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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Thursday, December 16, 2021  
WELL WORK PERMIT  
Horizontal 6A / New Drill

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

Re: Permit approval for SHR37KHSM  
47-095-02768

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.

A blue ink signature of James A. Martin, written in a cursive style.

James A. Martin  
Chief

Operator's Well Number: SHR37KHSM  
Farm Name: CNX GAS COMPANY LLC  
U.S. WELL NUMBER: 47-095-02768  
Horizontal 6A New Drill  
Date Issued: 12/16/2021

Promoting a healthy environment.

12/17/2021

## 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

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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](mailto:DEPOOGNotify@wv.gov).

12/17/2021

WW-6B  
(04/15)

API NO. 47-<sup>095</sup>4709502768  
OPERATOR WELL NO. SHR37KHSM  
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: SHR37KHSM 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  Oil  Underground Storage

Other

(b) If Gas Shallow  Deep

Horizontal

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' TVD at TD (dependent upon formation dip)

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

10) Proposed Total Measured Depth: 19,450' MD at TD

11) Proposed Horizontal Leg Length: 11,262'

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

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_

Depth: \_\_\_\_\_

Seam: \_\_\_\_\_

Owner: \_\_\_\_\_

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Date: 2021.11.09 11:29:35 -05'00'

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18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	L/S	<94.0	129	100	96 / CTS
Fresh Water	13.375	New	J-55	54.5	370	370	278 CTC
Coal	13.375	New	J-55	54.5	370	370	278 / CTS
Intermediate	9.625	New	J-55	36	6220	6220	1,725 / CTS
Production	5.5	New	P-110	20	19,450	19,450	3,754 / TOC @ 2,100
Tubing	2.375	New	J-55	4.7	Above assumes RF = 29'	TBD	N/A
Liners	N/A						

*QEB 11/17/21*

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	30	0.375	N/A	N/A	Type 1	1.18
Fresh Water	13.375	17.5	0.380	2,730	<500	Class A	1.19
Coal	13.375	17.5	0.380	2,730	<500	Class A	1.19
Intermediate	9.625	12.25	0.352	3,520	<2,815	Class A	1.19
Production	5.5	8.75 x 8.5	0.361	14,340	-10,000 during frac	Class A or H	1.10
Tubing	2.375	N/A	0.190	7,700	N/A	N/A	N/A
Liners	N/A						

PACKERS

Kind:	Mechanical			
Sizes:	9.625"			
Depths Set:	2600'			

WW-6B  
(10/14)

API NO. 47-095 4709502768  
OPERATOR WELL NO. SHR37KHSM  
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 PBTD. Flow back and clean-up well. Tie well into production. Run tubing when required.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 8.5

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:

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Date: 2021.11.09 11:30:22 -05'00'

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

25) Proposed borehole conditioning procedures:

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

\*Note: Attach additional sheets as needed.

**SHR37 Cement Additives**

Fresh water string: Class A cement with 1%-3% CaCl<sub>2</sub> and 1/4 pps cello-flake/LCM.  
Intermediate string: Class A cement with 0%-2% CaCl<sub>2</sub> 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**  
**SHR37K HSM-HS (Marcellus HZ)**  
 Marcellus Shale Horizontal  
 Tyler County, WV

Ground Elevation	1273.08	SHR37K HSM LP (Lat/Long)	301164.4425 N, 1620180.8546E (NAD27)
Azm	161°		

WELLBORE DIAGRAM		HOLE	CASING	GEOLOGY	MD	TVD	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
	36"	26"	Conductor		160	160	AIR	To Surface	N/A	Ensure the hole is clean at TD.	Stabilize surface 66' soil. Conductor casing = 0.375" wall thickness.
			DFGW		249						
	17.5"	13-3/8" 54 SW J-55 BTC	Freeport Coal	183	183	15.8 ppg Class II + 2% CaCl <sub>2</sub> @ 25# Load Cmc 30% Excess Yield = 1.25#	AIR		Flow Spring on first 2 joints then every 8' and joint to 100' from surface.	Scap the hole while drilling through the coal seams and ensure the hole is clean at TD.	Casing to be run 30' + 50' below base of Pittsburgh Coal Intermediate casing = 3.381" wall thickness Burst=2700 psi
			un-named shale and sand	184	184						
			Coal Casing	370	370						
			Harlem Coal	555	555						
	12.25"	9-5/8" 36# J-55 LTC	Bakerstown Coal	547	547	15.8 ppg Class A +0.4% Red, 0.15% Disp 0.2% Air Foam, 0.125# Gal Load Cmc 30% Excess Yield=1.263 To Surface	AIR		Flow spring centralizers every 8' joint to 100' feet from surface.	Ensures the hole is clean at TD.	Casing to be run 100' below the 5th Seaford Bank Intermediate casing = 3.553" wall thickness Burst=3300 psi
			Upper Kittaning Coal Seam	984	984						
			Middle Kittaning Coal Seam	1,021	1,021						
			Lower Kittaning Coal Seam	1,073	1,073						
			Little Lime	1,616	1,616						
			Big Lime	1,656	1,656						
			Koener / Big Injun Top	1,750	1,750						
			Price Formation (Base of Big Injun)	1,876	1,876						
			Weir Sand	2,026	2,026						
			Berna	2,176	2,176						
			Gordon	2,256	2,256						
			Warren Sand	3,156	3,156						
	Benton	4,750	4,750								
	Alexander	4,966	4,966								
Int. Casing	5,213	5,000									
8.75" Vertical		Cashaqua Shale	5,964	5,746	15.0ppg Class A 20-75/10 Systems +2.8% Cement add-on, 0.2% Fluid Loss additive, 0.42% High temp retarder, 0.2% friction reducer.	AIR		Jellybody bumping every joint to TOC.	Once at TD, circulate at max allowable pump rate for at least 60 minutes up. Once on bottom with casing, circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.561" wall thickness. Burst=1440 psi. Note: Actual centralizer volumes may be changed due to hole conditions.	
		Middlesex	7,364	6,146							
8.5" Curved	5-1/2" 23# P-110	West River	7,405	6,187	12.5ppg SOBMM	AIR					
		Burket Shale	7,475	6,257							
		Tully Limestone	6,293	TVD							
		Hamilton Shale	6,513	TVD							
		Upper Marcellus	6,326	TVD							
		Purcell	6,332	TVD							
8.5" Lateral		Middle Marcellus	6,244	TVD	12.5ppg-13.0ppg SOBMM	AIR					
		Cherry Valley	6,358	TVD							
		Lower Marcellus	6,368	TVD							
		Onondaga Limestone	6,375	TVD							

Inputs	
Pad	SHR37
Well Letter	K HSM
Ground Elev	1273.08
Azimuth	161
Lat Length	11262
Coordinate System	NAD27
TVD	5392
Northing	313674.2537
Easting	1619454.962
MD	0
TVD	NA
KDP	NA
NA	NA
7053	5933
LP	311612.9668
0°55'14.27"	5198
8322	
BHL	301164.4425
1620180.855	19400
8322	

LP @ +/- 0302' TVD      8.75" 8.5 Hole - Cemented Long String 5-1/2" 23# P-110      +/-11262' R Lateral      TD @ +/-19450' MD

WW-9  
(4/16)

API Number 47 - 095 - 02768

Operator's Well No. SHR37KHSM

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 WDTN5WHSM 47-061-01871, WDTN5XHSM 47-061-01872, WDTN5ZHSM 47-061-01873, WDTN19 wells API TBD )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain No Pits)

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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 land surface to pump back on surface  
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

Commonwealth of Pennsylvania - Notary Seal  
Rebecca Zachwieja, Notary Public  
Washington County  
My commission expires November 7, 2023  
Commission number 1269683  
Member, Pennsylvania Association of Notaries

~~Commonwealth of Pennsylvania~~ County of Washington

Subscribed and sworn before me this 10<sup>th</sup> day of November, 2021

Rebecca Zachwieja Notary Public

My commission expires November 7, 2023

Cragin Blevins  
Digitally signed by Cragin Blevins  
Date: 2021.11.08 11:10:22 -05'00'

12/17/2021

**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: Cragin Blevins Digitally signed by Cragin Blevins  
Date: 2021.11.08 11:10:52 -05'00'

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Environmental Resources Specialist III

Date: 11/8/2021

Field Reviewed? ( ) Yes (  ) No

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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 for the second round of drilling operations on this pad are:

SHR37KHSM  
SHR37LHSM  
SHR37MHSM  
SHR37NHSM  
SHR37OHSM  
SHR37PHSM  
SHR37QHSM  
SHR37RHSM

Sincerely,

A handwritten signature in blue ink that reads 'Sarah Weigand'.

Sarah Weigand

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Type of Waste	Disposal Company Name	Disposal Location	Disposal Location Co/Well ID / Name	Permit # (if applicable)	Accepted Waste Streams	Disposal Company Contact Information	
Brine Injection - Treatment	Appalachian Water Services (Nuverra Environmental Solutions)	2326 McClellandtown Road, Masontown, PA 15461	39.853056, -79.924786	Appalachian Water	WMGR GP No. 1235W001 WQM Industrial Waste Permit No.: 2608201 A-2	Brine (Produced Water) and oily water from compressor stations.	Rob Bealko 304-291-0383 Office 304-282-8814 Cell rob.bealko@nuverra.com Office: 740-609-3800
RW & TENDORM	Austin Master Services	801 N 1st St, Martins Ferry, OH 43995	40.105200, -80.711630	N/A	N/A	Non-radioactive material, low level radioactive material, (NORM/TENDORM), and high level TENDORM material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab.	Jack Bement CEO Austin Master Services LLC 355 Circle of Progress Pottstown PA, 19464 Ph: (585) 704-2744 Fax: 484 624-5505 Office: 740-609-3800
Brine Injection - Treatment	Austin Master Services	801 N 1st St, Martins Ferry, OH 43995	40.105200, -80.711630	N/A	N/A	Brine (Produced Water)	Jack Bement CEO Austin Master Services LLC 355 Circle of Progress Pottstown PA, 19464 Ph: (585) 704-2744 Fax: 484 624-5505*
RW & TENDORM	Belmont Solids Control	78405 Cadiz-New Athens Rd, Cadiz, OH 43907	40.233830, -81.003300	N/A	N/A	Non-radioactive material, low level radioactive material, (NORM/TENDORM), and high level TENDORM material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab.	Dave Brown 412-848-1828 Mark Winsap 330-692-0423; dbrown@ApexLF.com Bob Orr 740-796-6495 614-648-8898 orpetro@gmail.com
Brine Injection - Treatment	Cambrian Well Services - Kemble (Orr Petroleum Corporation)	Zanesville, Muskingum County, Perry Township, OH	39.974954, -81.845389	Kemble 1-D (SWIW#28)	34-119-2-8780	Brine (Produced Water)	
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.087460, -82.047918	BPC01	VAS2D960BBUC	CNX Owned UIC SWIWs: Frac water, brine, produced water	Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.222201, -81.959987	N26	VAS2D930BBUC	CNX Owned UIC SWIWs: Frac water, brine, produced water	Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.184198, -82.082549	U7	VAS2D926BBUC	CNX Owned UIC SWIWs: Frac water, brine, produced water	Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Russell County, VA	37.120547, -81.961222	AW114A	VAS2D970BRUS	CNX Owned UIC SWIWs: Frac water, brine, produced water	Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.147934, -82.075320	Ball Well	VAS52D921BBUC	CNX Owned UIC SWIWs: Frac water, brine, produced water	Contact Ops Groups
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Warren Township, OH	39.426278, -81.502379	Order No. 2015-452; Vocational School No. 2 Well; SWIW No. 20	API # 34-167-2-9543-00-00	Brine (Produced Water)	Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC Office: 740.371.5078 ext. 206   Cell: 304.588.0936
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Warren Township, OH	39.425172, -81.507900	Order No. 2015-582; Heinrich Unit #2 Well; SWIW No. 22	API # 34-167-2-9464-00-00	Brine (Produced Water)	Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC Office: 740.371.5078 ext. 206   Cell: 304.588.0936
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Warren Township, OH	39.429867, -81.511020	Order No. 2015-581; Heinrich Unit #1 Well; SWIW No. 21	API # 34-167-2-9445-00-00	Brine (Produced Water)	Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC Office: 740.371.5078 ext. 206   Cell: 304.588.0936
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Marietta Township, OH	39.402842, -81.476913	Order No. 2019-79; American Growers No. 1 Well; SWIW No. 26	API # 34-167-2-9766-00-00	Brine (Produced Water)	Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC Office: 740.371.5078 ext. 206   Cell: 304.588.0936

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								Michael Chapin: Ph. 740-763-3966 Cell 740-403-3664 tantrumr@aol.com
Brine Injection - Treatment	EGO Water Solutions LLC	5367 E. State Street, Newcomerstown, OH 43832	40.283293, - 81.578068	Mozena #1 Well (SWIW #13)	API # 34-157-2-5511	Brine (Produced Water)		Robert Schenken Director Business Development HydroEdge Solutions Wisconsin White Sand rschenken@hydroedgesolutions.com Cell 412.295.3614
Brine Injection - Treatment	Environmental Energy Services LLC (Force, Inc.)	Muskingum County, Perry Township, OH	39.973643, - 81.825727	Pattison Tract No. I-D (SWIW #30)	API # 34-119-2-8803	Brine (Produced Water)		Bryan Force Mobile: 412.289.0069 Office: 724.465.9399 bforce@forceincorporated.com
Brine Injection - Treatment	Environmental Energy Services LLC (Force, Inc.)	Barnsville, Belmont County, OH	NEED	Barnsville (ISWW #2)	34-013-2-0609 UIC #609	Frac water, brine, produced water		Bryan Force Mobile: 412.289.0069 Office: 724.465.9399 bforce@forceincorporated.com
Brine Injection - Treatment	Gas Field Services, Inc.	200 Camp Creek Road, Camp Creek, WV 25820	37.495138, - 81.105161	Camp Creek Disposal Well	UIC: UIC2D0550319 API: 47-055-00319	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 zacheryr@yahoo.com PO Box 555, Rosedale, VA 24280 Phone: (276) 880-2323
Brine Injection - Treatment	Greene County Water Treatment, Inc.	401 Jefferson Rd. Waynesburg, PA 15370	39.908611, - 80.141111	Waynesburg Facility	WMGR123SW010	Oil and Gas Fluids with minimal oil and solids present		Gary Carpenter 267-246-6176 JRCGCarpenter@aol.com Office: (330) 270-9900
RW & TENORM	Ground Tech LLC	240 Sinter Court, Youngstown, OH 44510	41.113260, - 80.674500	N/A	N/A	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.		Larry Chamberlain 330-393-5919 lchamberlain@iws-inc.com
Brine Injection - Treatment	Hydro Recovery	572 Route 18 Burgettstown, PA 15021	40.422874, - 80.426125	Burgettstown Facility	WMGR123SW019	Oil and Gas Fluids with minimal oil and solids present		Ashley Cromley 570-394-4450 Ashley.cromley@hydrorecovery.com
Non-Haz Disosal	Mascaro & Sons- Wetzel Co LF	1521 Wetzel County Landfill Rd. New Martinsville, WV 26155	N/A	Wetzel County Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings/Frac Sand, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum)Construction & Demolition Waste, Industrial Waste, Process Waste, Municipal Solid Waste		Terry Gadd terry.gadd@jomascaro.com, 610-636-4133
RW & TENORM	Mud Masters LLC	64054 Wintergreen Rd Lore City, OH 43725	40.027531, - 81.449219	N/A	N/A	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).		Tom Meinert 740-255-0357 heavymudmasters@gmail.com Billing Address: 739 Southgate Pkwy, Cambridge, Ohio 43725
Non-Haz Disosal	Noble Environmental Landfill (Former Westmoreland Waste)	111 Conner Lane, Belle Vernon, PA 15012	N/A	Noble / Westmoreland Sanitary Landfill		Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Municipal Solid Waste		Customer Service: (724) 929-7694
RW & TENORM	Pressure Tech	7675 East Pike Norwich, Ohio 43767	39.97415, -81.844765	N/A	N/A	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
Dily & Oily Water Treat - Recycle	Quala	515 Industrial Blvd., Wooster, OH 44691	N/A	N/A	N/A	Non-hazardous wastewater, transportation, treatment and disposal facility. Also offer transportation and solidification services.		330-264-8080 (O) jslater@quala.us.com
Non-Haz Disosal	Republic Services - Imperial (Allied Waste of PA)	11 Boggs Rd, Imperial, PA 15126	N/A	Imperial Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings/Frac Sand, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Municipal Solid Waste		Jack Palermo - jpalermo@republicservices.com, 330-536-7575
Brine Injection - Treatment	Reserved Environmental Services (RES)	1119 Old Route 119 South Mt. Pleasant, PA 15666	40.215555, - 79.606388	New Stanton Facility	WMGR123SW005	Oil and Gas Fluids with minimal oil and solids present		Matt Kicinski 814-574-9701 mkicinski@reswater.com
Brine Injection - Treatment	Reserved Environmental Services (RES)	506 Lippencott Road Waynesburg, PA 15370	39.945555, - 80.140833	Waynesburg Facility	WMGR123SW031	Oil and Gas Fluids with minimal oil and solids present		Matt Kicinski 814-574-9701 mkicinski@reswater.com
Hazardous Waste Disposal	Safety Klean	10 Industrial Park Drive Wheeling,Wv. 26003	N/A	Wheeling Landfill	N/A	RCRA/TSCA Waste, PCB Transformers & Capacitors, PCB Soil/Debris, Non-Hazardous Wastes, Asbestos Waste, Solidification Services		Gordon Cooper Gordon.cooper@safety-klean.com 304-215-2284 1-866-670-9034
Oily & Oily Water Treat - Recycle	Spirit Services, Inc.	173 Industrial Park Ln, Beech Bottom, WV 26030	N/A	N/A	N/A	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.		Joe Staton: 717-350-7916 Office: 301-223-1251 Fax: 301-223-1253 jstaton@spiritservices.com

RW & TENORM	Empire Fluid Solutions (Formerly Troo Clean)	41540 National Road Belmont, OH 43718	40.0687, -81.04963	N/A	N/A	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.	Orin David Orin.david@trooclean.com 918-413-6426 Corporate Number: 734-442-2353 Guy Turturice gturturice@valcor.com 304-963-1563 Steve Atkinson SAtkinson@valcor.com
Oil & Oily Water Treat - Recycle	Valcor Environmental Services LLC	515 N. 8th Ave, Huntington, WV 25201	N/A	N/A	N/A	Approved for non-haz water treatment of oil & water mix, oil filters, and antifreeze only.	
Non-Haz Disosal	Waste Management - American Landfill	7916 Chapel St SE, Waynesburg, OH 44688	N/A	American Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum) Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Arden Landfill	200 Rangos Ln, Washington, PA 15301	N/A	Arden Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Evergreen Landfill	1310 Luciusboro Rd, Blairsville, PA 15717	N/A	Evergreen Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Kelly Run	1500 Hayden Blvd, Elizabeth, PA 15037	N/A	Kelly Run Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Mahoning Landfill	3510 E Garfield Rd, New Springfield, OH 44443	N/A	Mahoning Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum) Construction & Demolition Waste, Industrial Waste, Non-Friable Asbestos, Process Waste, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Meadowfill Landfill	1488 Dawson Dr, Bridgeport, WV 26330	N/A	Meadowfill Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum) Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Hazardous Waste Disposal	Waste Management - Model City	1550 Balmer Rd Youngstown, NY 14174	N/A	Model City Landfill	N/A	RCRA/TSCA Waste, PCB Transformers & Capacitors, PCB Soil/Debris, Non-Hazardous Wastes, Asbestos Waste, Solidification Services	Linda Davis: 716-286-0365 or 716-754-8231 or 800-963-4776
Non-Haz Disosal	Waste Management - Northwestern Landfill	510 Dry Run Rd, Parkersburg, WV 26104	N/A	Northwestern Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum) Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - S&S Grading Landfill	4439 Good Hope Pike, Clarksburg, WV 26301	N/A	S&S Grading Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum) Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - South Hills (Arnon)	3100 Hill Rd, South Park Township, PA 15129	N/A	South Hills Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Valley Landfill	6015 Pleasant Valley Rd, Irwin, PA 15642	N/A	Valley Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com

Non-Haz Disposal	Waste Management - Chestnut Ridge	385 Harr Ln, Blountville, TN 37617				Spencer to complete	Travis Maryanski tmaryanski@wm.com (865) 388-7279 Cell (205) 652-8137 Tech Service
Non-Haz Disposal	MXI Environmental Services LLC	2619 Old Trail Road Abingdon, VA 24210				Spencer to complete	John Twiddy john1@mxinc.com 276-628-6636 ext. 202; 276-608-0003 Cell
Non-Haz Disposal	Republic Services - Short Creek	North Fork Short Creek Road, Wheeling, WV 26003	N/A	Short Creek Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings/Frac Sand, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Municipal Solid Waste	Jack Palermo - jpalermo@republicservices.com, 330-536-7575
Non-Haz Disposal	Republic Services - Carbon-Limestone**	8100 S State Line Rd, Lowellville, OH 44436	N/A	Carbon-Limestone Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (including Petroleum) Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste ** 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.	Jack Palermo - jpalermo@republicservices.com, 330-536-7575
Disposal like mudmasters takes ex Fluid Management Solutions (FMS)		5445 US-40 East, Triadelphia, WV 26059	40.06886,-80.61492	N/A	N/A	Cement Water, Oil Base, Drill Mud, Water Base, Cellar Clean Outs ex. Also they do washouts and they have storage capacity at 2000bbl for 10lb brine and 10.5lb brine.	Kevin Flaherty (412)973-2586



## SHR37\_M2 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 1000' buffer of the SHR37\_M2 pad Area of Review (AOR). These wells have been reviewed and are provided in a list that includes API, Operator, Well Name, Well Number, Current Status, Total Depth, and Producing Formation at Total Depth. See the following pages, including (Figures 3 and 4).

The Marcellus Shale of the SHR37 Pad 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 producing 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. To provide a feel for risk, all wells shallower than 3000' are colored green on Figure 3 and all wells deeper than 3000' are colored red.

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 SHR37 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. Without faulting acting as a conduit, CNX Geology does not feel that SOG Communication is feasible in the Shirley area.

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

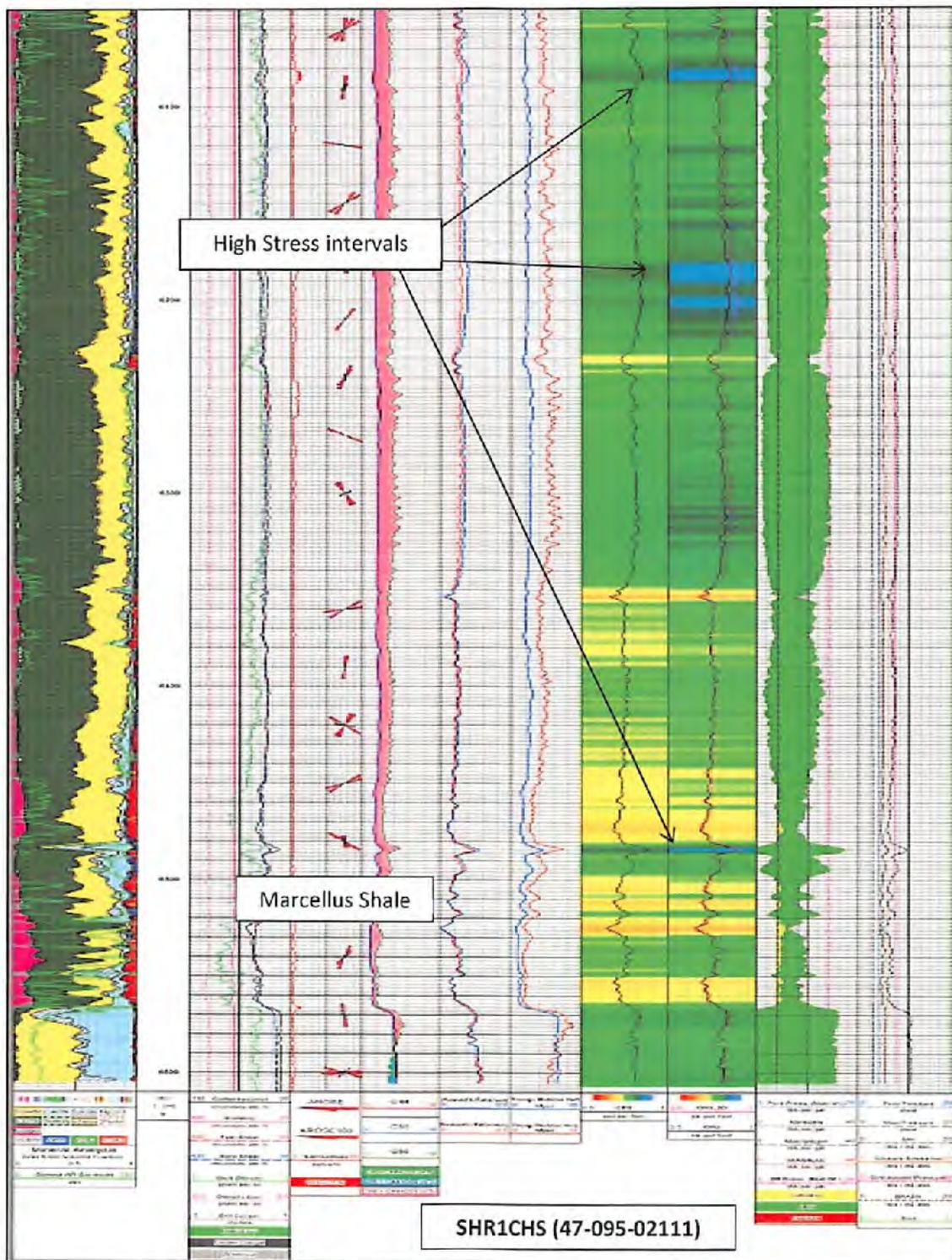


Figure 2. Stratigraphic intervals of high stress should serve as adequate frac barriers for a Marcellus frac. The frac modeling example below is from the Oxford area of western Doddridge County, where the Marcellus and adjacent shales are lithologically similar to the same formations in the Shirley area.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

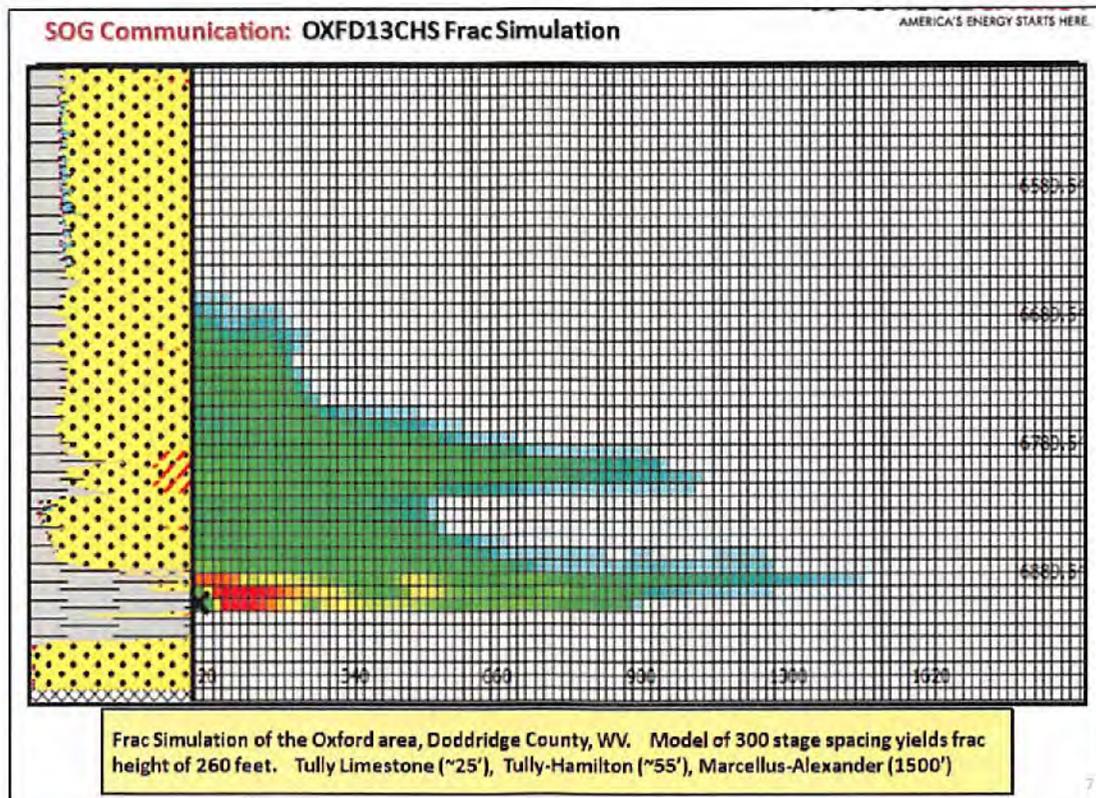


Figure 3. All wells within a 1000' buffer around the laterals have been reviewed and listed below. Wells with TD less than 3000' are colored green and TD' deeper than 3000' colored red.

