

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

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API 47 - 061 - 01823 County MONONGALIA District BATTELLE
Quad WADESTOWN Pad Name WDTN5 Field/Pool Name _____
Farm name WISE Well Number WDTN5GHSM
Operator (as registered with the OOG) CNX GAS COMPANY, LLC
Address 1000 CONSOL ENERGY DRIVE City CANONSBURG State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 440508.69 (NAD 27) Easting 1764409.85 (NAD 27)
Landing Point of Curve Northing 439352.03 (NAD 27) Easting 1763006.98 (NAD 27)
Bottom Hole Northing 445869.18 (NAD 27) Easting 1756139.32 (NAD 27)

Elevation (ft) 1388 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
SYNTHETIC BASED FLUID

ADDITIVES: ABS MUL (EMULSIFIER), CALCIUM CHLORIDE, FLR PLUS (GILSONITE), CLAYTONE EM (SUSPENSION AGENT), AES WA II (WETTING AGENT), LIME

Date permit issued 1/04/2019 Date drilling commenced 1/04/2019 Date drilling ceased 5/09/2019
Date completion activities began 7/18/2019 Date completion activities ceased 9/8/2019
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 399 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1730, 2479, 2509 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 830, 1170 TRACE: 1810, 1820, 1912, 1918, 2100 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed

Reviewed by:
MDK 11/26/2019

API 47-061 - 01823 Farm name WISE Well number WDTN5GHSM

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20"	129	NEW	94lb/ft	N/A	GROUT TO SURFACE
Surface	17.5"	13.375"	1356	NEW	J-55 54.5lb/ft	N/A	Y - CEMENT TO SURFACE
Coal							
Intermediate 1	12.25"	9.625"	2960	NEW	J-55 36lb/ft	N/A	Y - CEMENT TO SURFACE
Intermediate 2							
Intermediate 3							
Production	8.75" & 8.5"	5.5"	18167	NEW	P-110 20lb/ft	N/A	Y - TOC @ 1600
Tubing							
Packer type and depth set							

Comment Details ALL DEPTHS ARE REFERENCED TO RKB = 29' GLE

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	HALCEM	1010	15.8	1.169	1181	0	8
Coal							
Intermediate 1	HALCEM	970	15.8	1.147	1113	0	8
Intermediate 2							
Intermediate 3							
Production	NEOCEM (LEAD) / NEOCEM (TAIL)	1245 (LEAD) / 2265 (TAIL)	14.5 (LEAD) / 14.5 (TAIL)	1.189 (LEAD) / 1.185 (TAIL)	1455 (LEAD) / 2630 (TAIL)	1600	8
Tubing							

Drillers TD (ft) 18237 Loggers TD (ft) N/A
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 7548

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Check all wireline logs run
 caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

SURFACE: Centralize every other joint from shoe to surface
 INTERMEDIATE: Centralize every 3rd joint from shoe to surface
 PRODUCTION: Centralize every joint from shoe to 2,479'

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED

API 47- 061 - 01823 Farm name WISE Well number WDTN5GHSM

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>MARCELLUS</u>	<u>8,009</u> TVD	<u>8,573</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

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Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2228 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 3507.50 mcfpd Oil 0 bpd NGL 0 bpd Water 1248 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
UNDIFFERENTIATED SAND	0	440	0	440	SANDSTONE / SILTSTONE/ TRACES OF LIMESTONE
UNDIFFERENTIATED LIME	440	470	440	470	LIME STONE / SANDSTONE
UNDIFFERENTIATED SAND	470	510	470	510	SANDSTONE / LIMESTONE
UNDIFFERENTIATED SILT	510	830	510	830	SILTSTONE / LIMESTONE/ TRACES OF SANDSTONE & RED SHALE
WAYNESBURG	830	832	830	832	COAL / SILTSTONE / SANDSTONE
UNDIFFERENTIATED SILT	832	850	832	850	SILTSTONE / SANDSTONE
UNDIFFERENTIATED SAND	850	950	850	950	SANDSTONE
UNDIFFERENTIATED SILT	950	1000	950	1000	SILTSTONE / LIMESTONE
UNDIFFER. LIME / SILT	1000	1170	1000	1170	LIMESTONE / SILTSTONE
PITTSBURGH COAL	1170	1180	1170	1180	COAL / LIMESTONE / SILTSTONE
UNDIFFERENTIATED LIME	1180	1230	1180	1230	LIMESTONE / SILTSTONE
UNDIFFERENTIATED SILT	1230	1400	1230	1400	SILTSTONE / LIMESTONE / RED SHALE
UNDIFFERENTIATED SILT	1400	1730	1400	1730	SILTSTONE / SANDSTONE
UPPER FREEPORT	1730	1740	1730	1740	SANDSTONE

Please insert additional pages as applicable.


Drilling Contractor PATTERSON-UTI DRILLING COMPANY
Address 207 CARLTON DRIVE City EIGHTY FOUR State PA Zip 15330

Logging Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company HALLIBURTON
Address 121 CHAMPION WAY SUITE #210 City CANONSBURG State PA Zip 15317

Stimulating Company KEANE
Address 5825 North Sam Houston Parkway West Suite 600 City Houston State TX Zip 77086

Please insert additional pages as applicable.

Completed by Michael Nonce Telephone 304-884-2138
Signature  Title Superintendent Completions Date 10/22/2019



LITHOLOGIES CONTINUED

LITHOLOGY / FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT NAME TVD	TOP DEPTH IN FT NAME MD	BOTTOM DEPTH IN FT NAME MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S, ETC)
UNDIFFERENTIATED SAND	1740	1810	1740	1810	SANDSTONE
LOWER FREEPORT	1810	1820	1810	1820	SANDSTONE/ SILTSTONE/ TRACES OF COAL
UNDIFFERENTIATED SAND	1820	1912	1820	1912	SANDSTONE/ SILTSTONE/ TRACES OF COAL
MIDDLE KITTANING	1912	1918	1912	1918	SANDSTONE/ SILTSTONE/ TRACES OF COAL
UNDIFFERENTIATED SAND	1918	2100	1918	2100	SANDSTONE/ SILTSTONE/ TRACES OF COAL
UNDIFFERENTIATED SILT	2100	2280	2100	2280	SILTSTONE/ TRACES OF COAL
UNDIFFERENTIATED SAND	2280	2300	2280	2300	SANDSTONE
UNDIFFERENTIATED SILT	2300	2340	2300	2340	SILTSTONE
UNDIFFERENTIATED SHALE	2340	2380	2340	2380	RED SHALE
UNDIFFERENTIATED SILT	2380	2420	2380	2420	SILTSTONE/ RED SHALE
BIG LIME	2420	2480	2420	2480	LIMESTONE/ SILTSTONE
KEENER	2480	2510	2480	2510	SANDSTONE/ SILTSTONE
BIG INJUN	2510	2690	2510	2690	SANDSTONE
BIG INJUN BASE	2690	3080	2690	3080	SILTSTONE
50 FOOT	3080	3140	3080	3140	SILTSTONE
GORDON	3140	3305	3140	3305	SANDSTONE/ SILTSTONE
FIFTH	3305	3352	3305	3352	SILTSTONE
BAYARD	3352	5290	3352	5290	SILTSTONE/ TRACES RED & GREY SHALES
ELK	5290	5360			SILTSTONE/ GREY SHALE
UNDIFFERENTIATED SILT/ SHALE	5360	7406			
RHINESTREET	7406	7490			GREY SHALE
CASHAQUA	7490	8174			GREY SHALE
BURKET	8174	8211			GREY SHALE
TULLY	8211	8260			LIMESTONE/ GRAY SHALE
HAMILTON	8260	8523			GREY SHALE
MARCELLUS	8523				BLACK SHALE
TD (MARCELLUS)				18237	

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WDTN5GHSM – PERFORATION RECORD – ATTACHMENT 1

Stage No.	Perforation Date	Perforation from MD ft.	Perforation to MD ft.	Number of Perforations	Formation(s)
1	6/27/2019	18,037.0	18,132.6	24	Marcellus Shale
2	7/7/2019	17,793.5	17,975.5	40	Marcellus Shale
3	7/19/2019	17,568.5	17,739.0	40	Marcellus Shale
4	7/19/2019	17,343.5	17,525.5	40	Marcellus Shale
5	7/19/2019	17,118.5	17,300.5	40	Marcellus Shale
6	7/20/2019	16,893.5	17,075.5	40	Marcellus Shale
7	7/21/2019	16,668.5	16,850.5	40	Marcellus Shale
8	7/21/2019	16,443.5	16,625.5	40	Marcellus Shale
9	7/21/2019	16,218.5	16,400.5	40	Marcellus Shale
10	7/22/2019	15,993.5	16,175.5	40	Marcellus Shale
11	7/22/2019	15,768.5	15,950.5	40	Marcellus Shale
12	7/23/2019	15,543.5	15,725.5	40	Marcellus Shale
13	7/23/2019	15,318.5	15,500.5	40	Marcellus Shale
14	7/23/2019	15,093.5	15,275.5	40	Marcellus Shale
15	7/24/2019	14,868.5	15,050.5	40	Marcellus Shale
16	7/24/2019	14,643.5	14,825.5	40	Marcellus Shale
17	7/24/2019	14,418.5	14,600.5	40	Marcellus Shale
18	7/25/2019	14,193.5	14,375.5	40	Marcellus Shale
19	7/25/2019	13,968.5	14,150.5	40	Marcellus Shale
20	7/25/2019	13,743.5	13,925.5	40	Marcellus Shale
21	7/26/2019	13,518.5	13,700.5	40	Marcellus Shale
22	7/26/2019	13,293.5	13,475.5	40	Marcellus Shale
23	7/26/2019	13,068.5	13,250.5	40	Marcellus Shale
24	7/27/2019	12,843.5	13,025.5	40	Marcellus Shale
25	7/27/2019	12,618.5	12,800.5	40	Marcellus Shale
26	7/28/2019	12,393.5	12,575.5	40	Marcellus Shale
27	7/28/2019	12,168.5	12,350.5	40	Marcellus Shale
28	7/29/2019	11,943.5	12,125.5	40	Marcellus Shale
29	7/29/2019	11,718.5	11,900.5	40	Marcellus Shale
30	7/30/2019	11,493.5	11,675.5	40	Marcellus Shale
31	7/30/2019	11,268.5	11,450.5	40	Marcellus Shale
32	7/30/2019	11,043.5	11,225.5	40	Marcellus Shale
33	7/31/2019	10,818.5	11,000.5	40	Marcellus Shale
34	7/31/2019	10,593.5	10,775.5	40	Marcellus Shale
35	7/31/2019	10,368.5	10,550.5	40	Marcellus Shale
36	8/1/2019	10,143.5	10,325.5	40	Marcellus Shale
37	8/1/2019	9,918.5	10,100.5	40	Marcellus Shale
38	8/2/2019	9,693.5	9,875.5	40	Marcellus Shale
39	8/2/2019	9,469.4	9,650.6	40	Marcellus Shale
40	8/2/2019	9,245.4	9,426.6	40	Marcellus Shale
41	8/3/2019	9,021.4	9,202.6	40	Marcellus Shale
42	8/3/2019	8,797.4	8,978.6	40	Marcellus Shale
43	8/4/2019	8,573.4	8,754.6	40	Marcellus Shale

