



west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Monday, November 13, 2023
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

CNX GAS COMPANY LLC
1000 HORIZON VUE DR.

CANONSBURG, PA 15370

Re: Permit Modification Approval for WDTN18DHSM
47-061-01947-00-00

Lateral Extension

CNX GAS COMPANY LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before 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: WDTN18DHSM
Farm Name: CONSOL MINING COMPANY LLC
U.S. WELL NUMBER: 47-061-01947-00-00
Horizontal 6A New Drill
Date Modification Issued: 11/13/2023

Promoting a healthy environment.

11/17/2023

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 MONONGA BATTEL WADESTOWN
Operator ID County District Quadrangle

2) Operator's Well Number: WDTN18DHSM Well Pad Name: WDTN18

3) Farm Name/Surface Owner: CONSOL MINING CO. LLC Public Road Access: CAMP RUN ROAD CR 4

4) Elevation, current ground: 1215' Elevation, proposed post-construction: 1199'

5) Well Type (a) Gas X Oil _____ Underground Storage _____
Other _____
(b) If Gas Shallow X Deep _____
Horizontal X

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 @ 7815' - 7868' TVD, 53' thick, expected formation pressure ~4600 psi

8) Proposed Total Vertical Depth: 7848' TVD at TD, depending on formation dip

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

10) Proposed Total Measured Depth: 26,504' MD at TD

11) Proposed Horizontal Leg Length: 18,207'

12) Approximate Fresh Water Strata Depths: 103', 111', 190', 243', 259', 325', 399'

13) Method to Determine Fresh Water Depths: Offset Well Information

14) Approximate Saltwater Depths: 2415', 3045', 3210'

15) Approximate Coal Seam Depths: 448'-449', 537'-538', 612'-613', 614'-617', 873'-878', 960'-974'

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

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

(a) If Yes, provide Mine Info: Name: see mine map RECEIVED
Office Of Oil and Gas
Depth: _____ NOV - I 2023
Seam: _____
Owner: _____ WV Department of Environmental Protection

*CK# 2140043932
7500⁰⁰
11/8/23*

Gayne Knitowski, Inspector
Digitally signed by Gayne Knitowski, Inspector
Date: 2023.10.25 14:22:06 -04'00'

11/17/2023

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	75	46 ✓	96 / CTS ✓
Fresh Water	13.375	New	J-55	54.5	1,180	1,151 ✓	940 / CTS
Coal	13.375	New	J-55	54.5	1,180	1,151	940 / CTS
Intermediate	9.625	New	J-55	36	2,876	2,847 ✓	1,046 / CTS
Production	5.5	New	P-110	23	26,504	26,475 ✓	2,280 TOC @ 1,550'
Tubing	2.375	New	J-55	4.7	Above assumes RF = 29'	TBD	N/A
Liners	N/A						

Digitally signed by Gayne Knitowski, Inspector
Date: 2023.10.25 14:22:32 -04'00'

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	.375	N/A	N/A	Type 1	1.18
Fresh Water	13.375	17.5	.380	2,730	<500	Class A ✓	1.19
Coal	13.375	17.5	.380	2,730	<500	Class A	1.19
Intermediate	9.625	12.25	.352	3,520	<2,815	Class A	1.19
Production	5.5	8.75 x 8.5	.415	14,340	~11,000 ✓	Class A or H	1.10
Tubing	2.375	N/A	.190	7,700	N/A	N/A	N/A
Liners							

PACKERS

Kind:	N/A			
Sizes:				
Depths Set:				

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 the FW/coal casing will be set just above elevation - the casing will NOT be set below ground level (setting depth to isolate sloughing formations and red beds below the Pittsburgh Coal Seam). 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:

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): _____

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

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 rigid/bow spring centralizers.
Production string: centralize every joint from shoe to TOC - utilize single piece/rigid bow centralizers. Actual centralizer placement may be changed based on hole conditions.

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

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

25) Proposed borehole conditioning procedures:

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

*Note: Attach additional sheets as needed.



CNX



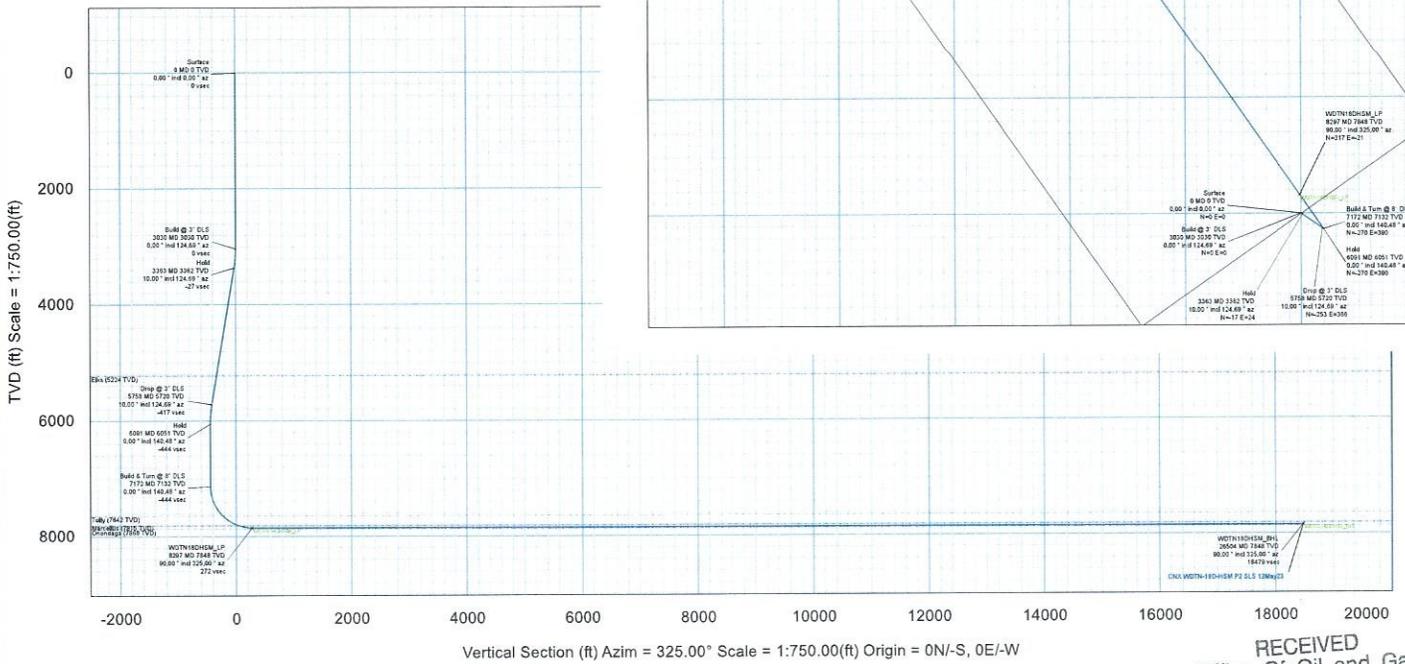
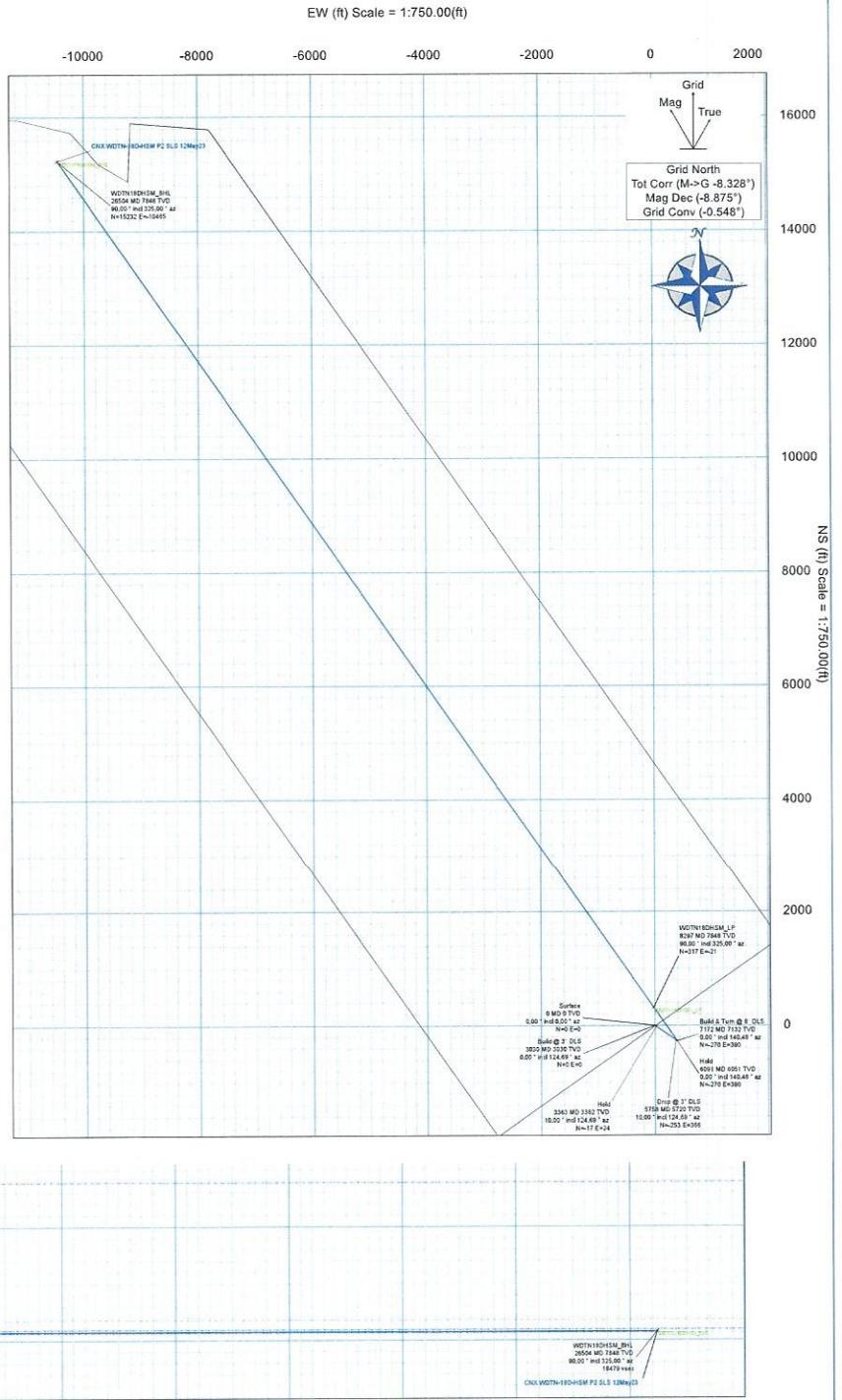
Borehole: Original Borehole	Well: WDTN18DHSM	Field: WV Monongalia County (NAD 27)	Structure: CNX WDTN18 Pad
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Gravity & Magnetic Parameters Model: HDGM 2023 Dip: 66.325° Date: 12-May-2023 MagDec: -8.975° FS: 61727.633mT Gravity FS: 999.349mgm (8.90665 Based)	Surface Location NAD27 West Virginia State Plane, Northern Zone, US Feet Lat: N 39 41 27.68 Lon: W 80 21 30.51 Northing: 434841.2281US Easting: 1788417.6581US Grid Conv: -0.6476" Scale Fact: 0.99994139	Miscellaneous Slot: WDTN18DHSM (WSS) Plan: CNX WDTN-18D-HSM P2 SLS 12May23 TVD Ref: KB(1228ft above MSL)
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Surface Location								
Target Description		Old Coord			Local Coord			
Target Name	Shape	Dimension	Latitude	Longitude	Northing	Easting	TVD	VSec
WDTN18_PRESLN_UNIT	Point	N/A	N 39 41 27.68	W 80 21 30.73	434852.89	1788469.36	1228.00	43.58
WDTN18DHSM_BHL	Point	N/A	N 39 43 57.10	W 80 23 46.31	450172.12	1747053.63	7848.00	19478.45
WDTN18DHSM_LP	Point	N/A	N 39 41 30.71	W 80 21 30.82	435258.19	1788395.47	7848.00	271.80