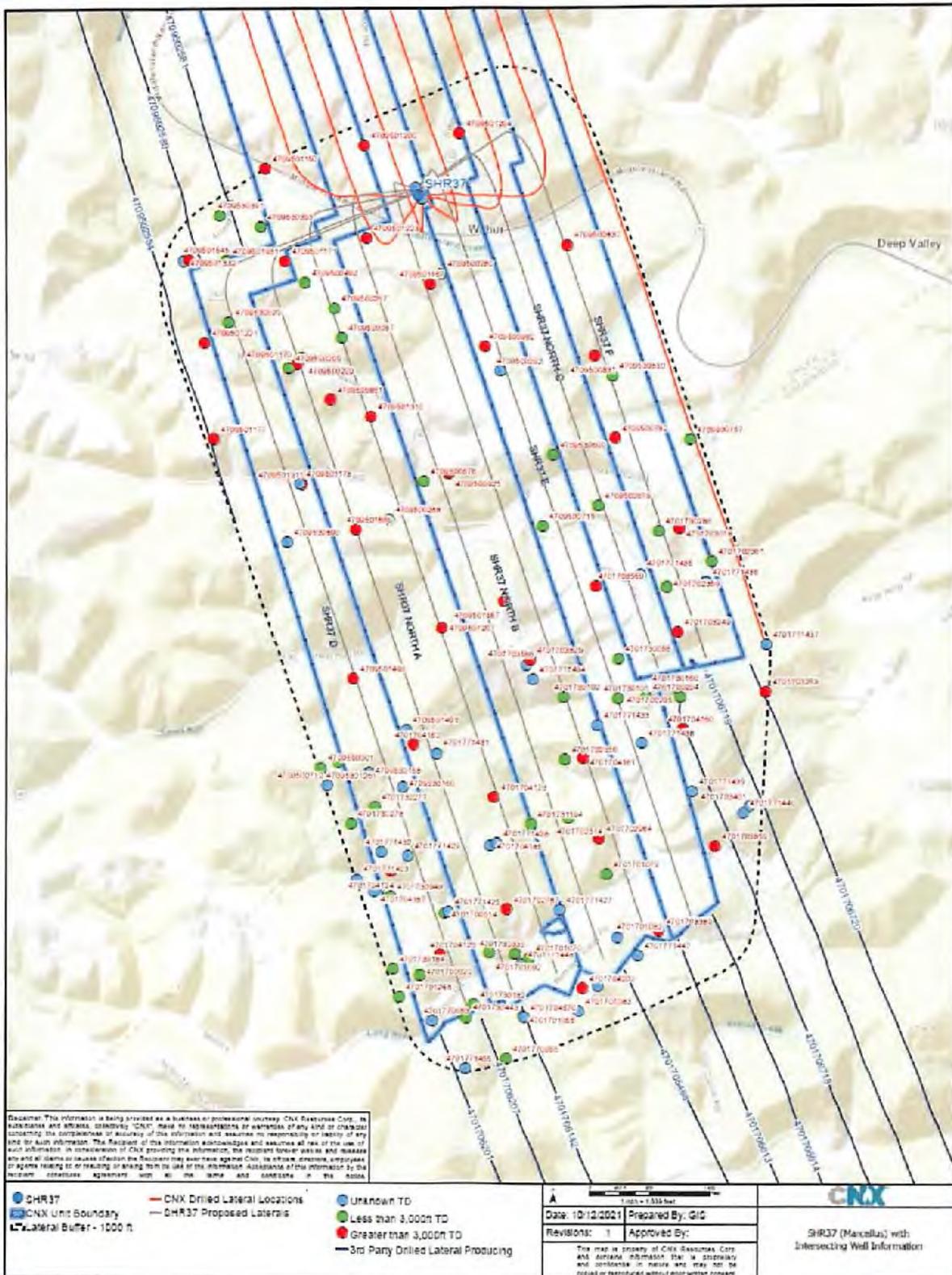




Figure 4. A list of all wells within a 1000' buffer around the laterals have been reviewed and listed below.

Apri10	CurrentOperator	WellName	CurrentStatu	TotalDept	FormationAtt
4701704124	KEY OIL COMPANY	C. DOTSON 2	ACTIVE	5216	BENSON
4701702359	RITCHIE PETROLEUM CORPORATION, INC.	HAMMER, L. G. 1	ACTIVE	2300	WEIR
4701702514	RITCHIE PETROLEUM CORPORATION, INC.	MONTGOMERY, JOHN 1	ACTIVE	2380	WEIR
4701703859	HARPER CROSBY HOLDINGS, LLC	JAMES 1	ACTIVE	5091	BENSON
4701704162	KEY OIL COMPANY	SHEPHERD 2	ACTIVE	5532	BENSON
4701704160	KEY OIL COMPANY	MILLER 1	ACTIVE	5320	BENSON
4701704187	RITCHIE PETROLEUM CORPORATION, INC.	SHEPHERD, CARROLL	ACTIVE	2050	INJUN
4701703253	GREYLOCK CONVENTIONAL	MCCUTCHAN, WILLIAM PAUL J-794	ACTIVE	5576	BENSON
4701704200	MURVIN & MEIER OIL CO.	CARL JAMES 1	ACTIVE	5350	BENSON
4701704161	KEY OIL COMPANY	SHEPHERD 1	ACTIVE	5336	BENSON
4701704123	KEY OIL COMPANY	C. DOTSON 1	ACTIVE	5436	BENSON
4701702361	RITCHIE PETROLEUM CORPORATION, INC.	HAMMER, L. G. 2	ACTIVE	2396	WEIR
4701703559	DIVERSIFIED GAS & OIL PLC	WAGNER 1 182-S	ACTIVE	4951	RILEY
4701703018	GREYLOCK CONVENTIONAL	MCCUTCHAN, WILLIAM P. J-513	ACTIVE	5305	BENSON
4701704126	KEY OIL COMPANY	A. DOTSON 2	ACTIVE	5375	BENSON
4701703249	GREYLOCK CONVENTIONAL	MCCUTCHAN, WILLIAM PAUL J-795	ACTIVE	5363	BENSON
4701702984	GREYLOCK CONVENTIONAL	HAMMER, LORENA J-390	ACTIVE	5267	BENSON
4701703829	DIVERSIFIED GAS & OIL PLC	WAGNER 3-184-S	ACTIVE	5150	BENSON
4709500831	GREYLOCK CONVENTIONAL	PRATT, A. E. - ESTATE J-315	ACTIVE	5512	BENSON
4709501170	GREYLOCK CONVENTIONAL	2515 JK-1282	ACTIVE	5530	BENSON
4709501207	DIVERSIFIED GAS & OIL PLC	WAGNER 2 183-S	ACTIVE	5056	BENSON
4709500925	GREYLOCK CONVENTIONAL	MCCUTHEN, W. PAUL J-515	ACTIVE	5428	BENSON
4709501204	DIVERSIFIED GAS & OIL PLC	HARRIS, DANNY & PATRICIA WVGK-2552	ACTIVE	4919	BENSON
4709500679	RITCHIE PETROLEUM CORPORATION, INC.	BRADFORD, HATTIE 2	ACTIVE	2313	WEIR
4709501221	GREYLOCK CONVENTIONAL	AYERS, VIRGINIA J-1365	ACTIVE	5579	BENSON
4709501171	DIVERSIFIED GAS & OIL PLC	FLINT, MATTIE DOTSON ETAL 2510	ACTIVE	5489	BENSON
4709501311	GREYLOCK OPCO, LLC	L. L. JAMES 4	ACTIVE	5130	BENSON
4709501545	MURVIN & MEIER OIL CO.	JOSEPH HEIRS 1	ACTIVE	5271	ELK
4709500992	GREYLOCK CONVENTIONAL	MCKITRICK, ROY - HEIRS J-864	ACTIVE	5014	BENSON
4709501931	MURVIN & MEIER OIL CO.	JOSEPH HEIRS 2	ACTIVE	2531	WEIR
4709501310	GREYLOCK OPCO, LLC	L. L. JAMES 3	ACTIVE	5490	BENSON
4709500830	GREYLOCK CONVENTIONAL	PRATT, A. E. - ESTATE J-314	ACTIVE	5136	BENSON
4709501200	DIVERSIFIED GAS & OIL PLC	PRATT, ELDON & NANCY JK-1310	ACTIVE	4927	BENSON
4709501669	DIVERSIFIED GAS & OIL PLC	LONG 1	ACTIVE	5175	BENSON
4709501223	DIVERSIFIED GAS & OIL PLC	JENKINS 1 334-S	ACTIVE	4954	BENSON
4709501150	DIVERSIFIED GAS & OIL PLC	GREGG 1	ACTIVE	4785	BENSON
4709500876	RITCHIE PETROLEUM CORPORATION, INC.	BRADFORD, HATTIE 1	ACTIVE	2466	WEIR
4709501495	DIVERSIFIED GAS & OIL PLC	THACKER 2	ACTIVE	5180	BENSON
4709501557	KEY OIL COMPANY	BURGESS 1	ACTIVE	5321	BENSON
4709502664	CNX	SHR 37 IHSM	ACTIVE	<Null>	MARCELLUS SHALE
4709502666	CNX	SHR 37 HHSM	ACTIVE	<Null>	MARCELLUS SHALE
4709502665	CNX	SHR 37 FHSM	ACTIVE	<Null>	MARCELLUS SHALE
4709502667	CNX	SHR 37 DHSM	ACTIVE	<Null>	MARCELLUS SHALE
4709502668	CNX	SHR 37 EHSM	ACTIVE	<Null>	MARCELLUS SHALE
4709502669	CNX	SHR 37 GHSM	ACTIVE	<Null>	MARCELLUS SHALE



SHR37\_M2 Pad Frac SOG Review / Pad Risk Review

Wednesday, October 13, 2021

Api#	CurrentOperator	WellName	CurrentStatus	TotalDepth	FormationAtTD
4701700014	RITCHIE PETROLEUM CORPORATION, INC.	DOTSON, ARLINGTON 2	INACTIVE	1845	INJUN
4701704186	RITCHIE PETROLEUM CORPORATION, INC.	BRAKE, SAMUEL J.	INACTIVE	2000	INJUN
4701704570	BLACKROCK ENTERPRISES, LLC	SHEPHERD, MICHAEL	INACTIVE	UNKNOWN	UNKNOWN
4701702356	RITCHIE PETROLEUM CORPORATION, INC.	SHEPHERD, N. 1	INACTIVE	2303	WEIR
4701771423	(N/A)	N MILLER	INACTIVE	UNKNOWN	UNKNOWN
4701771425	(N/A)	ARLINGTON DOTSON	INACTIVE	UNKNOWN	UNKNOWN
4701771430	(N/A)	E M JACKSON	INACTIVE	UNKNOWN	UNKNOWN
4701771433	HOPE NATURAL GAS CO	ELIAS THOMAS	INACTIVE	UNKNOWN	UNKNOWN
4701771435	HOPE NATURAL GAS CO.	WAGNER	INACTIVE	UNKNOWN	UNKNOWN
4701771439	BRADWATER	SAMANTHA COX	INACTIVE	UNKNOWN	UNKNOWN
4701771455	PHILADELPHIA OIL CO	F DOTSON	INACTIVE	UNKNOWN	UNKNOWN
4701770083	CARTER OIL CO	DOTSON, FINLEY	INACTIVE	UNKNOWN	UNKNOWN
4701770085	(N/A)	DOTSON, MCKENDRY	INACTIVE	1961	UNKNOWN
4701730056	HOPE NATURAL GAS CO.	E A HENDERSHOT	INACTIVE	1800	UNKNOWN
4701730278	HOPE CONSTRUCTION & REFINING	E M JACKSON	INACTIVE	2060	BIG INJUN (UNDIFF)
4701730335	JJ GRAHAM AGT ET AL	S YEATER	INACTIVE	1795	UNKNOWN
4701730949	DROPPLEMAN, J. P.	ARLINGTON DOTSON	INACTIVE	2012	BIG INJUN (UNDIFF)
4701731194	HICKMAN, CHARLES L.	CISCO DOTSON	INACTIVE	1973	BIG INJUN (UNDIFF)
4701771427	LUCAS	MARY MONTGOMERY	INACTIVE	UNKNOWN	UNKNOWN
4701771434	HOPE NATURAL GAS CO.	WAGNER	INACTIVE	UNKNOWN	UNKNOWN
4701771436	(N/A)	MCCUTCHAN-HAINES	INACTIVE	UNKNOWN	UNKNOWN
4701771447	HOPE NATURAL GAS CO.	LAWRENCE JAMES	INACTIVE	UNKNOWN	UNKNOWN
4701771448	(N/A)	S YEATER	INACTIVE	UNKNOWN	UNKNOWN
4701730443	CLIFTON OIL & GAS	MCKENDRY DOTSON	INACTIVE	1882	UNKNOWN
4701730102	DEEM, F S	OKEY WASHBURN	INACTIVE	1987	UNKNOWN
4701730182	(N/A)	FINLEY DOTSON	INACTIVE	1899	BIG INJUN (UNDIFF)
4701771437	HOPE NATURAL GAS CO.	MCCUTCHAN-HAINES	INACTIVE	UNKNOWN	UNKNOWN
4701771438	(N/A)	B HENDERSHOT	INACTIVE	UNKNOWN	UNKNOWN
4701730101	DEEM, F S	HENDERSON WALTON	INACTIVE	1880	UNKNOWN
4701730180	HOPE NATURAL GAS CO.	E A HENDERSHOT	INACTIVE	1930	BIG INJUN (UNDIFF)
4701771428	(N/A)	CISCO DOTSON	INACTIVE	UNKNOWN	UNKNOWN
4701771429	(N/A)	CISCO DOTSON	INACTIVE	UNKNOWN	UNKNOWN
4701771431	(N/A)	ALFRED DOTSON	INACTIVE	UNKNOWN	UNKNOWN
4701771440	HOPE NATURAL GAS CO.	SAMANTHA COX	INACTIVE	UNKNOWN	UNKNOWN
4701730184	PHILADELPHIA OIL CO	FINLEY DOTSON	INACTIVE	2682	UNKNOWN
4701730277	HOPE CONSTRUCTION & REFINING	E M JACKSON	INACTIVE	1976	UNKNOWN
4701730286	CLIFTON OIL & GAS	LEWIS MAXWELL HEIRS	INACTIVE	2142	UNKNOWN
4709501177	GREYLOCK CONVENTIONAL	JAMES, LAWRENCE & THELMA 2483	INACTIVE	5517	RILEY
4709530126	CARNEGIE NATURAL GAS CO	J A EXLINE	INACTIVE	2045	UNKNOWN
4709530160	HOPE CONSTRUCTION & REFINING	E M JACKSON	INACTIVE	UNKNOWN	UNKNOWN
4709530830	HOPE NATURAL GAS CO.	WILLIAM SMITH	INACTIVE	2922	BIG INJUN (UNDIFF)
4709530158	HOPE CONSTRUCTION & REFINING	E M JACKSON	INACTIVE	UNKNOWN	UNKNOWN
4709530391	DEEM, F S	A GORRELL DOAK	INACTIVE	2968	BIG INJUN (UNDIFF)
4709530600	HOPE NATURAL GAS CO.	W P BRADFORD	INACTIVE	2495	UNKNOWN
4709530393	DEEM, F S	A GORRELL DOAK	INACTIVE	2110	UNKNOWN
4709530520	HOPE NATURAL GAS CO.	A GORRELL DOAK	INACTIVE	2105	BIG INJUN (UNDIFF)
4709530890	HOPE NATURAL GAS CO.	ROBERT DOAK	INACTIVE	UNKNOWN	UNKNOWN
4709550001	DORVA CORP.	J A EXLINE	INACTIVE	2178	UNKNOWN



SHR37\_M2 Pad Frac SOG Review / Pad Risk Review

Wednesday, October 13, 2021

Api#	CurrentOperator	WellName	CurrentStatus	TotalDepth	FormationAtTD
4701700022	EASTERN GAS TRANSMISSION AND STORAGE, INC	DOTSON, F. 4981	P & A	2882	UNKNOWN
4701700204	EQUITRANS, L. P.	JAMES, BRUCE 1	P & A	1916	UNKNOWN
4701700205	EQUITRANS, L. P.	JAMES, BRUCE 2	P & A	1006	UNKNOWN
4701701065	(N/A)	IRONS, JOHN 1	P & A	1985	UNKNOWN
4701701248	CHRISTENSON, R WAYNE	DOTSON, FINLEY 1	P & A	1937	BIG INJUN (UNDIFF)
4701701070	PRIOR, FERRELL L	GARNER, D. 1	P & A	1792	BIG INJUN (UNDIFF)
4701701079	PRIOR, FERRELL L	THOMAS, ELIZABETH 1	P & A	2553	UNKNOWN
4701701092	(N/A)	DOTSON, ARLINGTON - HEIRS 3	P & A	1865	UNKNOWN
4701702787	GREYLOCK CONVENTIONAL	SHEPHERD, JAMES E. J-302	P & A	5070	UNKNOWN
4701703389	DIVERSIFIED GAS & OIL PLC	JAMES, LAWRENCE L. JK-1045	P & A	5321	UNKNOWN
4709501187	SOUTHWESTERN ENERGY	WAGNER 1	P & A	4866	RILEY
4709500851	SOUTHWESTERN ENERGY	GRIFFIN, EDITH H. 2	P & A	5025	WEIR
4709500712	DORWARD ENERGY CORPORATION	CARNEGIE #516	P & A	UNKNOWN	UNKNOWN
4709500202	(N/A)	MOORE, SARAH H. 1	P & A	1096	UNKNOWN
4709500267	(N/A)	ELLIS JENKINS HEIRS 1	P & A	1103	UNKNOWN
4709500492	ROSS AND WHARTON GAS COMPANY, INC.	SMITH, ROBERT & LUCILLE 2741	P & A	1916	UNKNOWN
4709500757	ALLIED ENERGY, INC.	PRATT, A. E. 1	P & A	2209	UNKNOWN
4709500715	INDUSTRIAL GAS/FRONTIER ENERGY CO.	BRADFORD, HATTIE 3	P & A	948	UNKNOWN
4709500280	APPALACHIAN ENERGY DEV INC	WAGNER #1	P & A	945	UNKNOWN
4709500288	(N/A)	DOAK, ROBERT 1	P & A	1849	UNKNOWN
4709500292	FLO-WELL INC	FORD, W.A., ET UX 1	P & A	UNKNOWN	UNKNOWN
4709500037	BACHELOR, D.	DOKE, MAGGIE, ET AL 1	P & A	1193	UNKNOWN
4709500205	(N/A)	S.M. DOAK HEIRS 1	P & A	1100	UNKNOWN
4709500782	BRAXTON OIL & GAS CORP.	MULVAY J-162	P & A	5100	UNKNOWN



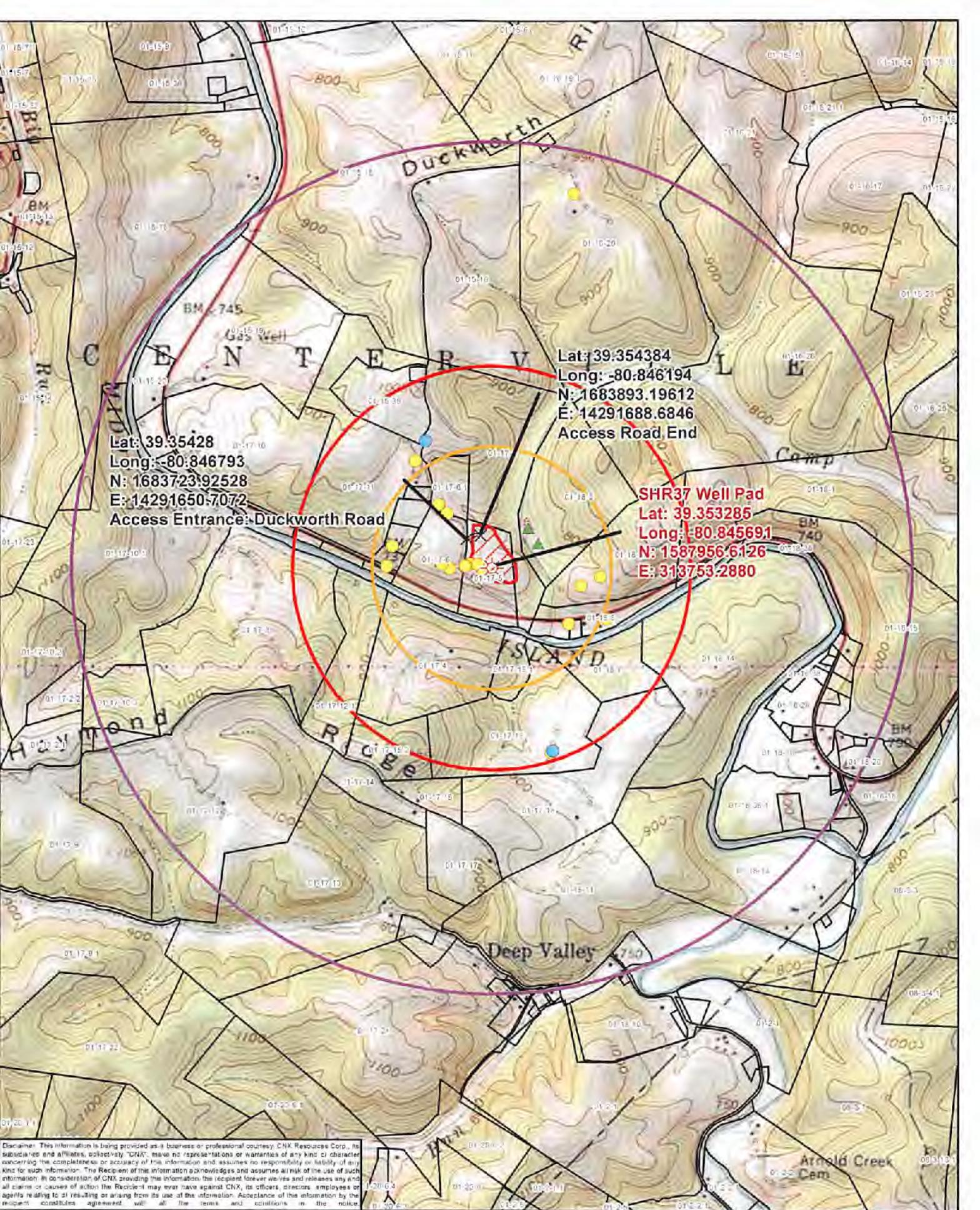
# Site Safety Plan for Wells SHR37KHSM CNX Gas Company, LLC.



RECEIVED  
Office of Oil and Gas

NOV 15 2021

WV Department of  
Environmental Protection



Lat: 39.35428  
 Long: -80.846793  
 N: 1683723.92528  
 E: 14291650.7072  
 Access Entrance: Duckworth Road

Lat: 39.354384  
 Long: -80.846194  
 N: 1683893.19612  
 E: 14291688.6846  
 Access Road End

**SHR37 Well Pad**  
 Lat: 39.353285  
 Long: -80.845691  
 N: 1587956.6126  
 E: 313753.2880

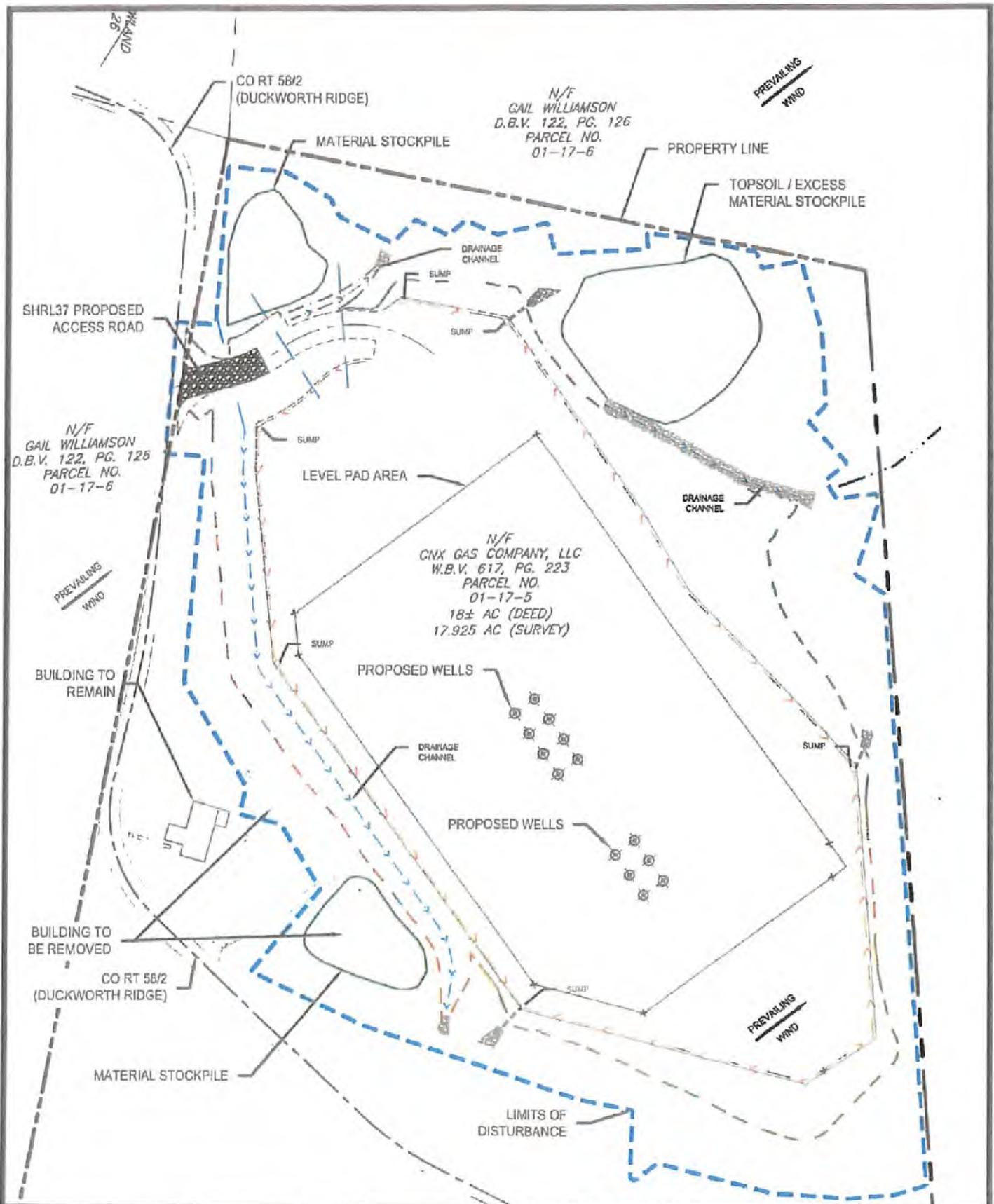
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- SHR37 Well Pad
- Pond
- Spring
- Well
- Access Points
- Access Road
- 1 Mile Buffer
- 2,500ft Buffer
- 1,500ft Buffer
- Surface Parcel
- Well Pad LOD



1 inch = 1,000 feet	
Date: 10/7/2021	Prepared By: GIS
Revisions: 1	Approved By:
This map is property of CNX Resource Corp and contains information that is proprietary and confidential in nature and may not be copied or reproduced without prior written consent.	