WDTN5GHSM – STIMULATION INFORMATION PER STAGE – ATTACHMENT 2

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/Other (units)
1*								N/A
2	7/18/2019	86	9,546.0	6,888.0	6,478.0	523,479.0	9,394.00	N/A
3	7/19/2019	97	9,907.0	7,285.0	5,857.0	555,370.0	10,263.00	N/A
4	7/19/2019	94	9,597.0	6,544.0	5,911.0	549,835.0	10,587.00	N/A
5	7/20/2019	94	9,415.0	6,370.0	6,085.0	579,057.0	10,806.00	N/A
6	7/20/2019	95	9,182.0	7,344.0	6,052.0	539,492.0	10,280.00	N/A
7	7/21/2019	95	9,451.0	7,129.0	6,093.0	530,410.0	8,472.02	N/A
8	7/21/2019	95	9,496.0	7,032.0	5,652.0	544,618.0	9,964.00	N/A
9	7/22/2019	90	9,327.0	7,585.0	5,611.0	548,931.0	8,762.00	N/A
10	7/22/2019	95	9,319.0	7,672.0	5,467.0	536,940.0	9,964.00	N/A
11	7/23/2019	95	9,231.0	6,977.0	5,828.0	540,857.0	10,005.00	N/A
12	7/23/2019	93	9,357.0	6,778.0	5,902.0	534,305.0	8,422.00	N/A
13	7/23/2019	91	9,221.0	7,407.0	6,098.0	550,060.0	8,560.98	N/A
14	7/23/2019	92	8,961.0	7,685.0	5,589.0	540,374.0	9,884.00	N/A
15	7/24/2019	94	9,045.0	6,867.0	5,806.0	554,003.0	8,688.00	N/A
16	7/24/2019	96	9,173.0	6,378.0	5,593.0	537,474.0	8,633.00	N/A
17	7/24/2019	98	9,019.0	6,506.0	5,718.0	552,449.0	10,521.00	N/A
18	7/25/2019	99	9,166.0	6,670.0	5,571.0	536,080.0	8,537.00	N/A
19	7/25/2019	99	9,215.0	6,568.0	5,180.0	536,469.0	8,497.00	N/A
20	7/25/2019	99	9,360.0	7,325.0	4,801.0	557,090.0	8,630.00	N/A
21	7/26/2019	97	9,262.0	6,833.0	4,611.0	545,815.0	9,618.00	N/A
22	7/26/2019	100	9,552.0	7,927.0	5,421.0	539,776.0	8,347.00	N/A
23	7/27/2019	96	9,095.0	7,911.0	5,363.0	554,371.0	8,513.00	N/A
24	7/27/2019	98	9,396.0	7,242.0	5,705.0	543,976.0	8,398.00	N/A
25	7/28/2019	101	9,468.0	7,471.0	5,589.0	541,045.0	8,599.00	N/A
26	7/28/2019	98	9,303.0	6,417.0	5,832.0	543,767.0	8,415.00	N/A
27	7/28/2019	100	9,085.0	6,441.0	5,772.0	543,997.0	8,315.00	N/A
28	7/29/2019	80	9,274.0	6,826.0	5,547.0	539,072.0	8,223.00	N/A
29	7/30/2019	98	8,944.0	6,411.0	5,580.0	541,014.0	8,289.00	N/A
30	7/30/2019	98	8,853.0	6,157.0	5,598.0	543,902.0	8,277.00	N/A
31	7/30/2019	97	8,881.0	5,949.0	5,941.0	540,426.0	8,261.00	N/A
32	7/31/2019	100	8,896.0	7,484.0	5,320.0	541,612.0	9,195.00	N/A
33	7/31/2019	94	8,283.0	5,893.0	5,722.0	544,133.0	8,357.00	N/A
34	7/31/2019	98	8,456.0	6,605.0	5,790.0	546,224.0	8,174.07	N/A
35	8/1/2019	98	8,602.0	6,799.0	5,731.0	542,532.0	8,255.02	N/A
36	8/1/2019	90	8,378.0	6,680.0	5,647.0	542,968.0	8,363.00	N/A
37	8/1/2019	100	8,502.0	6,780.0	5,793.0	569,361.0	8,433.98	N/A
38	8/2/2019	97	8,093.0	6,226.0	5,795.0	542,516.0	8,291.98	N/A
39	8/2/2019	98	8,115.0	6,327.0	5,881.0	553,443.0	8,238.02	N/A
40	8/3/2019	99	8,121.0	6,560.0	5,555.0	552,971.0	8,181.00	N/A
41	8/3/2019	97	7,963.0	6,316.0	5,693.0	542,590.0	8,295.00	N/A
42	8/4/2019	100	8,080.0	6,364.0	5,753.0	554,539.0	8,196.05	N/A
43	8/4/2019	97	7,964.0	6,811.0	5,516.0	540,142.0	8,223.00	N/A

*Unable to inject into formation stage abandoned

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/18/2019
Job End Date:	8/4/2019
State:	West Virginia
County:	Monongalia
API Number:	47-061-01823-00-00
Operator Name:	CNX Gas Company LLC
Well Name and Number:	WDTN5 GHSM
Latitude:	39.70651400
Longitude:	-80.33716600
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	8,069
Total Base Water Volume (gal):	15,784,482
Total Base Non Water Volume:	0

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	CNX	Carrier/Base Fluid	Water	7732-18-5	100.00000	85.07482	None
Sand (Proppant)	Keane	Proppant	Crystalline silica: Quartz (SiO2)	14808-60-7	100.00000	14.30839	None
Hydrochloric Acid (7.5%)	Keane	Acid Inhibitor	Water	7732-18-5	92.50000	0.26895	None
			Hydrochloric Acid	7647-01-0	7.50000	0.02181	None
Hydrochloric Acid (15%)	Keane	Acidizing	Water	7732-18-5	85.00000	0.12449	None
			Hydrochloric Acid	7647-01-0	15.00000	0.02197	None
KFR-48	Keane	Friction Reducer	Water	7732-18-5	47.00000	0.03505	None
			butene, homopolymer	9003-29-6	25.00000	0.01864	None
			alkanes, C16-20-iso-	90622-59-6	25.00000	0.01864	None
			Alcohols, C12-18, ethoxylated	68213-23-0	3.00000	0.00224	None
KWG-111LS	Keane	Gel					



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			Distillates (petroleum), hydrotreated light	64742-47-8	55.00000	0.03483	None	
			Guar gum	9000-30-0	55.00000	0.03483	None	
KSI-22	Keane	Scale Inhibitor	Methanol	67-56-1	50.00000	0.01083	None	
			2-propenoic acid, polymer with 2-(1-oxo-2-propenyl) amino-1-propensulfonic acid monosodium salt and sodium phosphinite	110224-99-2	10.00000	0.00217	None	
MBC-516	Keane	Biocide	glutaral	111-30-8	26.70000	0.00448	None	
			didecyldimethylammonium chloride	7173-51-5	8.00000	0.00134	None	
			quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.30000	0.00089	None	
			Ethanol	64-17-5	2.80000	0.00047	None	
KEEAC-20	Keane	Iron Control	acetic acid	64-19-7	50.00000	0.00088	None	
			Citric acid	77-92-9	30.00000	0.00053	None	
KAI-18	Keane	Acid Inhibitor	methanol	67-56-1	65.00000	0.00056	None	
			formic acid	64-18-6	20.00000	0.00017	None	
			alkyl pyridine quaternary ammonium chloride surfactant	88909-18-2	20.00000	0.00017	None	
			propargyl alcohol	107-19-7	5.00000	0.00004	None	
KWBO-2	Keane	Breaker	Sodium persulfate	7775-27-1	99.00000	0.00062	None	
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.								
Other Chemical(s)	Listed Above	See Trade Name(s) List	Water	7732-18-5	92.50000	0.26895		
			Water	7732-18-5	85.00000	0.12449		
			Distillates (petroleum), hydrotreated light	64742-47-8	55.00000	0.03483		
			butene, homopolymer	9003-29-6	25.00000	0.01864		
			alkanes, C16-20-iso-	90622-59-6	25.00000	0.01864		
			Alcohols, C12-18, ethoxylated	68213-23-0	3.00000	0.00224		
			2-propenoic acid, polymer with 2-(1-oxo-2-propenyl) amino-1-propensulfonic acid monosodium salt and sodium phosphinite	110224-99-2	10.00000	0.00217		
			didecyldimethylammonium chloride	7173-51-5	8.00000	0.00134		
			quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.30000	0.00089		
			Citric acid	77-92-9	30.00000	0.00053		

