY LLC
By: Raymond Hoon
Its: Permitting Supervisor

Signature: _____
Telephone: 724-485-3540



Subscribed and sworn before me this 17 day of December
Douglas E. Smith Notary Public
My Commission Expires 12-6-2020

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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Operator Well No.

SHR37DHSM
SHR37EHSM
SHR37FHSM
SHR37GHSM
SHR37HHSM
SHR37IHSM
SHR37KHSM
SHR37LHSM
SHR37MHSM
SHR37NHSM
SHR37OHSM
SHR37PHSM
SHR37QHSM
SHR37RHSM

SAVANAH SWILACK
CAMPBELL DEVELOPMENT
2006 E CARSON STREET
PITTSBURGH, PA 15203-1902

Neil A Archer II
TYLER County 10:31:58 AM
Instrument No 1191946
Date Recorded 12/18/2018
Document Type OG
Pages Recorded 2
Book-Page 627-619
Recording Fee \$5.00
Additional \$6.00

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Office of Oil and Gas

OCT 31 2019

WV Department of
Environmental Protection

OCT 31 2019

WV Department of Environmental Protection
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

Comment and Waiver Provisions

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.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

VOLUNTARY STATEMENT OF NO OBJECTION

I, Sarah Weigand, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through _____, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>513306.076</u>
County:	<u>Tyler</u>	UTM NAD 83 Northing:	<u>4355990.256</u>
District:	<u>Centerville</u>	Public Road Access:	<u>Duckworth Ridge Road</u>
Quadrangle:	<u>West Union</u>	Generally used farm name:	<u>CNX Gas Company</u>
Watershed:	<u>Middle Island Creek</u>		

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

*Please check the box that applies

- SURFACE OWNER
- SURFACE OWNER (Road and/or Other Disturbance)
- SURFACE OWNER (Impoundments/Pits)
- COAL OWNER OR LESSEE
- COAL OPERATOR
- WATER PURVEYOR
- OPERATOR OF ANY NATURAL GAS STORAGE FIELD

FOR EXECUTION BY A NATURAL PERSON

Signature: _____
Print Name: _____
Date: _____

FOR EXECUTION BY A CORPORATION, ETC.

Company: CNX Gas Company, LLC
By: Sarah Weigand
Its: Manager Upstream Permitting

Signature: Sarah Weigand
Date: 10/23/19

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

December 14, 2018

Jill M. Newman
Deputy 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-37 Well Pad, Tyler County
shr37dhsm Well Site

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit #06-2018-0949 for the subject site to CNX Gas Company for access to the State Road for the well sites located off of Tyler County Route 58/2 SLS.

The operator has signed an OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

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Office of Oil and Gas

OCT 31 2019

WV Department of
Environmental Protection

Very Truly Yours,

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

Cc: Shannon Miller
CNX Gas Company, LLC
CH, OM, D-6
File

Section V – Proposed Additives to be used in Fracturing or Stimulations

Type: Water CAS: 7732-18-5

Type: Silica CAS: 14808-60-7

Type: Hydrochloric Acid CAS: 7647-01-0

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

Type: Petroleum distillate CAS: 64742-47-8

Type: Glutaraldehyde CAS: 111-30-8

Type: Ethylene glycol CAS: 107-21-1

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

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

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

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

Type: Ammonium chloride CAS: 12125-02-9

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

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

Type: Metanol CAS: 67-56-1

Type: Formaldehyde CAS: 50-00-0

Type: Thiourea CAS: 62-56-6

Type: Acetophenone CAS: 98-86-2

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OCT 31 2019

WV Department of
Environmental Protection



LOCATION MAP
USGS-WEST UNION, WV
Scale: 1"=200'

CNX RESOURCES CORPORATION

SHIRLEY 37 WELL PAD

AS-BUILT

ENTRANCE LOCATION

NAD 83 - LAT: 39° 21' 15.32"; LONG: 80° 50' 48.62"
 NAD 27 - LAT: 39° 21' 15.02"; LONG: 80° 50' 49.24"

CENTERVILLE DISTRICT,
 TYLER COUNTY, WEST VIRGINIA

DATE: JULY 02, 2019



LOCATION MAP
Scale: 1"=200'

WVDEP OOG
ACCEPTED AS-BUILT
VJL 10/31/2019

I hereby certify that I am a licensed engineer in the state of West Virginia. This As-Built certifies, to the best of my knowledge, information and belief, the Well Pad constructed by Anderson Excavating in Tyler County, WV on behalf of CNX Resources Corporation, has been constructed in general conformance to the plans and specifications and, in my professional opinion, is in compliance with applicable laws, codes, and ordinances.