12/17/2021  
 Geographic Well Pad  
 SHR37



Prepared By:			Drawn By: RLS	<b>SHRL37 Well Site</b> Prepared For: <b>CNX Resources Corporation</b> Site in: Centerville District, Tyler County, WV
 <b>Sheffler &amp; Company, Inc.</b> ENGINEERING • SURVEYING			Reviewed By: GAS	
1712 Mount Nebo Road Sewickley, PA 15143			Date: 12/13/2018	
Office Phone: 412-219-4509 Email: Info@ShefflerCo.com			Scale: 1"=100'	
			Project No.: 3738	
<b>EXHIBIT 1</b>				

12/17/2021

WW-9  
(4/16)

API Number 47 - 095  
Operator's Well No. SHR37KHSM

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, 34-013-2-0809 )
- Reuse (at API Number WDTN5WH5M 47-061-01671, WDTN5KH5M 47-061-01672, WDTN5ZH5M 47-061-01673, WDTN19 well's API TBD )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain No Pits)

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 spud/surface to curve bit-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

Commonwealth of Pennsylvania - Notary Seal  
Rebecca Zachwieja, Notary Public  
Washington County  
My commission expires November 7, 2023  
Commission number 1269663  
Member, Pennsylvania Association of Notaries

~~Commonwealth of Pennsylvania~~ County of Washington  
Subscribed and sworn before me this 10<sup>th</sup> day of November, 2021

Rebecca Zachwieja  
Notary Public  
My commission expires November 7, 2023

Cragin Blevins  
Digitally signed by Cragin Blevins  
Date: 2021.11.08 11:10:22 -0500'

12/17/2021

**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: Cragin Blevins Digitally signed by Cragin Blevins  
Date: 2021.11.08 11:10:52 -0500

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Environmental Resources Specialist III Date: 11/8/2021

Field Reviewed? ( ) Yes ( ) No

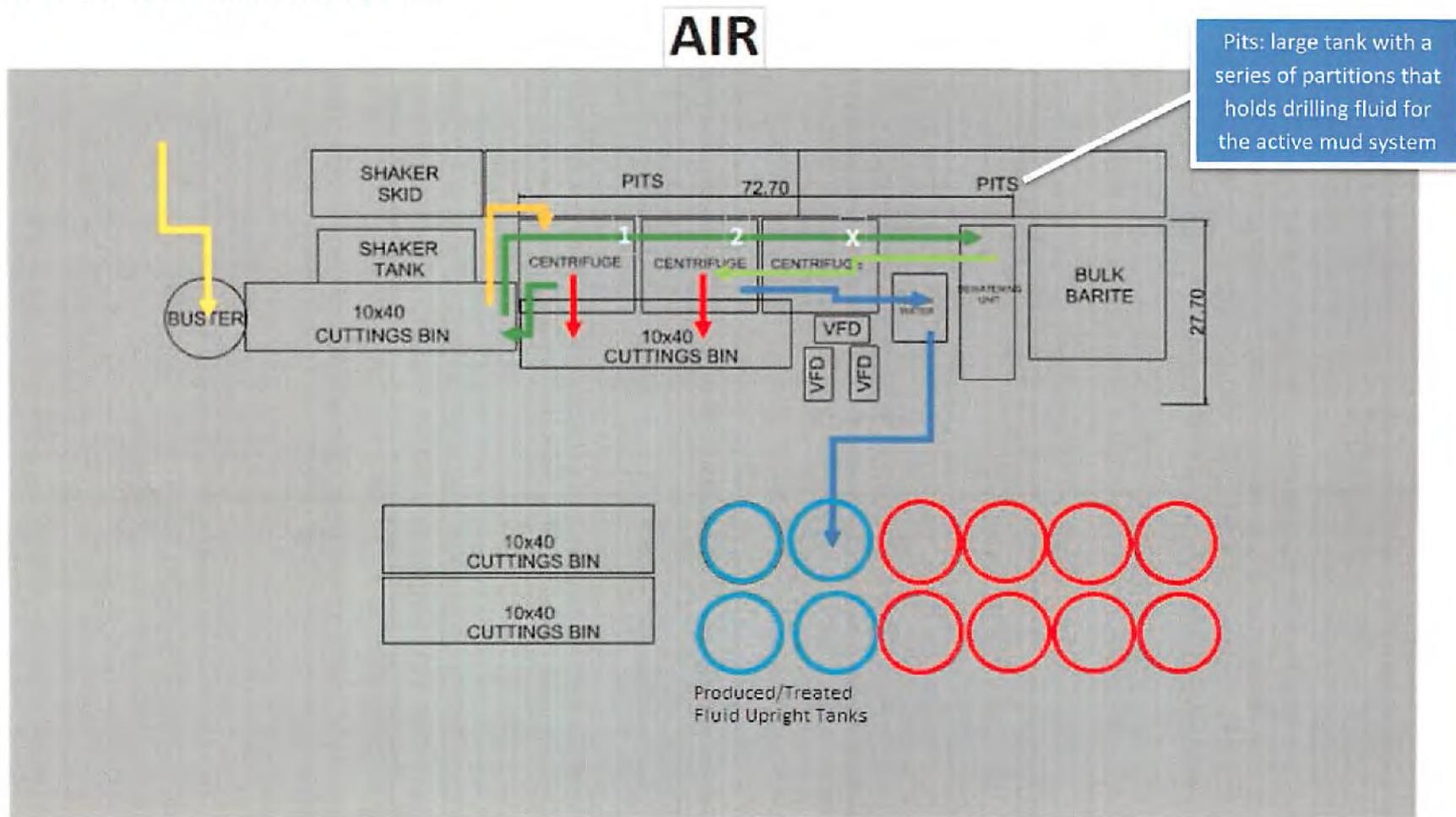
Type of Waste	Disposal Company Name	Disposal Location	Disposal Location Co. Well ID / Name	Permit # (if applicable)	Accepted Waste Streams	Disposal Company Contact Information
Brine Injection - Treatment	Appalachian Water Services (Nuverra Environmental Solutions)	2326 McClellandtown Road, Masontown, PA 15461	39.853056, -79.924786	Appalachian Water	WMGR GP No. 1235W001 WQM Industrial Waste Permit No. 2608201 A-2	Brine (Produced Water) and oily water from compressor stations. Rob Bealke 304-291-0383 Office 304-282-8514 Cell rob.bealke@nuverra.com Office: 740-609-3800
RW & TENORM	Austin Master Services	801 N 1st St, Martins Ferry, OH 43935	40.105200, -80.711630	N/A	N/A	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. Jack Bement CEO Austin Master Services LLC 355 Circle of Progress Pottstown PA, 19464 Ph: (585) 704-2744 Fax: 484 624-5506 Office: 740-609-3800
Brine Injection - Treatment	Austin Master Services	801 N 1st St, Martins Ferry, OH 43935	40 105200, -80.711630	N/A	N/A	Brine (Produced Water) Jack Bement CEO Austin Master Services LLC 355 Circle of Progress Pottstown PA, 19464 Ph: (585) 704-2744 Fax: 484 624-5506
RW & TENORM	Belmont Solids Control	78405 Cadiz-New Athens Rd. Cadiz, OH 43907	40.233830, -81.009300	N/A	N/A	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. Dave Brown 412-848-1828 Mark Winsap 330-692-0423; dbrown@ApestF.com Bob Orr 740-796-6405 614-648-8898 orrrpetr@gmail.com
Brine Injection - Treatment	Cambrian Well Services - Kemble (Orr Petroleum Corporation)	Zanesville, Muskingum County, Perry Township, OH	39.974954, -81.845389	Kemble I-D (SWW/R22)	34-119-2-8780	Brine (Produced Water)
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.087460, -82.047918	BPC01	VAS2D96088UC	CNX Owned UIC SWTW: Frac water, brine, produced water Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.222201, -81.959987	N26	VAS2D93098UC	CNX Owned UIC SWTW: Frac water, brine, produced water Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.184198, -82.882549	U7	VAS2D92688UC	CNX Owned UIC SWTW: Frac water, brine, produced water Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Russell County, VA	37.120547, -81.961222	AW114A	VAS2D97088UC	CNX Owned UIC SWTW: Frac water, brine, produced water Contact Ops Groups
Brine Injection - Treatment	CNX Resources Corporation	Buchanan County, VA	37.147934, -82.075320	Ball Well	VAS2D92188UC	CNX Owned UIC SWTW: Frac water, brine, produced water Contact Ops Groups Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Warren Township, OH	39.426278, -81.502379	Order No. 2015-452; Vocational School No. 2 Well; SWTW No. 20	API # 34-167-2-9543-00-00	Brine (Produced Water) Office: 740.371.5078 ext. 206   Cell: 304.588.0936 Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Warren Township, OH	39.425172, -81.507900	Order No. 2015-582; Heinrich Unit #2 Well, SWTW No. 22	API # 34-167-2-9464-00-00	Brine (Produced Water) Office: 740.371.5078 ext. 206   Cell: 304.588.0936 Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Warren Township, OH	39.429867, -81.511020	Order No. 2015-581; Heinrich Unit #1 Well, SWTW No. 21	API # 34-167-2-9445-00-00	Brine (Produced Water) Office: 740.371.5078 ext. 206   Cell: 304.588.0936 Wes Mossor General Manager wesm@deeprockds.com DeepRock Disposal Solutions LLC
Brine Injection - Treatment	DeepRock Disposal Solutions	Washington County, Marietta Township, OH	39.402842, -81.476913	Order No. 2019-79; American Growers No. 1 Well, SWTW No. 26	API # 34-167-2-9766-00-00	Brine (Produced Water) Office: 740.371.5078 ext. 206   Cell: 304.588.0936

									Michael Chaplin: Ph. 740-763-3965 Cell 740-403-9664 tantrumw@aol.com
Brine Injection - Treatment	EGO Water Solutions LLC	5347 E. State Street, Newcomerstown, OH 43832	40.283293, - 81.578068	Mazena #1 Well (SWW #13)	API# 34-157-2-5511	Brine (Produced Water)			Robert Schenken Director Business Development HydroEdge Solutions Wisconsin White Sand rschenken@hydroedgesolutions.com Cell 412.295.3614
Brine Injection - Treatment	Environmental Energy Services LLC (Force, Inc.)	Muskingum County, Perry Township, OH	39.978643, - 81.825727	Pattison Trust No. 1-D (SWW #30)	API# 34-119-2-8803	Brine (Produced Water)			Bryan Force Mobile: 412.289.0069 Office: 724.465.9399 bforce@forceincorporated.com
Brine Injection - Treatment	Environmental Energy Services LLC (Force, Inc.)	Barnsville, Belmont County, OH	NEED	Barnsville (SWW #2)	34-013-2-0609 UC #609	Frac water, brine, produced water			Bryan Force Mobile: 412.289.0069 Office: 724.465.9399 bforce@forceincorporated.com
Brine Injection - Treatment	Gas Field Services, Inc.	200 Camp Creek Road, Camp Creek, WV 25820	37.495134, - 81.105161	Camp Creek Disposal Well	UIC: UIC2D0550319 API: 47-055-00319	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 zachery4@yahoo.com PO Box 555, Rossdale, VA 24280 Phone: (276) 880-2923
Brine Injection - Treatment	Greene County Water Treatment, Inc.	401 Jefferson Rd. Waynesburg, PA 15370	39.908611, - 80.141111	Waynesburg Facility	WMGR1235W010	Oil and Gas Fluids with minimal oil and solids present			Gary Carpenter 267-246-6176 JRC@Carpenter@aol.com Office: (330) 270-8900
RW & TENORM	Ground Tech LLC	240 Sinter Court, Youngstown, OH 44510	41.113260, - 80.674500	N/A	N/A	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.			Larry Chamberlain 330-398-5919 lchamberlain@hrc-inc.com Ashley Cromley 570-394-1450 Ashley.cromley@hydrerecoveryip.com
Brine Injection - Treatment	Hydro Recovery	572 Route 18 Burgessstown, PA 15021	40.422674, 80.476125	Burgessstown Facility	WMGR1235W019	Oil and Gas Fluids with minimal oil and solids present			Terry Gadd terry.gadd@jomascaro.com, 610-636- 4133
Non-Haz Disposal	Mascaro & Sons- Wetzel Co LF	1521 Wetzel County Landfill Rd. New Martinsville, WV 26155	N/A	Wetzel County Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings/Frac Sand, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Process Waste, Municipal Solid Waste			Tom Meinert 740-255-0357 heavymfsmasters@gmail.com
RW & TENORM	Mud Masters LLC	64054 Wintergreen Rd Lore City, OH 43725	40.027531, - 81.449219	N/A	N/A	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).			Billing Address: 739 Southgate Pkwy, Cambridge, Ohio 43725
Non-Haz Disposal	Noble Environmental Landfill (Former Westmoreland Waste)	111 Conner Lane, Delle Vernon, PA 15012	N/A	Noble / Westmoreland Sanitary Landfill		Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Friable Asbestos, Non-Friable Asbestos, Municipal Solid Waste			Customer Service: (724) 929-7694
RW & TENORM	Pressure Tech	7675 East Pike Norwid, Ohio 43767	39.97415, -81.844765	N/A	N/A	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 614-646-8898
Oil & Oily Water Treat - Recycle	Quisk	515 Industrial Blvd., Wooster, OH 44691	N/A	N/A	N/A	Non-hazardous wastewater, transportation, treatment and disposal facility. Also offer transportation and solidification services.			330-264-8080 (O) jkleter@quisk.us.com
Non-Haz Disposal	Republic Services - Imperial (Allied Waste of PA)	11 Boggs Rd, Imperial, PA 15126	N/A	Imperial Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings/Frac Sand, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Municipal Solid Waste			Jack Palermo - jpalermo@republicservices.com, 330- 536-7575
Brine Injection - Treatment	Reserved Environmental Services (RES)	1119 Old Route 119 South Mt. Pleasant, PA 15666	40.215555, - 79.606388	New Stanton Facility	WMGR1235W005	Oil and Gas Fluids with minimal oil and solids present			Matt McInski 814-574-9701 mcmiski@reswater.com
Brine Injection - Treatment	Reserved Environmental Services (RES)	506 Lippencott Road Waynesburg, PA 15370	39.945555, - 80.140833	Waynesburg Facility	WMGR1235W031	Oil and Gas Fluids with minimal oil and solids present			Matt McInski 814-574-9701 mcmiski@reswater.com
Hazardous Waste Disposal	Safety Klean	10 Industrial Park Drive Wheeling, Wv. 26003	N/A	Wheeling Landfill	N/A	RCRA/TSCA Waste, PCB Transformers & Capacitors, PCB Soil/Debris, Non-Hazardous Wastes, Asbestos Waste, Solidification Services			Gordon Cooper Gordon.cooper@safety-klean.com 304-215-2284 1-866-670-9034
Oil & Oily Water Treat - Recycle	Spirit Services, Inc.	173 Industrial Park Ln., Beech Bottom, WV 26030	N/A	N/A	N/A	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 Safety Chain approval.			Joe Staton: 717-360-7916 Office: 301-223-1251 Fax: 301-223-1253 jstaton@spiritservices.com

RW & TENDORM	Empire Fluid Solutions (Formerly Troo Clean)	41540 National Road Belmont, OH 43718	40.0687, -81.04963	N/A	N/A	Non-radioactive material, low level radioactive material (NORM/TENDORM) material handling, storage, downblending, transport/loading to rail, tank cleaning, radiological sampling/testing analysis/lab. Non-radioactive material & radioactive material handling (NORM/TENDORM), solids separation, material downblending, tank cleaning, radiological sampling/testing analysis/lab. Liquid/semi-solids treatment and separation for waste disposal.	Orin David Orin.david@trooclean.com 910-413-6426 Corporate Number: 734-442-2353 Giy Turturice gturturice@valcor.com 304-963-1563 Steve Atkinson SAtkinson@valcor.com
Oil & Oil Water Treat - Recycle	Valcor Environmental Services LLC	515 N. 8th Ave, Huntington, WV 25201	N/A	N/A	N/A	Approved for non-haz water treatment of oil & water mix, oil, oil filters, and antifreeze only.	
Non-Haz Disosal	Waste Management - American Landfill	7916 Chapel St SE, Weynesburg, OH 44688	N/A	American Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum)Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Arden Landfill	200 Rangos Ln, Washington, PA 15301	N/A	Arden Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Evergreen Landfill	1810 Luckersboro Rd, Blairsville, PA 15717	N/A	Evergreen Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Kelly Run	1500 Haysten Blvd, Elizabeth, PA 15037	N/A	Kelly Run Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Mahoning Landfill	3510 E Garfield Rd, New Springfield, OH 44443	N/A	Mahoning Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum)Construction & Demolition Waste, Industrial Waste, Non-Friable Asbestos, Process Waste, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Meadowfill Landfill	1488 Dawson Dr, Bridgeport, WV 26330	N/A	Meadowfill Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum)Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Hazardous Waste Disposal	Waste Management - Model City	1550 Balmer Rd Youngstown, NY 14174	N/A	Model City Landfill	N/A	RCRA/TSCA Waste, PCB Transformers & Capacitors, PCB Soil/Debris, Non-Hazardous Wastes, Asbestos Waste, Solidification Services	Unda Davie: 716-286-0365 or 716-754-8231 or 800-963-4776
Non-Haz Disosal	Waste Management - Northwestern Landfill	510 Dry Run Rd, Parkersburg, WV 26104	N/A	Northwestern Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum)Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - S&S Grading Landfill	4439 Good Hope Pike, Clarksburg, WV 26301	N/A	S&S Grading Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum)Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - South Hills (Arnon)	3100 Hill Rd, South Park Township, PA 15129	N/A	South Hills Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com
Non-Haz Disosal	Waste Management - Valley Landfill	6015 Pleasant Valley Rd, Irwin, PA 15642	N/A	Valley Landfill	N/A	Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (Including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Friable Asbestos, Non-Friable Asbestos, Process Waste, Solidification Services, Municipal Solid Waste	Customer Service: 1 (866) 909-4458 Mark A. Thomas: 412-522-0610, mthoma15@wm.com Tom Farnsworth: C- 330-204-4244, TFarnsw@wm.com

Non-Haz Disposal	Waste Management - Chestnut Ridge	385 Harr Ln, Blountville, TN 37617				Spencer to complete	Travis Maryanski tmaryanski@wm.com (865) 388-7279 Cell (205) 652-8137 Tech Service
Non-Haz Disposal	MOI Environmental Services LLC	2519 Old Trail Road Abingdon, VA 24210				Spencer to complete	John Twiddy johnt@moilnc.com 276-628-6636 ext. 202; 276-608-0003 Cell
Non-Haz Disposal	Republic Services - Short Creek	North Fork Short Creek Road, Wheeling, WV 26003	N/A	Short Creek Landfill	N/A		Gas Specific Waste Streams: Drill Cuttings/Frac Sand, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (including Petroleum), Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Municipal Solid Waste Jack Palermo - jpalermo@republicservices.com, 330-536-7575
Non-Haz Disposal	Republic Services - Carbon-Limestone**	8100 S State Line Rd, Lowellville, OH 44436	N/A	Carbon-Limestone Landfill	N/A		Gas Specific Waste Streams: Drill Cuttings, Waste Liners, Other Accepted Waste Streams: Contaminated Soil (including Petroleum) Construction & Demolition Waste, Industrial Waste, Sludge, Process Waste, Solidification Services, Municipal Solid Waste **Ohio "TENDORM" - requires Radium 226/228 analysis by load before leaving the well pad. Solid waste landfills in Ohio can only accept TENDORM waste with combined concentration less than 5 picocuries per gram above the natural background level. Jack Palermo - jpalermo@republicservices.com, 330-536-7575
Disposal like mudwaters lakes in	Fluid Management Solutions (FMS)	5445 US-40 East, Triadelphia, WV 26059	40.06836 -80.61492	N/A	N/A		Cement Water, Oil Base, Drill Mud, Water Base, Cellar Clean Outs etc. Also they do washouts and they have storage capacity at 2000bbbl for 10lb brine and 10.5lb brine. Kevin Flaherty (412) 973-2586

Air - 3 centrifuges present, 2 centrifuges used



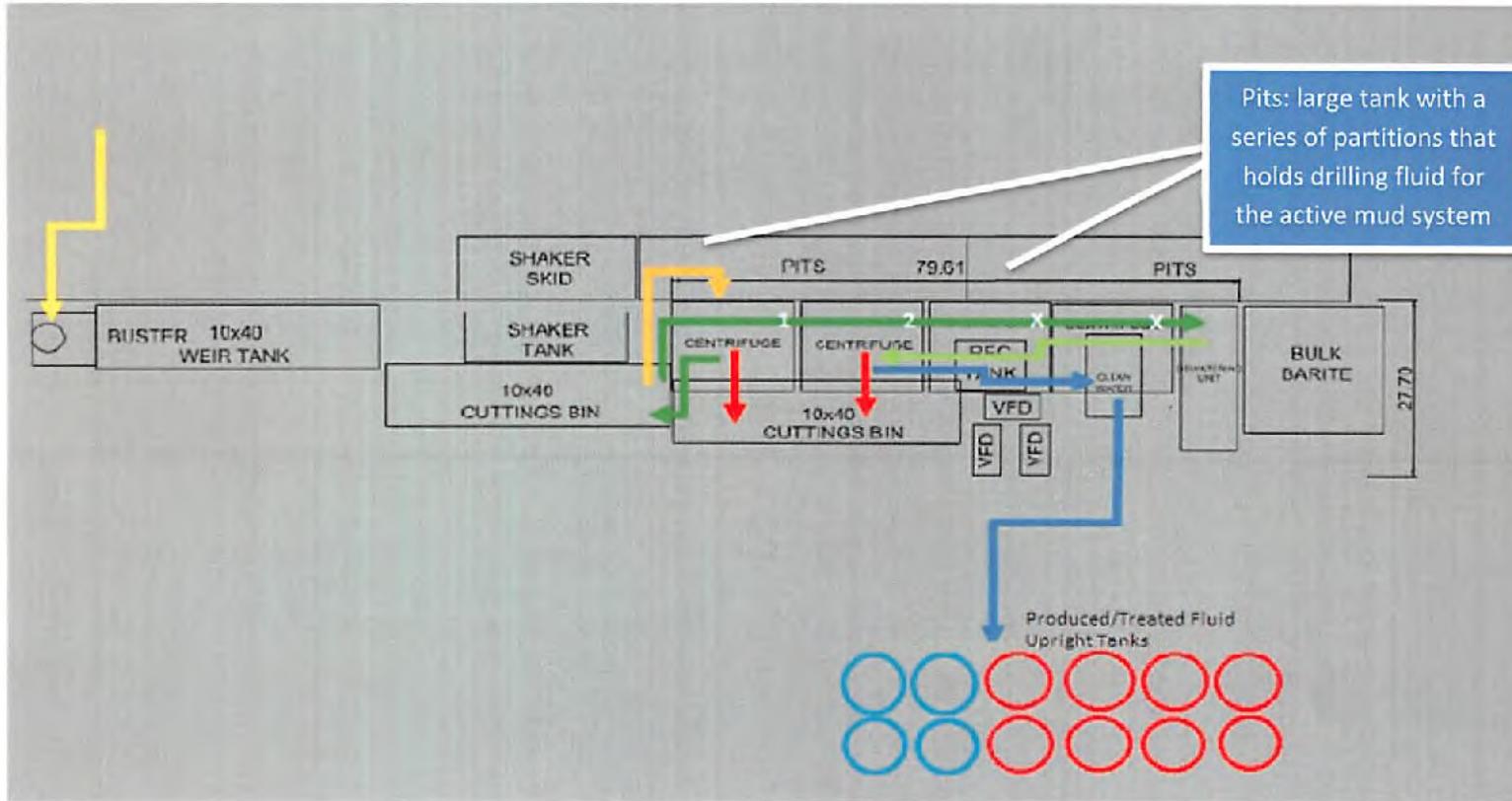
Pits: large tank with a series of partitions that holds drilling fluid for the active mud system



\*NOTE:1 Barite Recovery Machine NOT in use during this operation

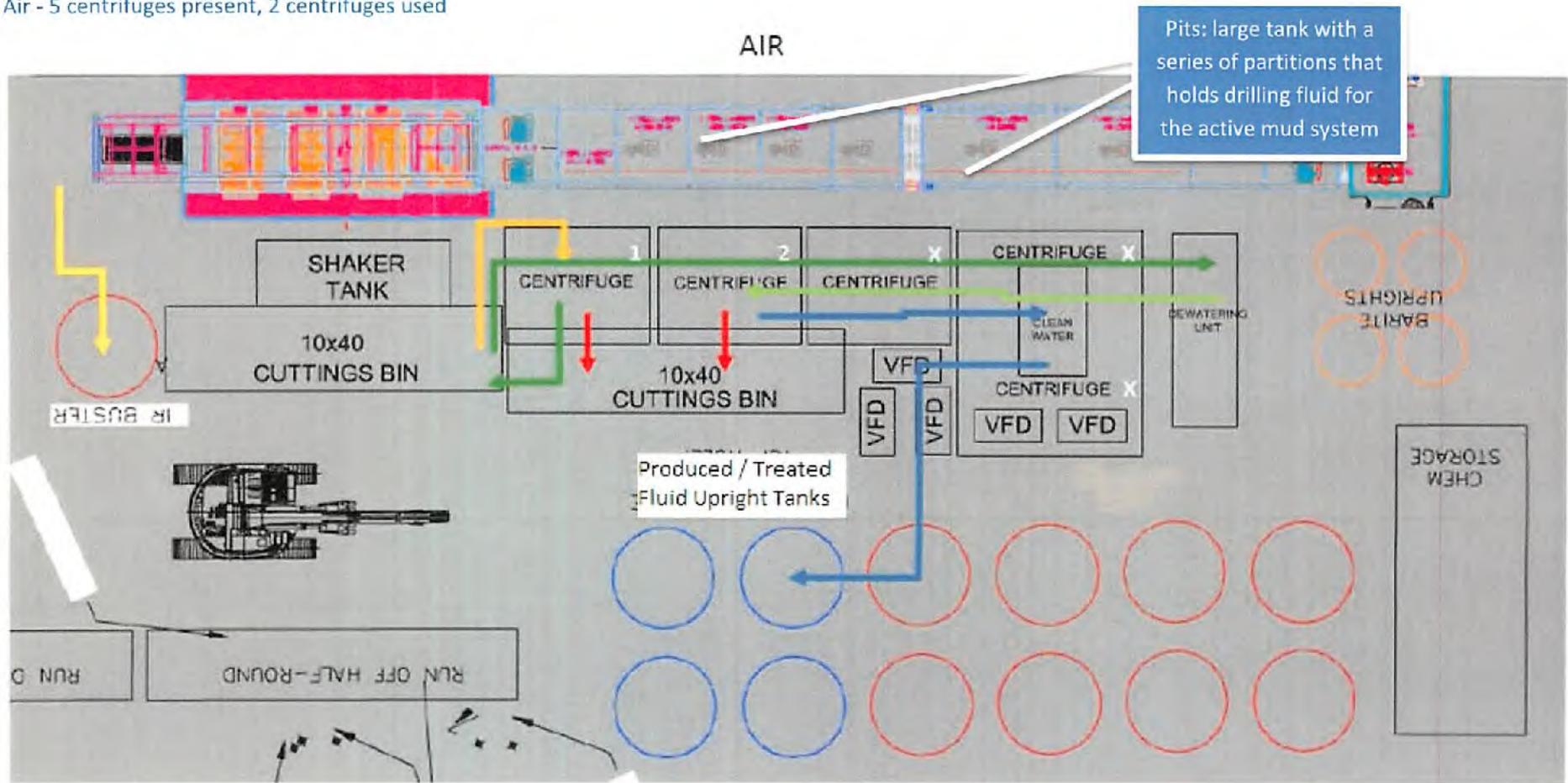
Air - 4 centrifuges present, 2 centrifuges used

# AIR



**\*NOTE: 2 Barite REcovery Machines NOT in use during this operation.**

Air - 5 centrifuges present, 2 centrifuges used



Pits: large tank with a series of partitions that holds drilling fluid for the active mud system

Produced / Treated Fluid Upright Tanks

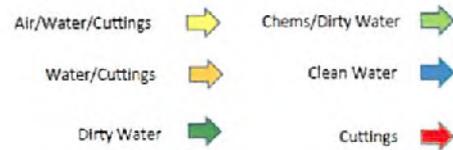
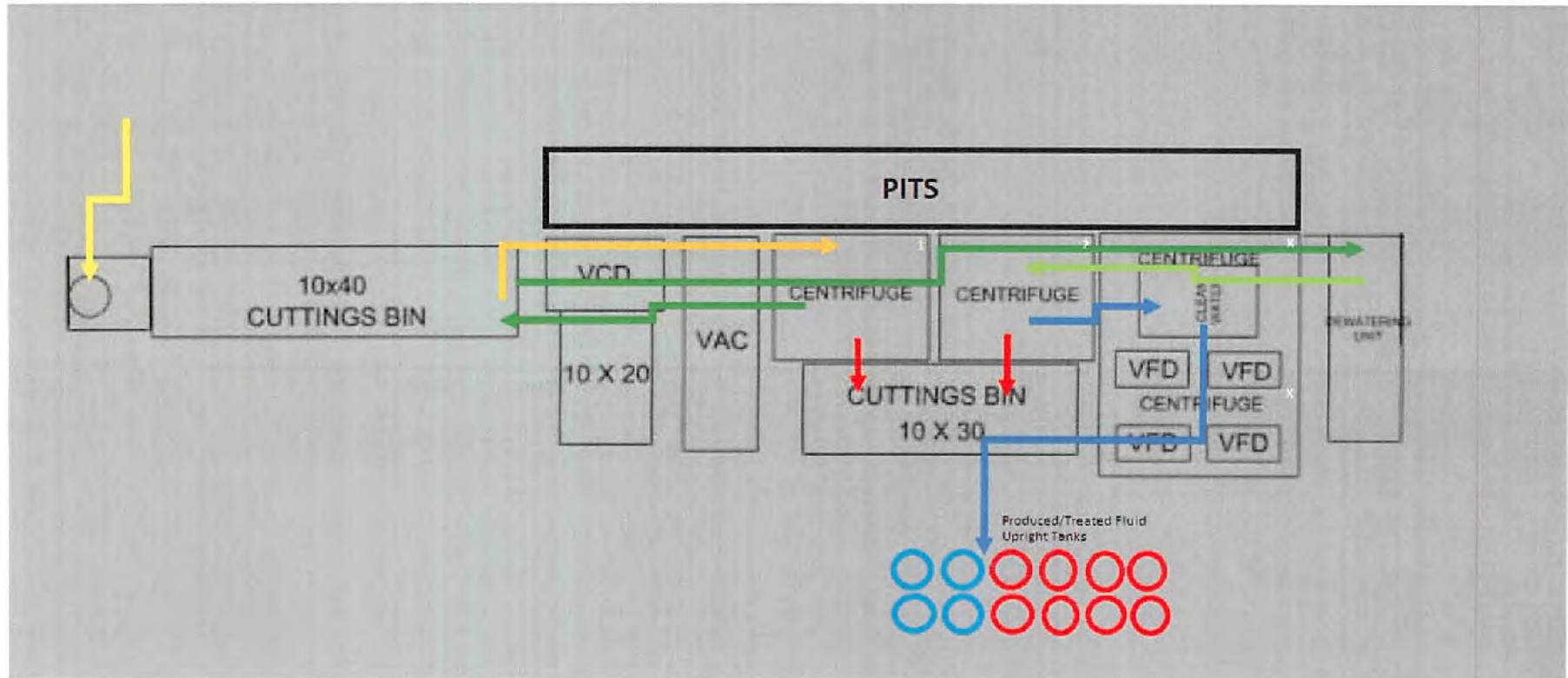
- Air/Water/Cuttings →
- Water/Cuttings →
- Dirty Water →
- Chems/Dirty Water →
- Clean Water →
- Cuttings →