	Ethanol	64-17-5	2.80000	0.00047
	alkyl pyridine quaternary	68909-18-2	20.00000	0.00017
	ammonium chloride			
	formic acid	64-18-6	20.00000	0.00017
	surfactant	Proprietary	10.00000	0.00009
	propargyl alcohol	107-19-7	5.00000	0.00004
	water	7732-18-5	75.00000	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

RECEIVED
Office of Oil and Gas

OCT 28 2019

WV Department of
Environmental Protection



CNX GAS COMPANY, LLC

Location: Monongalia County, WV
Field: Monongalia
Facility: WTN-5 Pad

Slot: Slot G
Well: WDTN-5G-HSM
Wellbore: WDTN-5G-HSM-PWB



Grid System: NAD83 / Lambert West Virginia Spher. / Northern Zone (FTN) / US Feet
Grid Reference: Grid North
North Reference: Grid North
Scale: True distance
Created by: Wellbore on 2019-05-13
Created for: Wellbore on 2019-05-13
Mean Sea Level to Mean Sea Level (AI Slot, Slot G) : -1387.78 ft
Mean Sea Level to Mean Sea Level (AI Slot, Slot G) : -1387.78 ft
Coordinates are in feet referenced to Slot



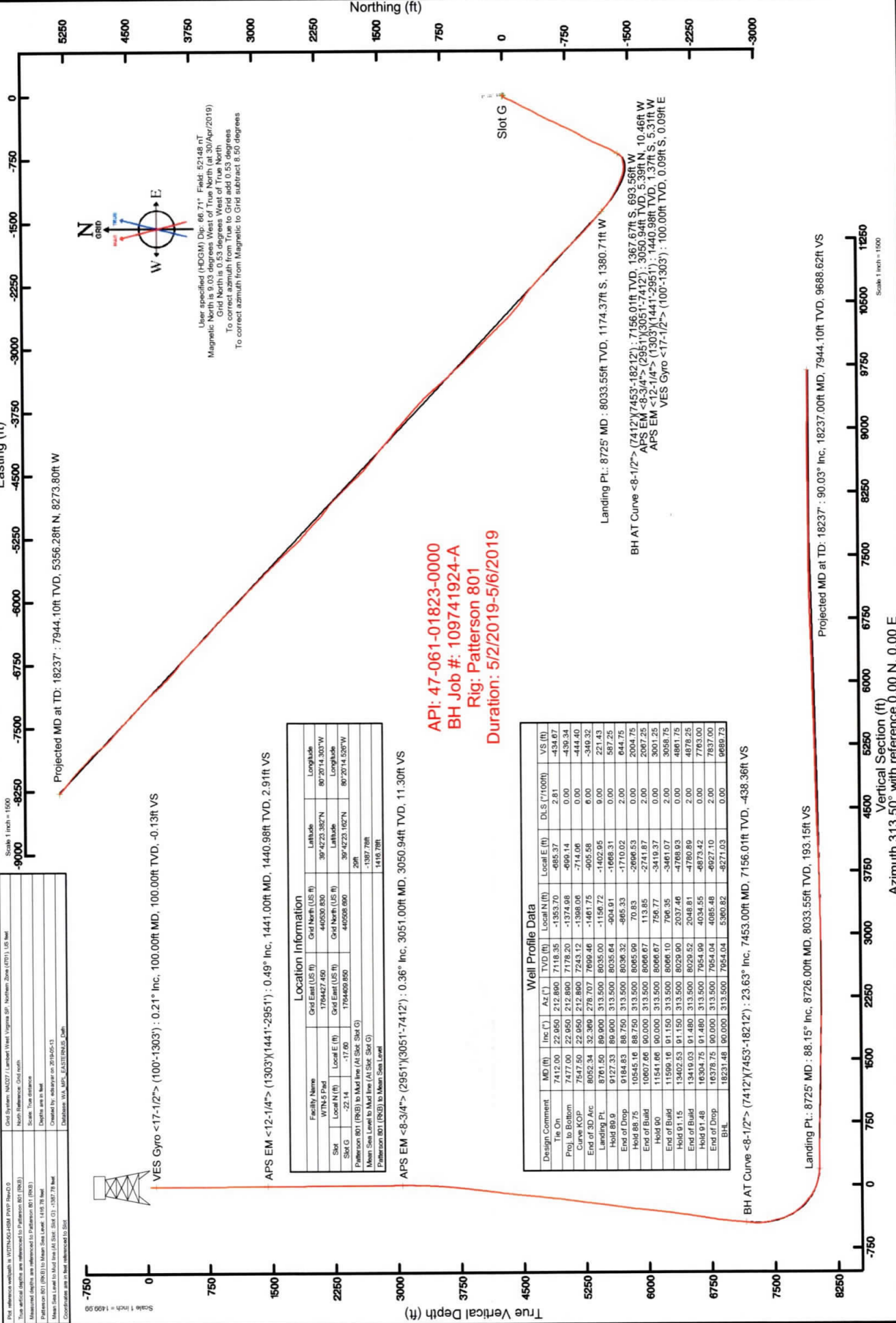
VES Gyro <17-1/2"> (100°-1303°) : 0.21° Inc, 100.00ft MD, 100.00ft TVD, -0.13ft VS

APS EM <12-1/4"> (1303°)(1441°-2951°) : 0.49° Inc, 1441.00ft MD, 1440.98ft TVD, 2.91ft VS

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
WTN-5 Pad	1794427.450	440530.830	99°20'14.303"W
Slot	Local E (ft)	Grid North (US ft)	Longitude
Slot G	-22.14	-17.00	99°20'14.526"W
Patterson 801 (RFB) to Mean Sea Level (AI Slot, Slot G)	1794409.850	440508.600	29ft
Mean Sea Level to Mean Sea Level (AI Slot, Slot G)			-1387.78ft
Patterson 801 (RFB) to Mean Sea Level			1416.78ft

APS EM <8-3/4"> (2951°)(3051°-7412°) : 0.36° Inc, 3051.00ft MD, 3050.94ft TVD, 11.30ft VS

API: 47-061-01823-0000
BH Job #: 109741924-A
Rig: Patterson 801
Duration: 5/2/2019-5/6/2019

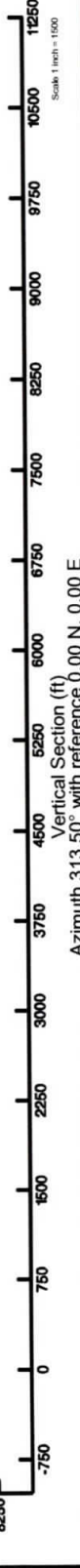


Well Profile Data									
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DI, S (°/100ft)	VS (ft)	
The On	7412.00	22.960	212.890	7116.35	-1353.70	-695.37	2.81	-434.87	
Proj. to Bottom	7417.00	22.960	212.890	7118.20	-1374.69	-699.14	0.00	-439.34	
Curve KOP	7547.50	22.960	212.890	7243.12	-1386.06	-714.68	0.00	-444.40	
End of 3D Arc	8052.34	32.369	278.707	7699.46	-1461.75	-665.58	6.00	-349.32	
Landing Pl.	8761.50	89.900	313.500	8035.00	-1156.72	-1402.95	9.00	-271.43	
Hold 89.9	9127.33	89.900	313.500	8035.64	-404.91	-1668.31	0.00	-587.25	
End of Drop	9184.83	88.750	313.500	8036.32	-465.33	-1710.02	2.00	-644.75	
Hold 88.75	10545.16	88.750	313.500	8065.99	70.83	-2696.53	0.00	-2044.75	
End of Build	10607.66	90.000	313.500	8066.67	113.85	-2741.87	2.00	-2087.25	
Hold 90	11541.66	90.000	313.500	8066.67	756.77	-3419.37	0.00	-3001.25	
End of Build	11599.16	91.150	313.500	8029.90	796.35	-3461.07	2.00	-3058.75	
Hold 91.15	13402.53	91.150	313.500	8029.52	2037.46	-4769.63	0.00	-4861.75	
End of Build	13410.03	91.480	313.500	8029.52	2048.81	-4780.89	2.00	-4878.25	
Hold 91.48	16304.75	91.480	313.500	7954.99	4034.55	-4873.42	0.00	-7763.00	
End of Drop	16378.75	90.000	313.500	7954.04	4085.48	-4927.10	2.00	-7837.00	
B.H.L.	18231.48	90.000	313.500	7954.04	5360.82	-4927.03	0.00	-9686.73	

BH AT Curve <8-1/2"> (7412°)(7453°-18212°) : 23.63° Inc, 7453.00ft MD, 7156.01ft TVD, -438.36ft VS

Landing Pl.: 8725 MD : 88.15° Inc, 8726.00ft MD, 8033.55ft TVD, 193.15ft VS

Projected MD at TD: 18237° : 90.03° Inc, 18237.00ft MD, 7944.10ft TVD, 9688.62ft VS