Know what's below.
 Call before you dig.



SHEET INDEX	
DWG #	DRAWING NAME
1	COVER SHEET
2	PLAN VIEW
3	PLAN VIEW WITH ORTHO
4	ACCESS ROAD PROFILE

Note: Drawing was created on 22x34 paper. 11x17 drawings are half scale. Refer to scale bar for proper scaling.

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NO.	SP.	DATE	DESCRIPTION
1	INC.	10/31/19	JMA ECASAKAJ
2	DEC.	10/31/19	JMA ECASAKAJ



DESIGN: JMA	DRAWN: JMA
CHECKED: JMA	DATE: 10/31/19



PROJECT NO.	050-10290
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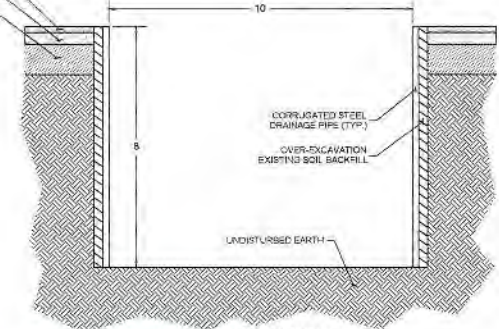
CNX RESOURCES CORPORATION
 SHIRLEY 37 SITE
 PAD AS-BUILT
 TYLER COUNTY, WEST VIRGINIA
 COVER SHEET

SHEET NO.
1

CHART OF PROPOSED WELL SPOTS AND SITE LOCATION

POINT	API #	NAD83 WY NORTH	UTM-NAD83-17 (Easting)
SHR37 D	780	39°21'10" 80°29'44.03"	435890.258 51550.776
SHR37 E	780	39°21'16" 80°29'45.888"	435895.585 51550.776
SHR37 F	780	39°21'16.22" 80°29'45.771"	435895.519 51550.603
SHR37 G	780	39°21'16.22" 80°29'45.526"	435894.187 51550.467
SHR37 H	780	39°21'16.478" 80°29'45.877"	435895.125 51550.495
SHR37 I	780	39°21'16.478" 80°29'45.420"	435893.928 51550.460
ENTRANCE		39°21'16.120" 80°29'48.620"	435890.576 51550.969

2" OF 24 MODIFIED STONE
4" OF ASHTO #4 STONE
12" MIN. OF SOL CEMENT STABILIZATION



PROPOSED WELL CELL (DETAIL NOT TO SCALE)