PART	Seq	Survey Tool	Vendor/Tool	Hole Size (in)	CPIPS Size (in)	Expected Max Ind (ft)	MD From (ft)	MD To (ft)	Curvy Frequency (ft)	ECOI Size (ft)	ECOI Size (ft)	Comments/Codensity
1	1	AD200a_OVRDALS-Depth Day		17.5	13.375		0	29	1/100	0.729	0.729	
1	2	AD200a_OVRDALS		17.5	13.375		29	1120	1/100	5.902	5.879	
1	3	ADD1M_WVD		12.25	6.825		1120	2930	1/100	10.878	10.865	
1	4	ADD1M_WVD		8.75	5.5		2930	7500	1/100	27.314	25.172	
1	5	B0200a_WVD-H2RF		5.5	5.5		7500	28504.208	1/100	585.209	54.198	

Critical Points							
Critical Point	MD	BVCL	AZIM	VSEC	N(Y)Sec	E(X)Maj	DLS
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Build @ 3' DLS	5000.00	0.00	124.89	3030.00	0.00	0.00	0.00
Hole	3383.33	10.00	124.89	3281.64	-27.21	-18.51	23.86
Elm	5254.42	10.00	124.89	5224.00	-335.18	-203.41	263.87
Drop @ 3' DLS	5757.83	10.00	124.89	5719.77	-417.16	-253.16	365.76
Hole	6091.15	0.00	145.48	6051.37	-444.37	-258.87	389.60
Build & Turn @ 3' DLS	7171.55	0.00	145.48	7131.79	-444.39	-258.89	389.62
Turn	7739.41	45.43	325.00	7842.00	-238.83	-84.75	287.12
MassBus	8073.30	72.54	325.00	7915.00	58.91	149.95	182.08
WDTN18DHSM_LP	8264.58	90.00	325.00	7848.00	271.80	314.98	-71.18
WDTN18DHSM_BHL	26504.21	90.00	325.00	7848.00	19478.45	15291.82	-15464.65
Overriggs	N/A	N/A	N/A	7848.00			



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WDTN18 M1 WV Area of Review

In accordance with WVDEP 35CSR8 Section 5.11, all known shallow oil and gas (SOG) wells have been identified within a 500' radius of the WDTN18 M1 wells that are within West Virginia state boundary. These wells extended their origination in West Virginia cross the state line into Pennsylvania. Any SOG well that falls within the Area of Review (AOR) has been reviewed and is provided in a list that includes API, Operator, Well Name, Well Number, Status, Formation at TD, Total Depth, and Lat/Long (see Figures 3 and 6).

The Marcellus Shale of the Wadestown area is found at an approximate True Vertical Depth (TVD) of 8,000'. In the Wadestown area, there were very few wells that produced from formations deeper than the Bayard Sand (approximately 3,600'). With that being said, there are **no known vertical wells that reach a total depth within 1,500 vertical feet of the Marcellus Shale**. Based on our experience with frac communication and shallow wells, CNX Geology feels that it is highly unlikely for communication to occur with any wells producing in the area above the WDTN18 M1 wells.

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. These reservoirs are not developed in the area. Geomechanical data is available that suggests the Tully Limestone to be an adequate upward frac barrier for Marcellus hydraulic fracturing. This data was collected from dipole sonic logs. CNX's nearest sonic data is from the NV20CCV well (Figure 4), approximately 21.4 miles north of the WDTN18 pad. Frac modeling (Figure 5) of the Marcellus in the area does not show significant upward frac growth.

There are no known CNX Marcellus lateral wells that lie within 500' of the proposed WDTN18 M1 wells. If any CNX Marcellus wells existed within 500' of the WDTN18 laterals, we would monitor and utilize the Production Control Room (PCR) to set up alarms via CygNet for any abrupt casing pressure or water rate changes. Those variances are outlined below. If the CNX PCR receives an alarm, the process is to notify the production foreman and production engineer responsible for the pad so that they can analyze if a frac hit is imminent, or if the alarm is of little to no concern. Should a communication event occur that triggers DEP notification requirements per 35CRS8 Section 9.3.a, CNX will follow and implement applicable guidance documents regarding incident reporting and resolution.

- 20% positive or negative rate of change for hourly water log period
- 10% positive or negative rate of change for casing pressure over a period of 30 minutes

There are no 3rd Party Marcellus lateral wells that lie within 500' of the proposed WDTN18 M1 wells in West Virginia.



Figure 1. Zero 3rd Party Marcellus wells lie within a 500’ buffer around the proposed WDTN18 laterals, producing from the Marcellus Shale, shown below.

Well Name/API	Formation	Operator	Orientation	Within Zone of Influence	TVD Depth (ft)
N/A					

Figure 2. Zero CNX wells producing from formations within 1,500’ above or below the Marcellus Shale and within 500’ of proposed WDTN18 laterals.