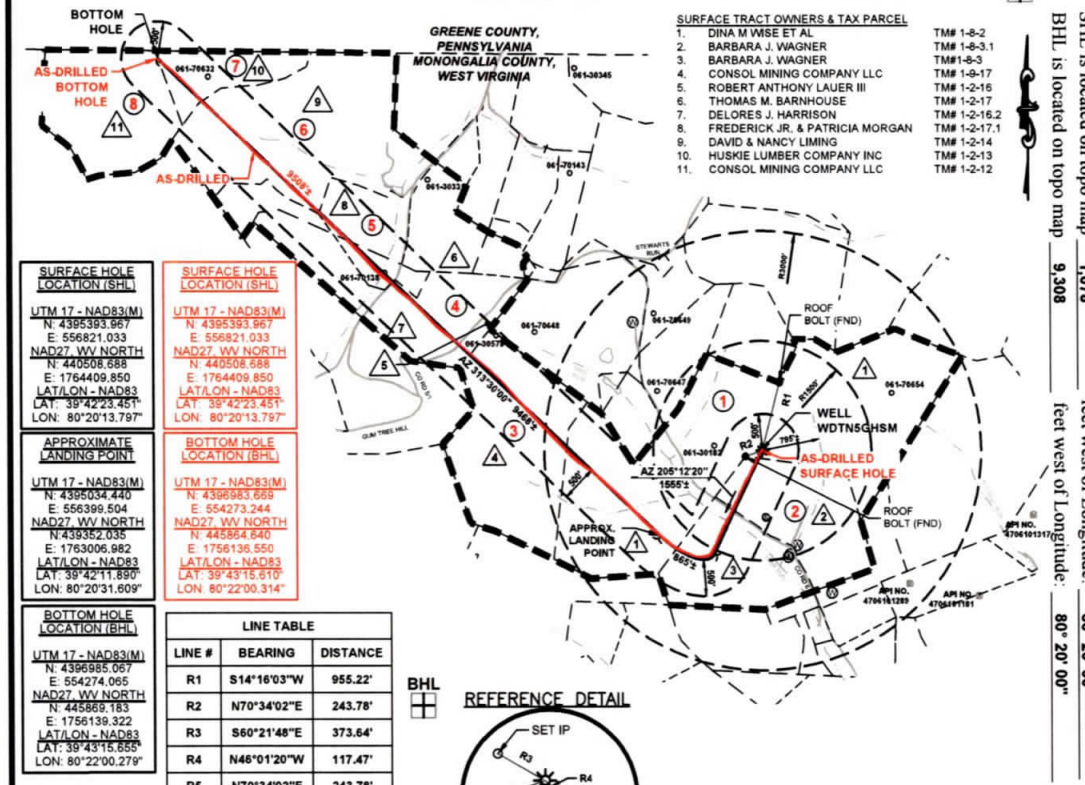


Vertical Section (ft)
Azimuth 313.50° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500

SHL is located on topo map 662 feet south of Latitude: 39° 42' 30"
 BHL is located on topo map 10,415 feet south of Latitude: 39° 45' 00"

SHL



- SURFACE TRACT OWNERS & TAX PARCEL**
- | | |
|------------------------------------|--------------|
| 1. DINA M WISE ET AL | TM# 1-8-2 |
| 2. BARBARA J. WAGNER | TM# 1-8-3.1 |
| 3. CONSOL MINING COMPANY LLC | TM# 1-8-3 |
| 4. ROBERT ANTHONY LAUER III | TM# 1-9-17 |
| 5. THOMAS M. BARNHOUSE | TM# 1-2-16 |
| 6. DELORES J. HARRISON | TM# 1-2-17 |
| 7. FREDERICK JR. & PATRICIA MORGAN | TM# 1-2-16.2 |
| 8. DAVID & NANCY LIMING | TM# 1-2-17.1 |
| 9. HUSKIE LUMBER COMPANY INC | TM# 1-2-14 |
| 10. CONSOL MINING COMPANY LLC | TM# 1-2-13 |
| 11. CONSOL MINING COMPANY LLC | TM# 1-2-12 |

SURFACE HOLE LOCATION (SHL)
 UTM 17 - NAD83(M)
 N: 4395393.967
 E: 556821.033
 NAD27 WV NORTH
 N: 440508.588
 E: 1764409.850
 LAT/LON - NAD83
 LAT: 39°42'23.451"
 LON: 80°20'13.797"

SURFACE HOLE LOCATION (SHL)
 UTM 17 - NAD83(M)
 N: 4395393.967
 E: 556821.033
 NAD27 WV NORTH
 N: 440508.588
 E: 1764409.850
 LAT/LON - NAD83
 LAT: 39°42'23.451"
 LON: 80°20'13.797"

APPROXIMATE LANDING POINT
 UTM 17 - NAD83(M)
 N: 4395034.440
 E: 556399.504
 NAD27 WV NORTH
 N: 439352.035
 E: 1763006.982
 LAT/LON - NAD83
 LAT: 39°42'11.850"
 LON: 80°20'31.609"

BOTTOM HOLE LOCATION (BHL)
 UTM 17 - NAD83(M)
 N: 4396983.553
 E: 554273.244
 NAD27 WV NORTH
 N: 445854.840
 E: 1756136.550
 LAT/LON - NAD83
 LAT: 39°43'15.510"
 LON: 80°22'00.314"

BOTTOM HOLE LOCATION (BHL)
 UTM 17 - NAD83(M)
 N: 4396985.067
 E: 554274.065
 NAD27 WV NORTH
 N: 445869.183
 E: 1756139.322
 LAT/LON - NAD83
 LAT: 39°43'15.855"
 LON: 80°22'00.279"

LINE TABLE

LINE #	BEARING	DISTANCE
R1	S14°16'03"W	955.22'
R2	N70°34'02"E	243.78'
R3	S60°21'48"E	373.64'
R4	N46°01'20"W	117.47'
R5	N70°34'02"E	243.78'

LEGEND

	TOPO MAP POINT		PROPOSED WELL		WATER SOURCE		SPRING		SURFACE TRACT		LEASED NUMBER BASED ON ATTACHED WW6A1		WELLS WITHIN 3000'
	RECORD GAS WELL		UNKNOWN WELL		PROPOSED HORIZONTAL WELL		SURFACE OIL & GAS LINES		SURFACE TRACT LINES ONLY		GAS LEASE LINES ONLY		WELL REFERENCE
	STREAM/WATERWAY		ROAD		AS-DRILLED HORIZONTAL WELL		LEASE BOUNDARY		PROPOSED HORIZONTAL WELL		SURFACE OIL & GAS LINES		SURFACE TRACT LINES ONLY
	GAS LEASE LINES ONLY		WELL REFERENCE		STREAM/WATERWAY		ROAD		AS-DRILLED HORIZONTAL WELL		LEASE BOUNDARY		PROPOSED HORIZONTAL WELL

AS-DRILLED PLAT

Sheffler & Company, Inc.
 ENGINEERING • SURVEYING

1712 Mount Nebo Road Phone: 412-219-4509
 Sewickley, PA 15143 Email: info@shefflerCo.com

- NOTES:**
- There are no water wells or developed springs within 250' of proposed well.
 - There are no existing buildings within 625' of proposed well.
 - Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
 - There are no native trout streams within 300' of proposed well.
 - Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
 - It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, and based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

FILE #: WDTN5GHSM
 DRAWING #: 3601 - WDTN5G - AD.DWG
 SCALE: 1"=2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE: USGS MONUMENT
 OF ELEVATION: JX1864: 1,496.32'

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

SIGNED:

R.P.E.: 21452 L.L.S.: P.S. NO.



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

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

WATERSHED: DUNKARD CREEK ELEVATION: 1412'
 COUNTY/DISTRICT: MONONGALIA / BATTELLE QUADRANGLE: WADESTOWN, WV
 SURFACE OWNER: JOHN M. WISE, ET UX., ET AL. ACREAGE: 207.36
 OIL & GAS ROYALTY OWNER: RICHARD W. WISE, ET AL. ACREAGE: 207.36

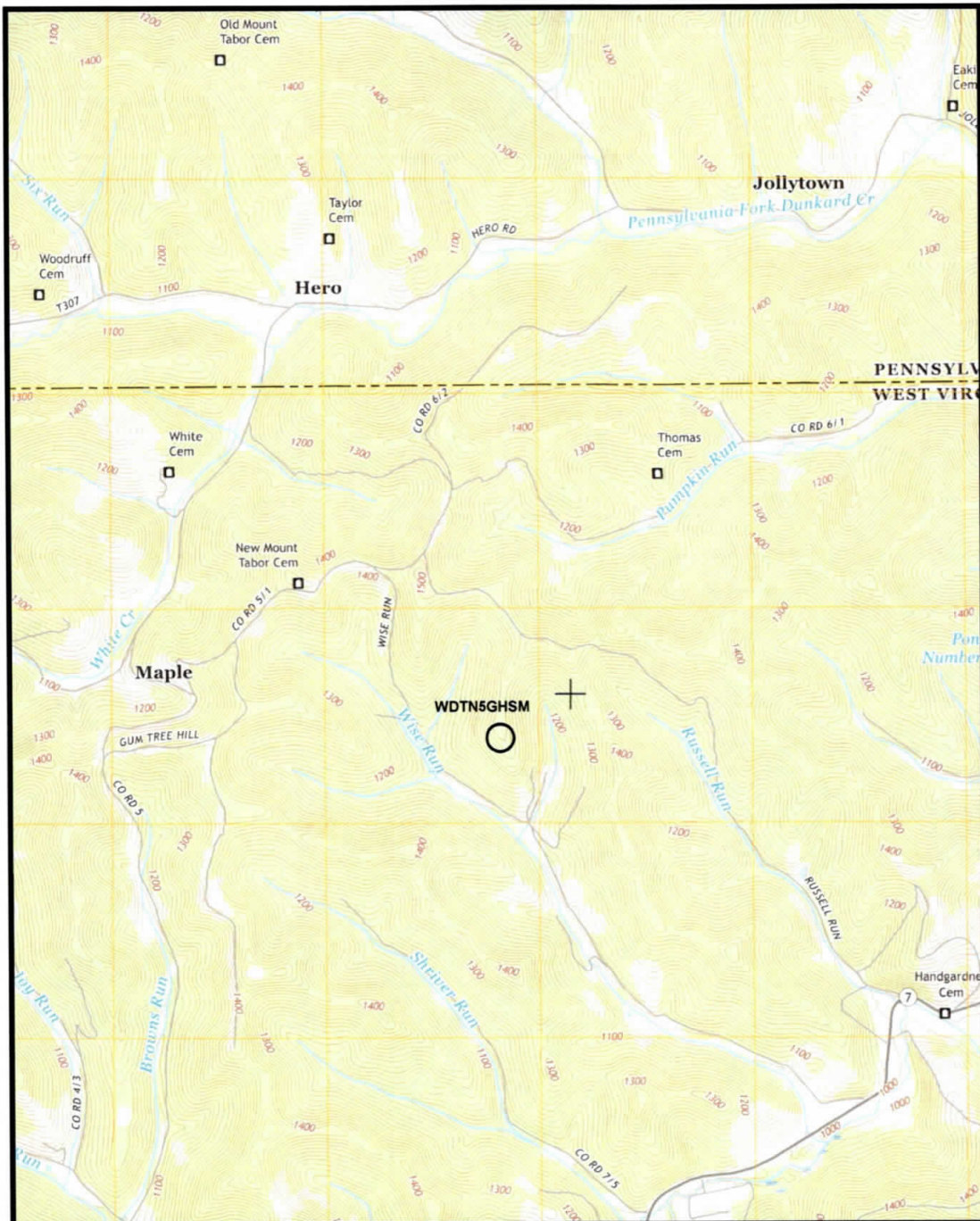
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 7,715' ± TMD: 17,991' ±
 WELL OPERATOR: CNX GAS COMPANY, LLC DESIGNATED AGENT: CHRIS TURNER
 Address: 1000 CONSOL ENERGY DRIVE Address: 1 DOMINION DRIVE
 City CANONSBURG State PA Zip Code 15317 City JANE LEW State WV Zip Code 26378