**\*NOTE: 3 Barite Recovery Machines NOT in use during this operation**



Air - 4 centrifuges & 1 vertical cuttings dryer present, 2 centrifuges used

# AIR



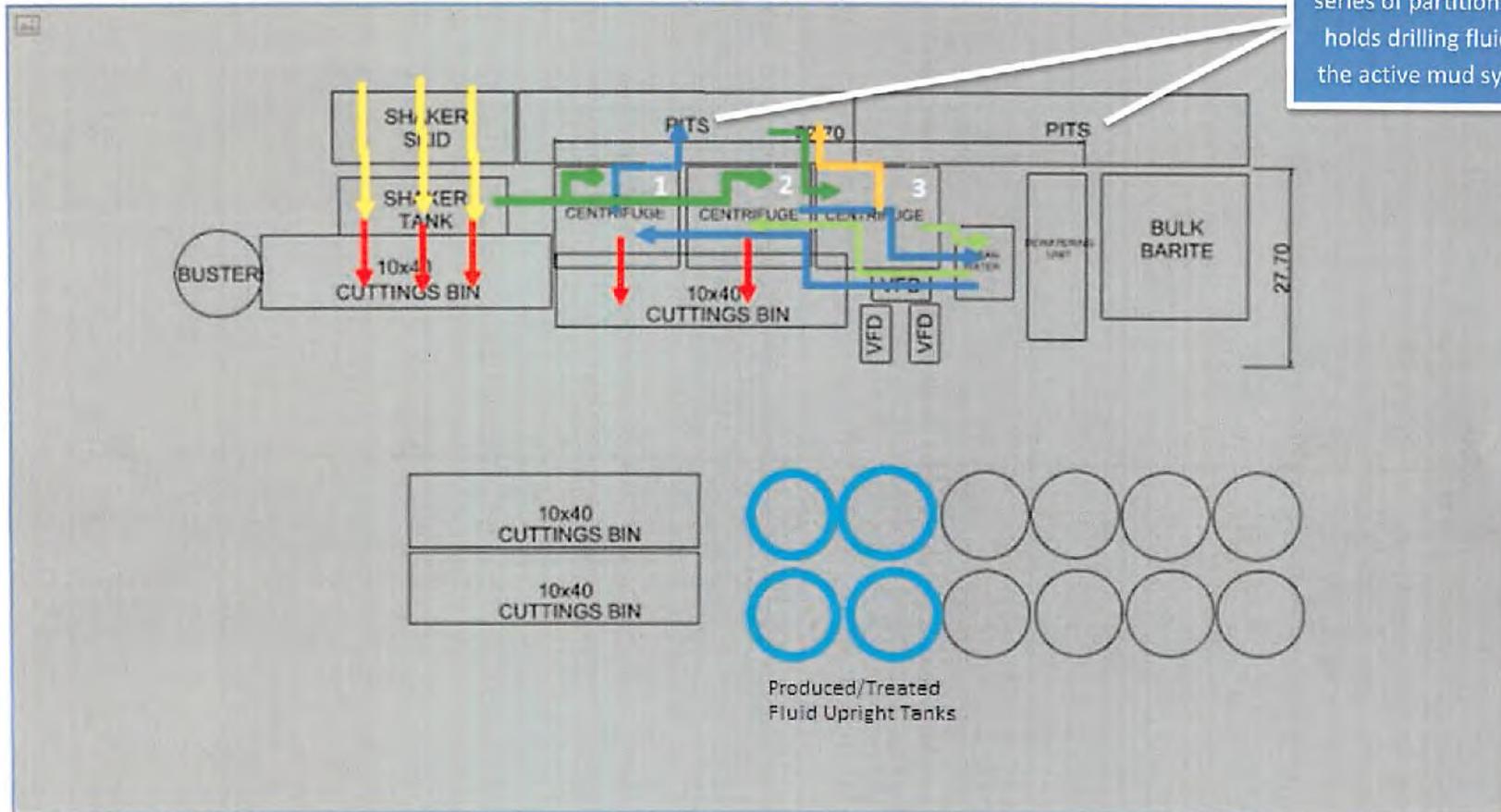
\*NOTE: Barite Recovery Machines and VCD/VAC NOT in use during this operation

**Exhibit B**  
Mud Schematic

Oil Based Mud (OBM) - 3 centrifuges present, 3 centrifuges used

# OBM

Pits: large tank with a series of partitions that holds drilling fluid for the active mud system

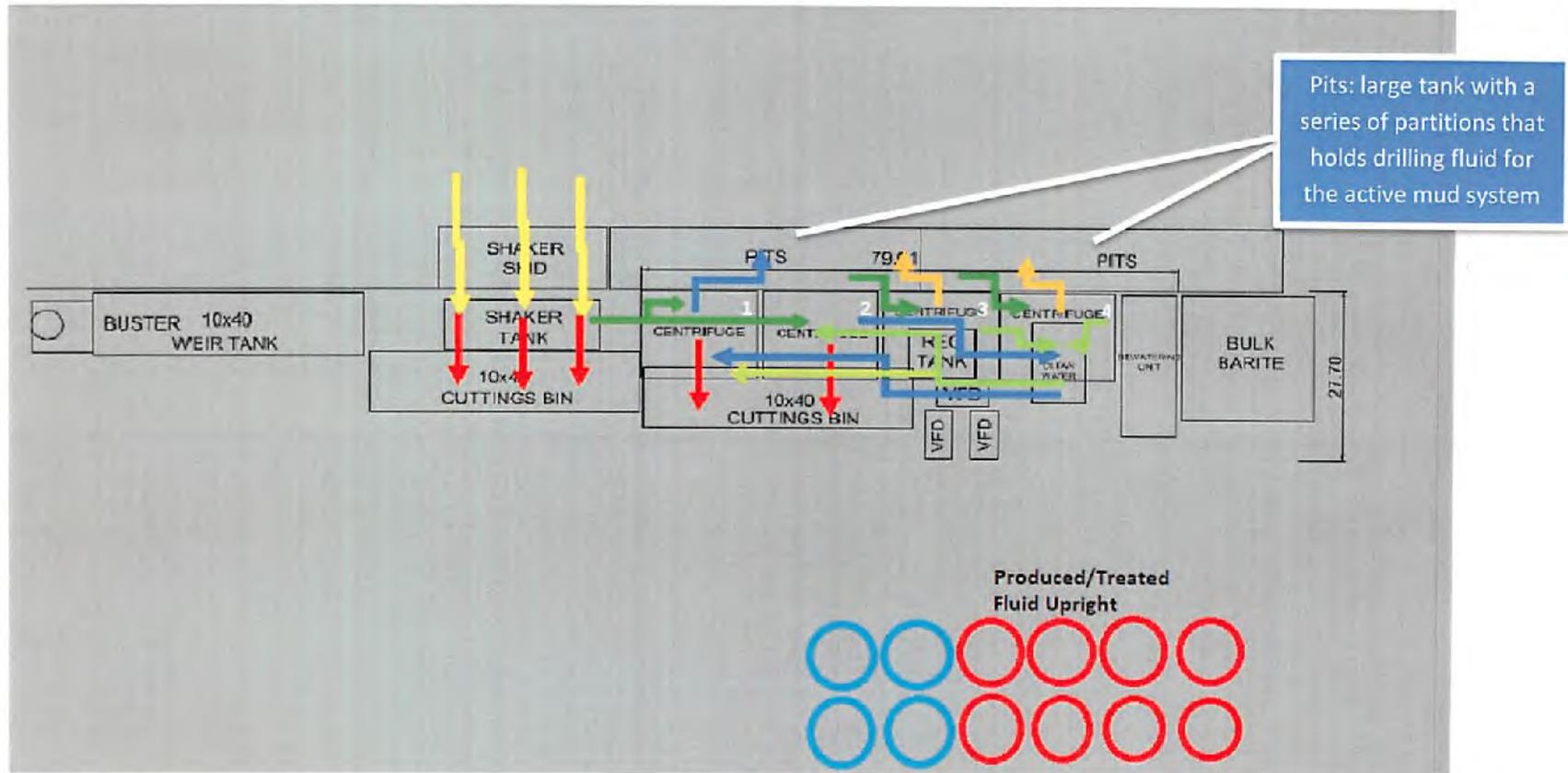


## Oil Based Mud (OBM)

10/20/2020 revision

Oil Based Mud (OBM) - 4 centrifuges present, 4 centrifuges used

# OBM



- |                  |  |             |  |
|------------------|--|-------------|--|
| Fluid/Cuttings   |  | Light Fluid |  |
| Recovered Barite |  | Clean Fluid |  |
| Dirty Fluid      |  | Cuttings    |  |

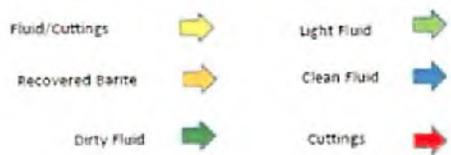
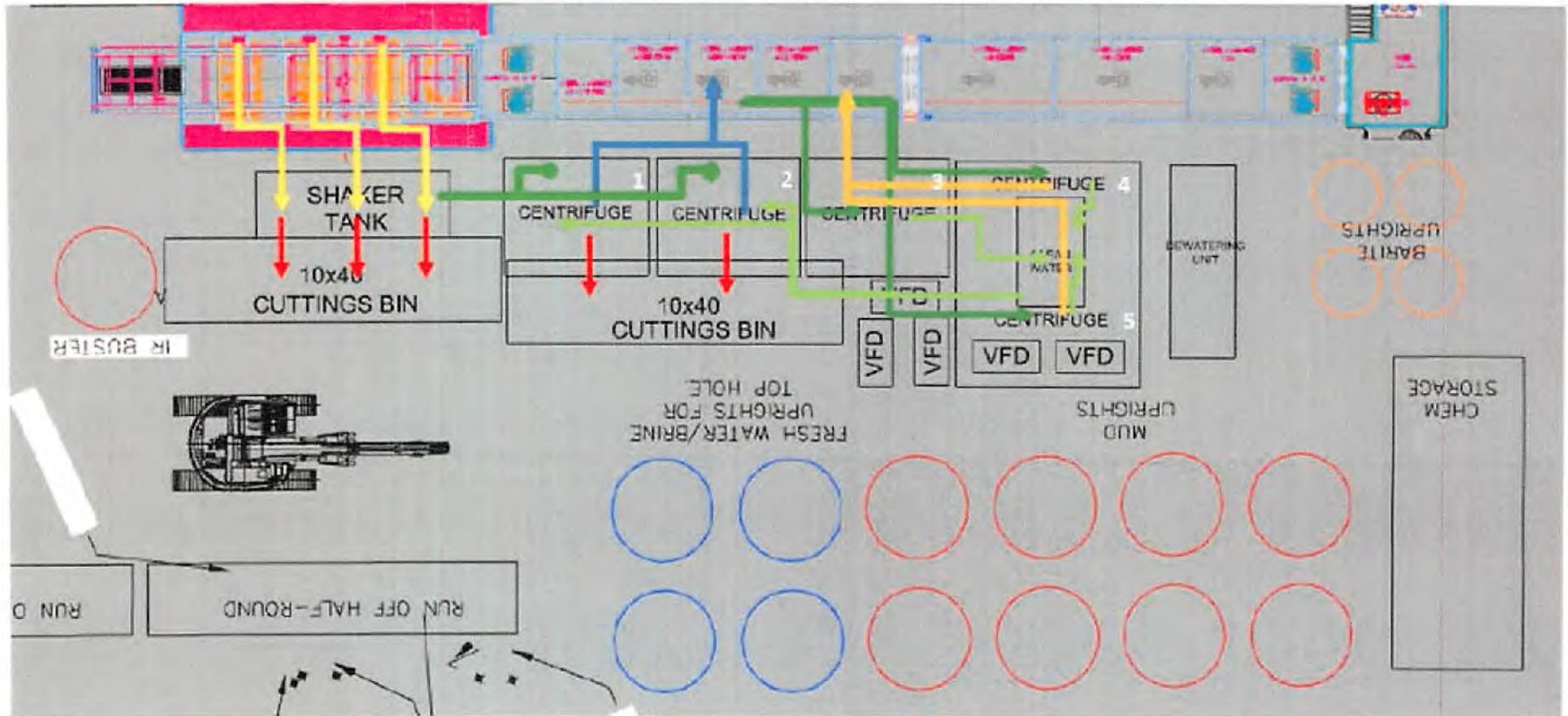
## Oil Based Mud (OBM)

10/20/2020 revision

Pits: large tank with a series of partitions that holds drilling fluid for the active mud system

Oil Based Mud (OBM) - 5 centrifuges present, 5 centrifuges used

### OBM

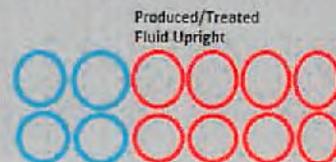
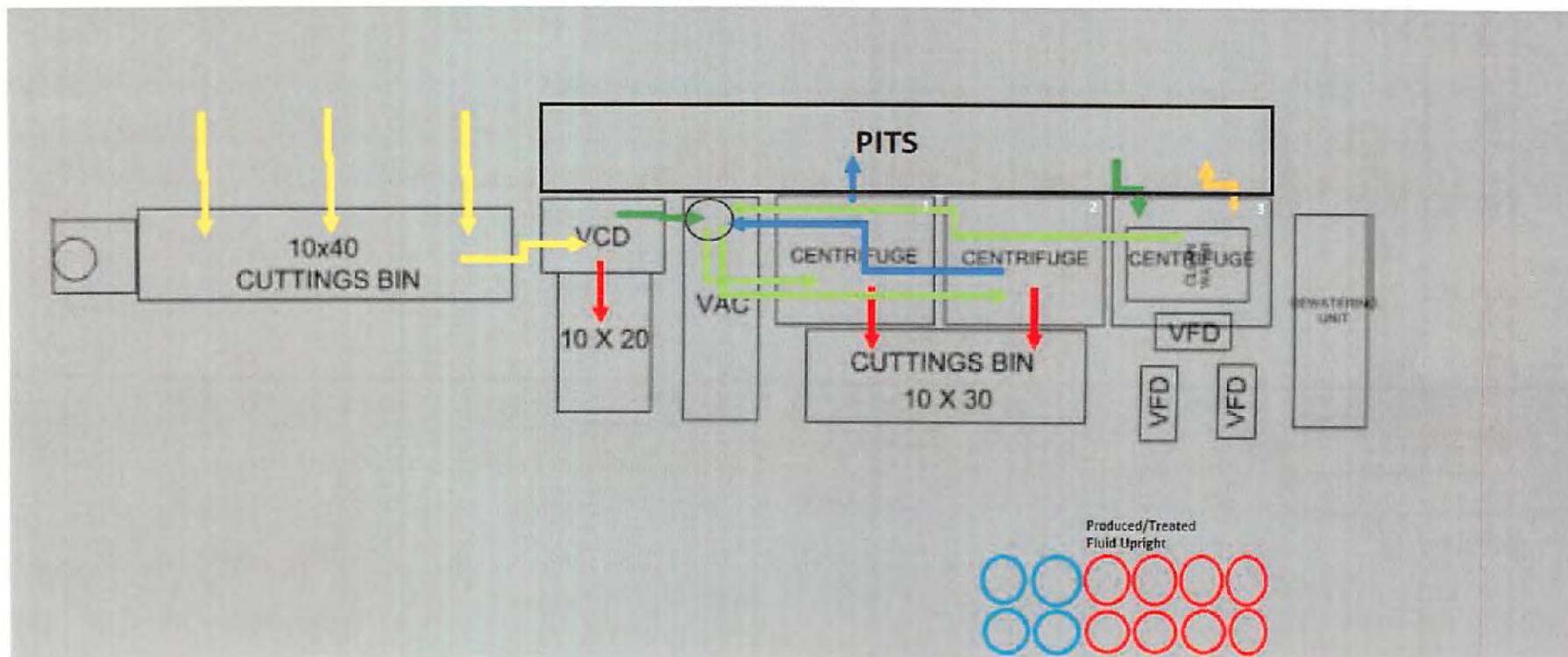


Oil Based Mud (OBM)

10/20/2020 revision

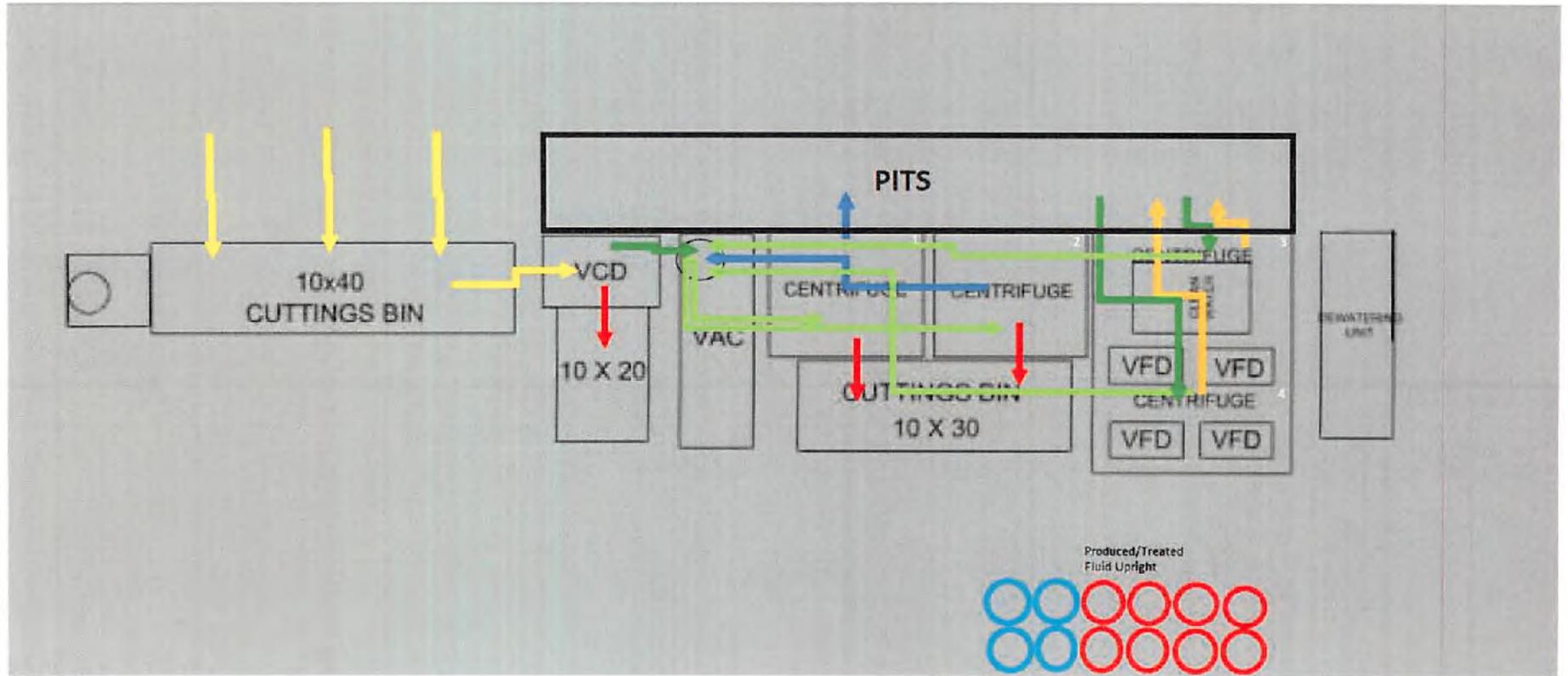
Oil Based Mud (OBM) - 3 centrifuges & 1 vertical cuttings dryer present, all equipment used

# OBM



Oil Based Mud (OBM) - 4 centrifuges & 1 vertical cuttings dryer present, all equipment used

# OBM



LATITUDE 39° 22' 30"

TH: 3,520'

LATITUDE 39° 20' 00"

BH: 2,555'

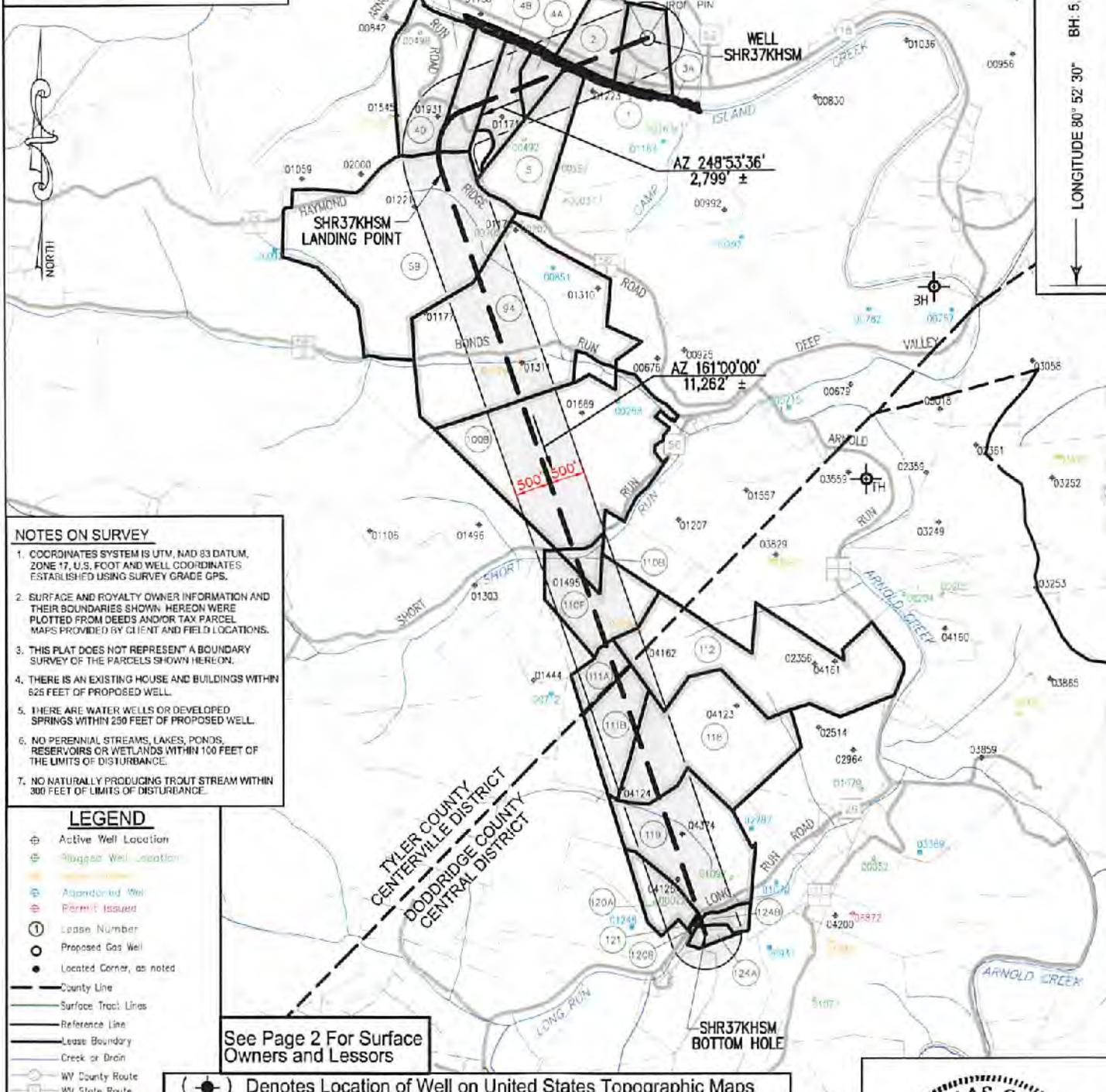
BH: 5,160'

LONGITUDE 80° 52' 30"

LONGITUDE 80° 50' 00"

TH: 7,840'

SHR37KHSM  
CNX Gas Company LLC



- NOTES ON SURVEY**
1. COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
  2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN. HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
  3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
  4. THERE IS AN EXISTING HOUSE AND BUILDINGS WITHIN 625 FEET OF PROPOSED WELL.
  5. THERE ARE WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
  6. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
  7. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

- LEGEND**
- ⊕ Active Well Location
  - ⊕ Plugged Well Location
  - ⊕ Abandoned Well
  - ⊕ Permit Issued
  - ① Lease Number
  - Proposed Gas Well
  - Located Corner, as noted
  - County Line
  - Surface Tract Lines
  - Reference Line
  - Lease Boundary
  - Creek or Drain
  - WV County Route
  - WV State Route

See Page 2 For Surface Owners and Lessors

(⊕) Denotes Location of Well on United States Topographic Maps



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.

*Thomas C. Smit*  
L. L. S. 687



FILE NO:  
DRAWING NO:  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: SG-GPS (OPUS)

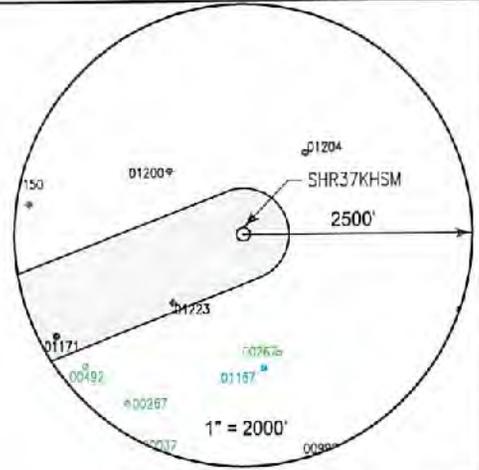


DATE: November 03 20 21  
OPERATORS WELL NO: SHR37KHSM  
API WELL NO: 47 - 095 - 62768  
STATE COUNTY PERMIT

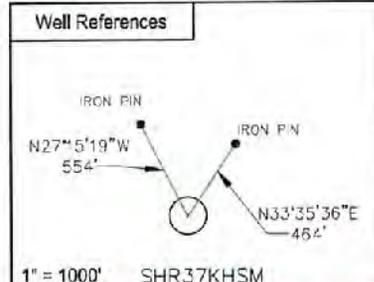
WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION ELEVATION: 828' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union, WV 7.5'  
DISTRICT: Centerville COUNTY: Tyler  
SURFACE OWNER: CNX Gas Company LLC ACREAGE: 19 ±  
ROYALTY OWNER: Eleanor V. & Dean A. Earnheart, et al. LEASE NO: 269278000 ACREAGE: 720.525 ±  
PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: TVD: 6,302'

WELL OPERATOR: CNX Gas Company LLC DESIGNATED AGENT: Anthony Kendziora  
ADDRESS: 1000 Consol Energy Drive ADDRESS: 1000 Consol Energy Drive  
Canonsburg, PA 15317 Canonsburg, PA 15317

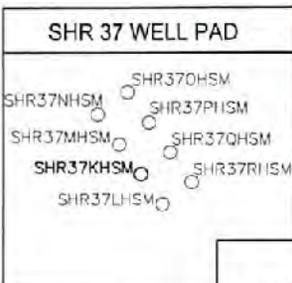
SHR37KHSM  
CNX Gas Company LLC



SURFACE OWNER	LESSOR	PIN
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 Wanda Weckley, widow 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 Wanda Weckley, widow Myrna Morgan and David Morgan, H/W Reva D. Rowland aka Reva Rowland and Ronald Royce Rowland	1-17-6
West Virginia Division of Natural Resources	West Virginia Division of Natural Resources	Middle Island Creek
3A		
4A James R Sr. & James R Jr. Underwood & Mitzie Johnson	Mattie Dotson Flint Aris Hope Jack Parker, AIF for Colen C. Jack Linda K. Bright aka Linda Bright Viola M. Trenton aka Viola Trenton Judy Schillace and Nicholas Schillace, W/H William Christopher Taylor and Cynthia Taylor, H/W Maryless Haymond and Floyd Haymond, W/H Gayla A. Braeh aka Gayla A. Hickman Helen Louise Hickman aka Helen L. Hickman aka Helen Louise Leasure, by her AIF, Frances Louise Bunner aka Frances L. Bunner Ruby Newlon Cheryl L. Tadsen aka Cheryl L. Gill and James F. Tadsen, W/H Barbara J. Davis aka Barbara Davis Cindy A. Gill aka Cynthia Ann Gill David M. Gill aka David Michael Gill and Catherine J. Gill aka Cathy Gill, H/W Terry R. Washburn aka Terry Washburn and Joy D. Washburn, H/W Jean Kuchenbecker aka Nellie Jean Kuchenbecker aka Nellie Jean Hickman and William Kuchenbecker, W/H James Albert Taylor Judy Webb aka Judy Newbrough Cledith H. Davis Linda L. Catona aka Linda L. Sellers B. Pauline Murphy aka B. Pauline Moore Denver Hickman Delmas Hickman Donna D. Hart Howard W. Smith aka Bill Smith Amanda L. Davis Connie Sue Maxwell and Michael Mayne Maxwell, W/H Alex Craig Smith aka Alex C. Smith and Bobbie Smith, H/W Eric Scott Smith William Gene Stone Emerson C. Davis, II Theodore K. Davis and Jill Davis, H/W Michael P. Davis Martha Jill Holliday Juli Edith Germany Kimberly Wilcox and Danny Wilcox, W/H Matthew Storm Shirley L. Urbanowicz aka Shirley L. Quinn aka Shirley L. Hickman and John Quinn, W/H Deanna Zirkelbach aka Deanna Stamper and Tommy Zirkelbach, W/H Ronald Sessler	1-17 12.1



SURFACE HOLE LOCATION (SHL)	
UTM 17 NAD 83	N: 4356014.578 E: 513287.726
NAD 83, WV NORTH	
N: 313709.139	E: 1587963.819
LAT/LON DATUM NAD 83	
LAT: 39° 21' 12.509"	LONG: 80° 50' 44.798"
LANDING POINT	
UTM 17 NAD 83	N: 4355432.813 E: 512416.539
NAD 83, WV NORTH	
N: 311847.772	E: 1589073.137
LAT/LON DATUM NAD 83	
LAT: 39° 20' 53.684"	LONG: 80° 51' 21.237"
BOTTOM HOLE LOCATION (BHL)	
UTM 17 NAD 83	N: 4352207.393 E: 513,587.699
NAD 83, WV NORTH	
N: 301199.323	E: 1588739.704
LAT/LON DATUM NAD 83	
LAT: 39° 19' 08.991"	LONG: 80° 50' 32.542"



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.