Well Name/API	Formation	Operator	Orientation	Within Zone of Influence	TVD Depth (ft)
N/A					

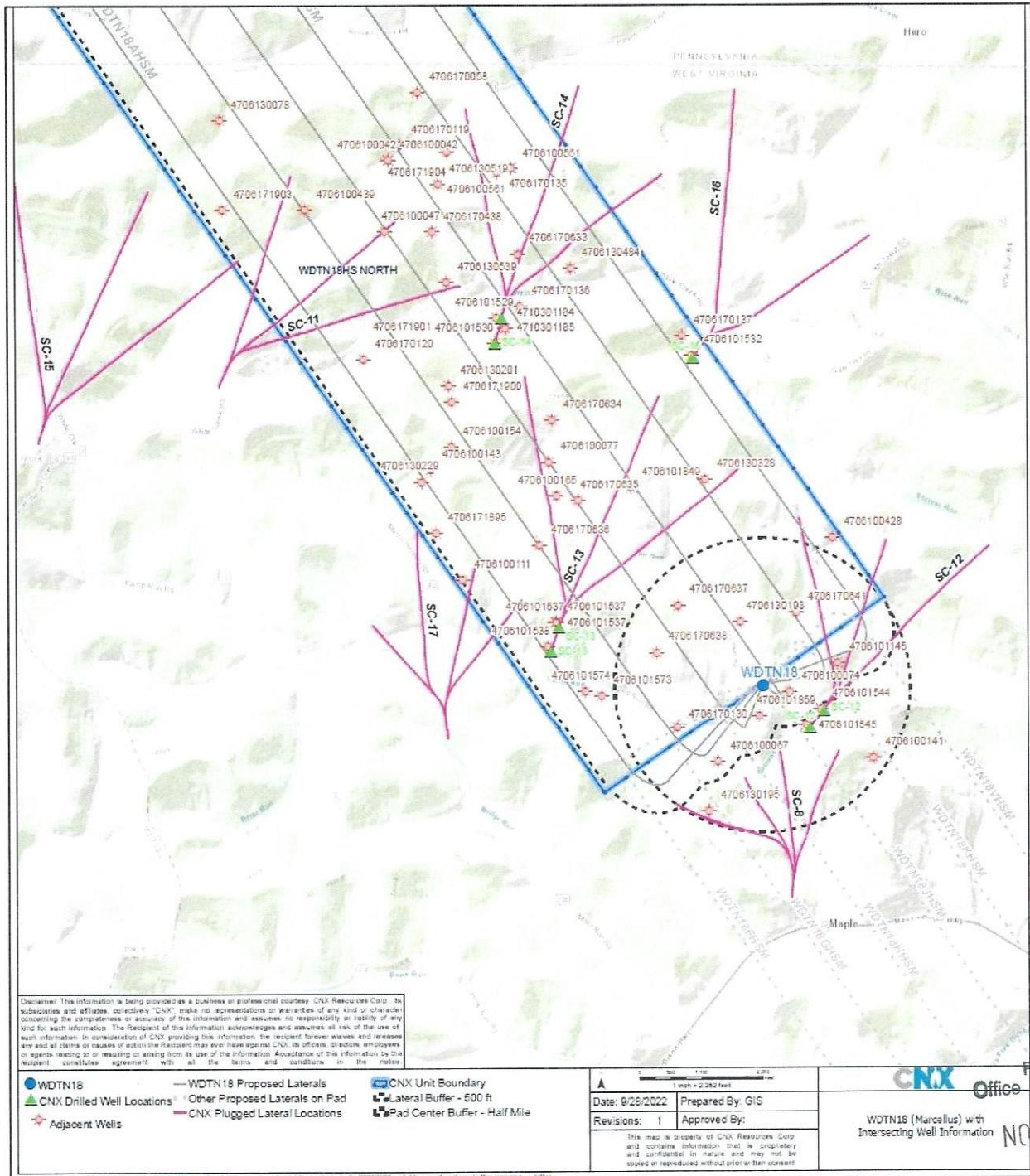
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WDTN18 M1 Pad Risk Assessment Review

September 13, 2023

Figure 3. 18 wells lie within a 500' buffer around the WDTN18 M1 pad that penetrate the Big Injun Sand or deeper horizons (highlighted green in the table on page 6). The deepest well is 3,740' and produces from the Bayard Sand. No known SOG Communication events have occurred in this area. The pink horizontal wells in the figure below are Pittsburgh Coal seam horizontal laterals.



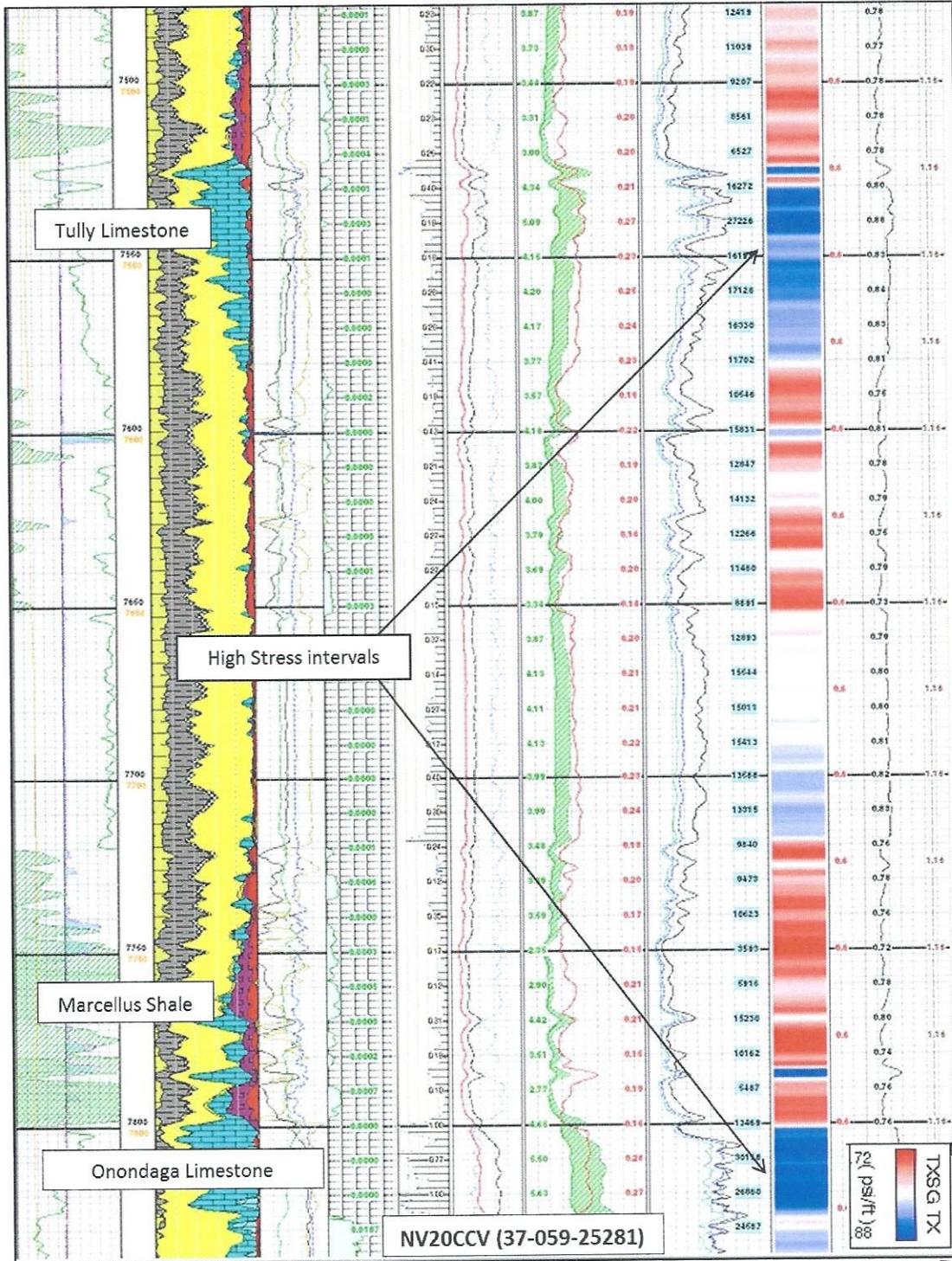
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Figure 4. Stratigraphic intervals of high stress should serve as adequate confining layers, or frac barriers, for a Marcellus frac, seen below in the Wadestown Area Stress Profile log.

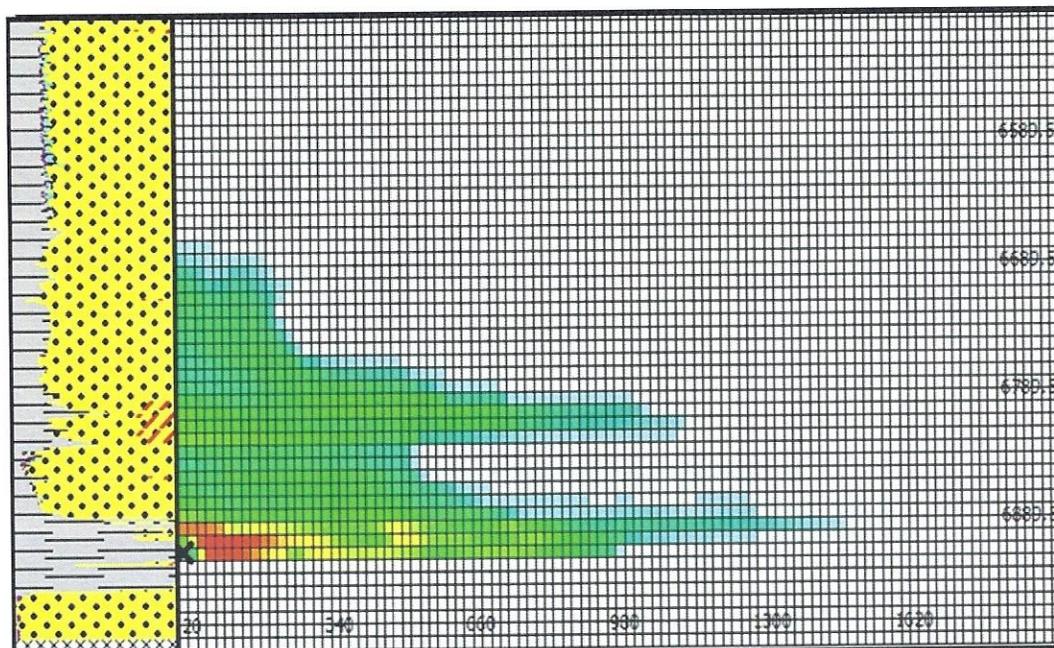
Wadestown Area Stress Profile Log



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Figure 5. 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 Hamilton and Tully are much thinner than Wadestown. Frac modeling predicts frac height of approximately 300'.