DATE: September 21, 2018, Rev. July 9, 2019
 OPERATOR'S WELL #: WDTN5GHSM
 API WELL # 47 061
 STATE COUNTY PERMIT

1712 Mount Nebo Road Phone: 412-219-4509
 Sewickley, PA 15143 Email: info@shefflerCo.com

SHL is located on topo map 1,078 feet west of Longitude: 80° 20' 00"
 BHL is located on topo map 9,308 feet west of Longitude: 80° 20' 00"



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 SURFACE OWNER: JOHN M. WISE, ET UX., ET AL. ACREAGE: 207.36
 OIL & GAS ROYALTY OWNER: RICHARD W. WISE, ET AL. ACREAGE: 207.36

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 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

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 WELL OPERATOR: CNX GAS COMPANY, LLC DESIGNATED AGENT: CHRIS TURNER
 Address: 1000 CONSOL ENERGY DRIVE Address: 1 DOMINION DRIVE
 City CANONSBURG State PA Zip Code 15317 City JANE LEW State WV Zip Code 26378

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
1	1-8-2	189010000	Richard L. McCauley	CNX Gas Company LLC
			Judy A. Eckman	CNX Gas Company LLC
			Thomas E. McCauley	CNX Gas Company LLC
			Regina Wise Myers, aka Violet Regina Myers	CNX Gas Company LLC
			Evalee A. Everly Shaheen	CNX Gas Company LLC
			Zelda Ruth Brummage	CNX Gas Company LLC
			Dexter Murie Stewart	CNX Gas Company LLC
			Walter C. Ord	CNX Gas Company LLC
			James Freeman Stewart	CNX Gas Company LLC
			Clifford J. Wise	CNX Gas Company LLC
			Victor E. Wise, a single man	CNX Gas Company LLC
			Jesse D. Jones, a married man	CNX Gas Company LLC
			Phyllis J. Petrosky, a widowed woman	CNX Gas Company LLC
			Annette E. Stewart, single	CNX Gas Company LLC
			Harold M. Jones, Jr., a single man	CNX Gas Company LLC
			Robert Stewart	CNX Gas Company LLC
			Richard W. Wise	CNX Gas Company LLC
			Walter R. Currence	CNX Gas Company LLC
			Donald D. Wise, aka Donald G. Wise	CNX Gas Company LLC
			Maureen S. Currence	CNX Gas Company LLC
			Opal Jane Wise, Life Estate Holder and John Matthew Wise and Dina M. Wise, Remaindermen	CNX Gas Company LLC
			Michelle L. Currence	CNX Gas Company LLC
			Justin P. Stewart, single	CNX Gas Company LLC
			Debra Goff	CNX Gas Company LLC
			Eleanor J. Wise, single	CNX Gas Company LLC
			Donald E. Nunley and Deborah L. Nunley	CNX Gas Company LLC
			Fred C. Wise and Alice F. Wise	CNX Gas Company LLC
			Patricia J. Mumaw and Richard L. Mumaw	CNX Gas Company LLC
			Richard A. Nunley and Diana K. Nunley	CNX Gas Company LLC
			Mary Nunley Stepelton and Donald Stepelton	CNX Gas Company LLC
			Linda Slapp	CNX Gas Company LLC
			Melissa A. Bookout	CNX Gas Company LLC
			Jane Irons, widow	CNX Gas Company LLC
			Eileen Ann Lyle	CNX Gas Company LLC
			Robert Eugene Michael, Sr.	CNX Gas Company LLC
			Frank Dennis Michael, Jr.	CNX Gas Company LLC
			Evelyn June Michael	CNX Gas Company LLC
			Tonya Chersin	CNX Gas Company LLC
			Boyd Hawkins	CNX Gas Company LLC
Becky L. Hawkins fka Becky Bortnick	CNX Gas Company LLC			
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
2	1-8-3 1-8-3.1	204769000	Barbara J. Wagner, a widow	CNX Gas Company LLC
			Donald L. White, et al	CNX Gas Company LLC
			Arnold D. Anderson, individually, and as Trustee of the Arnold D. Anderson and Barbara J. Anderson Living Trust UTD May 14th, 2008	CNX Gas Company LLC
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
3	1-8-17	189599000	Ralph Six	Antero Resources Corporation
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
4	1-2-16 1-2-16.2 p/o 1-2-16.1 p/o 1-2-17 p/o 1-2-17.1	189578000	XTO Energy, Inc.	CNX Gas Company, LLC
			Three Rivers Royalty II, LLC	CNX Gas Company, LLC
			Elizabeth A. Martineau, a/k/a, Elizabeth Ada Snyder, a/k/a, Elizabeth Snyder Martineau	CNX Gas Company, LLC
			Rebecca Snyder Bromley, a/k/a Alice Rebecca Snyder Bromley	CNX Gas Company, LLC
			James Brant Snyder	CNX Gas Company, LLC
			Sharon White Bartholomew, a/k/a Sharon R. W. Bartholomew, a/k/a, Sharon Ruth White Bartholomew	CNX Gas Company, LLC
			David T. White and Sarah K. White, h/w, as JTROS	CNX Gas Company, LLC
			Glenn L. White, individually and as trustee of Glenn L. White Trust	CNX Gas Company, LLC
			Alice T. Boone	CNX Gas Company, LLC
			Eldon Bryant Tucker, et ux	CNX Gas Company, LLC
			Charles Tucker, et ux	CNX Gas Company, LLC
			Robert Earl, et ux	CNX Gas Company, LLC
			David Tucker	CNX Gas Company, LLC
			James Tucker, et ux	CNX Gas Company, LLC
			Cheryl Molesky	CNX Gas Company, LLC
			Laurence D. Hare	CNX Gas Company, LLC
			James F. Hare III, et ux	CNX Gas Company, LLC
			Lacy L. Adams, et vir	CNX Gas Company, LLC
			Donald Pelger	CNX Gas Company, LLC
			Carl L. Anderson, et ux	CNX Gas Company, LLC
David Wayne Anderson	CNX Gas Company, LLC			

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



Sheffler & Company, Inc.
ENGINEERING • SURVEYING

1712 Mount Nebo Road Sewickley, PA 15143 Phone: 412-219-4509 Email: info@shefflerCo.com

DATE: September 21, 2018, Rev. July 9, 2019

Well Type: Oil Waste Disposal Production Deep

OPERATOR'S WELL #: WDTN5GHSU

Gas Liquid Injection Storage Shallow

API WELL # 47 061
STATE COUNTY PERMIT

WATERSHED: DUNKARD CREEK

ELEVATION: 1412'

COUNTY/DISTRICT: MONONGALIA / BATTELLE

QUADRANGLE: WADESTOWN, WV

SURFACE OWNER: JOHN M. WISE, ET UX., ET AL.

ACREAGE: 207.36

OIL & GAS ROYALTY OWNER: RICHARD W. WISE, ET AL.