*L. L. S.*  
L. L. S. 687



FILE NO:  
DRAWING NO:  
SCALE: 1" = 1000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: November 03 20 21  
OPERATORS WELL NO: SHR37KHSM  
API WELL NO: 47 - 095 - 02768  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION ELEVATION: 828' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union, WV 7.5'  
DISTRICT: Centerville COUNTY: Tyler

SURFACE OWNER: CNX Gas Company LLC ACREAGE: 18.4  
ROYALTY OWNER: Eleanor V. & Dean A. Earnheart, et al. LEASE NO: 269278000 ACREAGE: 720.525 ±  
PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: TVD: 6,302'

WELL OPERATOR: CNX Gas Company LLC DESIGNATED AGENT: Anthony Kendziora  
ADDRESS: 1000 Consol Energy Drive ADDRESS: 1000 Consol Energy Drive  
Canonsburg, PA 15317 Canonsburg, PA 15317

	SURFACE OWNER	LESSOR	PIN
4B	Kimberly Ridgeway	Nathan Josephs Mattie Dotson Flint Aris Hope Jack Parker, AIF for Colen C. Jack	1-17-3
4C	Kimberly Ridgeway	Nathan Josephs	1-17-3
4D	Kimberly Ridgeway	Nathan Josephs	1-17-3
5A	James R Sr. & James R Jr. Underwood & Mitzie Johnson	Sarah E. Doak, Austin Doak, and Myrtle E. Doak, H/W, Dorsey Doak and Sarah E. Doak, H/W, Oliver A. Doak, Kirby D. Doak, Ida Lemasters and Elzy Lemasters, W/H, Myrtle White and Jasper White, W/H Tribune Resources Minerals, LLC fka Ascent Resources Marcellus Minerals, LLC	1-17-12.1
5B	Andrew E Smith	Sarah E. Doak, Austin Doak, and Myrtle E. Doak, H/W, Dorsey Doak and Sarah E. Doak, H/W, Oliver A. Doak, Kirby D. Doak, Ida Lemasters and Elzy Lemasters, W/H, Myrtle White and Jasper White, W/H	1-17-2.4
5B	CNG Transmission Corporation		1-17-12
5B	James R Sr. & James R Jr. Underwood & Mitzie Johnson		1-17-12.2
		Tribune Resources Minerals, LLC, Ascent Resources Marcellus Minerals, LLC	
94	George W Ash	Donna J. Griffith and Jacob Paul Griffith Peggy A. Bumpass Laura Jean Suddreth Michael R. Burk Janet Cliff Pitts Paul Conger and Mary Conger Debbie Hileman and Mark A. Hileman Jeffrey A. James and Marla J. James William Patrick James and Dianne James Pamela Fern Friedman Dwight Eugene Sturm Anna Colleen Presley aka Colleen Presley Patricia G. Doty Philip Wayne Sturm Lisa Schafer Carol Elaine Higgins and Everett Higgins aka Everett W. Higgins Michael James and Vicky L. James Doris J. Bee and Livingstone S. Bee Jill Robin Thompson and Kelvin Thompson Jock Jeffrey Pitts aka Jock J. Pitts and Deborah M. Pitts David Eugene Bersebach Judith Adams fka Judith Diane Polling and Clifford Adams Denise Gambill aka Denis K. Gambill Gregory B. Mercer James W. Schumacher and Lisa B. Schumacher Larry O. Schumacher and Kathleen M. Schumacher Lori Hufstetler Mary Jane Schumacher Bryan Bumgarner and Lisa D. Bumgarner Patricia Ruth Heater, By Paul Eugene Heater, Jr. POA Sheryl Groves Waco Oil and Gas Co., Inc. Gregory Sellers aka Greg Sellers and D. Lee Seller James Lindsey Betty Lewis and Douglas C. Lewis Robert Groves and Carol J. Groves Ann Adel Gosney Kimberly Abrecht fka Kimberly Gene Pitts C. Gloria Atkinson aka Gloria Atkinson and Charles W. Atkinson Matthew Pitts Boda Family Trust, by Margaret E. Boda, Co-Trustee by Wanda L. Boda, POA and Wand L. Boda Co-Trustee Kathryn Stephens Nicholas R. Lucas Tyler Pitts Linda J. Franz Terri Ann Suddreth Ernest M. Sharp Thomas Lee Suddreth Michael Allan McGlasson Carol Groves AMP Fund II, LP Deanna L. Weese Gary Alan Listoe Lorraine E. Gildenhorn James C. Pierce, Jr. Jan B. Crawford Julie K. Walsh Don Leroy Pierce Kathleen McCluskey Christopher Scott Power Beverly J. Collins Sandra Gall Stevens, nee Power Harold Hunt Power Trust U/A/D 7/29/2004 Antero Minerals, LLC	1-17-13
100B	Charles M Young Jr & Crystal R Young	Margaret E. Doak	1-17-24
100B	Ronald & Frances Hurst	Robert L. Doak and Aline Doak, h/w Donna Jean Long Waco Oil and Gas Co., Inc. Norma Long, widow	1-17-24.1
110B	James R & Tricia Mushinsky	Ina M. Montgomery, AIF, for Leslie E. Montgomery and Ina M. Montgomery, H/W Mildred M. Stevens, widow and Cheryl B. Ash, Sr., single Sam Horton and Carol Horton, H/W, Frank Butler and Molly Butler, H/W, Edward Mullooly, single Ralph Thacker and Betty Thacker, H/W, J. Maurice Carlisle and Mary Ann Carlisle, H/W Kenneth R. Mason and Jennifer L. Mason, H/W	1-20-6.2
110F	James R & Tricia Mushinsky	Ina M. Montgomery, AIF, for Leslie E. Montgomery and Ina M. Montgomery, H/W Mildred M. Stevens, widow and Cheryl B. Ash, Sr., single Sam Horton and Carol Horton, H/W, Frank Butler and Molly Butler, H/W, Edward Mullooly, single Ralph Thacker and Betty Thacker, H/W, J. Maurice Carlisle and Mary Ann Carlisle, H/W Waco Oil and Gas Co., Inc. Kenneth R. Mason and Jennifer L. Mason, H/W Norma T. Long Trust, dated November 8, 2013	1-20-6

12/17/2021

	SURFACE OWNER	LESSOR	PIN
111A	Antero Midstream LLC	Jeffrey S. Anderson	1-4-1
111A	Richard F McCullough	Braxton Minerals III, LLC	1-1-1
		Robln D. Frazer	
		Pavlo Lynn Hedglin, heir of I. S. Dotson	
		Valerie L. Burkhart, heir of I. S. Dotson	
		Matthew Morgan Gangwer	
		Michael Chancellor Gangwer	
		Clarence W. Mutschelknaus and Mary F. Mutschelknaus, H/W	
		Lynida Britton Darbes	
		Richard M. Swadley and Ellen V. Swadley, H/W	
		Randall Swadley	
		Jason Baldwin, aka Jason D. H. Baldwin, heir of Savannah Hensler	
		Teresa Rush and Ronal W. Rush, W/H	
		John Robert Snaman	
		Robert F. Montgomery	
		Maria Cecilia G. Muller, heir of Ramona Duty	
		Thomas Wade Bush	
		Daniel John Bush	
		Richard J. Bush	
		Ronald G. Bush	
		Elizabeth Duty Samson, aka Elizabeth Duty	
		Alfredo E. Gallardo, Jr.	
		Albert Duty, aka Albert E. Duty	
		Francis D. Bautista	
		Rachel G. Escobedo	
		Corazon J. Bautista	
		Virginia C. Bautista	
		Norma C. Campbell	
		Edward O. Ferrebee and Diane H. Ferrebee, H/W	
		Clarence N. Leggett	
		Donna Sue Luh	
		Hermenegilda T. Bautista	
		Howard Parke Leggett	
		William Andrew Hatfield	
		Marie Christine Brinks, nee Castro, heir of John Boyd Duty	
		Joseph James Sarasua	
		Kelly M. Somervill	
		Kevin M. Somervill	
		Dominic Luciano, Jr.	
		Lawrence Lester Dotson	
		Twila Wilson	
		Larry Wilson	
		Russell Wilson	
		Hershell Wilson	
		Roger Swadley	
		Michael Hensler	
		Jennifer Betts	
		Michael Hensler	
		Sharon Swadley Winkler	
		Stephen Swadley	
		Joleen McMillion	
		Donald Montgomery	
		Katherine Montgomery	
		Jose Bautista	
		Michael A. Dotson	
		William J. Dotson	
		Paula Nancy Bautista aka, Sr. Ma. Teresa Bautista	
		Wilma Belle Duty	
		Donna Wright	
		Mary Maxine Dolies	
		Robert Berl Dotson	
		Cynthia Somervill Modlin	
		Annette Taylor	
		Joseph C. Buckman and Beth Ellwanger Buckman, H/W	
		John Bennett	
		Karen Woodward	
		Charles Somervill and Barbara Somervill, H/W	
		Stevie Somervill, Jr.	
		Johnathan Warren Ash, aka Jonathan Warren Ash	
		Michelle Elizabeth Lyons	
		Erica Lora Henry	
		Lisa Dawn Mulfooly	
		Thomas Edward Mulfooly II	
		Lisa Joette Chambers	
		Frank Butler	
		Sam Horton	
		John Luciano	
		Ryan Taylor Henry	
		Carl Luciano	
		James Luciano	
		Donna Luciano Hall	
		Melanie Jean Hartman	
		Wayne Alexander Sarasua	
		Elizabeth Hogan, fka Elizabeth Mae Oliver	
		Natasha Marie Ash aka Natasha M. Wolfe	
		Morris Mountaineer Oil and Gas LLC	
		The Sidney Austin Smith Trust, LLC, by Security National Trust Company, Manager	
		J.W. Kerns Heirs Trust, by United Banks, Successor Trustee	
		Robert Mitchell Oliver	
		David Oliver Sarasua	
		Isabelle C. Quinn	
		Jenny Sarasua	
		Judy Sarasua	

12/17/2021

	SURFACE OWNER	LESSOR	PIN
111B	Antero Midstream LLC	Jeffrey S. Anderson	1-4-1
111B	Richard F McCullough	Braxton Minerals III, LLC	1-1-1
		Robin D. Frazer	
		Pavio Lynn Hedglin, heir of I. S. Dotson	
		Valerie L. Burkhart, heir of I. S. Dotson	
		Matthew Morgan Gangwer	
		Michael Chancellor Gangwer	
		Clarence W. Mutschelknaus and Mary F. Mutschelknaus, H/W	
		Lynida Britton Darbes	
		Richard M. Swadley and Ellen V. Swadley, H/W	
		Randall Swadley	
		Jason Baldwin, aka Jason D. H. Baldwin, heir of Savannah Hensler	
		Teresa Rush and Ronal W. Rush, W/H	
		John Robert Snaman	
		Robert F. Montgomery	
		Maria Cecilia G. Muller, heir of Ramona Duty	
		Thomas Wade Bush	
		Daniel John Bush	
		Richard J. Bush	
		Ronald G. Bush	
		Elizabeth Duty Samson, aka Elizabeth Duty	
		Alfredo E. Gallardo, Jr.	
		Albert Duty, aka Albert E. Duty	
		Francis D. Bautista	
		Rachel G. Escobedo	
		Corazon J. Bautista	
		Virginia C. Bautista	
		Norma C. Campbell	
		Edward O. Ferrebee and Diane H. Ferrebee, H/W	
		Clarence N. Leggett	
		Donna Sue Luh	
		Hermenegilda T. Bautista	
		Howard Parke Leggett	
		William Andrew Hatfield	
		Marie Christine Brinks, nee Castro, heir of John Boyd Duty	
		Joseph James Sarasua	
		Kelly M. Somervill	
		Kevin M. Somervill	
		Dominic Luciano, Jr.	
		Lawrence Lester Dotson	
		Twila Wilson	
		Larry Wilson	
		Russell Wilson	
		Hershell Wilson	
		Roger Swadley	
		Michael Hensler	
		Jennifer Betts	
		Michael Hensler	
		Sharon Swadley Winkler	
		Stephen Swadley	
		Joleen McMillion	
		Donald Montgomery	
		Katherine Montgomery	
		Jose Bautista	
		Michael A. Dotson	
		William J. Dotson	
		Paula Nancy Bautista aka, Sr. Ma. Teresa Bautista	
		Wilma Belle Duty	
		Donna Wright	
		Mary Maxine Dolles	
		Robert Berl Dotson	
		Cynthia Somervill Modlin	
		Annette Taylor	
		Joseph C. Buckman and Beth Ellwanger Buckman, H/W	
		John Bennett	
		Karen Woodward	
		Charles Somervill and Barbara Somervill, H/W	
		Stevie Somervill, Jr.	
		Johnathan Warren Ash, aka Jonathan Warren Ash	
		Michelle Elizabeth Lyons	
		Erica Lora Henry	
		Lisa Dawn Mullooly	
		Thomas Edward Mullooly II	
		Lisa Joette Chambers	
		Frank Butler	
		Sam Horton	
		John Luciano	
		Ryan Taylor Henry	
		Carl Luciano	
		James Luciano	
		Donna Luciano Hall	
		Melanie Jean Hartman	
		Wayne Alexander Sarasua	
		Elizabeth Hogan, fka Elizabeth Mae Oliver	
		Natasha Marie Ash aka Natasha M. Wolfe	
		Morris Mountaineer Oil and Gas LLC	
		The Sidney Austin Smith Trust, LLC, by Security National Trust Company, Manager	
		J.W. Kerns Heirs Trust, by United Banks, Successor Trustee	
		Robert Mitchell Oliver	
		David Oliver Sarasua	
		Isabelle C. Quinn	
		Jenny Sarasua	
		Judy Sarasua	

12/17/2021

	SURFACE OWNER	LESSOR	PIN
112	Lonnie C James	Ullie M. Shepherd	1-2-5
		Allegheny Land and Mineral Company	
		The Union National Bank as Trustee for Truman E. Gore and C. Burke Morris, u/a dtd. 8/25/1966	
118	Antero Midstream LLC	Cisco Dotson and Lola B. Dotson, his wife; and Isiah S. Dotson	1-2-6
119	Antero Midstream LLC	Arlington Dotson and Zoe Dotson, H/W	1-4-1
119	Melissa A Shepard		1-4-1.4
119	James E Shepard II		1-4-1.5
119	Michael Shepard		1-4-10
120A	James E Shepard II	Franklin L. Butler	1-3-2 1-3-2.1 1-3-2.2
		Lisa Dawn Mullooly	
		Thomas E. Mullooly, II	
		Lisa J. Chambers	
120B	James E Shepard II	Franklin L. Butler	1-3-2
		Lisa Dawn Mullooly	
		Thomas E. Mullooly, II	
		Lisa J. Chambers	
121	West Virginia Department of Transportation, Division of Highways ET AL	West Virginia Department of Transportation, Division of Highways	Unknown
124A	Michael Shepard	McKendry Dotson and Mattie Dotson, H/W	1-4-10
124B	Michael Shepard	McKendry Dotson and Mattie Dotson, H/W	1-4-10
		Arlington Dotson and Zoe Dotson, H/W	

12/17/2021

LATITUDE 39° 22' 30"

TH: 3,520'

LATITUDE 39° 20' 00"

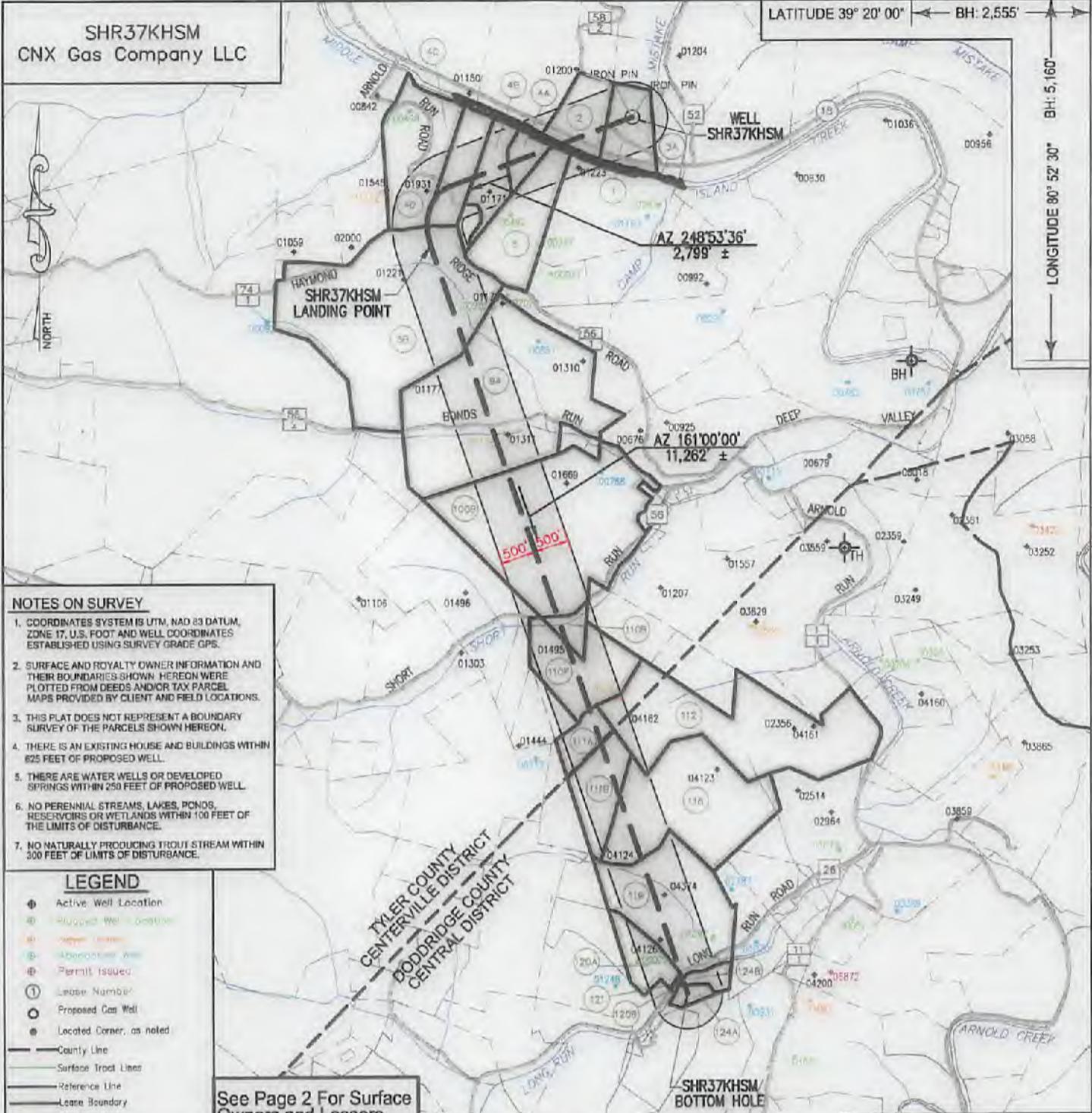
BH: 2,555'

LONGITUDE 80° 52' 30"

TH: 7,840'

LONGITUDE 80° 50' 00"

SHR37KHSM  
CNX Gas Company LLC



**NOTES ON SURVEY**

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- THERE IS AN EXISTING HOUSE AND BUILDINGS WITHIN 825 FEET OF PROPOSED WELL.
- THERE ARE WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

**LEGEND**

- Active Well Location
- Proposed Well Location
- Well Location
- Abandoned Well
- Permit Issued
- ① Lease Number
- Proposed Gas Well
- Located Corner, as noted
- County Line
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- WV County Route
- WV State Route

See Page 2 For Surface Owners and Lessors

(\*) Denotes Location of Well on United States Topographic Maps



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.

*Thomas C. Smits*

L. L. S. 687



SEAL

FILE NO: \_\_\_\_\_  
 DRAWING NO: \_\_\_\_\_  
 SCALE: 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY: 1:2500  
 PROVEN SOURCE OF ELEVATION: SG-GPS (OPUS)

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

DATE: November 03 20 21  
 OPERATORS WELL NO: SHR37KHSM  
 API WELL NO: 47 - 095 - 02768  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

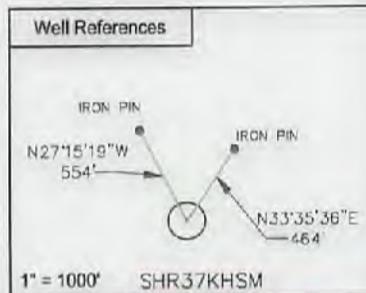
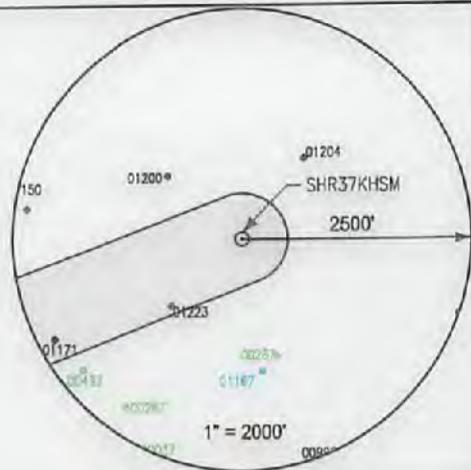
LOCATION ELEVATION: 828' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union, WV 7.5'  
 DISTRICT: Centerville COUNTY: Tyler

SURFACE OWNER: CNX Gas Company LLC ACREAGE: 164/12/17/2021  
 ROYALTY OWNER: Eleanor V. & Dean A. Earnheart, et al. LEASE NO: 269278000 ACREAGE: 720.525 ±

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: TVD: 6,302'

WELL OPERATOR: CNX Gas Company LLC DESIGNATED AGENT: Anthony Kendziora  
 ADDRESS: 1000 Consol Energy Drive ADDRESS: 1000 Consol Energy Drive  
 Canonsburg, PA 15317 Canonsburg, PA 15317

SURFACE OWNER	LESSOR	PM
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 Wanda Weekley, widow Myra 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 Wanda Weekley, widow Myra Morgan and David Morgan, H/W Reva D. Rowland aka Reva Rowland and Ronald Royce Rowland	1-17-6
3A West Virginia Division of Natural Resources	West Virginia Division of Natural Resources	Middle Island Creek
4A James R Sr. & James R Jr. Underwood & Mitzie Johnson	Vattie Dotson Flint Aris Hope Jack Parker, AIF for Colen C. Jack Linda E. Bright aka Unda Bright Viola M. Trenton aka Viola Trenton Judy Schillace and Nicholas Schillace, W/H William Christopher Taylor and Cynthia Taylor, H/W Maryless Haymond and Floyd Haymond, W/H Gayla A. Beech aka Gayla A. Hickman Helen Louise Hickman aka Helen L. Hickman aka Helen Louise Leasure, by her AIF, Frances Louise Bunner aka Frances L. Bunner Ruby Newlon Cheryl L. Tadsen aka Cheryl L. Gill and James F. Tadsen, W/H Barbara J. Davis aka Barbara Davis Cindy A. Gill aka Cynthia Ann Gill David M. Gill aka David Michael Gill and Catherine J. Gill aka Cathy Gill, H/W Terry R. Washburn aka Terry Washburn and Joy D. Washburn, H/W Jean Kuchenbecker aka Nellie Jean Kuchenbecker aka Nellie Jean Hickman and William Kuchenbecker, W/H James Albert Taylor Judy Webb aka Judy Newbrough Cledith H. Davis Linda L. Catona aka Unda L. Sellers B. Pauline Murphy aka B. Pauline Moore Deaver Hickman Delmas Hickman Donna D. Hart Howard W. Smith aka Bill Smith Amanda L. Davis Connie Sue Maxwell and Michael Wayne Maxwell, W/H Alex Craig Smith aka Alex C. Smith and Robbie Smith, H/W Eric Scott Smith William Gene Stone Emerson C. Davis, II Theodore E. Davis and Jill Davis, H/W Michael P. Davis Mertha Jill Holliday Juli Edith Germany Kimberly Wilcox and Danny Wilcox, W/H Matthew Storm Shirley L. Urbaniowicz aka Shirley L. Quinn aka Shirley L. Hickman and John Quinn, W/H Deanna Zirkelbach aka Deanna Stamper and Tommy Zirkelbach, W/H Ronald Sessler	1-17-12.1



**SURFACE HOLE LOCATION (SHL)**

UTM 17 NAD 83
N: 4356014.578
E: 513287.726
NAD 83, WV NORTH
N: 313709.139
E: 1587963.819
LAT/LON DATUM NAD 83
LAT: 39° 21' 12.509"
LONG: 80° 50' 44.798"

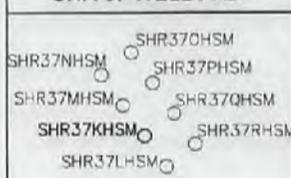
**LANDING POINT**

UTM 17 NAD 83
N: 4356432.813
E: 512418.539
NAD 83, WV NORTH
N: 311847.772
E: 1585073.137
LAT/LON DATUM NAD 83
LAT: 39° 20' 53.694"
LONG: 80° 51' 21.237"

**BOTTOM HOLE LOCATION (BHL)**

UTM 17 NAD 83
N: 4352207.393
E: 513,587.690
NAD 83, WV NORTH
N: 301199.323
E: 1598739.704
LAT/LON DATUM NAD 83
LAT: 39° 19' 08.991"
LONG: 80° 50' 32.542"

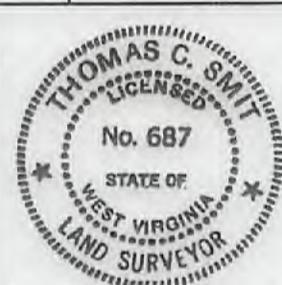
**SHR 37 WELL PAD**



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.