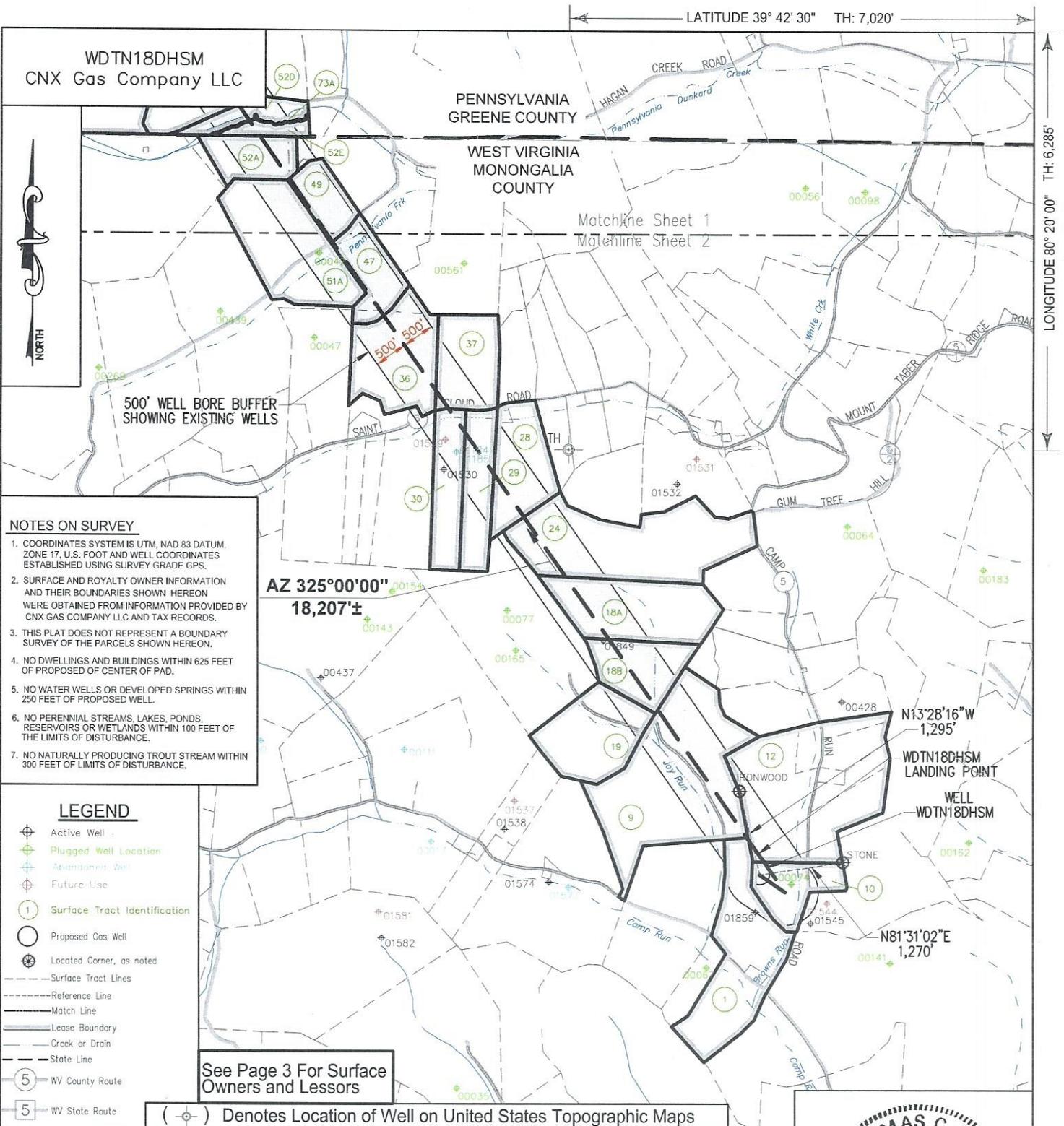
Frac Simulation of the Oxford area, Doddridge County, WV. Model of 300 stage spacing yields frac height of 260 feet. Tully Limestone (~25'), Tully-Hamilton (~55'), Marcellus-Alexander (1500')

7



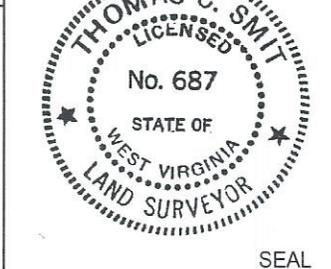
Figure 6. 70 wells lie within the 500' buffer of the entire WDTN18 M1 wells and pad. With the data available, only 18 of them can be verified to penetrate the Big Injun Sand or deeper stratigraphy (green). 14 of them are Pittsburgh Coal seam wells. 38 wells have no Formation or TD information available (status highlighted pink). Completion reports are not available for these on the WVGES website.