ACREAGE: 207.36

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE

PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON

CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS

ESTIMATED DEPTH: TVD: 7,715' ± TMD: 17,991' ±

WELL OPERATOR: CNX GAS COMPANY, LLC

DESIGNATED AGENT: CHRIS TURNER

Address: 1000 CONSOL ENERGY DRIVE

Address: 1 DOMINION DRIVE

City CANONSBURG State PA Zip Code 15317

City JANE LEW State WV Zip Code 26378

Tract ID	Tax Map & Parcel	Title Opinion GLS #	Grantor, Lessor, etc	Grantee, Lessee, etc			
4 (CONT.)	1-2-16 1-2-16.2 plo 1-2-16.1 plo 1-2-17 plo 1-2-17.1	18957800	Deborah Horton, Trustee and Beneficiary of the Ronald L. Horton Revocable Living Trust	CNX Gas Company, LLC			
			Chris Pelger	CNX Gas Company, LLC			
			Shannon Harker	CNX Gas Company, LLC			
			Chase Schwesenska	CNX Gas Company, LLC			
			John Pelger	CNX Gas Company, LLC			
			Holly Pelger	CNX Gas Company, LLC			
			Brenda Murphy	EQT Production Company			
			Vickie L. Simmons	EQT Production Company			
			Sherry C. McCoy	EQT Production Company			
			David C. Anderson	EQT Production Company			
			Kelly Dilbeck	CNX Gas Company, LLC			
			Grantor, Lessor, etc				
			Grantee, Lessee, etc				
			5	1-2-17.2 plo 1-2-17 plo 1-2-17.1 plo 1-2-16.1	23993500	XTO Energy, Inc.	CNX Gas Company, LLC
Three Rivers Royalty II, LLC	CNX Gas Company, LLC						
Elizabeth A. Martineau, a/k/a, Elizabeth Ada Snyder, a/k/a, Elizabeth Snyder Martineau	CNX Gas Company, LLC						
Rebecca Snyder Bromley, a/k/a Alice Rebecca Snyder Bromley	CNX Gas Company, LLC						
James Brant Snyder	CNX Gas Company, LLC						
Sharon White Bartholomew, a/k/a Sharon R. W. Bartholomew, a/k/a, Sharon Ruth White Bartholomew	CNX Gas Company, LLC						
David T. White and Sarah K. White, h/w, as JTROS	CNX Gas Company, LLC						
Glenn L. White, individually and as trustee of Glenn L. White Trust	CNX Gas Company, LLC						
Alice T. Boone	CNX Gas Company, LLC						
Eldon Bryant Tucker, et ux	CNX Gas Company, LLC						
Charles Tucker, et ux	CNX Gas Company, LLC						
Robert Earl, et ux	CNX Gas Company, LLC						
David Tucker	CNX Gas Company, LLC						
James Tucker, et ux	CNX Gas Company, LLC						
Cheryl Molesky	CNX Gas Company, LLC						
Laurence D. Hare	CNX Gas Company, LLC						
James F. Hare III, et ux	CNX Gas Company, LLC						
Lacy L. Adams, et vir	CNX Gas Company, LLC						
Donald Pelger	CNX Gas Company, LLC						
Carl L. Anderson, et ux	CNX Gas Company, LLC						
David Wayne Anderson	CNX Gas Company, LLC						
Deborah Horton, Trustee and Beneficiary of the Ronald L. Horton Revocable Living Trust	CNX Gas Company, LLC						
Chris Pelger	CNX Gas Company, LLC						
Shannon Harker	CNX Gas Company, LLC						
Chase Schwesenska	CNX Gas Company, LLC						
John Pelger	CNX Gas Company, LLC						
Holly Pelger	CNX Gas Company, LLC						
Brenda Murphy	EQT Production Company						
Vickie L. Simmons	EQT Production Company						
Sherry C. McCoy	EQT Production Company						
David C. Anderson	EQT Production Company						
Kelly Dilbeck	CNX Gas Company, LLC						
Grantor, Lessor, etc							
Grantee, Lessee, etc							
6	1-2-14	189577000				XTO Energy, Inc.	CNX Gas Company, LLC
						David Liming and Nancy Liming	CNX Gas Company, LLC
						Three Rivers Royalty II, LLC	CNX Gas Company, LLC
						Elizabeth A. Martineau, a/k/a, Elizabeth Ada Snyder, a/k/a, Elizabeth Snyder Martineau	CNX Gas Company, LLC
						Rebecca Snyder Bromley, a/k/a Alice Rebecca Snyder Bromley	CNX Gas Company, LLC
						James Brant Snyder	CNX Gas Company, LLC
						Sharon White Bartholomew, a/k/a Sharon R. W. Bartholomew, a/k/a, Sharon Ruth White Bartholomew	CNX Gas Company, LLC
						David T. White and Sarah K. White, h/w, as JTROS	CNX Gas Company, LLC
						Glenn L. White, individually and as trustee of Glenn L. White Trust	CNX Gas Company, LLC
						Alice T. Boone	CNX Gas Company, LLC
						Eldon Bryant Tucker, et ux	CNX Gas Company, LLC
						Charles Tucker, et ux	CNX Gas Company, LLC
						Robert Earl, et ux	CNX Gas Company, LLC
						David Tucker	CNX Gas Company, LLC
			James Tucker, et ux	CNX Gas Company, LLC			
			Cheryl Molesky	CNX Gas Company, LLC			
			Laurence D. Hare	CNX Gas Company, LLC			
			James F. Hare III, et ux	CNX Gas Company, LLC			
			Lacy L. Adams, et vir	CNX Gas Company, LLC			
			Donald Pelger	CNX Gas Company, LLC			
			Carl L. Anderson, et ux	EQT Production Company			
			David Wayne Anderson	CNX Gas Company, LLC			
			Deborah Horton, Trustee and Beneficiary of the Ronald L. Horton Revocable Living Trust	CNX Gas Company, LLC			
			Chris Pelger	CNX Gas Company, LLC			
			Shannon Harker	CNX Gas Company, LLC			
			Grantor, Lessor, etc				
			Grantee, Lessee, etc				

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
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 1712 Mount Nebo Road Phone: 412-219-4509
 Sewickley, PA 15143 Email: info@shefflerCo.com

DATE: **September 21, 2018, Rev. July 9, 2019**

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

OPERATOR'S WELL #: WDTN5GHSU
 API WELL # 47 061
 STATE COUNTY PERMIT

WATERSHED: DUNKARD CREEK ELEVATION: 1412'
 COUNTY/DISTRICT: MONONGALIA / BATTELLE QUADRANGLE: WADESTOWN, WV
 SURFACE OWNER: JOHN M. WISE, ET UX., ET AL. ACREAGE: 207.36
 OIL & GAS ROYALTY OWNER: RICHARD W. WISE, ET AL. ACREAGE: 207.36

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

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 7,715' ± TMD: 17,991' ±
 WELL OPERATOR: CNX GAS COMPANY, LLC DESIGNATED AGENT: CHRIS TURNER
 Address: 1000 CONSOL ENERGY DRIVE Address: 1 DOMINION DRIVE
 City CANONSBURG State PA Zip Code 15317 City JANE LEW State WV Zip Code 26378

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
6 (CONT.)	1-2-14	188577000	Chase Schwarsensaka	CNX Gas Company, LLC
			John Pelger	CNX Gas Company, LLC
			Holly Pelger	CNX Gas Company, LLC
			Brenda Murphy	EQT Production Company
			Vickie L. Simmons	EQT Production Company
			Sherry C. McCoy	EQT Production Company
			David C. Anderson	EQT Production Company
			Kelly Dilbeck	CNX Gas Company, LLC
7	1-2-13	188610000	Ralph Six Huskie Lumber Co., Inc.	CNX Gas Company LLC Anlero Resources Corporation

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



Sheffler & Company, Inc.
ENGINEERING • SURVEYING

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 Gas Liquid Injection Storage Shallow

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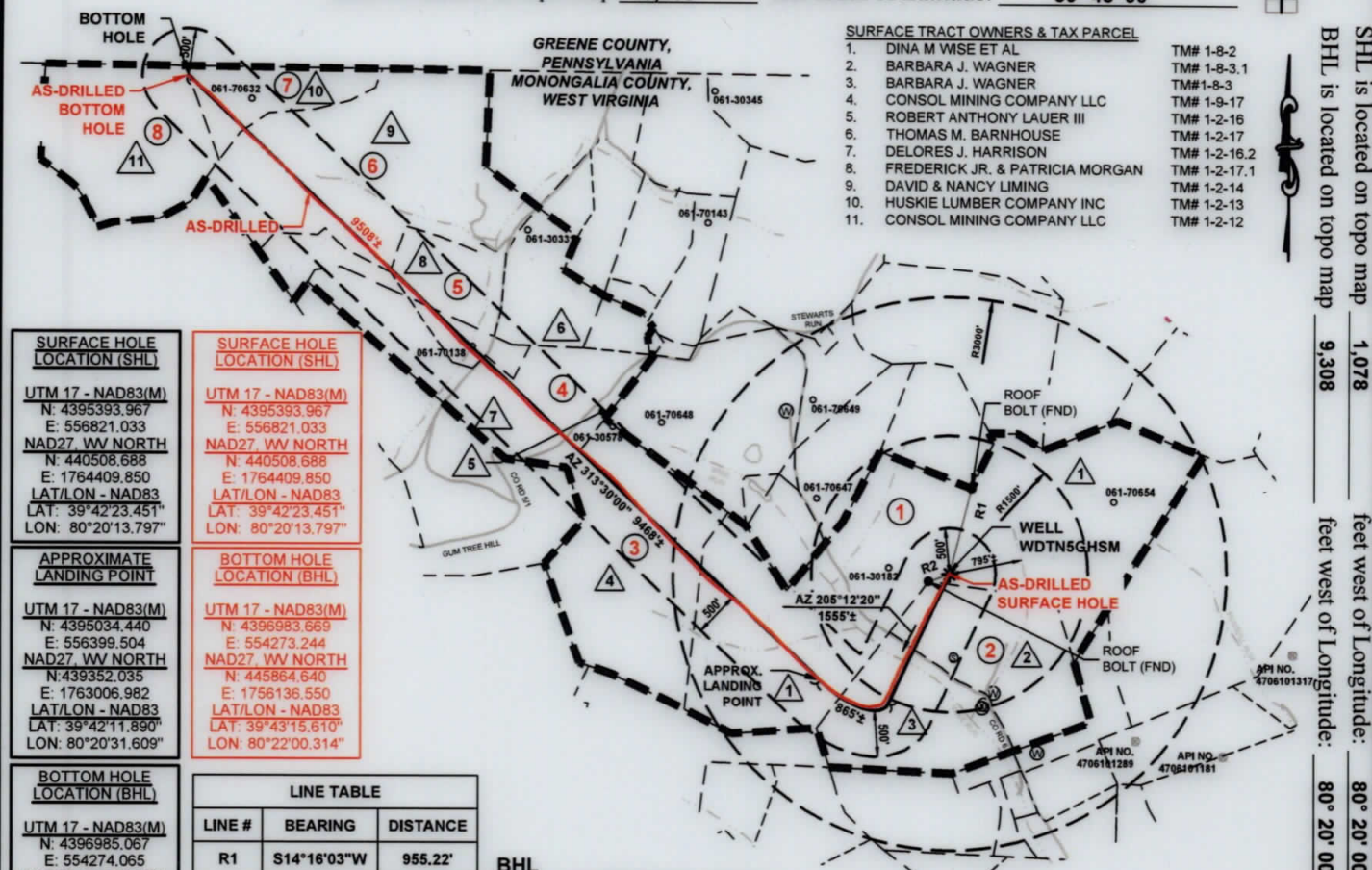
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SHL is located on topo map 662 feet south of Latitude: 39° 42' 30"
 BHL is located on topo map 10,415 feet south of Latitude: 39° 45' 00"