*L. L. S.*

L. L. S. 687



SEAL

FILE NO:
DRAWING NO:
SCALE: 1" = 1000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: November 03 20 21
OPERATORS WELL NO: SHR37KHSM
API WELL NO: 47 - 095 - 02768
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION ELEVATION: 828' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union, WV 7.5'  
 DISTRICT: Centerville COUNTY: Tyler

SURFACE OWNER: CNX Gas Company LLC ACREAGE: 18 ±  
 ROYALTY OWNER: Eleanor V. & Dean A. Earnheart, et al. LEASE NO: 269278000 ACREAGE: 720.525 ±

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: TVD: 6,302'

WELL OPERATOR: CNX Gas Company LLC DESIGNATED AGENT: Anthony Kendziora  
 ADDRESS: 1000 Consol Energy Drive ADDRESS: 1000 Consol Energy Drive  
 Canonsburg, PA 15317 Canonsburg, PA 15317

	SURFACE OWNER	LESSOR	PIN
4B	Kimberly Ridgeway	Nathan Josephs Mattie Dotson Flint Aris Hope Jack Parker, AIF for Colen C. Jack	1-17-3
4C	Kimberly Ridgeway	Nathan Josephs	1-17-3
4D	Kimberly Ridgeway	Nathan Josephs	1-17-3
5A	James R Sr. & James R Jr. Underwood & Mitzie Johnson	Sarah E. Doak, Austin Doak, and Myrtle E. Doak, H/W, Dorsey Doak and Sarah E. Doak, H/W, Oliver A. Doak, Kirby D. Doak, Ida Lemasters and Elzy Lemasters, W/H, Myrtle White and Jasper White, W/H Tribune Resources Minerals, LLC fka Ascent Resources Marcellus Minerals, LLC	1-17-12.1
5B	Andrew E Smith	Sarah E. Doak, Austin Doak, and Myrtle E. Doak, H/W, Dorsey Doak and Sarah E. Doak, H/W, Oliver A. Doak, Kirby D. Doak, Ida Lemasters and Elzy Lemasters, W/H, Myrtle White and Jasper White, W/H	1-17-2.4
5B	CNG Transmission Corporation		1-17-12
5B	James R Sr. & James R Jr. Underwood & Mitzie Johnson		1-17-12.2
		Tribune Resources Minerals, LLC, Ascent Resources Marcellus Minerals, LLC	
94	George W Ash	Donna J. Griffith and Jacob Paul Griffith Peggy A. Bumpass Laura Jean Suddreth Michael R. Burk Janet Cliff Pitts Paul Conger and Mary Conger Debbie Hileman and Mark A. Hileman Jeffrey A. James and Maria J. James William Patrick James and Dianne James Pamela Fern Friedman Dwight Eugene Sturm Arina Colleen Presley aka Colleen Presley Patricia G. Doty Phillip Wayne Sturm Lisa Schafer Carol Elaine Higgins and Everett Higgins aka Everett W. Higgins Michael James and Vicky L. James Doris J. Bee and Livingstone S. Bee Jill Robin Thompson and Kelvin Thompson Jock Jeffrey Pitts aka Jock J. Pitts and Deborah M. Pitts David Eugene Bersebach Judith Adams fka Judith Diane Polling and Clifford Adams Denise Gambill aka Denis K. Gambill Gregory R. Mercer James W. Schumacher and Lisa B. Schumacher Larry O. Schumacher and Kathleen M. Schumacher Lori Hufstедler Mary Jane Schumacher Bryan Bumgarner and Lisa D. Bumgarner Patricia Ruth Heater, By Paul Eugene Heater, Jr. POA Sheryl Groves Waco Oil and Gas Co., Inc. Gregory Sellers aka Greg Sellers and D. Lee Seller James Lindsey Betty Lewis and Douglas C. Lewis Robert Groves and Carol J. Groves Ann Adel Gosney Kimberley Abrecht fka Kimberly Gene Pitts C. Gloria Atkinson aka Gloria Atkinson and Charles W. Atkinson Matthew Pitts Boda Family Trust, by Margaret E. Boda, Co-Trustee by Wanda L. Boda, POA and Wand L. Boda Co-Trustee Kathryn Stephens Nicholas R. Lucas Tyler Pitts Linda J. Franz Terri Ann Suddreth Ernest M. Sharp Thomas Lee Suddreth Michael Allan McGlasson Carol Groves AMP Fund II, LP Deanna L. Weese Gary Alan Listoe Lorraine E. Glidenhorn James C. Pierce, Jr. Jan B. Crawford Julie E. Walsh Don Leroy Pierce Kathleen McCuskey Christopher Scott Power Beverly J. Collins Sandra Gail Stevens, nee Power Harold Hunt Power Trust WA/D 7/29/2004 Antero Minerals, LLC	1-17-13
100B	Charles M Young Jr & Crystal R Young	Margaret E. Doak	1-17-24
100B	Ronald & Frances Hurst	Robert L. Doak and Aline Doak, h/w Donna Jean Long Waco Oil and Gas Co., Inc. Norma Long, widow	1-17-24.1
110B	James R & Tricia Mushinsky	Ina M. Montgomery, AIF, for Leslie E. Montgomery and Ina M. Montgomery, H/W Mildred M. Stevens, widow and Cheryl B. Ash, Sr., single Sam Horton and Carol Horton, H/W, Frank Butler and Molly Butler, H/W, Edward Mullooly, single Ralph Thacker and Betty Thacker, H/W, J. Maurice Carlisle and Mary Ann Carlisle, H/W Kenneth R. Mason and Jennifer L. Mason, H/W	1-20-6.2
110F	James R & Tricia Mushinsky	Ina M. Montgomery, AIF, for Leslie E. Montgomery and Ina M. Montgomery, H/W Mildred M. Stevens, widow and Cheryl B. Ash, Sr., single Sam Horton and Carol Horton, H/W, Frank Butler and Molly Butler, H/W, Edward Mullooly, single Ralph Thacker and Betty Thacker, H/W, J. Maurice Carlisle and Mary Ann Carlisle, H/W Waco Oil and Gas Co., Inc. Kenneth R. Mason and Jennifer L. Mason, H/W Norma T. Long Trust, dated November 8, 2013	1-20-6

12/17/2021

	SURFACE OWNER	LESSOR	PIN
111A	Antero Midstream LLC	Jeffrey S. Anderson	1-4-1
111A	Richard F McCullough	Braxton Minerals III, LLC	1-2-1
		Robin D. Frazer	
		Pavlo Lynn Hedglin, heir of I. S. Dotson	
		Valerie L. Burkhart, heir of I. S. Dotson	
		Matthew Morgan Gangwer	
		Michael Chancellor Gangwer	
		Clarence W. Mutschelknaus and Mary F. Mutschelknaus, H/W	
		Lynida Britton Darbes	
		Richard M. Swadley and Ellen V. Swadley, H/W	
		Randall Swadley	
		Jason Baldwin, aka Jason D. H. Baldwin, heir of Savannah Hensler	
		Teresa Rush and Ronal W. Rush, W/H	
		John Robert Snaman	
		Robert F. Montgomery	
		Maria Cecilia G. Muller, heir of Ramona Duty	
		Thomas Wade Bush	
		Daniel John Bush	
		Richard J. Bush	
		Ronald G. Bush	
		Elizabeth Duty Samson, aka Elizabeth Duty	
		Alfredo E. Gallardo, Jr.	
		Albert Duty, aka Albert E. Duty	
		Francis D. Bautista	
		Rachel G. Escobedo	
		Corazon J. Bautista	
		Virginia C. Bautista	
		Norma C. Campbell	
		Edward O. Ferrebee and Diane H. Ferrebee, H/W	
		Clarence N. Leggett	
		Donna Sue Luh	
		Hermenegilda T. Bautista	
		Howard Parke Leggett	
		William Andrew Hatfield	
		Marie Christine Brinks, nee Castro, heir of John Boyd Duty	
		Joseph James Sarasua	
		Kelly M. Somervill	
		Kevin M. Somervill	
		Dominic Luciano, Jr.	
		Lawrence Lester Dotson	
		Twila Wilson	
		Larry Wilson	
		Russell Wilson	
		Hershel Wilson	
		Roger Swadley	
		Michael Hensler	
		Jennifer Betts	
		Michael Hensler	
		Sharon Swadley Winkler	
		Stephen Swadley	
		Joleen McMillion	
		Donald Montgomery	
		Katherine Montgomery	
		Jose Bautista	
		Michael A. Dotson	
		William J. Dotson	
		Paula Nancy Bautista aka, Sr. Ma. Teresa Bautista	
		Wilma Belle Duty	
		Donna Wright	
		Mary Maxine Dolies	
		Robert Berl Dotson	
		Cynthia Somervill Modlin	
		Annette Taylor	
		Joseph C. Buckman and Beth Ellwanger Buckman, H/W	
		John Bennett	
		Karen Woodward	
		Charles Somervill and Barbara Somervill, H/W	
		Stevie Somervill, Jr.	
		Johnathan Warren Ash, aka Jonathan Warren Ash	
		Michelle Elizabeth Lyons	
		Erica Lora Henry	
		Lisa Dawn Mullooly	
		Thomas Edward Mullooly II	
		Lisa Joette Chambers	
		Frank Butler	
		Sam Horton	
		John Luciano	
		Ryan Taylor Henry	
		Carl Luciano	
		James Luciano	
		Donna Luciano Hall	
		Melanie Jean Hartman	
		Wayne Alexander Sarasua	
		Elizabeth Hogan, fka Elizabeth Mae Oliver	
		Natasha Marie Ash aka Natasha M. Wolfe	
		Morris Mountaineer Oil and Gas LLC	
		The Sidney Austin Smith Trust, LLC, by Security National Trust Company, Manager	
		J.W. Kerns Heirs Trust, by United Banks, Successor Trustee	
		Robert Mitchell Oliver	
		David Oliver Sarasua	
		Isabelle C. Quinn	
		Jenny Sarasua	
		Judy Sarasua	

12/17/2021

	SURFACE OWNER	LESSOR	PIN
111B	Antero Midstream LLC	Jeffrey S. Anderson	1-4-1
111B	Richard F McCullough	Braxton Minerals III, LLC	1-1-1
		Robin D. Frazer	
		Pavlo Lynn Hedglin, heir of I. S. Dotson	
		Valeie L. Burkhart, heir of I. S. Dotson	
		Matthew Morgan Gangwer	
		Michael Chancellor Gangwer	
		Clarence W. Mutschelknaus and Mary F. Mutschelknaus, H/W	
		Lynida Britton Darbes	
		Richard M. Swadley and Eilen V. Swadley, H/W	
		Randall Swadley	
		Jason Baldwin, aka Jason D. H. Baldwin, heir of Savannah Hensler	
		Teresa Rush and Ronal W. Rush, W/H	
		John Robert Snaman	
		Robert F. Montgomery	
		Maria Cecilia G. Muller, heir of Ramona Duty	
		Thomas Wade Bush	
		Daniel John Bush	
		Richard J. Bush	
		Ronald G. Bush	
		Elizabeth Duty Samson, aka Elizabeth Duty	
		Alfredo E. Gallardo, Jr.	
		Albert Duty, aka Albert E. Duty	
		Francis D. Bautista	
		Rachel G. Escobedo	
		Corazon J. Bautista	
		Virginia C. Bautista	
		Norma C. Campbell	
		Edward O. Ferrebee and Diane H. Ferrebee, H/W	
		Clarence N. Leggett	
		Donna Sue Luh	
		Hermenegilda T. Bautista	
		Howard Parke Leggett	
		William Andrew Hatfield	
		Marie Christine Brinks, nee Castro, heir of John Boyd Duty	
		Joseph James Sarasua	
		Kelly M. Somervill	
		Kevin M. Somervill	
		Dominic Luciano, Jr.	
		Lawrence Lester Dotson	
		Twila Wilson	
		Larry Wilson	
		Russell Wilson	
		Hershell Wilson	
		Roger Swadley	
		Michael Hensler	
		Jennifer Betts	
		Michael Hensler	
		Sharon Swadley Winkler	
		Stephen Swadley	
		Joleen McMillion	
		Donald Montgomery	
		Katherine Montgomery	
		Jose Bautista	
		Michael A. Dotson	
		William J. Dotson	
		Paula Nancy Bautista aka, Sr. Ma. Teresa Bautista	
		Wilma Belle Duty	
		Donna Wright	
		Mary Maxine Dolies	
		Robert Berl Dotson	
		Cynthia Somervill Modlin	
		Annette Taylor	
		Joseph C. Buckman and Beth Ellwanger Buckman, H/W	
		John Bennett	
		Karen Woodward	
		Charles Somervill and Barbara Somervill, H/W	
		Stevie Somervill, Jr.	
		Johnathan Warren Ash, aka Jonathan Warren Ash	
		Michelle Elizabeth Lyons	
		Erica Lora Henry	
		Lisa Dawn Mullooly	
		Thomas Edward Mullooly II	
		Lisa Joette Chambers	
		Frank Butler	
		Sam Horton	
		John Luciano	
		Ryan Taylor Henry	
		Carl Luciano	
		James Luciano	
		Donna Luciano Hall	
		Melanie Jean Hartman	
		Wayne Alexander Sarasua	
		Elizabeth Hogan, fka Elizabeth Mae Oliver	
		Natasha Marie Ash aka Natasha M. Wolfe	
		Morris Mountaineer Oil and Gas LLC	
		The Sidney Austin Smith Trust, LLC, by Security National Trust Company, Manager	
		J.W. Kerns Heirs Trust, by United Banks, Successor Trustee	
		Robert Mitchell Oliver	
		David Oliver Sarasua	
		Isabelle C. Quinn	
		Jenny Sarasua	
		Judy Sarasua	

12/17/2021

	SURFACE OWNER	LESSOR	PIN
112	Lonnie C James	Lillie M. Shepherd	1-2-5
		Allegheny Land and Mineral Company	
		The Union National Bank as Trustee for Truman E. Gore and C. Burke Morris, u/a dtd. 8/25/1966	
118	Antero Midstream LLC	Cisco Dotson and Lola B. Dotson, his wife; and Isiah S. Dotson	1-2-6
119	Antero Midstream LLC	Arlington Dotson and Zoe Dotson, H/W	1-4-1
119	Melissa A Shepard		1-4-1.4
119	James E Shepard II		1-4-1.5
119	Michael Shepard		1-4-10
120A	James E Shepard II	Franklin L. Butler	1-3-2 1-3-2.1 1-3-2.2
		Lisa Dawn Mullooly	
		Thomas E. Mullooly, II	
		Usa J. Chambers	
120B	James E Shepard II	Franklin L. Butler	1-3-2
		Usa Dawn Mullooly	
		Thomas E. Mullooly, II	
		Lisa J. Chambers	
121	West Virginia Department of Transportation, Division of Highways ET AL.	West Virginia Department of Transportation, Division of Highways	Unknown
124A	Michael Shepard	McKendry Dotson and Mattie Dotson, H/W	1-4-10
124B	Michael Shepard	McKendry Dotson and Mattie Dotson, H/W	1-4-10
		Arlington Dotson and Zoe Dotson, H/W	

12/17/2021

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

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

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

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

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

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

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

RECEIVED  
Office of Oil and Gas

NOV 15 2021

WV Department of  
Environmental Protection

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

Well Operator: CNX GAS COMPANY LLC  
 By: Sarah Weigand *Sarah Weigand*  
 Its: Manager Upstream Permitting



Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
			Michael P. Davb	CNX Gas Company, LLC	Not less than 1/8	98/395
			Martha Jill Holliday	CNX Gas Company, LLC	Not less than 1/8	95/323
			Juli Edith Germany	CNX Gas Company, LLC	Not less than 1/8	108/584
			Kimberly Wilcox and Danny Wilcox, w/h	CNX Gas Company, LLC	Not less than 1/8	108/574
			Matthew Storm	CNX Gas Company, LLC	Not less than 1/8	121/192
			Shirley L. Urbanowicz, s/k/a Shirley L. Quinn, f/k/a, Shirley L. Hickman and John Quinn, w/h	CNX Gas Company, LLC	Not less than 1/8	108/579
			Deanna Zirkebach, f/k/a Deanna Stamper and Tommy Zirkebach, w/h	CNX Gas Company, LLC	Not less than 1/8	121/458
			Ronald Sessler	CNX Gas Company, LLC	Not less than 1/8	121/454
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
48	1-17-3	266308000	Nathan Josephs	Central Development Company	Not less than 1/8	61/344
			Central Development Company	Carnegie Natural Gas Company	Assignment	Unrecorded
			Carnegie Natural Gas Company	Murvin Oil Company	Assignment	304/368
			Murvin Oil Company	Murvin & Meier Oil Company	Assignment	318/233
			Murvin & Meier Oil Company	CNX Gas Company, LLC	Assignment	83/344
			Mattie Dotson Flint	J&J Enterprises, Inc.	Not less than 1/8	259/283
			Arls Hope Jack Parker, AIF for Colen C. Jack	J&J Enterprises, Inc.	Not less than 1/8	259/281
			J&J Enterprises, Inc.	Eastern American Energy Corp.	Assignment	282/296
			Eastern American Energy Corp.	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 Corp.	Assignment	402/132
			Antero Resources Appalachian Corp.	CNX Gas Company, LLC and Noble Energy, Inc.	Assignment	433/7
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	550/273
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
4C	1-17-3	266308000	Nathan Josephs	Central Development Company	Not less than 1/8	61/344
			Central Development Company	Carnegie Natural Gas Company	Assignment	Unrecorded
			Carnegie Natural Gas Company	Murvin Oil Company	Assignment	304/368
			Murvin Oil Company	Murvin & Meier Oil Company	Assignment	318/233
			Murvin & Meier Oil Company	CNX Gas Company, LLC	Assignment	83/344
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
4D	1-17-3	266308000	Nathan Josephs	Central Development Company	Not less than 1/8	61/344
			Central Development Company	Carnegie Natural Gas Company	Assignment	Unrecorded
			Carnegie Natural Gas Company	Murvin Oil Company	Assignment	304/368
			Murvin Oil Company	Murvin & Meier Oil Company	Assignment	318/233
			Murvin & Meier Oil Company	CNX Gas Company, LLC	Assignment	83/344
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
5A	1-17-12.1	271971000	Sarah E. Doak, Austin Doak, and Myrtle E. Doak, h/w, Dorsey Doak and Sarah E. Doak, h/w, Oliver A. Doak, Kirby D. Doak, Ida Lemasters and Etzy Lemasters, w/h, Myrtle White and Jasper White, w/h	Hope Natural Gas Company	Not less than 1/8	73/138
			Hope Natural Gas Company	Consolidated Gas Supply Corporation	Assignment	169/26
			Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	249/287
			Consolidated Gas Transmission Corporation	Mike Ross, Inc.	Assignment	326/34
			Mike Ross, Inc.	Antero Resources Corporation	Assignment	643/153
			Mike Ross, Inc.	Antero Resources Corporation	Extension	20/291
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	23/398
			Tribune Resources Minerals, LLC, f/k/a Ascent Resources Marcellus Minerals, LLC	CNX Gas Company, LLC	Fee	655/515
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
5B	1-17-12.2 1-17-12.4	271971000	Sarah E. Doak, Austin Doak, and Myrtle E. Doak, h/w, Dorsey Doak and Sarah E. Doak, h/w, Oliver A. Doak, Kirby D. Doak, Ida Lemasters and Etzy Lemasters, w/h, Myrtle White and Jasper White, w/h	Hope Natural Gas Company	Not less than 1/8	73/138
			Hope Natural Gas Company	Consolidated Gas Supply Corporation	Assignment	169/26
			Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	249/287
			Consolidated Gas Transmission Corporation	Mike Ross, Inc.	Assignment	326/34
			Mike Ross, Inc.	Antero Resources Corporation	Assignment	643/153
			Mike Ross, Inc.	Antero Resources Corporation	Extension	20/291
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	23/398
			Tribune Resources Minerals, LLC, f/k/a Ascent Resources Marcellus Minerals, LLC	CNX Gas Company, LLC	Fee	655/515
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
94	1-17-13	267070000	Donna J. Griffith and Jacob Paul Griffith	Noble Energy, Inc.	Not less than 1/8	486/520
			Peggy A. Bumpass	Noble Energy, Inc.	Not less than 1/8	508/663
			Laura Jean Suddreth	Noble Energy, Inc.	Not less than 1/8	524/312
			Michael R. Burk	Noble Energy, Inc.	Not less than 1/8	527/478
			Janet Cliff Pitts	Noble Energy, Inc.	Not less than 1/8	526/608
			Paul Conger and Mary Conger	Noble Energy, Inc.	Not less than 1/8	520/403
			Debbie Hileman and Mark A. Hileman	Noble Energy, Inc.	Not less than 1/8	503/56
			Jeffrey A. James and Marie J. James	Noble Energy, Inc.	Not less than 1/8	503/58
			William Patrick James and Dianne James	Noble Energy, Inc.	Not less than 1/8	506/68
			Pamela Fern Friedman	Noble Energy, Inc.	Not less than 1/8	520/332
			Dwight Eugene Sturm	Noble Energy, Inc.	Not less than 1/8	524/317
			Anna Colleen Presley aka Colleen Presley	Noble Energy, Inc.	Not less than 1/8	524/335
			Patricia G. Doty	Noble Energy, Inc.	Not less than 1/8	524/332
			Philip Wayne Sturm	Noble Energy, Inc.	Not less than 1/8	524/320
			Lisa Schaefer	Noble Energy, Inc.	Not less than 1/8	524/347
			Carol Elaine Higgins and Everett Higgins aka Everett W. Higgins	Noble Energy, Inc.	Not less than 1/8	527/485
			Michael James and Vicky L. James	Noble Energy, Inc.	Not less than 1/8	520/417
			Doris J. Bee and Livingstone S. Bee	Noble Energy, Inc.	Not less than 1/8	520/397
			Jill Robin Thompson and Kelvin Thompson	Noble Energy, Inc.	Not less than 1/8	520/538
			Jock Jeffrey Pitts aka Jock J. Pitts and Deborah M. Pitts	Noble Energy, Inc.	Not less than 1/8	520/324
			David Eugene Bersebach	Noble Energy, Inc.	Not less than 1/8	527/472
			Judith Adams aka Judith Diane Poling and Clifford Adams	Noble Energy, Inc.	Not less than 1/8	534/233
			Denise Gambill aka Denis K. Gambill	Noble Energy, Inc.	Not less than 1/8	534/265
			Gregory R. Mercer	Noble Energy, Inc.	Not less than 1/8	534/262
			James W. Schumacher and Lisa B. Schumacher	Noble Energy, Inc.	Not less than 1/8	532/207

			Larry O. Schumacher and Kathleen M. Schumacher	Noble Energy, Inc.	Not less than 1/8	532/187
			Lori Hufstetler	Noble Energy, Inc.	Not less than 1/8	532/171
			Mary Jane Schumacher	Noble Energy, Inc.	Not less than 1/8	534/287
			Bryan Bumgarner and Lisa D. Bumgarner	Noble Energy, Inc.	Not less than 1/8	535/519
			Patricia Ruth Heater, By Paul Eugene Heater, Jr. POA	Noble Energy, Inc.	Not less than 1/8	534/278
			Sheryl Groves	Noble Energy, Inc.	Not less than 1/8	532/167
			Waco Oil and Gas Co., Inc.	Noble Energy, Inc.	Not less than 1/8	534/302
			Gregory Sellers aka Greg Sellers and D. Lee Seller	Noble Energy, Inc.	Not less than 1/8	538/525
			James Lindsay	Noble Energy, Inc.	Not less than 1/8	538/541
			Betty Lewis and Douglas C. Lewis	Noble Energy, Inc.	Not less than 1/8	538/511
			Robert Groves and Carol J. Groves	Noble Energy, Inc.	Not less than 1/8	541/430
			Ann Adel Gosney	Noble Energy, Inc.	Not less than 1/8	543/562
			Kimberly Abracht fka Kimberly Gene Pitts	Noble Energy, Inc.	Not less than 1/8	543/534
			C. Gloria Atkinson aka Gloria Atkinson and Charles W. Atkinson	Noble Energy, Inc.	Not less than 1/8	545/845
			Matthew Pitts	Noble Energy, Inc.	Not less than 1/8	543/538
			Boda Family Trust, by Margaret E. Boda, Co-Trustee by Wanda L. Boda, POA and Wand L. Boda Co-Trustee	Noble Energy, Inc.	Not less than 1/8	541/506
			Kathryn Stephens	Noble Energy, Inc.	Not less than 1/8	546/21
			Nicholas R. Lucas	Noble Energy, Inc.	Not less than 1/8	546/13
			Tyler Pitts	Noble Energy, Inc.	Not less than 1/8	545/841
				CNX Gas Company, LLC	Assignment	521/80
				CNX Gas Company, LLC	Assignment	542/134
				CNX Gas Company, LLC	Assignment	542/147
				CNX Gas Company, LLC	Assignment	550/273
			Linda J. Franz	Noble Energy, Inc.	Not less than 1/8	543/403
			Noble Energy, Inc.	HG Energy Appalachia II, LLC	Assignment	570/96
			HG Energy Appalachia II, LLC	Antero Resources Corporation	Assignment	667/1
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	23/398
			Terri Ann Suddreth	CNX Gas Company, LLC	Not less than 1/8	588/688
			Ernest M. Sharp	CNX Gas Company, LLC	Not less than 1/8	591/469
			Thomas Lee Suddreth	CNX Gas Company, LLC	Not less than 1/8	597/817
			Michael Allan McGlasson	CNX Gas Company, LLC	Not less than 1/8	665/752
			Carol Groves	CNX Gas Company, LLC	Not less than 1/8	135/196
			AMP Fund II, LP	Antero Resources Corporation	Not less than 1/8	656/747
			Deanna L. Weese	Antero Resources Corporation	Not less than 1/8	658/384
			Gary Alan Listoe	Antero Resources Corporation	Not less than 1/8	658/389
			Lorraine E. Gildenhorn	Antero Resources Corporation	Not less than 1/8	660/225
			James C. Pierce, Jr.	Antero Resources Corporation	Not less than 1/8	659/485
			Jan B. Crawford	Antero Resources Corporation	Not less than 1/8	659/341
			Julie K. Walsh	Antero Resources Corporation	Not less than 1/8	659/490
			Don Leroy Pierce	Antero Resources Corporation	Not less than 1/8	659/685
			Kathleen McCluskey	Antero Resources Corporation	Not less than 1/8	660/260
			Christopher Scott Power	Antero Resources Corporation	Not less than 1/8	665/749
			Beverly J. Collins	Antero Resources Corporation	Not less than 1/8	659/495
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	23/398
			Sandra Gail Stevens, nee Power	Antero Resources Corporation	Not less than 1/8	666/328
			Harold Hunt Power Trust U/A/D 7/29/2004			
			Antero Minerals, LLC	Antero Resources Corporation	Not less than 1/8	68/755
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	109/674
<b>Tract ID</b>	<b>Tax Map &amp; Parcel</b>	<b>Title Opinion QLS #</b>	<b>Grantor, Lessor, etc</b>	<b>Grantee, Lessee, etc</b>	<b>Royalty</b>	<b>Book/Page</b>
100B	1-17-24 1-17-24.1	269990000	Margaret E. Doak Robert L. Doak and Aline Doak, h/w Donna Jean Long Drilling Appalachian Corporation	Drilling Appalachian Corporation Drilling Appalachian Corporation Drilling Appalachian Corporation Antero Resources Corporation	Not less than 1/8 Not less than 1/8 Not less than 1/8 Assignment	318/150 318/164 317/518 391/416
			Antero Resources Corporation	CNX Gas Company LLC and Noble Energy, Inc.	Assignment	421/130
			Noble Energy, Inc.	CNX Gas Company, LLC	Assignment	503/738
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	550/273
						629/658
			Waco Oil and Gas Co., Inc.	Antero Resources Corporation	Not less than 1/8	559/675
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	629/658
			Norma Long, widow	Exxon Corporation	Not less than 1/8	209/132
			Exxon Corporation	XTO Energy Inc.	Assignment	496/126
			XTO Energy Inc.	Antero Resources Corporation	Assignment	532/239
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	629/658
<b>Tract ID</b>	<b>Tax Map &amp; Parcel</b>	<b>Title Opinion QLS #</b>	<b>Grantor, Lessor, etc</b>	<b>Grantee, Lessee, etc</b>	<b>Royalty</b>	<b>Book/Page</b>
110B	1-20-6.2	271969000	Ina M. Montgomery, AIF, for Leslie E. Montgomery and Ina M. Mildred M. Stevens, widow and Clary B. Ash, Sr., single Bojacque, Inc. Bojacque, Inc.	Bojacque, Inc. Bojacque, Inc. Stonewall Gas Company Stonewall Gas Company	Not less than 1/8 Not less than 1/8 Assignment Assignment	273/338 274/250 278/485 278/464
			Stonewall Gas Company	Drilling Appalachian Corporation	Assignment	282/392
			Drilling Appalachian Corporation	Antero Resources Corporation	Assignment	287/547
						401/499
			Antero Resources Corporation	CNX Gas Company LLC	Assignment	421/138
						629/658
			Sam Horton and Carol Horton, h/w, Frank Butler and Molly Butler, h/w, Edward Mullooly, single	Stonewall Gas Company	Not less than 1/8	287/325
			Stonewall Gas Company	Drilling Appalachian Corporation	Assignment	287/547
			Drilling Appalachian Corporation	Antero Resources Corporation	Assignment	401/499
						421/138
			Antero Resources Corporation	CNX Gas Company LLC	Assignment	629/658
			Ralph Thacker and Betty Thacker, h/w, J. Maurice Carlisle and Mary Ann Carlisle, h/w	Drilling Appalachian Corporation	Not less than 1/8	286/444
			Drilling Appalachian Corporation	Antero Resources Corporation	Assignment	401/499
						421/138
			Antero Resources Corporation	CNX Gas Company LLC	Assignment	629/658
			Kenneth R. Mason and Jennifer L. Mason, h/w	CNX Gas Company, LLC	Not less than 1/8	124/765
<b>Tract ID</b>	<b>Tax Map &amp; Parcel</b>	<b>Title Opinion QLS #</b>	<b>Grantor, Lessor, etc</b>	<b>Grantee, Lessee, etc</b>	<b>Royalty</b>	<b>Book/Page</b>