API Number	Well Name	Well Number	Current Operator	Fluid Type	Profile Type	Completion Formation	Current Status	Total Depth	Latitude - WGS84	Longitude - WGS84
47061015320000	TERRA FIRMA COMPANY	SC16A	CNX	OIL & GAS	V	PITTSBURGH COAL	INACTIVE	912	39.7071659	-80.352824
47061001650000	HENNEN, ALEX - HEIRS 1	1	OPER IN MIN.OWNER FLD.NO CODE ASSGN(ORPHAN WELL PROJ.)	DRY HOLE	V	SEWICKLEY COAL	P & A	820	39.700238	-80.371501
47061015360000	CONSOLIDATION COAL CO.	SC13A	CNX	OIL & GAS	V	PITTSBURGH COAL	ACTIVE	1210	39.692845	-80.371566
47061015450000	CONSOLIDATION COAL CO.	SC12A	CNX	OIL & GAS	V	PITTSBURGH COAL	ACTIVE	1210	39.692845	-80.355512
47061015440000	CONSOLIDATION COAL CO.	SC12	CNX	OIL & GAS	V	UNIDENTIFIED COAL	INACTIVE	1210	39.699112	-80.354637
47061015740000	TERRA FIRMA COMPANY	SC 5A	DIVERSIFIED ENERGY	OIL & GAS	V	PITTSBURGH COAL	INACTIVE	1250	39.690265	-80.359514
47061015370000	CONSOLIDATION COAL CO.	SC13	CNX	OIL & GAS	H	PITTSBURGH COAL	INACTIVE	1270	39.69402	-80.371478
47061015370100	CONSOLIDATION COAL CO.	SC13	CNX	CBM	H	<Null>	DRILLED	1270	39.69402	-80.371478
47061015370200	CONSOLIDATION COAL CO.	SC13	CNX	CBM	H	<Null>	COMPLETED	1270	39.69402	-80.371478
47061015290000	MOORE, EDGAR & SETH	SC14	CNX	OIL & GAS	V	PITTSBURGH COAL	INACTIVE	1304	39.705911	-80.375388
47061015290000	MOORE, EDGAR & SETH	SC14	CNX	OIL & GAS	V	PITTSBURGH COAL	INACTIVE	1304	38.70766	-80.374445
47061015300000	MOORE, EDGAR & SETH	SC14A	CNX	OIL & GAS	V	PITTSBURGH COAL	INACTIVE	1484	39.701449	-80.379491
47061001430000	E C CLOVIS HEIRS	1	OPER IN MIN.OWNER FLD.NO CODE ASSGN(ORPHAN WELL PROJ.)	GAS	V	PITTSBURGH COAL	P & A	1520	39.690478	-80.388527
47061015730000	TERRA FIRMA COMPANY	SC 5B	DIVERSIFIED ENERGY	GAS	V	UNIDENTIFIED COAL	P & A	1630	39.702509	-80.378177
47061001540000	CLOVIS, E. C. - HEIRS 2	2	OPER IN MIN.OWNER FLD.NO CODE ASSGN(ORPHAN WELL PROJ.)	DRY HOLE	V	PITTSBURGH COAL	P & A	1630	39.702509	-80.351567
4706101701190000	ELLI WHITE		NELSON W HARDS	UNKNOW	U		INACTIVE	2650	39.657224	-80.351097
47061000670000	M.L. SHRIVER ESTATE 1-2510		(N/A)	GAS	V	BIG INJUN (PRICESEQ)	P & A	3165	39.715554	-80.382306
47061000420000	SIX, D.A. 1	1	OPER IN MIN.OWNER FLD.NO CODE ASSGN(ORPHAN WELL PROJ.)	UNKNOW	V	PITTSBURGH COAL	P & A	3165	39.716554	-80.382306
47061000420001	SIX, D.A. 1	1	OPER IN MIN.OWNER FLD.NO CODE ASSGN(ORPHAN WELL PROJ.)	UNKNOW	V	PITTSBURGH COAL	P & A	3165	39.716554	-80.379117
47061000190000	S E KIMBLE		(N/A)	GAS	V	FIFTY-FOOT	INACTIVE	3260	39.715424	-80.375926
47061000170000	CLOVIS, EVA H. 1		PILLAR ENERGY LLC	UNKNOW	V		P & A	3352	39.692305	-80.393011
47061000180000	MRS S R COX		WALKER/CONKLIN/MINTR	WATER	U		INACTIVE	3363	39.71547	-80.352454
47061000470000	WHITE, JAMES L. 2		(N/A)	UNKNOW	V		P & A	3365	39.69507	-80.385692
47061000740000	TENNANT, LEMLEY 5285		(N/A)	GAS	V	THIRTY-FOOT	INACTIVE	3445	39.711364	-80.37058
47061004840000	J H STILES		AM SNIDER	GAS	V		INACTIVE	3455	39.682078	-80.377426
47061001110000	C E HENNEN		PITTSBURGH & WV GAS	GAS	V	BAYARD	INACTIVE	3465	39.705579	-80.389601
47061003740000	LUCINDA SIX		CLOVIS ROY W	GAS	U	BAYARD	INACTIVE	3471	39.692173	-80.35355
47061011450000	HAINES, E		A V COMPANY	GAS	V	FIFTH	INACTIVE	3501	39.711683	-80.394039
47061002550000	GILMORE, ELIZABETH, ETUX 1	1	BIG SAND DRILLING/BIG SANDY GAS	GAS	V	BAYARD	INACTIVE	3520	39.705919	-80.38351
47061012000000	JAMES L WHITE		(N/A)	UNKNOW	U		INACTIVE	3576	39.703674	-80.350058
47061002290000	E C CLOVIS		PITTSBURGH & WV GAS	GAS	U	BIG INJUN (PRICESEQ)	INACTIVE	3580	39.710559	-80.378553
47061003530000	W FRANK TAYLOR		B GUY & A G PATTERSON	GAS	V	FIFTH	INACTIVE	3580	39.710559	-80.378553
47061001410000	SHRIVER, CHARLES F. 1-3832		A V COMPANY	WATER	V	BAYARD	INACTIVE	3740	39.657472	-80.351244
47061018590000	CONSOL MINING COMPANY LLY WDTN18MHSU		CNX	UNKNOW	H	MARCELLUS SHALE	EXPIRED PERMIT	<Null>	39.698904	-80.358481
47061004280000	SHRIVER 5114		PILLAR ENERGY LLC	GAS	V		ACTIVE	39.698254	-80.353953	
47061004570000	CLOVIS 5390		PILLAR ENERGY LLC	GAS	V		ACTIVE	39.698981	-80.361931	
47061001930000	MAHLON TENNANT HEIRS	1	PITTSBURGH & WV GAS	GAS	U	BAYARD	INACTIVE	39.694108	-80.359785	
47061001950000	CHAS WHITE		MANUFACTURERS LIGHT & HEAT CO	GAS	U	BAYARD	INACTIVE	39.694775	-80.361858	
47061002210000	E C CLOVIS	2	PITTSBURGH & WV GAS	GAS	U	BAYARD	INACTIVE	39.705554	-80.378374	
47061002220000	LAURA B TENNANT	2	MANUFACTURERS LIGHT & HEAT CO	GAS	U	BAYARD	INACTIVE	39.703049	-80.385897	
47061002280000	FRED HENNEN	2	CARNEGIE NATURAL GAS CO	GAS	U	GORDON STRAY	INACTIVE	39.701009	-80.382024	
47061004750000	FRED HENNEN	2	CARNEGIE NATURAL GAS CO	GAS	U	GORDON STRAY	INACTIVE	39.7119919	-80.373313	
47061004750001	R V HENNEYTAYLOR	1	BP	UNKNOW	U	FIFTH	INACTIVE	39.7119919	-80.373313	
47061008300000	F H HENNEN		OPER IN MIN.OWNER FLD.NO CODE ASSGN(ORPHAN WELL PROJ.)	UNKNOW	U		INACTIVE	39.719892	-80.380429	
47061019500000	JOHN G WHITE		CARNEGIE NATURAL GAS CO	UNKNOW	U		INACTIVE	39.698839	-80.363724	
47061013800000	SIMON L WHITE		CARNEGIE NATURAL GAS CO	UNKNOW	U		INACTIVE	39.715004	-80.375361	
47061013700000	HENRY W HAINES		PHILADELPHIA COIMPANY, THE	UNKNOW	U		INACTIVE	39.702475	-80.373571	
47061015700000	ELIJAH C CLOVIS		PHILADELPHIA COIMPANY, THE	UNKNOW	U		INACTIVE	39.708124	-80.363544	
47061016100000	S E KIMBLE		MANUFACTURERS LIGHT & HEAT CO	UNKNOW	U		INACTIVE	39.692476	-80.348335	
47061004980000	J G WHITE		(N/A)	UNKNOW	U		INACTIVE	39.700584	-80.381932	
47061006340000	L A STILES		(N/A)	UNKNOW	U		INACTIVE	39.71307	-80.37949	
47061006350000	ALEX HENNAN		(N/A)	UNKNOW	U		INACTIVE	39.712055	-80.374444	
47061006360000	L HENNEN		(N/A)	UNKNOW	U		INACTIVE	39.703915	-80.371594	
47061006370000	MAHLON TENNANT		(N/A)	UNKNOW	U		INACTIVE	39.697519	-80.372444	
47061006380000	ROBERT CLOVIS		(N/A)	UNKNOW	U		INACTIVE	39.694917	-80.365323	
47061006410000	S S WHITE		PHILADELPHIA OIL CO	UNKNOW	U		INACTIVE	39.692594	-80.365037	
47061006430000	ALEX HENNEN		PHILADELPHIA OIL CO	UNKNOW	U		INACTIVE	39.694620	-80.365016	
47061018980000	ALEX HENNEN		(N/A)	UNKNOW	U		INACTIVE	39.6994	-80.379115	
47061019000000	CHARLES WHITE		CLOVIS	UNKNOW	U		INACTIVE	39.69811	-80.369004	
47061019010000	R PETHLE		(N/A)	UNKNOW	U		INACTIVE	39.704785	-80.378177	
47061019030000	ELIZABETH GILMORE		(N/A)	UNKNOW	U		INACTIVE	39.707895	-80.382494	
47061019040000	S E KIMBLE		(N/A)	UNKNOW	U		INACTIVE	39.714065	-80.382516	
47061000770000	ALEX HENNEN		PITTSBURGH & WV GAS	DRY HOLE	V		P & A	39.710599	-80.378502	
47061004390000	OLA SIX	37	EQUITRANS MIDSTREAM	UNKNOW	V		P & A	39.701583	-80.371961	
47061005610000	HENNEN	37	EGT	GAS	V		P & A	39.714067	-80.387551	
47061005610001	HENNEN	37	EGT	GAS	V		P & A	39.7162	-80.374459	
47061015100000	INDIGO 3		INDIGO ENERGY	UNKNOW	V		P & A	39.7162	-80.374459	
47103011840000	SANTEE HEIRS 4		J A & M OIL & GAS COMPANY	UNKNOW	V	MAXTON	P & A	39.720508	-80.401636	
47103011850000	SANTEE HEIRS 5		J A & M OIL & GAS COMPANY	GAS	V	MAXTON	P & A	39.708413	-80.374798	



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. Smith
L. L. S. 687



FILE NO:
DRAWING NO:
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: OCTOBER 17 20 23
OPERATORS WELL NO:
API WELL NO
47 - 061 - 01947
STATE COUNTY PERMIT

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

LOCATION ELEVATION: 1199' WATERSHED: Dunkard Creek QUADRANGLE: Wadestown
DISTRICT: Battelle COUNTY: Monongalia

SURFACE OWNER: Consol Mining Company LLC ACREAGE: 46.75 ±
ROYALTY OWNER: Bounty Minerals, LLC LEASE NO: 189033000 ACREAGE: 59.62

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: 7,848'

WELL OPERATOR: CNX Gas Company LLC DESIGNATED AGENT: Anthony Kendziora
ADDRESS: 1000 Horizon Vue Drive ADDRESS: 111 Avondale Road
Canonsburg, PA 15317 Fairmont, WV 26554

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NOV - 1 2023
WV Department of Environmental Protection

LATITUDE 39° 45' 00" BH: 5,905'

LONGITUDE 80° 22' 30" BH: 6,335'

WDTN18DHSM
CNX Gas Company LLC



WDTN18DHSM
BOTTOM HOLE

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 OBTAINED FROM INFORMATION PROVIDED BY CNX GAS COMPANY LLC AND TAX RECORDS.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
5. NO 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
- Plugged Well Location
- Abandoned Well
- Future Use
- Surface Tract Identification
- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Match Line
- Lease Boundary
- Creek or Drain
- State Line
- WV County Route
- WV State Route

500' WELL BORE BUFFER
SHOWING EXISTING WELLS

AZ 325°00'00"
18,207±

See Page 3 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



SEAL

FILE NO: _____
 DRAWING NO: _____
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1:2500
 PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: OCTOBER 17 20 23
 OPERATORS WELL NO: _____
 API WELL NO
 47 - 061 - 01947
 STATE COUNTY PERMIT