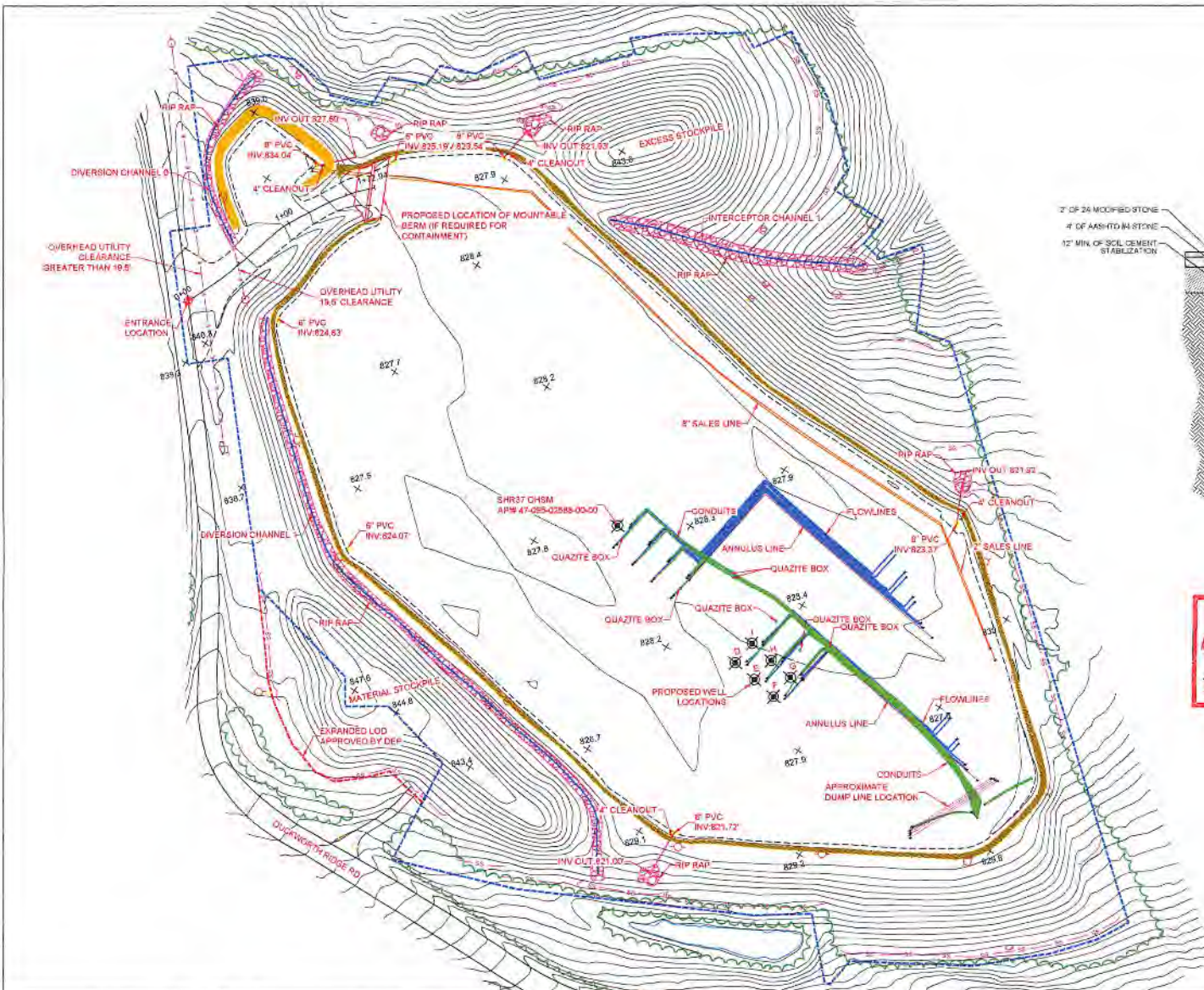
**WVDEP OOG
ACCEPTED AS-BUILT**
10/31/2019

LEGEND

- - - - - EDGE OF GRAVEL
- - - - - BITCH
- - - - - DESIGN LOD
- - - - - TREE LINE
- - - - - SALT SOCK
- - - - - SALT SOCK
- - - - - COMPOSITE FILTER SOCK
- POST
- UTILITY POLE
- RIP RAP
- ROOM
- FLOWLINES
- ANNULUS LINE
- CONDUIT LINES
- SALES LINES
- DUMP LINES
- QUARTZITE BOX
- OVERHEAD UTILITY



NOTE: DRAWING WAS CREATED ON 22x34 PAPER. (1:1) DRAWINGS ARE HALF SCALE. REFER TO SCALE BAR FOR PROPER SCALING



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NO.	REV.	DATE	DESCRIPTION
1	SMC	10-23-19	ISSUED AS-BUILT
1	CCS	10-29-19	ISSUED AS-BUILT
1	BT	04-11-20	ISSUED AS-BUILT

CNX
CNX RESOURCES CORPORATION
1900 GARDNER DRIVE
LANCASTER, PA 17301

SCALE: 1"=40'
DRAWN BY: DATE: 09/24/19
CHECKED BY: DATE: 09/24/19
REVIEWED BY: DATE: 10/01/19
DESIGNED BY: DATE: 10/01/19
SURVEY BY:
PROJECT NUMBER:

THRASHER
10150 MARKET GARDEN HIGHWAY
BARTON, WV 26032
PHONE: 2049-902-6400 FAX: (204) 924-7011
www.thrasher.com

PHASE NO.	CONTRACT NO.	PROJECT NO.
		050-10290

CNX RESOURCES CORPORATION
SHIRLEY 37 SITE
PAD AS-BUILT
TYLER COUNTY, WEST VIRGINIA
PLAN VIEW

SHEET NO. **2**