SHL

SURFACE TRACT OWNERS & TAX PARCEL

- | | |
|------------------------------------|--------------|
| 1. DINA M WISE ET AL | TM# 1-8-2 |
| 2. BARBARA J. WAGNER | TM# 1-8-3.1 |
| 3. BARBARA J. WAGNER | TM# 1-8-3 |
| 4. CONSOL MINING COMPANY LLC | TM# 1-9-17 |
| 5. ROBERT ANTHONY LAUER III | TM# 1-2-16 |
| 6. THOMAS M. BARNHOUSE | TM# 1-2-17 |
| 7. DELORES J. HARRISON | TM# 1-2-16.2 |
| 8. FREDERICK JR. & PATRICIA MORGAN | TM# 1-2-17.1 |
| 9. DAVID & NANCY LIMING | TM# 1-2-14 |
| 10. HUSKIE LUMBER COMPANY INC | TM# 1-2-13 |
| 11. CONSOL MINING COMPANY LLC | TM# 1-2-12 |



SURFACE HOLE LOCATION (SHL)
 UTM 17 - NAD83(M)
 N: 4395393.967
 E: 556821.033
 NAD27 - WV NORTH
 N: 440508.688
 E: 1764409.850
 LAT/LON - NAD83
 LAT: 39°42'23.451"
 LON: 80°20'13.797"

SURFACE HOLE LOCATION (SHL)
 UTM 17 - NAD83(M)
 N: 4395393.967
 E: 556821.033
 NAD27 - WV NORTH
 N: 440508.688
 E: 1764409.850
 LAT/LON - NAD83
 LAT: 39°42'23.451"
 LON: 80°20'13.797"

APPROXIMATE LANDING POINT
 UTM 17 - NAD83(M)
 N: 4395034.440
 E: 556399.504
 NAD27 - WV NORTH
 N: 4439352.035
 E: 1763006.982
 LAT/LON - NAD83
 LAT: 39°42'11.890"
 LON: 80°20'31.609"

BOTTOM HOLE LOCATION (BHL)
 UTM 17 - NAD83(M)
 N: 4396983.669
 E: 554273.244
 NAD27 - WV NORTH
 N: 445864.640
 E: 1756136.550
 LAT/LON - NAD83
 LAT: 39°43'15.610"
 LON: 80°22'00.314"

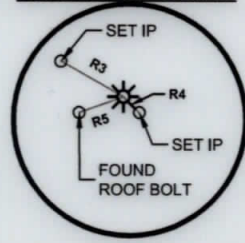
BOTTOM HOLE LOCATION (BHL)
 UTM 17 - NAD83(M)
 N: 4396985.067
 E: 554274.065
 NAD27 - WV NORTH
 N: 445869.183
 E: 1756139.322
 LAT/LON - NAD83
 LAT: 39°43'15.655"
 LON: 80°22'00.279"

LINE TABLE

LINE #	BEARING	DISTANCE
R1	S14°16'03"W	955.22'
R2	N70°34'02"E	243.78'
R3	S60°21'48"E	373.64'
R4	N46°01'20"W	117.47'
R5	N70°34'02"E	243.78'

BHL

REFERENCE DETAIL



LEGEND

	TOPO MAP POINT		PROPOSED WELL		WATER SOURCE		SPRING		SURFACE TRACT		LEASED NUMBER BASED ON ATTACHED WW6A1		WELLS WITHIN 3000'		RECORD GAS WELL		UNKNOWN WELL		ALL ARE POINTS UNLESS OTHERWISE NOTED		LEASE BOUNDARY		PROPOSED HORIZONTAL WELL		SURFACE, OIL & GAS LINES		SURFACE TRACT LINES ONLY		GAS LEASE LINES ONLY		WELL REFERENCE		STREAM/WATERWAY		ROAD		AS-DRILLED HORIZONTAL WELL
--	----------------	--	---------------	--	--------------	--	--------	--	---------------	--	---------------------------------------	--	--------------------	--	-----------------	--	--------------	--	---------------------------------------	--	----------------	--	--------------------------	--	--------------------------	--	--------------------------	--	----------------------	--	----------------	--	-----------------	--	------	--	----------------------------

AS-DRILLED PLAT

Sheffler & Company, Inc.
 ENGINEERING • SURVEYING

1712 Mount Nebo Road
 Sewickley, PA 15143
 Phone: 412-219-4509
 Email: info@shefflerCo.com

NOTES:

- There are no water wells or developed springs within 250' of proposed well.
- There are no existing buildings within 625' of proposed well.
- Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no native trout streams within 300' of proposed well.
- Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
- It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted herein. The location of the boundary lines, as shown, and based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

FILE #: WDTN5GHSM
 DRAWING #: 3601 - WDTN5G - AD.DWG
 SCALE: 1"=2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: USGS MONUMENT JX1864: 1,496.32'

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

SIGNED: [Signature]
 R.P.E.: 21452 L.L.S.: P.S. NO. _____



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

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

WATERSHED: DUNKARD CREEK
 COUNTY/DISTRICT: MONONGALIA / BATTELLE
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 OIL & GAS ROYALTY OWNER: RICHARD W. WISE, ET AL.

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

TARGET FORMATION: MARCELLUS
 WELL OPERATOR: CNX GAS COMPANY, LLC
 Address: 1000 CONSOL ENERGY DRIVE
 City CANONSBURG State PA Zip Code 15317

DATE: September 21, 2018, Rev. July 9, 2019
 OPERATOR'S WELL #: WDTN5GHSM
 API WELL # 47 061
 STATE COUNTY PERMIT

ELEVATION: 1412'
 QUADRANGLE: WADESTOWN, WV
 ACREAGE: 207.36
 ACREAGE: 207.36

ESTIMATED DEPTH: TVD: 7,715' ± TMD: 17,991' ±
 DESIGNATED AGENT: CHRIS TURNER
 Address: 1 DOMINION DRIVE
 City JANE LEW State WV Zip Code 26378





CNX GAS COMPANY, LLC

Location: Monongalia County, WV
Field: Monongalia
Facility: WTN-5 Pad

Slot: Slot G
Well: WDTN-5G-HSM
Wellbore: WDTN-5G-HSM-PWB

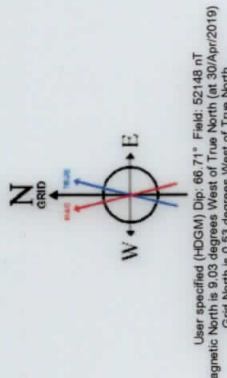
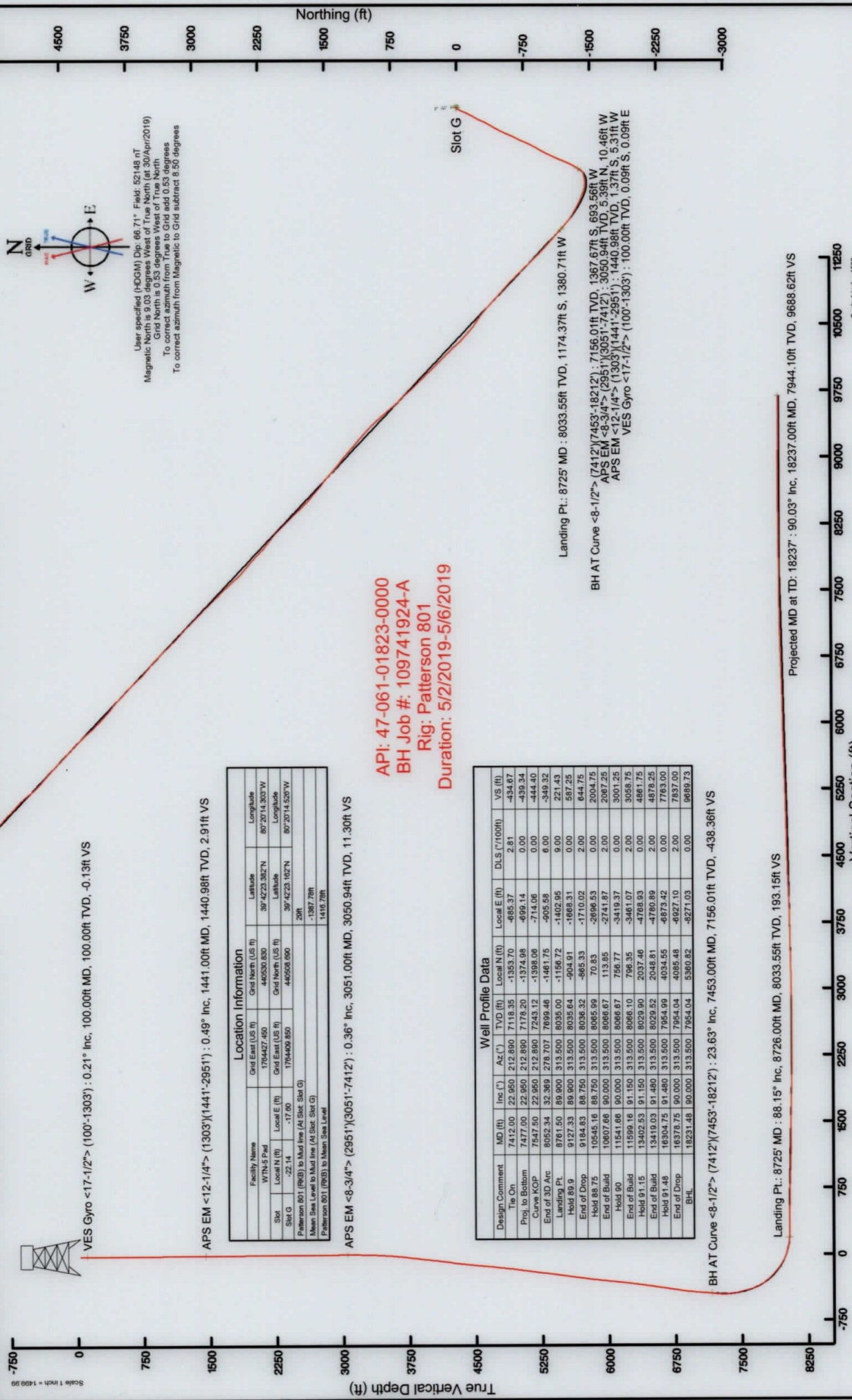