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

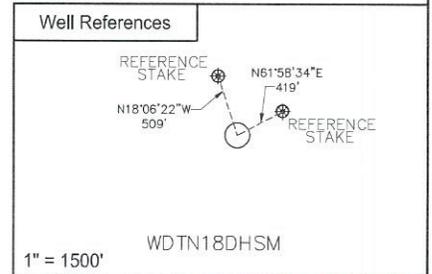
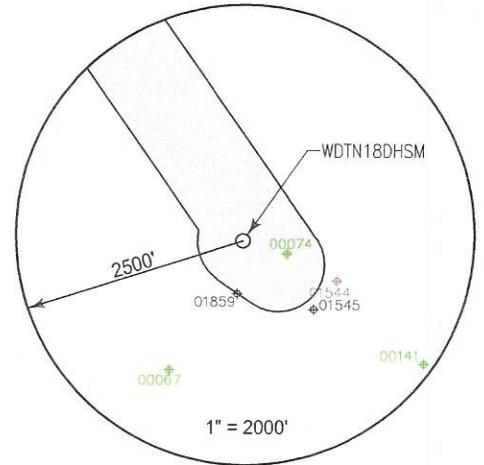
LOCATION ELEVATION: 1199' WATERSHED: Dunkard Creek QUADRANGLE: Wadestown
 DISTRICT: Battelle COUNTY: Monongalia

SURFACE OWNER: Consol Mining Company LLC ACREAGE: 46.75 ±
 ROYALTY OWNER: Bounty Minerals, LLC LEASE NO: 189033000 ACREAGE: 59.02 ± **11/17/2023**

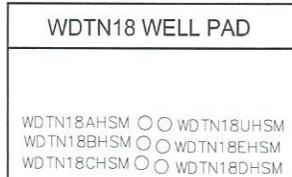
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: TVD: 7,848'

WELL OPERATOR: CNX Gas Company LLC DESIGNATED AGENT: Anthony Kendziora
 ADDRESS: 1000 Horizon Vue Drive ADDRESS: 111 Avondale Road
 Canonsburg, PA 15317 Fairmont, WV 26554

TRACT ID	SURFACE OWNER	LESSOR	PIN		
1	Consol Mining Company LLC	Bounty Minerals, LLC	1-9-37		
		Bounty Minerals III Acquisitions, LLC	1-12-7		
		LOLA Drilling I, LLC			
		Rice Drilling B, LLC			
9	Consol Mining Company LLC	Paul Reeder, single and Doris L. Wenck, single	1-9-32		
		Consolidation Coal Company	1-9-33		
		CONSOL Mining Company LLC			
		CNX Resource Holdings LLC			
10	Consol Mining Company LLC	Eastern Associated Coal Corporation	1-9-37		
			1-9-38		
12	Consol Mining Company LLC, et al	Ralph Six	1-9-39		
			1-9-39.1		
			1-9-39.2		
			1-9-39.3		
			1-9-39.4		
			1-9-39.5		
			1-9-39.6		
		Antero Resources Corporation			
		Doris Margaret White			
		George Stephen Knight			
		18A	CNX RCPC LLC	Donna R. Hennen	1-9-20
				WOG Leasing, LLC	
		Milan W. Cikovich, Jr. and Susan K. Cikovich, husband and wife			
		EQT Production Company			
		Don Fordyce			
		Betty Short			
		Milan W. Cikovich, Jr. and Christine Michelle Park, individually and trustee of the Amended and Restated Milan W. Cikovich Testamentary Trust F/B/O Francine R. Cikovich			
		Melissa Ann Hennen Limbaugh			
		Linda S. Sansone			
		Mildred Louise Walton			
		Judy Kay Marshall, f/k/a Judy Kay Howard			
		Mary Virginia Davis			
		Karen S. Gray			
		Helene M. Muetzel			
		James R. Hennen, Jr.			
		Cecil Hennen			
		Roger L. Pratt			
		Nelson James Hennen, Jr.			
		Clark H. Hennen			
		Delores Ann Hennen Bryant			
		Francis J. Waldron Hennen			
		Ronald Fordyce			
		James Cox			
		Joseph Muto			
		Robert Morgan and Vickie Morgan			
		Terra Firma Company			
		CNX Land LLC			



SURFACE HOLE LOCATION (SHL)	
UTM 17 NAD 83	
N: 4393667.28	
E: 555023.70	
NAD 83, WV NORTH	
N: 434978.596	
E: 1726980.783	
LAT/LON DATUM NAD 83	
LAT: 39°41'27.870"	
LON: 80°21'29.791"	
LANDING POINT	
UTM 17 NAD 83	
N: 4393763.74	
E: 555015.64	
NAD 83, WV NORTH	
N: 435295.561	
E: 1726959.621	
LAT/LON DATUM NAD 83	
LAT: 39°41'31.001"	
LON: 80°21'30.100"	
BOTTOM HOLE LOCATION (BHL)	
UTM 17 NAD 83	
N: 4398254.39	
E: 551758.33	
NAD 83, WV NORTH	
N: 450209.727	
E: 1716517.386	
LAT/LON DATUM NAD 83	
LAT: 39°43'57.389"	
LON: 80°23'45.585"	



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. 687
L. L. S. 687



SEAL

FILE NO: _____		DATE: <u>OCTOBER 17</u> 20 <u>23</u>
DRAWING NO: _____		OPERATORS WELL NO: _____
SCALE: <u>1" = 1000'</u>		API WELL NO: _____
MINIMUM DEGREE OF ACCURACY: <u>1:2500</u>		<u>47</u> - <u>061</u> - <u>01947</u>
PROVEN SOURCE OF ELEVATION: <u>NGS CORS Station</u>	STATE _____ COUNTY _____ PERMIT _____	

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

LOCATION ELEVATION: 1199' WATERSHED: Dunkard Creek QUADRANGLE: Wadestown
 DISTRICT: Battelle COUNTY: Monongalia

SURFACE OWNER: Consol Mining Company LLC ACREAGE: 146.75 ±
 ROYALTY OWNER: Bounty Minerals, LLC LEASE NO: 189033000 ACREAGE: 59.02 ±

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: 7,848'

WELL OPERATOR: CNX Gas Company LLC DESIGNATED AGENT: Anthony Kendziora
 ADDRESS: 1000 Horizon Vue Drive ADDRESS: 111 Avondale Road
Canonsburg, PA 15317 Fairmont, WV 26554

TRACT ID	SURFACE OWNER	LESSOR	PIN
18B	CNX RCPC LLC	Kimeric and Company LLC Antero Resources Corporation	1-9-20
19	Consol Mining Company LLC	Bounty Minerals, LLC John E. Stankola	1-9-31
24	Consol Mining Company LLC	Bounty Minerals, LLC	1-9-19
28	Paul David Beck, et al	Bounty Minerals, LLC	1-9-6 1-9-6.1 1-9-6.2
29	Consol Mining Company LLC	Roger Goodwin and Ilene Goodwin, his wife Consolidation Coal Company CONSOL Mining Company LLC CNX Resource Holdings LLC	1-9-5
30	Seth Allen Moore	Douglas A. Church Terra Firma Company CNX Land LLC	1-9-4
36	Wolfe Kids LLC	XTO Energy Inc. Shuman Inc. Noumenon Corporation O-Max Coal Company	1-2-6
37	Mike J. Prendergast, et ux	Mike J. Prendergast and Thelma M. Predergast	1-2-7
47	Consol Mining Company LLC	Shuman Inc. Noumenon Corporation O-Max Coal Company Flossie Kimble; Denzle Kimble and Olive Irene Wright Kimble Consolidation Coal Company	1-2-5
49	Consol Mining Company LLC	David L. McGowan and Brenda J. McGowan Barbara A. Berry Rand L. Martin and Jeannetta I. Martin Salvatore Veltri and Janis M. Veltri Bessie Eden Wise Consolidation Coal Company	1-2-3
51A	Monongalia County Coal Resources Inc.	XTO Energy, Inc. Regina Schrimper Laticia Estridge Jon Walton Ellis Shannon McCreadie Anna Marie Boortz Dora Irene Antel Six Virginia L. Smalley Judith Six Alice Clara Conwell, a/k/a Alice Claire Conwell Sarah E. Roark, f/k/a Sarah E. McCreadie Clareen Frances Gomez Gregory Joseph Kleinhenz MP&G Legacy Holding LLC Stanhagen Legal Limited Liability Company Accord Land Services, LLC Wild Thing Barnstormers, LLC David M. McCallum Marjorie Oakley Timothy Michael Kleinhenz and Verallen M. Kleinhenz, h/w Laura Lee Cook William N. Richards, a/k/a William Nelson Pamela Colleen Dillon John C. Richards Norita Hinerman Phyllis Ann Richards Douglas Grant Richards, a/k/a Grant Douglas Richards Michael Stephen Kleinhenz Mark Anthony Kleinhenz Andrea Lee Chapman Anthony Francis Kleinhenz Carol Marie Murray Barbara Ann Dillon Linda Samuels Jimmie Kyle Core Donna DiPietrantonio, f/k/a Donna Romey Wilma Arlene Coffey Monongalia County Coal Company	1-2-1