110F	1-20-6	271969000	Ina M. Montgomery, AIF, for Leslie E. Montgomery and Ina M. Montgomery, h/w Mildred M. Stevens, widow and Cheryl B. Ash, Sr., single Bojacque, Inc. Bojacque, Inc. Stonewall Gas Company Drilling Appalachian Corporation Antero Resources Corporation	Bojacque, Inc. Bojacque, Inc. Stonewall Gas Company Stonewall Gas Company Drilling Appalachian Corporation Antero Resources Corporation CNX Gas Company LLC	Not less than 1/8 Not less than 1/8 Assignment Assignment Assignment Assignment Assignment	273/338 274/250 278/485 278/464 282/392 287/547 401/499 421/138 629/658
			Sam Horton and Carol Horton, h/w, Frank Butler and Molly Butler, h/w, Edward Mullooly, single Stonewall Gas Company Drilling Appalachian Corporation Antero Resources Corporation	Stonewall Gas Company Drilling Appalachian Corporation Antero Resources Corporation CNX Gas Company LLC	Not less than 1/8 Assignment Assignment Assignment	287/325 287/547 401/499 421/138 629/658
			Ralph Thacker and Betty Thacker, h/w, J. Maurice Carlisle and Mary Ann Carlisle, h/w Drilling Appalachian Corporation Antero Resources Corporation Antero Resources Corporation	Drilling Appalachian Corporation Antero Resources Corporation CNX Gas Company LLC	Not less than 1/8 Assignment Assignment	286/444 401/499 421/138 629/658
			Waco Oil and Gas Co., Inc. Antero Resources Corporation	Antero Resources Corporation CNX Gas Company, LLC	Not less than 1/8 Assignment	559/678 629/658
			Kenneth R. Mason and Jennifer L. Mason, h/w Norma T. Long Trust, dated November 6, 2013	CNX Gas Company, LLC CNX Gas Company, LLC	Not less than 1/8 Not less than 1/8	124/765 132/522
<b>Traffic ID</b>	<b>Tax Map &amp; Parcel</b>	<b>Title Opinion QLS #</b>	<b>Grantor, Lessor, etc</b>	<b>Grantees, Lessees, etc</b>	<b>Royalty</b>	<b>Book/Pages</b>
111A	1-1-1 1-4-1	293885000	Jeffrey S. Anderson	Antero Resources Corporation	Not less than 1/8	418/317
			Braxton Minerals III, LLC	Antero Resources Corporation	Not less than 1/8	430/672
			Robin D. Fraser	Antero Resources Corporation	Not less than 1/8	438/489
			Pavlo Lynn Hedglin, heir of I. S. Dotson	Antero Resources Corporation	Not less than 1/8	428/113
			Valerie L. Burkhardt, heir of I. S. Dotson	Antero Resources Corporation	Not less than 1/8	428/116
			Matthew Morgan Gangwer	Antero Resources Corporation	Not less than 1/8	440/244
			Michael Chancellor Gangwer	Antero Resources Corporation	Not less than 1/8	440/239
			Clarence W. Mutschelknaus and Mary F. Mutschelknaus, h/w	Antero Resources Corporation	Not less than 1/8	334/17
			Lynda Britton Darbes	Antero Resources Corporation	Not less than 1/8	438/310
			Richard M. Swadley and Ellen V. Swadley, h/w	Antero Resources Corporation	Not less than 1/8	438/395
			Randall Swadley	Antero Resources Corporation	Not less than 1/8	433/350
			Jason Baldwin, s/h/a Jason D. H. Baldwin, heir of Savannah Hensler	Antero Resources Corporation	Not less than 1/8	445/463
			Teresa Rush and Ronald W. Rush, w/h	Antero Resources Corporation	Not less than 1/8	446/710
			John Robert Smanan	Antero Resources Corporation	Not less than 1/8	446/213
			Robert F. Montgomery	Antero Resources Corporation	Not less than 1/8	445/563
			Maria Cecilia G. Muller, heir of Ramona Duty	Antero Resources Corporation	Not less than 1/8	444/535
			Thomas Wade Bush	Antero Resources Corporation	Not less than 1/8	435/433
			Daniel John Bush	Antero Resources Corporation	Not less than 1/8	435/422
			Richard J. Bush	Antero Resources Corporation	Not less than 1/8	435/417
			Ronald G. Bush	Antero Resources Corporation	Not less than 1/8	435/412
			Elizabeth Duty Samson, s/h/a Elizabeth Duty	Antero Resources Corporation	Not less than 1/8	438/202
			Alfredo E. Gallardo, Jr.	Antero Resources Corporation	Not less than 1/8	433/585
			Albert Duty, s/h/a Albert E. Duty	Antero Resources Corporation	Not less than 1/8	437/705
			Francis D. Bautista	Antero Resources Corporation	Not less than 1/8	433/573
			Rachel G. Escobedo	Antero Resources Corporation	Not less than 1/8	443/555
			Corazon J. Bautista	Antero Resources Corporation	Not less than 1/8	348/456
			Virginia C. Bautista	Antero Resources Corporation	Not less than 1/8	435/428
			Norma C. Campbell	Antero Resources Corporation	Not less than 1/8	276/385 367/1
			Edward O. Ferrebee and Diane H. Ferrebee, h/w	Antero Resources Corporation	Not less than 1/8	465/507
			Clarence N. Leggett	Antero Resources Corporation	Not less than 1/8	433/597
			Donna Sue Luh	Antero Resources Corporation	Not less than 1/8	435/586
			Hermenegilda T. Bautista	Antero Resources Corporation	Not less than 1/8	305/121 366/723
			Howard Parke Leggett	Antero Resources Corporation	Not less than 1/8	436/630
			William Andrew Hatfield	Antero Resources Corporation	Not less than 1/8	438/682
			Marie Christine Brinks, nee Castro, her of John Boyd Duty	Antero Resources Corporation	Not less than 1/8	450/441
			Joseph James Serasua	Antero Resources Corporation	Not less than 1/8	443/274
			Kelly M. Somerville	Antero Resources Corporation	Not less than 1/8	452/244
			Kevin M. Somerville	Antero Resources Corporation	Not less than 1/8	448/556
			Dominic Luciano, Jr.	Antero Resources Corporation	Not less than 1/8	437/403
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
			Lawrence Lester Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	272/716
			Twila Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	263/187
			Larry Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	262/182
			Russell Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	262/276
			Hershell Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	262/281
			Roger Swadley	Antero Resources Appalachian Corporation	Not less than 1/8	262/517
			Michael Hensler	Antero Resources Appalachian Corporation	Not less than 1/8	260/546
			Jennifer Betts	Antero Resources Appalachian Corporation	Not less than 1/8	260/536
			Michael Hensler	Antero Resources Appalachian Corporation	Not less than 1/8	262/286
			Sharon Swadley Winkler	Antero Resources Appalachian Corporation	Not less than 1/8	263/172
			Stephen Swadley	Antero Resources Appalachian Corporation	Not less than 1/8	261/57
			Joleen McMillion	Antero Resources Appalachian Corporation	Not less than 1/8	261/274
			Donald Montgomery	Antero Resources Appalachian Corporation	Not less than 1/8	290/361
			Katherine Montgomery	Antero Resources Appalachian Corporation	Not less than 1/8	290/326
			Jose Bautista	Antero Resources Appalachian Corporation	Not less than 1/8	298/560
			Michael A. Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	289/1
			William J. Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	289/6
			Paula Nancy Bautista s/h/a, Sr. Ma. Teresa Bautista	Antero Resources Appalachian Corporation	Not less than 1/8	301/6
			Wilma Belle Duty	Antero Resources Appalachian Corporation	Not less than 1/8	258/574
			Donna Wright	Antero Resources Appalachian Corporation	Not less than 1/8	261/25
			Mary Maxine Dolis	Antero Resources Appalachian Corporation	Not less than 1/8	260/531
			Robert Bert Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	263/332
			Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	WVSCS
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
			Cynthia Somerville Modlin	EQT Production Company	Not less than 1/8	453/93
			Annette Taylor	EQT Production Company	Not less than 1/8	453/95
			Joseph C. Buckman and Beth Elwanger Buckman, h/w	EQT Production Company	Not less than 1/8	440/349

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
			John Bennett	EQT Production Company	Not less than 1/8	442/304
			Karen Woodward	EQT Production Company	Not less than 1/8	442/308
			Charles Somerville and Barbara Somerville, h/w	EQT Production Company	Not less than 1/8	442/306
			Stevie Somerville, Jr.	EQT Production Company	Not less than 1/8	440/347
			EQT Production Company	Antero Resources Corporation	Assignment	467/165
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
			Johnathan Warren Ash, a/k/a Jonathan Warren Ash	CNX Gas Company, LLC	Not less than 1/8	498/168
			Michelle Elizabeth Lyons	CNX Gas Company, LLC	Not less than 1/8	498/163
			Erica Lora Henry	CNX Gas Company, LLC	Not less than 1/8	498/208
			Lisa Dawn Mullooly	CNX Gas Company, LLC	Not less than 1/8	498/203
			Thomas Edward Mullooly II	CNX Gas Company, LLC	Not less than 1/8	498/193
			Lisa Joette Chambers	CNX Gas Company, LLC	Not less than 1/8	498/198
			Frank Butler	CNX Gas Company, LLC	Not less than 1/8	498/173
			Sam Horton	CNX Gas Company, LLC	Not less than 1/8	Tyler County 131/270
			John Luciano	CNX Gas Company, LLC	Not less than 1/8	498/262
			Ryan Taylor Henry	CNX Gas Company, LLC	Not less than 1/8	498/357
			Carl Luciano	CNX Gas Company, LLC	Not less than 1/8	498/178
			James Luciano	CNX Gas Company, LLC	Not less than 1/8	498/183
			Donna Luciano Hall	CNX Gas Company, LLC	Not less than 1/8	498/188
			Melanie Jean Hartman	CNX Gas Company, LLC	Not less than 1/8	498/223
			Wayne Alexander Sarasua	CNX Gas Company, LLC	Not less than 1/8	498/218
			Elizabeth Hogan, fka Elizabeth Mae Oliver	CNX Gas Company, LLC	Not less than 1/8	498/352
			Natasha Marie Ash aka Natasha M. Wolfe	CNX Gas Company, LLC	Not less than 1/8	498/213
			Morris Mountaineer Oil and Gas LLC	CNX Gas Company, LLC	Not less than 1/8	498/445
			The Sidney Austin Smith Trust, LLC, by Security National Trust Company, Manager	CNX Gas Company, LLC	Not less than 1/8	498/441
			J.W. Kerns Heirs Trust, by United Banks, Successor Trustee	CNX Gas Company, LLC	Not less than 1/8	498/437
			Robert Mitchell Oliver	CNX Gas Company, LLC	Cotenancy	62/136
			David Oliver Sarasua	CNX Gas Company, LLC	Cotenancy	62/136
			Isabelle C. Quinn	CNX Gas Company, LLC	Cotenancy	62/136
			Jenny Sarasua	CNX Gas Company, LLC	Cotenancy	62/136
			Judy Sarasua	CNX Gas Company, LLC	Cotenancy	62/136
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
111B	1-1-1 1-4-1	293885000	Jeffrey S. Anderson	Antero Resources Corporation	Not less than 1/8	418/317
			Braxton Minerals III, LLC	Antero Resources Corporation	Not less than 1/8	430/672
			Robin D. Frazer	Antero Resources Corporation	Not less than 1/8	458/489
			Pavlo Lynn Hedglin, heir of I. S. Dotson	Antero Resources Corporation	Not less than 1/8	428/113
			Valerie L. Burkhardt, heir of I. S. Dotson	Antero Resources Corporation	Not less than 1/8	428/116
			Matthew Morgan Gangwer	Antero Resources Corporation	Not less than 1/8	440/244
			Michael Chancellor Gangwer	Antero Resources Corporation	Not less than 1/8	440/239
			Clarence W. Mutschelknaus and Mary F. Mutschelknaus, h/w	Antero Resources Corporation	Not less than 1/8	334/17
			Lyndia Britton Darbes	Antero Resources Corporation	Not less than 1/8	438/310
			Richard M. Swadley and Ellen V. Swadley, h/w	Antero Resources Corporation	Not less than 1/8	438/395
			Randall Swadley	Antero Resources Corporation	Not less than 1/8	433/350
			Jason Baldwin, a/k/a Jason D. H. Baldwin, heir of Savannah Hensler	Antero Resources Corporation	Not less than 1/8	445/463
			Teresa Rush and Ronald W. Rush, w/h	Antero Resources Corporation	Not less than 1/8	446/710
			John Robert Snaman	Antero Resources Corporation	Not less than 1/8	446/213
			Robert F. Montgomery	Antero Resources Corporation	Not less than 1/8	445/563
			Marla Cecilia G. Muller, heir of Ramona Duty	Antero Resources Corporation	Not less than 1/8	444/536
			Thomas Wade Bush	Antero Resources Corporation	Not less than 1/8	435/433
			Daniel John Bush	Antero Resources Corporation	Not less than 1/8	435/422
			Richard J. Bush	Antero Resources Corporation	Not less than 1/8	435/417
			Ronald G. Bush	Antero Resources Corporation	Not less than 1/8	435/412
			Elizabeth Duty Semson, a/k/a Elizabeth Duty	Antero Resources Corporation	Not less than 1/8	438/202
			Alfredo E. Gallardo, Jr.	Antero Resources Corporation	Not less than 1/8	433/585
			Albert Duty, a/k/a Albert E. Duty	Antero Resources Corporation	Not less than 1/8	437/705
			Francis D. Bautista	Antero Resources Corporation	Not less than 1/8	433/573
			Rachel G. Escobedo	Antero Resources Corporation	Not less than 1/8	443/555
			Corason J. Bautista	Antero Resources Corporation	Not less than 1/8	348/456
			Virginia C. Bautista	Antero Resources Corporation	Not less than 1/8	435/428
			Norma C. Campbell	Antero Resources Corporation	Not less than 1/8	276/385 367/1
			Edward O. Ferrebee and Diane H. Ferrebee, h/w	Antero Resources Corporation	Not less than 1/8	465/507
			Clarence N. Leggett	Antero Resources Corporation	Not less than 1/8	433/597
			Donna Sue Luh	Antero Resources Corporation	Not less than 1/8	435/586
			Hermenegilda T. Bautista	Antero Resources Corporation	Not less than 1/8	305/121 366/723
			Howard Parke Leggett	Antero Resources Corporation	Not less than 1/8	436/630
			William Andrew Hatfield	Antero Resources Corporation	Not less than 1/8	438/682
			Marie Christine Brinks, nee Castro, her of John Boyd Duty	Antero Resources Corporation	Not less than 1/8	450/441
			Joseph James Sarasua	Antero Resources Corporation	Not less than 1/8	443/274
			Kelly M. Somerville	Antero Resources Corporation	Not less than 1/8	452/244
			Kevin M. Somerville	Antero Resources Corporation	Not less than 1/8	448/556
			Dominic Luciano, Jr.	Antero Resources Corporation	Not less than 1/8	437/403
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
			Lawrence Lester Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	272/716
			Twila Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	263/187
			Larry Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	262/182
			Russell Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	262/276
			Hershell Wilson	Antero Resources Appalachian Corporation	Not less than 1/8	262/281
			Roger Swadley	Antero Resources Appalachian Corporation	Not less than 1/8	262/517
			Michael Hensler	Antero Resources Appalachian Corporation	Not less than 1/8	260/546
			Jennifer Betts	Antero Resources Appalachian Corporation	Not less than 1/8	260/536
			Michael Hensler	Antero Resources Appalachian Corporation	Not less than 1/8	262/286
			Sharon Swadley Winkler	Antero Resources Appalachian Corporation	Not less than 1/8	263/172
			Stephen Swadley	Antero Resources Appalachian Corporation	Not less than 1/8	261/57
			Joleen McMillion	Antero Resources Appalachian Corporation	Not less than 1/8	261/274
			Donald Montgomery	Antero Resources Appalachian Corporation	Not less than 1/8	290/361
			Katherine Montgomery	Antero Resources Appalachian Corporation	Not less than 1/8	290/326
			Jose Bautista	Antero Resources Appalachian Corporation	Not less than 1/8	288/560
			Michael A. Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	289/3
			William J. Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	289/6
			Paula Nancy Bautista a/k/a, Sr. Ma. Teresa Bautista	Antero Resources Appalachian Corporation	Not less than 1/8	301/6
			Wilma Belle Duty	Antero Resources Appalachian Corporation	Not less than 1/8	258/574
			Donna Wright	Antero Resources Appalachian Corporation	Not less than 1/8	261/25
			Mary Maxine Dolles	Antero Resources Appalachian Corporation	Not less than 1/8	260/531
			Robert Berl Dotson	Antero Resources Appalachian Corporation	Not less than 1/8	263/332
			Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	WVSOS

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
			Cynthia Somerville Modlin	EQT Production Company	Not less than 1/8	453/93
			Annette Taylor	EQT Production Company	Not less than 1/8	453/95
			Joseph C. Buckman and Beth Elwanger Buckman, h/w	EQT Production Company	Not less than 1/8	440/349
			John Bennett	EQT Production Company	Not less than 1/8	442/304
			Karen Woodward	EQT Production Company	Not less than 1/8	442/308
			Charles Somerville and Barbara Somerville, h/w	EQT Production Company	Not less than 1/8	442/306
			Stevie Somerville, Jr.	EQT Production Company	Not less than 1/8	440/347
			EQT Production Company	Antero Resources Corporation	Assignment	467/165
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
			Johnathan Warren Ash, s/h/e Jonathan Warren Ash	CNX Gas Company, LLC	Not less than 1/8	498/168
			Michelle Elizabeth Lyons	CNX Gas Company, LLC	Not less than 1/8	498/163
			Erica Lora Henry	CNX Gas Company, LLC	Not less than 1/8	498/208
			Lisa Dawn Mullooly	CNX Gas Company, LLC	Not less than 1/8	498/203
			Thomas Edward Mullooly II	CNX Gas Company, LLC	Not less than 1/8	498/193
			Lisa Joetta Chambers	CNX Gas Company, LLC	Not less than 1/8	498/198
			Frank Butler	CNX Gas Company, LLC	Not less than 1/8	498/173
			Sam Horton	CNX Gas Company, LLC	Not less than 1/8	Tyler County 131/270
			John Luciano	CNX Gas Company, LLC	Not less than 1/8	498/262
			Ryan Taylor Henry	CNX Gas Company, LLC	Not less than 1/8	498/357
			Carl Luciano	CNX Gas Company, LLC	Not less than 1/8	498/178
			James Luciano	CNX Gas Company, LLC	Not less than 1/8	498/183
			Donna Luciano Hall	CNX Gas Company, LLC	Not less than 1/8	498/188
			Melanie Jean Hartman	CNX Gas Company, LLC	Not less than 1/8	498/223
			Wayne Alexander Sarasua	CNX Gas Company, LLC	Not less than 1/8	498/218
			Elizabeth Hogan, fka Elizabeth Mae Oliver	CNX Gas Company, LLC	Not less than 1/8	498/352
			Natasha Marie Ash aka Natasha M. Wolfe	CNX Gas Company, LLC	Not less than 1/8	498/213
			Morris Mountaineer Oil and Gas LLC	CNX Gas Company, LLC	Not less than 1/8	498/445
			The Sidney Austin Smith Trust, LLC, by Security National Trust Company, Manager	CNX Gas Company, LLC	Not less than 1/8	498/441
			J.W. Kerns Heirs Trust, by United Banks, Successor Trustee	CNX Gas Company, LLC	Not less than 1/8	498/437
			Robert Mitchell Oliver	CNX Gas Company, LLC	Cotenancy	62/136
			David Oliver Sarasua	CNX Gas Company, LLC	Cotenancy	62/136
			Isabelle C. Quinn	CNX Gas Company, LLC	Cotenancy	62/136
			Jenny Sarasua	CNX Gas Company, LLC	Cotenancy	62/136
			Judy Sarasua	CNX Gas Company, LLC	Cotenancy	62/136
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
112	1-2-5	293580000	Lillie M. Shepherd	Petroleum Services, Inc.	Not less than 1/8	107/499
			Allegheny Land and Mineral Company	Petroleum Services, Inc.	Not less than 1/8	107/679
			The Union National Bank as Trustee for Truman E. Gore and C. Burke Morris, w/a dtd. 8/25/1966	Petroleum Services, Inc.	Not less than 1/8	107/677
			Petroleum Services, Inc.	Summer Gas Associates 78-2	Assignment	108/446
			Summer Gas Associates 78-2	Frontier Energy Corporation	Affidavit	175/533
			Frontier Energy Corporation	Key Oil Company	Assignment	172/655
			Key Oil Company	Antero Resources Appalachian Corporation	Assignment	256/285
			Key Oil Company	Antero Resources Appalachian Corporation	Assignment	276/526
			Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	WVS05
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
118	1-2-6	293581000	Cisco Dotson and Lola B. Dotson, his wife; and Isiah S. Dotson	James D. Foley	Not less than 1/8	46/4
			James D. Foley	James P. Droppelman and J.J. Graham, mining partners	Assignment	59/267
			Joseph J. Graham, deceased	Ella Graham	Last Will and Testament	WB 6/466
			James P. Droppelman	Charles L. Hickman	Assignment	81/538
			Charles L. Hickman, deceased	Charles D. Hickman	Last Will and Testament	WB 51/696
			Ella Graham	Charles D. Hickman	Assignment	81/546
			Ella Graham	Carl D. Perkins	Assignment	81/542
			Charles D. Hickman, deceased	Charise M. Hickman	Last Will and Testament	WB 51/699
			Carl D. Perkins	Perkins Oil and Gas, Inc.	Assignment	176/607
			Charise M. Hickman, widow, and Perkins Oil and Gas, Inc.	Shackleford Energy, Inc.	Assignment	163/524
			Shackleford Energy, Inc.	Key Oil Company	Assignment	171/107
			Key Oil Company	Antero Resources Appalachian Corporation	Assignment	268/607
			Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	WVS05
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
119	1-4-1 1-4-1.4 1-4-1.5 1-4-10	291608000 297277000	Arlington Dotson and Zoe Dotson, h/w	H. C. Stuck	Not less than 1/8	20/179
			H. C. Stuck	J. F. Donaldson	Assignment	24/76
			J. F. Donaldson	The Philadelphia Company of West Virginia	Assignment	24/82
			The Philadelphia Company of West Virginia	Pittsburgh and West Virginia Gas Company	Assignment	32/253
			Pittsburgh and West Virginia Gas Company	J. D. Foley	Assignment	45/102
			J. D. Foley and Ruth Foley, h/w	W. J. Droppelman	Assignment	45/237
			J. D. Foley and Ruth Foley, h/w	E. G. Mundell	Assignment	47/317
			J. D. Foley and Ruth Foley, h/w	Mrs. Joseph Cooper	Assignment	47/400
			Lulu Cooper and Joseph Cooper, w/h	W. J. Droppelman	Assignment	47/482
			J. D. Foley and Ruth Foley, h/w	W. J. Droppelman	Assignment	47/484
			W. M. Ash	W. M. Ash	Assignment	47/495
			E. G. Mundell and Martha Mundell, h/w	W. J. Droppelman	Assignment	47/498
			E. G. Mundell and Martha Mundell, h/w	W. J. Droppelman	Assignment	47/499
			J. D. Foley and Ruth Foley, h/w	W. J. Droppelman	Assignment	48/1
			W. J. Droppelman	J. J. Graham and J. P. Droppelman	Assignment	52/314
			James D. Foley and Ruth Foley, James P. Droppelman, Clara Droppelman, Lena Rogers, Nellie M. Stuart, Arnold Lyle Stuart, G. W. Hill, administrator of the LWT of N. D. Pratt and J. J. Graham	Clara G. Droppelman and James P. Droppelman	Last Will and Testament	WB 5/106
			Joseph J. Graham, deceased	James P. Droppelman and J. J. Graham, as mining partners	Assignment	59/267
			James P. Droppelman	Ella Graham	Last Will and Testament	WB 6/466
			Charles L. Hickman, deceased	Charles L. Hickman	Assignment	81/538
			Ella Graham	Charles D. Hickman	Last Will and Testament	WB 51/696
				Charles D. Hickman	Assignment	81/546

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
			Ella Graham	Carl D. Perkins	Assignment	81/542
			Charles D. Hickman, deceased	Charise M. Hickman	Last Will and Testament	WB 51/699
			Carl D. Perkins	Perkins Oil and Gas, Inc.	Assignment	176/607
			Charise M. Hickman, widow, and Perkins Oil and Gas, Inc.	Shackleford Energy, Inc.	Assignment	163/524
			Shackleford Energy, Inc.	Key Oil Company	Assignment	171/107
			Key Oil Company	Antero Resources Appalachian Corporation	Assignment	256/285
			Key Oil Company	Antero Resources Appalachian Corporation	Assignment	276/526
			Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	WVS05
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
120A	1-3-2 1-3-2.1 1-3-2.2	293617000	Franklin L. Butler	Antero Resources Corporation	Not less than 1/8	321/216
			Lisa Dawn Mullooly	Antero Resources Corporation	Not less than 1/8	329/528
			Thomas E. Mullooly, II	Antero Resources Corporation	Not less than 1/8	321/611
			Lisa J. Chambers	Antero Resources Corporation	Not less than 1/8	321/609
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
120B	1-3-2	293617000	Franklin L. Butler	Antero Resources Corporation	Not less than 1/8	321/216
			Lisa Dawn Mullooly	Antero Resources Corporation	Not less than 1/8	329/528
			Thomas E. Mullooly, II	Antero Resources Corporation	Not less than 1/8	321/611
			Lisa J. Chambers	Antero Resources Corporation	Not less than 1/8	321/609
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
121	Unknown	297275000	West Virginia Department of Transportation, Division of Highways	CNX Gas Company, LLC	Not less than 1/8	497/316
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
124A	1-4-10	293610000	McKendry Dotson and Mattie Dotson, h/w	Sun Gas Company	Not less than 1/8	31/56
			George G. Trainer and Viola C. D. Trainer, his wife, J. E. Trainer and Tressie May Trainer, his wife, and George H. Trainer and J. E. Trainer, partners trading under the firm name and style of Sun Gas Company	W. W. Hepburn	Assignment	34/244
			W. W. Hepburn	Eastern Petroleum Company	Assignment	34/257
			Eastern Petroleum Company	The Pennsylvania Company for Insurances on Lives and Granting Annuities	Assignment	9/356
			The Pennsylvania Company for Insurances on Lives and Granting Annuities	Clifton Oil and Gas Company	Assignment	81/105
			Clifton Oil and Gas Company	Quaker State Oil Refining Corporation	Assignment	56/165
			Quaker State Oil Refining Corporation	Williston Oil Development	Assignment	97/462
			Williston Oil Development	J. Kelley Riggs	Assignment	101/275
			J. Kelley Riggs	Spindletop Farms, Inc.	Assignment	155/379
			Spindletop Farms, Inc.	Willow Run Corporation	Assignment	182/271
			Willow Run Corporation	Willow Run Energy, LLC	Assignment	315/322
			Willow Run Energy, LLC	Antero Resources Corporation	Assignment	319/378
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
124B	1-4-10	293610000 293608000	McKendry Dotson and Mattie Dotson, h/w	Sun Gas Company	Not less than 1/8	31/56
			George G. Trainer and Viola C. D. Trainer, his wife, J. E. Trainer and Tressie May Trainer, his wife, and George H. Trainer and J. E. Trainer, partners trading under the firm name and style of Sun Gas Company	W. W. Hepburn	Assignment	34/244
			W. W. Hepburn	Eastern Petroleum Company	Assignment	34/257
			Eastern Petroleum Company	The Pennsylvania Company for Insurances on Lives and Granting Annuities	Assignment	9/356
			The Pennsylvania Company for Insurances on Lives and Granting Annuities	Clifton Oil and Gas Company	Assignment	81/105
			Clifton Oil and Gas Company	Quaker State Oil Refining Corporation	Assignment	56/165
			Quaker State Oil Refining Corporation	Williston Oil Development	Assignment	97/462
			Williston Oil Development	J. Kelley Riggs	Assignment	101/275
			J. Kelley Riggs	Spindletop Farms, Inc.	Assignment	155/379
			Spindletop Farms, Inc.	Willow Run Corporation	Assignment	182/271
			Willow Run Corporation	Willow Run Energy, LLC	Assignment	315/322
			Willow Run Energy, LLC	Antero Resources Corporation	Assignment	319/378
			Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395
			Arlington Dotson and Zoe Dotson, h/w	H. C. Stuck	Not less than 1/8	20/179
			H. C. Stuck	J. F. Donaldson	Assignment	24/76
			J. F. Donaldson	The Philadelphia Company of West Virginia	Assignment	24/82
			The Philadelphia Company of West Virginia	Pittsburgh and West Virginia Gas Company	Assignment	32/253
			Pittsburgh and West Virginia Gas Company	J. D. Foley	Assignment	45/102
			J. D. Foley and Ruth Foley, h/w	W. J. Droppleman	Assignment	45/237
			J. D. Foley and Ruth Foley, h/w	E. G. Mundell	Assignment	47/317
			J. D. Foley and Ruth Foley, h/w	Mrs. Joseph Cooper	Assignment	47/400
			Lulu Cooper and Joseph Cooper, w/h	W. J. Droppleman	Assignment	47/482
			J. D. Foley and Ruth Foley, h/w	W. M. Ash	Assignment	47/484
			W. M. Ash	W. M. Ash	Assignment	47/495
			E. G. Mundell and Martha Mundell, h/w	W. J. Droppleman	Assignment	47/498
			E. G. Mundell and Martha Mundell, h/w	W. J. Droppleman	Assignment	47/499
			J. D. Foley and Ruth Foley, h/w	W. J. Droppleman	Assignment	48/1
			W. J. Droppleman	J. J. Graham and J. P. Droppleman	Assignment	52/314
			James D. Foley and Ruth Foley, James P. Droppleman, Clara Droppleman, Lena Rogers, Nellie M. Stuart, Arnold Lyle Stuart, G. W. Hill, administrator of the LWT of N. D. Pratt and J. J. Graham	Clara G. Droppleman and James P. Droppleman	Last Will and Testament	WB 5/106
			Joseph J. Graham, deceased	James P. Droppleman and J. J. Graham, as mining partners	Assignment	59/267
			James P. Droppleman	Ella Graham	Last Will and Testament	WB 6/466
			Charles L. Hickman, deceased	Charles L. Hickman	Assignment	81/538
			Ella Graham	Charles D. Hickman	Last Will and Testament	WB 51/696
			Charles D. Hickman, deceased	Charles D. Hickman	Assignment	81/546
			Carl D. Perkins	Carl D. Perkins	Assignment	81/542
			Charise M. Hickman, widow, and Perkins Oil and Gas, Inc.	Charise M. Hickman	Last Will and Testament	WB 51/699
			Shackleford Energy, Inc.	Perkins Oil and Gas, Inc.	Assignment	176/607
			Key Oil Company	Shackleford Energy, Inc.	Assignment	163/524
			Antero Resources Appalachian Corporation	Key Oil Company	Assignment	171/107
				Antero Resources Appalachian Corporation	Assignment	256/285

		Key Oil Company	Antero Resources Appalachian Corporation	Assignment	276/526
		Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	WVSOS
		Antero Resources Corporation	CNX Gas Company, LLC	Assignment	481/395



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

CNX Center  
1000 CONSOL Energy Drive  
Canonsburg, PA 15317-8506  
724-485-4000  
cnx.com

October 8, 2021

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

**RE: Road Letter – SHR37 M2 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](mailto:SarahWeigand@cnx.com).

Sincerely,

A handwritten signature in blue ink that reads 'Sarah Weigand'.