11/17/2023



API WELL NO
47 - 061 - 01947
STATE COUNTY PERMIT

TRACT ID	SURFACE OWNER	LESSOR	PIN
52A	Cucumber Tree Farm Inc.	Cucumber Tree Farm, Inc.	1-2-2.1
		Mountain V Oil & Gas, Inc.	
		Hayden Harper Energy Pennsylvania, LLC	
		Bluestone Energy Partners	
		Antero Resources Bluestone LLC	
		Antero Resources Appalachian Corporation	
		Energy Corporation of America	
		EQT Production Company	

11/17/2023

WW-6A1
(5/13)

Operator's Well No. WDTN18DHSM

**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 - 1 2023
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 PERMITTING SERVICES

Attachment - Form WW-GA-1 for WDTN18DHSM							
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Surface Owner	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
1	1-9-37 1-12-7	189033000	Consol Mining Company LLC	Bounty Minerals, LLC	LOLA Drilling I, LLC	Not less than 1/8	1586/325
				Bounty Minerals III Acquisitions, LLC	LOLA Drilling I, LLC	Not less than 1/8	1586/328
				LOLA Drilling I, LLC	Rice Drilling B, LLC	Assignment	133/752
				Rice Drilling B, LLC	CNX Gas Company LLC	Assignment	159/809
9	1-9-32 1-9-33	188616000	Consol Mining Company LLC	Paul Reeder, single and Doris L. Wenck, single	Consolidation Coal Company	Fee	1309/433
				Consolidation Coal Company	CONSOL Mining Company LLC	Quitclaim	1489/107
				CONSOL Mining Company LLC	CNX Resource Holdings LLC	Quitclaim	1603/78
				CNX Resource Holdings LLC	CNX Gas Company LLC	Quitclaim	1667/86
10	1-9-37 1-9-38	203527000	Consol Mining Company LLC	Eastern Associated Coal Corporation	CNX Gas Company LLC	Fee	1267/233
12	1-9-39 1-9-39.1 1-9-39.2 1-9-39.3 1-9-39.4 1-9-39.5 1-9-39.6	189024000 189009000 189019000 189020000 189021000 189022000 189023000	Consol Mining Company LLC, et al	Ralph Six	Antero Resources Corporation	Not less than 1/8	1781/354
				Antero Resources Corporation	CNX Gas Company LLC	Assignment	158/372
				Doris Margaret White	CNX Gas Company LLC	Not less than 1/8	1484/348
				George Stephen Knight	CNX Gas Company LLC	Not less than 1/8	1482/438
18A	1-9-20	188573000	CNX RCPC LLC	Donna R. Hennen	WOG Leasing, LLC	Not less than 1/8	1800/218
				WOG Leasing, LLC	CNX Gas Company LLC	Assignment	161/362
				Milan W. Cikovich, Jr. and Susan K. Cikovich, husband and wife	EQT Production Company	Not less than 1/8	1642/416
				EQT Production Company	CNX Gas Company LLC	Assignment	1644/14
				Don Fordyce	CNX Gas Company LLC	Not less than 1/8	1639/567
				Betty Short	CNX Gas Company LLC	Not less than 1/8	1639/552
				Milan W. Cikovich, Jr. and Christine Michelle Park, individually and trustee of the Amended and Restated Milan W. Cikovich Testamentary Trust F/B/O Francine R. Cikovich	CNX Gas Company LLC	Not less than 1/8	1648/731
				Melissa Ann Hennen Limbaugh	CNX Gas Company LLC	Not less than 1/8	1655/291
				Linda S. Sansone	CNX Gas Company LLC	Not less than 1/8	1807/789
				Mildred Louise Walton	CNX Gas Company LLC	Not less than 1/8	1803/723
				Judy Kay Marshall, f/k/a Judy Kay Howard	CNX Gas Company LLC	Not less than 1/8	1655/286
				Mary Virginia Davis	CNX Gas Company LLC	Not less than 1/8	1656/792
				Karen S. Gray	CNX Gas Company LLC	Not less than 1/8	1650/660
				Helene M. Muetzel	CNX Gas Company LLC	Not less than 1/8	1653/752
				James R. Hennen, Jr.	CNX Gas Company LLC	Not less than 1/8	1655/281
				Cecil Hennen	CNX Gas Company LLC	Not less than 1/8	1826/36
				Roger L. Pratt	CNX Gas Company LLC	Not less than 1/8	1808/146
				Nelson James Hennen, Jr.	CNX Gas Company LLC	Not less than 1/8	168/224
				Clark H. Hennen	CNX Gas Company LLC	Fee	1650/594
				Delores Ann Hennen Bryant	CNX Gas Company LLC	Fee	1640/737
Francis J. Waldron Hennen	CNX Gas Company LLC	Fee	1638/794				
Ronald Fordyce	CNX Gas Company LLC	Fee	1640/741				
James Cox	CNX Gas Company LLC	Fee	1653/690				
Joseph Muto	CNX Gas Company LLC	Fee	1640/733				
Robert Morgan and Vickie Morgan	Terra Firma Company	Fee	1285/420				
Terra Firma Company	CNX Land LLC	Merger	60/312				
CNX Land LLC	CNX Gas Company LLC	Quitclaim	1827/131				
18B	1-9-20	188573000	CNX RCPC LLC	Kimeric and Company LLC	Antero Resources Corporation	Not less than 1/8	1776/602
				Antero Resources Corporation	CNX Gas Company LLC	Assignment	158/372
19	1-9-31	293176000	Consol Mining Company LLC	Bounty Minerals, LLC	CNX Gas Company LLC	Not less than 1/8	1644/316
				John E. Stankola	CNX Gas Company LLC	Not less than 1/8	1735/826
24	1-9-19	188567000	Consol Mining Company LLC	Bounty Minerals, LLC	CNX Gas Company LLC	Not less than 1/8	1644/316
28	1-9-6 1-9-6.1 1-9-6.2	188563000	Paul David Beck, et al	Bounty Minerals, LLC	CNX Gas Company LLC	Not less than 1/8	1694/225
29	1-9-5	188562000	Consol Mining Company LLC	Roger Goodwin and Ilene Goodwin, his wife	Consolidation Coal Company	Fee	1309/678
				Consolidation Coal Company	CONSOL Mining Company LLC	Quitclaim	1489/107
				CONSOL Mining Company LLC	CNX Resource Holdings LLC	Quitclaim	1603/78
				CNX Resource Holdings LLC	CNX Gas Company LLC	Quitclaim	1666/713
30	1-9-4	188561000	Seth Allen Moore	Douglas A. Church	Terra Firma Company	Fee	1295/148
				Terra Firma Company	CNX Land LLC	Merger	60/312
				CNX Land LLC	CNX Gas Company LLC	Quitclaim	1666/707
36	1-2-6	189588000	Wolfe Kids LLC	XTO Energy Inc.	CNX Gas Company LLC	Not less than 1/8	1639/585
				Shuman Inc.	CNX Gas Company LLC	Not less than 1/8	1736/212
				Noumenon Corporation	CNX Gas Company LLC	Not less than 1/8	1731/229
				O-Max Coal Company	CNX Gas Company LLC	Not less than 1/8	1731/234
37	1-2-7	191527000	Mike J. Prendergast, et ux	Mike J. Prendergast and Thelma M. Predergast	CNX Gas Company LLC	Not less than 1/8	1507/432

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Surface Owner	Grantor, Lessor, etc	Grantee, Lessee, etc	Royalty	Book/Page
47	1-2-5	191524000	Consol Mining Company LLC	Shuman Inc.	CNX Gas Company LLC	Not less than 1/8	1736/212
				Noumenon Corporation	CNX Gas Company LLC	Not less than 1/8	1731/229
				O-Max Coal Company	CNX Gas Company LLC	Not less than 1/8	1731/234
				Flossie Kimble; Denzle Kimble and Olive Irene Wright Kimble	Consolidation Coal Company	Fee	715/529
			Consolidation Coal Company	CNX Gas Company LLC	Deed	1300/1	
49	1-2-3	195150000	Consol Mining Company LLC	David L. McGowan and Brenda J. McGowan	CNX Gas Company LLC	Not less than 1/8	1522/557
				Barbara A. Berry	CNX Gas Company LLC	Not less than 1/8	1523/121
				Rand L. Martin and Jeannetta I. Martin	CNX Gas Company LLC	Not less than 1/8	1523/125
				Salvatore Veltri and Janis M. Veltri	CNX Gas Company LLC	Not less than 1/8	1523/129
				Bessie Eden Wise	Consolidation Coal Company	Fee	704/511
				Consolidation Coal Company	CNX Gas Company LLC	Deed	1300/1
51A	1-2-1	189460000	Monongalia County Coal Resources Inc.	XTO Energy, Inc.	CNX Gas Company LLC	Not less than 1/8	1639/585
				Regina Schrimper	CNX Gas Company LLC	Not less than 1/8	1652/16
				Laticia Estridge	CNX Gas Company LLC	Not less than 1/8	1652/46
				Jon Walton	CNX Gas Company LLC	Not less than 1/8	1652/793
				Ellis Shannon McCreddie	CNX Gas Company LLC	Not less than 1/8	1652/706
				Anna Marie Boortz	CNX Gas Company LLC	Not less than 1/8	1656/770
				Dora Irene Antel Six	CNX Gas Company LLC	Not less than 1/8	1663/11
				Virginia L. Smalley	CNX Gas Company LLC	Not less than 1/8	1661/277
				Judith Six	CNX Gas Company LLC	Not less than 1/8	1664/181
				Alice Clara Conwell, a/k/a Alice Claire Conwell	CNX Gas Company LLC	Not less than 1/8	1674/451
				Sarah E. Roark, f/k/a Sarah E. McCreddie	CNX Gas Company LLC	Not less than 1/8	1680/447
				Clareen Frances Gomez	CNX Gas Company LLC	Not less than 1/8	1685/636
				Gregory Joseph Kleinhenz	CNX Gas Company LLC	Not less than 1/8	1685/626
				MP&G Legacy Holding LLC	CNX Gas Company LLC	Not less than 1/8	1733/414
				Stanhagen Legal Limited Liability Company	CNX Gas Company LLC	Not less than 1/8	1734/284
				Accord Land Services, LLC	CNX Gas Company LLC	Not less than 1/8	1734/274
				Wild Thing Barnstormers, LLC	CNX Gas Company LLC	Not less than 1/8	1734/279
				David M. McCallum	CNX Gas Company LLC	Not less than 1/8	1751/656
				Marjorie Oakley	CNX Gas Company LLC	Not less than 1/8	1805/450
				Timothy Michael Kleinhenz and Verallen M. Kleinhenz, h/w	CNX Gas Company LLC	Not less than 1/8	1646/490
				Laura Lee Cook	CNX Gas Company LLC	Not less than 1/8	1651/813
				William N. Richards, a/k/a William Nelson	CNX Gas Company LLC	Not less than 1/8	1651/818
				Pamela Colleen Dillon	CNX Gas Company LLC	Not less than 1/8	1653/762
				John C. Richards	CNX Gas Company LLC	Not less than 1/8	1664/784
				Norita Hinerman	CNX Gas Company LLC	Not less than 1/8	1663/71
				Phyllis Ann Richards	CNX Gas Company LLC	Not less than 1/8	1664/126
				Douglas Grant Richards, a/k/a Grant Douglas Richards	CNX Gas Company LLC	Not less than 1/8	1674/444
				Michael Stephen Kleinhenz	CNX Gas Company LLC	Not less than 1/8	1826/525
				Mark Anthony Kleinhenz	CNX Gas Company LLC	Not less than 1/8	168/226
				Andrea Lee Chapman	CNX Gas Company LLC	Not less than 1/8	168/226
				Anthony Francis Kleinhenz	CNX Gas Company LLC	Not less than 1/8	168/226
				Carol Marie Murray	CNX Gas Company LLC	Not less than 1/8	168/226
				Barbara Ann Dillon	CNX Gas Company LLC	Not less than 1/8	168/226
				Linda Samuels	CNX Gas Company LLC	Not less than 1/8	168/226
				Jimmie Kyle Core	CNX Gas Company LLC	Fee	1677/168
				Donna DiPietrantonio, f/k/a Donna Romey	CNX Gas Company LLC	Fee	1675/278
				Wilma Arlene Coffey	CNX Gas Company LLC	Fee	1696/629
				Monongalia County Coal Company	CNX Gas Company LLC	Fee	1660/124
52A	1-2-2.1	239984000	Cucumber Tree Farm Inc.	Cucumber Tree Farm, Inc.	Mountain V Oil & Gas, Inc.	Not less than 1/8	1328/406
				Mountain V Oil & Gas, Inc.	Hayden Harper Energy Pennsylvania, LLC	Assignment	100/444
				Hayden Harper Energy Pennsylvania, LLC	Bluestone Energy Partners	Assignment	108/486
				Bluestone Energy Partners	Antero Resources Bluestone LLC	Merger	WVSO5
				Antero Resources Bluestone LLC	Antero Resources Appalachian Corporation	Assignment	115/803
				Antero Resources Appalachian Corporation	Energy Corporation of America	Assignment	116/92
				Energy Corporation of America	EQT Production Company	Assignment	124/688
				EQT Production Company	CNX Gas Company LLC	Assignment	159/797

Page 3 of 3

From: [Weigand, Sarah](#)
To: [EP, SW OG-Submissions](#)
Cc: [Zachwieja, Becky](#)
Subject: CNX AOR for WDTN18 M1 Wells with Origination in West Virginia
Date: Monday, October 9, 2023 11:47:00 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)
[20231009 WDTN18 M1 cover letter.pdf](#)
[WDTN18 M1 PA AORs.xlsx](#)
[WDTN18 M1 AOR Well Maps.pdf](#)
[20231009 WDTN18 M1 PA monitoring and historic.pdf](#)

Hello,

Please find CNX's AOR for our WDTN18 M1 wells that originate in West Virginia, but cross the southern state line into Pennsylvania. Per the guidance given earlier this year, we were advised that we should follow the AOR requirements and submit to this email. The attached cover letter includes locational information as well as additional documentation of the earlier guidance given, as well as a screenshot of the failed attempt to submit via Greenport. Typically AOR's are submitted individually, however since this isn't getting submitted via Greenport all wells are tabbed in the excel summaries and the PDF for maps includes all individual well maps.

Thank you,

Sarah Weigand

CNX | Manager, Permitting Services

CNX Center | **1000 Horizon Vue Drive** | Canonsburg, PA 15317

(724) 485-3244 – office | (412) 628-1829 – mobile



cnx.com

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11/17/2023

From: [Donohue, Thomas E](#)
To: [Weigand, Sarah](#); [Zachwieja, Becky](#)
Cc: [Campbell, Heather](#); [Keller, Joel](#); [Sabocheck, Scott](#)
Subject: [EXTERNAL] CNX - WDTN18UHSM Well Permit Application
Date: Thursday, October 27, 2022 8:46:28 AM
Attachments: [WV Well Plat - CNX.pdf](#)

CAUTION: This email originated from outside CNX. Do not click links or open attachments unless you recognize the sender and believe the content is safe.

Sarah and Becky,

Thank you for your notification that this WV well will be crossing into PA. Please be aware of CNX's obligations to submit an Area of Review survey pursuant to PA Code Ch. 78a.52a for the portion of the well that will exist in Pennsylvania, prior to commencing drilling.

Additionally, if the portion of this well in Pennsylvania is drilled below the top of the Onondaga horizon, CNX will need to adhere to provisions of the Oil & Gas Conservation Law, in particular Section 6. This states in part that *"...In areas in which no spacing order has been entered and no application is pending, no permit shall be issued for the drilling of a well unless the location of the well is at least three hundred thirty feet from the nearest outside boundary line of the lease on which it is located: Provided, however, That if the lease is included in a voluntary unit, a well may be located without regard to lease lines if it is not within three hundred thirty feet of the nearest unit line...."*. Please provide a statement whether or not the portion of the well in Pennsylvania will be drilled below the top of the Onondaga.

Links to PA Code Ch. 78a.52a and the Oil & Gas Conservation Law are below for your reference.

PA Code Ch. 78a.52a – Area of Review

<http://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/025/chapter78a/chap78atoc.html&d=#78a.52a>.

Oil & Gas Conservation Law

<http://files.dep.state.pa.us/OilGas/BOGM/BOGMPortalFiles/LawsRegsGuidelines/Act359uc.pdf>

Please let me know if you have any questions.

Thanks

Thomas E. Donohue, P.G. | Environmental Program Manager
Department of Environmental Protection | District Oil & Gas Operations
400 Waterfront Dr. | Pittsburgh, PA 15222
Phone: 412.442.4004 | Fax: 412.442.4328
www.depweb.state.pa.us

11/17/2023



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

October 24, 2023

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

RE: WDTN18DHSM- *MODIFICATION* Horizontal Drilling Permit Application

To Whom It May Concern:

CNX Gas Company LLC (CNX) is requesting a modification to extend the WDTN18DHSM horizontal lateral well permit. The subject WDTN18 Marcellus lease well, is in Monongalia County.

CNX would like to use the expedited review process for the WDTN18DHSM Modification application and have enclosed a check for: \$15,150.00. CNX previously permitted the "WDTN18DHSM" in September 2023.

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

Sincerely,

A handwritten signature in blue ink that reads 'Sarah Weigand'. The signature is fluid and cursive, with the first name 'Sarah' being the most prominent.

Sarah Weigand

RECEIVED
Office Of Oil and Gas

NOV - 1 2023

WV Department of
Environmental Protection

11/17/2023



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

November 7, 2023

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

RE: WDTN18 A-E MOD Payments

Dear Cragin,

Please find the correct checks for the WDTN18 A, B, C, D, & E MOD permit applications enclosed.

Thank you,

Becky Zachwieja

A	2140043929	7500 ⁰⁰
B	2140043930	7500 ⁰⁰
C	2140043931	7500 ⁰⁰
D	2140043932	7500 ⁰⁰
E	2140043933	7500 ⁰⁰

RECEIVED
Office of Oil and Gas

NOV 08 2023

WV Department of
Environmental Protection

11/17/2023