Sarah Weigand

RECEIVED  
Office of Oil and Gas

NOV 15 2021

WV Department of  
Environmental Protection

12/17/2021

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

Date of Notice Certification: 11/17/2021

API No. 47- \_\_\_\_\_  
Operator's Well No. SHR37KHSM  
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>513287.726</u>
County: <u>Tyler</u>		Northing: <u>4356014.578</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		<p align="center"><b>OOG OFFICE USE ONLY</b></p> <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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RECEIVED  
Office of Oil and Gas  
NOV 15 2021  
WV Department of  
Environmental Protection

**Required Attachments:**

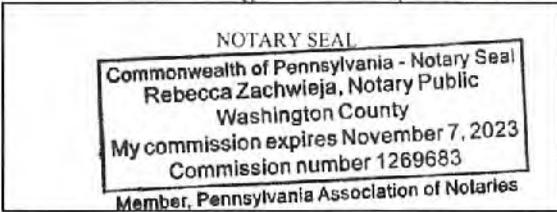
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication 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.

**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

Commonwealth of Pennsylvania, County of Washington



Subscribed and sworn before me this 3<sup>rd</sup> day of November 2021  
Rebecca Zachwieja Notary Public  
 My Commission Expires November 7, 2023

**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](mailto:depprivacyofficer@wv.gov).

WW-6A  
(9-13)

API NO. 47- \_\_\_\_\_  
OPERATOR WELL NO. SHR37KHSM  
Well Pad Name: SHR37

**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: 11/15/2021 Date Permit Application Filed: 11/15/2021

Notice of:

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

RECEIVED  
Office of Oil and Gas

NOV 15 2021

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

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

WV Department of Environmental Protection

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

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

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

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

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

COAL OPERATOR  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: See attached.  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

**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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://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 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

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

**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.

WW-6A  
(8-13)

API NO. 47- 095 - 02768  
OPERATOR WELL NO. SHR37KHSM  
Well Pad Name: SHR37

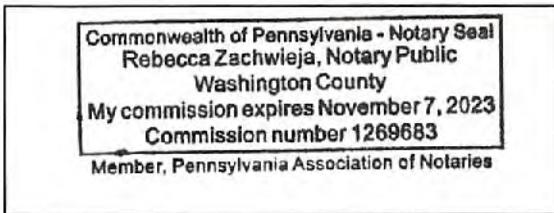
**Notice is hereby given by:**

Well Operator: CNX Gas Company LLC  
Telephone: 724-485-3244  
Email: SarahWeigand@cnx.com *Sarah Weigand*

Address: 1000 CONSOL Energy Drive, Canonsburg, PA 15317  
Facsimile: \_\_\_\_\_

**Oil and Gas Privacy Notice:**

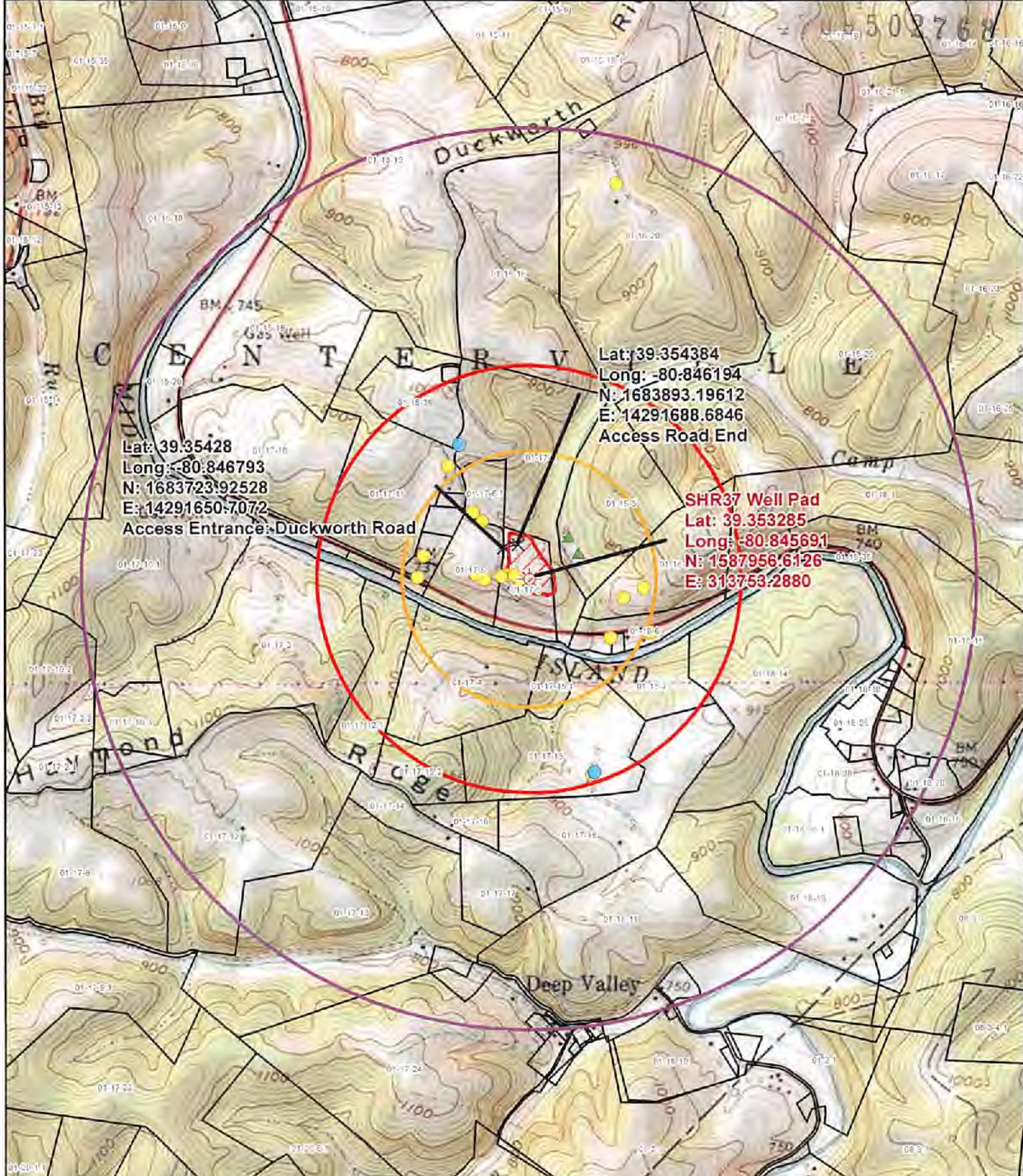
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory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



Subscribed and sworn before me this 27<sup>th</sup> day of October, 2021.  
Rebecca Zachwieja Notary Public  
My Commission Expires November 7, 2023

RECEIVED  
Office of Oil and Gas  
NOV 15 2021  
WV Department of  
Environmental Protection

12/17/2021



Lat: 39.35428  
 Long: -80.846793  
 N: 1683723.92528  
 E: 14291650.7072  
 Access Entrance: Duckworth Road

Lat: 39.354384  
 Long: -80.846194  
 N: 1683893.19612  
 E: 14291688.6846  
 Access Road End

**SHR37 Well Pad**  
**Lat: 39.353285**  
**Long: -80.845691**  
**N: 1587956.6126**  
**E: 313753.2880**

Disclaimer: This information is being provided as a business or professional courtesy. CNX Resources Corp., its subsidiaries and affiliates, collectively "CNX", make no representations or warranties of any kind or character concerning the completeness or accuracy of this information and assumes no responsibility or liability of any kind for such information. The Recipient of the information acknowledges and assumes a full risk of the use of such information. In consideration of CNX providing this information, the recipient hereby waives and releases any and all claims or causes of action the Recipient may ever have against CNX, its officers, directors, employees or agents relating to or resulting or arising from its use of the information. Acceptance of this information by the recipient constitutes agreement with all the terms and conditions in the notice.

SHR37 Well Pad	Pond	1 Mile Buffer
Spring	2,500ft Buffer	Surface Parcel
Well	1,500ft Buffer	Well Pad LOD
Access Points	Surface Parcel	
Access Road		

Date: 10/7/2021 Prepared By: GIS  
 Revisions: 1 Approved By:

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

Topographic Well Map  
**12/17/2021**

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

CNX RESOURCES CORPORATION ✓  
1000 CONSOL ENERGY DRIVE  
CANONSBURG, PA 15317

RYAN & CARRIE L DAVIS ✓  
730 THRUST DRIVE  
VASS, NC 28394

RIKI NICOLE DUNCAN (RILEY) ✓  
8100 SHAW AVENUE  
HAMLIN, WV 25523

DANNY CARL & PATRICIA J HARRIS ✓  
16269 MIDDLE ISLAND ROAD  
WEST UNION, WV 26456

EDWIN D & PATRICIA L MULVAY ✓  
3665 SHORT RUN ROAD  
PENNSBORO, WV 26415

FORREST G. POWELL ✓  
PO BOX 91  
ALMA, WV 26320

ELDEN L, RODNEY DEAN, & TIMOTHY RAY PRATT ✓  
873 DUCKWORTH RIDGE ROAD  
ALMA, WV 26320

RODNEY D. PRATT ✓  
365 DUCKWORTH RIDGE ROAD  
ALMA, WV 26320

RONALD ROYCE & REVA D. ROWLAND ✓  
358 DUCKWORTH RIDGE ROAD  
ALMA, WV 26320

GAIL WILLIAMSON ✓  
195 DUCKWORTH RIDGE ROAD  
ALMA, WV 26320

DOUG LANTZ ✓  
1376 MIDWAY ROAD  
BELINGTON, WV 26250

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WV Department of  
Environmental Protection

12/17/2021



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 11, 2021

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

**RE: SHR37KHSM Waiver Request**

To Whom It May Concern:

CNX Gas Company LLC (CNX) as surface and coal owner of the SHR37KHSM 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](mailto:SarahWeigand@cnx.com).

Sincerely,

A handwritten signature in blue ink that reads 'Sarah Weigand'.

Sarah Weigand

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12/17/2021



<b>TMP 1-17-5</b>	
<b>Surface Owner</b>	<b>Address</b>
CNX Gas Company LLC	1000 Consol Energy Drive Canonsburg, PA 15317
<b>Coal Owner</b>	<b>Address</b>
CNX Gas Company LLC	1000 Consol Energy Drive Canonsburg, PA 15317

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

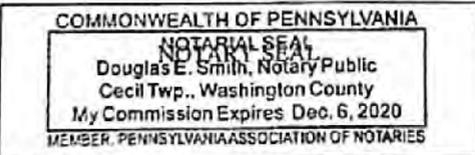
Signature:
Print Name:
Date:

FOR EXECUTION BY A CORPORATION, ETC.

Company: CNX Gas Company LLC
By: Timothy Surmick
Its: Assistant Vice President
Signature:
Date: 12/17/2020

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

NOV 15 2021

WV Department of Environmental Protection

12/17/2021

WW-6RW Well Location Restriction Waiver

EXHIBIT A

SHR37HSM

Operator Well No.

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

SAVANNAH SHTLACK  
 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

**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 Weisand 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>513267.726</u>
County:	<u>Tyler</u>		Northing:	<u>4356014.578</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.

<p>*Please check the box that applies</p> <p><input checked="" type="checkbox"/> SURFACE OWNER</p> <p><input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input checked="" type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input type="checkbox"/> COAL OPERATOR</p> <p><input type="checkbox"/> WATER PURVEYOR</p> <p><input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD</p>	<p><b>FOR EXECUTION BY A NATURAL PERSON</b></p> <p>Signature: _____</p> <p>Print Name: _____</p> <p>Date: _____</p> <p><b>FOR EXECUTION BY A CORPORATION, ETC.</b></p> <p>Company: <u>CNX Gas Company LLC</u></p> <p>By: <u>Sarah Weisand</u></p> <p>Its: <u>Permitting manager</u></p> <p>Signature: <u>Dave Weisand</u></p> <p>Date: <u>11/3/2021</u></p>
---	---

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WV Department of  
Environmental Protection

**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](mailto:depprivacyofficer@wv.gov).

12/17/2021



4709502768

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
**Division of Highways**

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

D. Alan Reed, P.E.  
State Highway Engineer

Jimmy Wriston, P. E.  
Secretary of Transportation  
Commissioner of Highways

October 12, 2021

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

Subject: DOH Permit for the SHR-37 Pad, Tyler County  
SHR37KHSM Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0949 which has been issued to CNX Gas Company for access to the State Road for a well site located off Tyler County Route 58/2 SLS MP 0.25.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Gary K. Clayton, P.E.  
Regional Maintenance Engineer  
Central Office O&G Coordinator

Cc: Becky Zachwieja  
CNX Gas Company  
CH, OM, D-6  
File

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WV Department of  
Environmental Protection

<b>Section V – Proposed Additives to be used in Fracturing or Stimulations</b>		
<b>Chemical</b>	<b>Chemical Name</b>	<b>CAS No.</b>
28% HCL Acid	Water	7732-18-5
	Hydrogen Chloride	7647-01-0
ACI-150	Methyl Alcohol	67-56-1
	N,N-Dimethylformamide	68-12-2
	Ethylene glycol	107-21-1
	2-Butoxyethanol	111-76-2
	Poly(oxy-1,2-ethanediyl),.alpha.-(4-nonylphenyl)-.omega.-hydroxy-,branched	127087-87-0
	Tar Bases, quinoline derivs, benzyl chloride-quat	72480-70-7
	Cinnamaldehyde	104-55-2
Citric Acid 50%	Citric Acid	77-92-9
	Water	7732-18-5
StimSTREAM FR 9800	Alkanes, C16-20-iso	90622-59-6
	Butene, homopolymer	9003-29-6
	Ethoxylated alcohols (C12-18)	68213-23-0
StimSTREAM SC 398	Bis(HexaMethylene Triamine Penta (Methylene Phosphonic Acid) (BHMT)	34690-00-1
	Non-hazardous substances	Proprietary
Clearal 268	Glutaraldehyde	111-30-8
	Didecyl dimethyl ammonium chloride	7173-51-5
	Quaternary Ammonium Compounds	68424-85-1
	Ethanol	64-17-5
	Non-hazardous substances	Proprietary
VB 625	Heavy Aliphatic Naphtha	64742-96-7
	TRADE SECRET	Proprietary
	TRADE SECRET	Proprietary
	TRADE SECRET	Proprietary
	Guar gum	9000-30-0
Ammonium Persulfate	Ammonium Persulfate	7727-54-0



LOCATION MAP  
USGS WEST LINCEN, WV  
SCALE 1"=2000'

# 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'

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.

**WVDEP OOG  
ACCEPTED AS-BUILT**

*VBJ* 10 / 31 / 2019



PROJECT  
LOCATION

# THRASHER

WEST VIRGINIA



Know what's below.  
Call before you dig.

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

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

<small>THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP, INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2019 THE THRASHER GROUP, INC.</small>	<table border="1"> <tr> <th>NO.</th> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>001</td> <td>10/29/19</td> <td>UPDATED AS-BUILT</td> </tr> <tr> <td>1</td> <td>002</td> <td>10/31/19</td> <td>UPDATED AS-BUILT</td> </tr> <tr> <td>1</td> <td>003</td> <td>10/31/19</td> <td>UPDATED AS-BUILT</td> </tr> </table>	NO.	REV.	DATE	DESCRIPTION	1	001	10/29/19	UPDATED AS-BUILT	1	002	10/31/19	UPDATED AS-BUILT	1	003	10/31/19	UPDATED AS-BUILT	<p>CNX RESOURCES CORPORATION 100 CANON ENGINEERING CANTONMENT, PA 15817</p>	<table border="1"> <tr> <td>SCALE 1:50</td> <td>DRAWN BY: _____</td> <td>CHECKED BY: _____</td> </tr> <tr> <td>DATE: 10/29/19</td> <td>DATE: 10/29/19</td> <td>DATE: 10/29/19</td> </tr> <tr> <td>REVISIONS: 001</td> <td>DATE: 10/29/19</td> <td>DATE: 10/29/19</td> </tr> <tr> <td>BY: _____</td> <td>DATE: _____</td> <td>DATE: _____</td> </tr> <tr> <td>FIELD NO.:</td> <td></td> <td></td> </tr> </table>	SCALE 1:50	DRAWN BY: _____	CHECKED BY: _____	DATE: 10/29/19	DATE: 10/29/19	DATE: 10/29/19	REVISIONS: 001	DATE: 10/29/19	DATE: 10/29/19	BY: _____	DATE: _____	DATE: _____	FIELD NO.:			<p>1915 BRADDOCK DRIVE, CANTONMENT, PA 15817 PH: 724.863.4444 FAX: 724.863.4444</p>	<table border="1"> <tr> <td>PROJECT NO.</td> <td>050-10290</td> </tr> <tr> <td>CONTRACT NO.</td> <td></td> </tr> <tr> <td>DATE: 10/29/19</td> <td></td> </tr> </table>	PROJECT NO.	050-10290	CONTRACT NO.		DATE: 10/29/19		<p>CNX RESOURCES CORPORATION SHIRLEY 37 SITE PAD AS-BUILT TYLER COUNTY, WEST VIRGINIA COVER SHEET</p>	<table border="1"> <tr> <th>SHEET No.</th> <td>1</td> </tr> </table>	SHEET No.	1
	NO.	REV.	DATE	DESCRIPTION																																										
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DATE: 10/29/19																																														
SHEET No.	1																																													



# SHR-37 WELL PAD

## Erosion & Sedimentation Control Plan

Centerville District, Tyler County, West Virginia

Prepared For:

**CNX GAS COMPANY, LLC**

1000 CONSOL Energy Drive  
Canonsburg, PA 15317

Issue Date: November 19, 2018

Revised: January 16, 2019



SITE ENTRANCE  
COORDINATES:

N39°21'15.37"  
W80°50'48.61"

(39.354269, -80.846836)

WELL PAD  
CENTER:

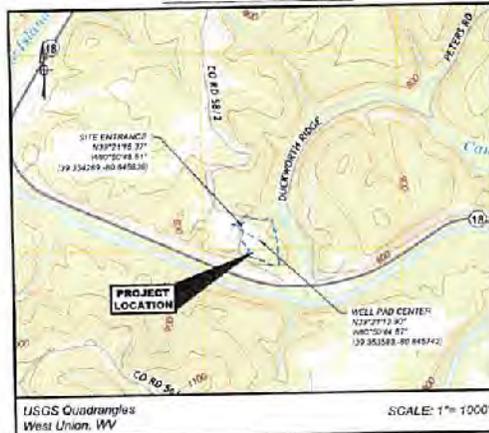
N39°21'12.90"  
W80°50'44.67"

(39.353583, -80.845742)

### DRAWING SCHEDULE

SHEET NO.	SHEET TITLE
1 OF 13	TITLE SHEET
2 OF 13	GENERAL NOTES
3 OF 13	EXISTING CONDITIONS PLAN
4 OF 13	SITE SOILS PLAN
5 OF 13	EROSION & SEDIMENTATION CONTROL AND GRADING PLAN
6 OF 13	ACCESS ROAD PROFILES, SECTIONS, AND OFFSET EXHIBIT
7 OF 13	WELL PAD PROFILES
8 OF 13	GEO TECHNICAL DETAILS
9 OF 13	EROSION AND SEDIMENTATION CONTROL DETAILS
10 OF 13	CONSTRUCTION DETAILS
11 OF 13	SITE RESTORATION PLAN
12 OF 13	SITE REVEGETATION PLAN
13 OF 13	QUANTITY SUMMARY

SITE VICINITY MAP



SITE LOCATION MAP



### LANDOWNER IMPACT TABLE

ACRES	LANDOWNER
8.5	CNX Gas Company, LLC 01-17-5



Prepared By:

**Sheffler & Company, Inc.**  
ENGINEERING • SURVEYING

1712 Mt. Nebo Road  
Sewickley, PA 15143

Office Phone: 412-219-4509  
Email: Info@ShefflerCo.com

Cragin Blevins

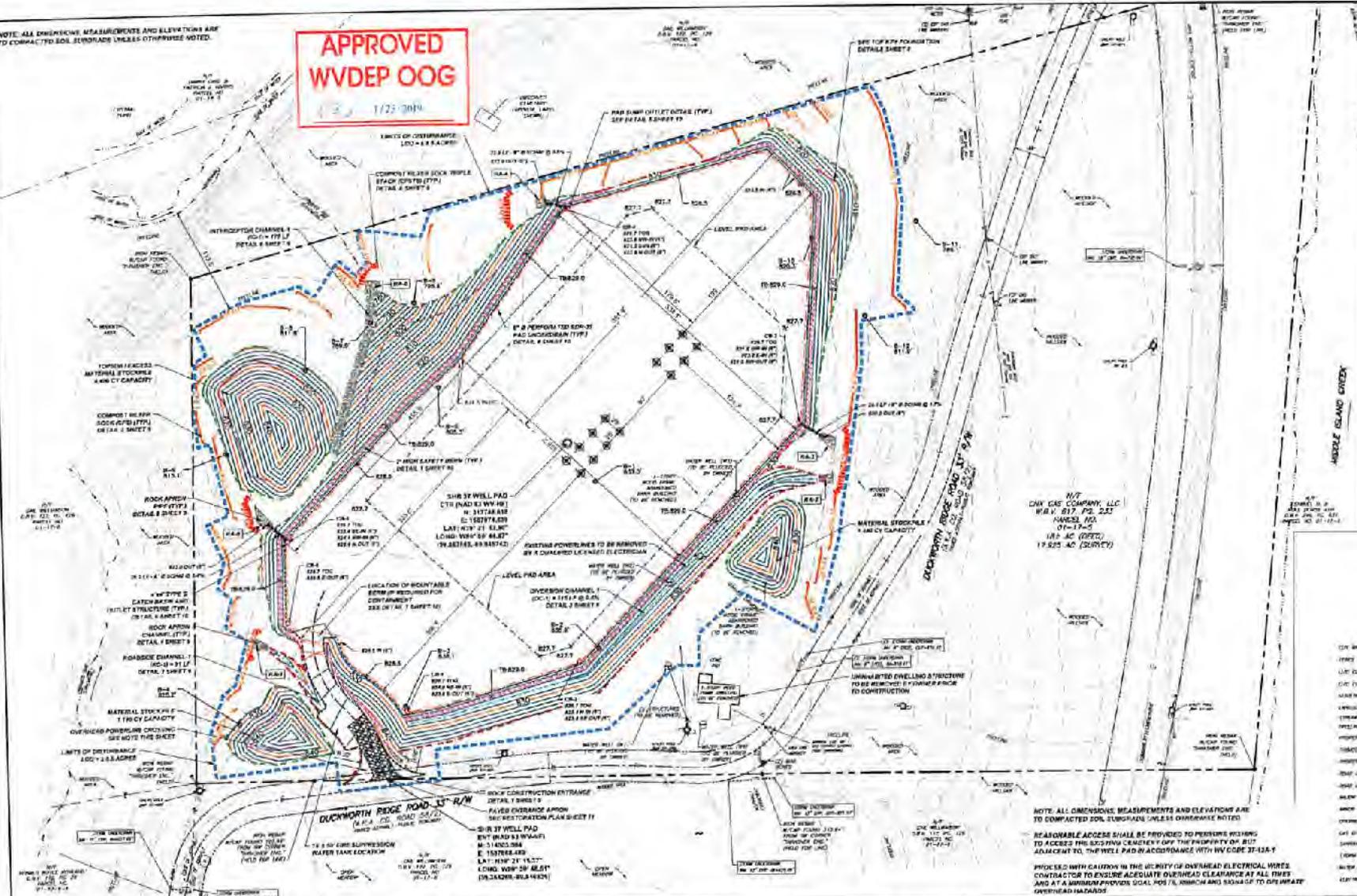
Digitally signed by Cragin

Blevins

Date: 2021.11.08 10:40:01 -05'00'

NOTE: ALL DIMENSIONS, MEASUREMENTS AND ELEVATIONS ARE TO COMPACTED SOIL SURFACES UNLESS OTHERWISE NOTED.

**APPROVED**  
**WV DEP OOG**  
1/23/2019



SHR 37 WELL PAD  
EARTHWORK (A.U.)  
VOLUME (CY) (DEPTH)  
WELLPAD AND ACCESS ROAD  
DRAIN CUT 30,000 CY  
LEGS TOPSOIL 25,400 CY  
LEGS 2% SLOPE BANKS 24,200 CY  
FULL FILL 10,000 CY  
NET 10,000 CY (EXCESS)  
\*MASSIVE 5% BIRTHMAGE  
PROJECT LIMITS OF DISTURBANCE  
(OO = ± 3.5 ACRES)  
NET CLEANING = 1.0 ACRES



W/V  
CNX GAS COMPANY, LLC  
W.V. 1517 PZ 233  
PARCEL NO.  
07-17-5  
(1.8 AC (OOE))  
17,825 AC (SURVEY)

NOTE: ALL DIMENSIONS, MEASUREMENTS AND ELEVATIONS ARE TO COMPACTED SOIL SURFACES UNLESS OTHERWISE NOTED.  
REASONABLE ACCESS SHALL BE PROVIDED TO PERFORM BOWING TO ACCESS THE BOTTOM LEADER'S ON THE PROPERTY OF BIST ADJACENT TO THE WELL PAD IN ACCORDANCE WITH WV CODE 37-125-1  
PROCEED WITH CAUTION IN THE VICINITY OF OVERHEAD ELECTRICAL WIRES CONTRACTOR TO ENSURE ADEQUATE OVERHEAD CLEARANCE AT ALL TIMES AND AT A MINIMUM PROVIDE 10' H, 10' B, AND 10' S OF CLEARANCE TO OVERHEAD WIRING

**811** Know what's below. Call before you dig.  
www.811.org



Date	Revision Description	By	Professional Seal	Prepared By
1/23/2019	Final Design	JDG		

Professional Seal: **Sheffer & Company, Inc.** ENGINEERING - SURVEYING  
1212 Mount Union Blvd, Smethport, PA 16742 | Office Phone: 412-210-4076 | Email: info@shefferco.com

**SHR 37 WELL PAD**  
Denverite District, Tyler County, West Virginia  
Prepared for: **CNX**

EROSION & SEDIMENTATION CONTROL AND GRADING PLAN	
DRAWING SCALE: AS NOTED	DESIGNED BY: JDP
DATE ISSUED: 8/18/2018	REVIEWED BY: GAS
PROJECT JOB#: 1218-040-33	FIELD DRAWN BY:
CADD:	

**5/13**

# National Flood Hazard Layer FIRMette



39°21'27.98"N



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

- |                                    |  |  |
|------------------------------------|--|--|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br>Zone A, V, AE9   |
|                                    |  | With BFE or Depth Zone AE, AO, AN, VE, AR  |
|                                    |  | Regulatory Floodway  |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | 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 Zone J |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard Zone X   |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes, Zone X   |
|                                    |  | Area with Flood Risk due to Levee Zone D   |
| <b>OTHER AREAS</b>                 |  | Area of Minimal Flood Hazard Zone X  |
|                                    |  | Effective LOMRs  |
| <b>GENERAL STRUCTURES</b>          |  | Channel, Culvert, or Storm Sewer   |
|                                    |  | Levee, Dike, or Floodwall  |
| <b>OTHER FEATURES</b>              |  | Cross Sections with 1% Annual Chance Water Surface Elevation   |
|                                    |  | Coastal Transect   |
|                                    |  | Base Flood Elevation Line (BFE)  |
|                                    |  | Limit of Study   |
|                                    |  | Jurisdiction Boundary  |
|                                    |  | Coastal Transect Baseline  |
| <b>MAP PANELS</b>                  |  | 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: base map 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.

80°50'24.72"W