Final reference wellbore is WDTN-5G-HSM-PWB Rec-02
True vertical depths are referenced to Patterson 801 (R0B)
Measured depths are referenced to Patterson 801 (R0B)
Patterson 801 (R0B) to Mean Sea Level: -1410.78 feet
Mean Sea Level to Mud line (At Slot, Slot G): -1387.78 feet
Coordinates are in feet, referenced to Slot

Grid System: NAD83, Lambert West Virginia SP, Northern Zone (W71), US feet
North Reference: Grid North
Scale: True distance
Datum: NAD83
Created by: software on 2019-05-13
Database: WA, US, EASTWV, US, DWH

Scale: 1 inch = 1000'

Scale: 1 inch = 1000'



User specified (HGM) Dip: 66.71° Field: 52148 nT
Magnetic North is 9.03 degrees West of True North (at 30/Apr/2019)
Grid North is 0.53 degrees West of True North
To correct azimuth from True to Grid add 0.53 degrees
To correct azimuth from Magnetic to Grid subtract 8.50 degrees

Projected MD at TD: 18237' : 7944.10ft TVD, 5356.28ft N, 8273.80ft W

VES Gyro <17-1/2"> (100°-1303') : 0.21° Inc, 100.00ft MD, 100.00ft TVD, -0.13ft VS

APS EM <12-1/4"> (1303')(1441'-2951') : 0.49° Inc, 1441.00ft MD, 1440.98ft TVD, 2.91ft VS

APS EM <8-3/4"> (2951')(3051'-7412') : 0.36° Inc, 3051.00ft MD, 3050.94ft TVD, 11.30ft VS

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
WTN-5 Pad	1794427.450	4405030.830	80°20'14.303"W
Slot	Local E (ft)	Local N (ft)	Longitude
Slot G	-22.14	1794409.850	80°20'14.507"W
Patterson 801 (R0B) to Mud line (At Slot, Slot G)		20ft	
Mean Sea Level to Mud line (At Slot, Slot G)		-1387.78ft	
Patterson 801 (R0B) to Mean Sea Level		1410.78ft	

Well Profile Data									
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)	
The On	7412.00	22.860	212.890	7118.35	-1353.70	-695.37	2.81	-434.67	
Proj. to Bottom	7477.80	22.860	212.890	7178.20	-1374.98	-699.14	0.00	-439.34	
Curve KCP	7547.50	22.860	212.890	7245.12	-1398.08	-714.06	0.00	-444.40	
End of 3D Arc	8052.34	32.380	278.707	7899.46	-1461.75	-905.58	0.00	-349.32	
Landing Pt.	8761.50	89.000	313.500	8035.64	-904.91	-1668.31	9.00	967.25	
Hold 89.9	9127.33	89.000	313.500	8035.64	-904.91	-1668.31	2.00	644.75	
End of Drop	9184.83	88.750	313.500	8036.32	-865.33	-1710.02	0.00	2004.75	
Hold 88.75	10545.16	88.750	313.500	8066.67	70.83	-2696.53	0.00	2067.25	
End of Build	10607.66	90.000	313.500	8066.67	113.85	-2741.87	2.00	3001.25	
Hold 90	11541.66	90.000	313.500	8066.67	756.77	-3419.37	0.00	3058.75	
End of Build	11599.16	91.150	313.500	8029.00	796.35	-3461.07	2.00	4861.75	
Hold 91.15	13402.53	91.150	313.500	8029.00	2037.48	-4768.93	0.00	4878.25	
End of Build	13410.03	91.480	313.500	8029.52	2048.81	-4780.89	2.00	7763.00	
Hold 91.48	16304.75	91.480	313.500	7954.90	4034.55	-6873.42	0.00	7837.00	
End of Drop	16378.75	90.000	313.500	7954.04	4085.48	-6927.10	2.00	9689.73	
BHL	18231.48	90.000	313.500	7954.04	5360.82	-8271.03	0.00	9689.73	

BH AT Curve <8-1/2"> (7412')(7453'-18212') : 23.63° Inc, 7453.00ft MD, 7156.01ft TVD, -438.36ft VS

Landing Pt.: 8725' MD : 88.15° Inc, 8726.00ft MD, 8033.55ft TVD, 193.15ft VS

Projected MD at TD: 18237' : 90.03° Inc, 18237.00ft MD, 7944.10ft TVD, 9688.62ft VS

API: 47-061-01823-0000
BH Job #: 109741924-A
Rig: Patterson 801
Duration: 5/2/2019-5/6/2019

Scale: 1 inch = 1000'

Vertical Section (ft)
Azimuth 313.50° with reference 0.00 N, 0.00 E



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



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API WELL # 47 061 01823
 STATE COUNTY PERMIT

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 Gas Liquid Injection Storage Shallow

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Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
1	1-8-2	189010000	Richard L. McCauley	CNX Gas Company LLC
			Judy A. Eckman	CNX Gas Company LLC
			Thomas E. McCauley	CNX Gas Company LLC
			Regina Wise Myers, aka Violet Regina Myers	CNX Gas Company LLC
			Evalee A. Everly Shaheen	CNX Gas Company LLC
			Zelda Ruth Brummage	CNX Gas Company LLC
			Dexter Murle Stewart	CNX Gas Company LLC
			Walter C. Ord	CNX Gas Company LLC
			James Freeman Stewart	CNX Gas Company LLC
			Clifford J. Wise	CNX Gas Company LLC
			Victor E. Wise, a single man	CNX Gas Company LLC
			Jesse D. Jones, a married man	CNX Gas Company LLC
			Phyllis J. Petrosky, a widowed woman	CNX Gas Company LLC
			Annette E. Stewart, single	CNX Gas Company LLC
			Harold M. Jones, Jr., a single man	CNX Gas Company LLC
			Robert Stewart	CNX Gas Company LLC
			Richard W. Wise	CNX Gas Company LLC
			Walter R. Currence	CNX Gas Company LLC
			Donald D. Wise, aka Donald G. Wise	CNX Gas Company LLC
			Maureen S. Currence	CNX Gas Company LLC
			Opal Jane Wise, Life Estate Holder and John Matthew Wise and Dina M. Wise, Remaindermen	CNX Gas Company LLC
			Michelle L. Currence	CNX Gas Company LLC
			Justin P. Stewart, single	CNX Gas Company LLC
			Debra Goff	CNX Gas Company LLC
			Eleanor J. Wise, single	CNX Gas Company LLC
			Donald E. Nunley and Deborah L. Nunley	CNX Gas Company LLC
			Fred C. Wise and Alice F. Wise	CNX Gas Company LLC
			Patricia J. Mumaw and Richard L. Mumaw	CNX Gas Company LLC
			Richard A. Nunley and Diana K. Nunley	CNX Gas Company LLC
			Mary Nunley Stempelton and Donald Stempelton	CNX Gas Company LLC
			Linda Stapp	CNX Gas Company LLC
			Melissa A. Bookout	CNX Gas Company LLC
			Jane Irons, widow	CNX Gas Company LLC
			Eileen Ann Lyle	CNX Gas Company LLC
			Robert Eugene Michael, Sr.	CNX Gas Company LLC
			Frank Dennis Michael, Jr.	CNX Gas Company LLC
			Evelyn June Michael	CNX Gas Company LLC
			Tonya Chersin	CNX Gas Company LLC
			Boyd Hawkins	CNX Gas Company LLC
			Becky L. Hawkins f/k/a Becky Bortnick	CNX Gas Company LLC
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
2	1-8-3 1-8-3.1	204769000	Barbara J. Wagner, a widow	CNX Gas Company LLC
			Donald L. White, et al	CNX Gas Company LLC
			Arnold D. Anderson, individually, and as Trustee of the Arnold D. Anderson and Barbara J. Anderson Living Trust UTD May 14th, 2008	CNX Gas Company LLC
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
3	1-9-17	188599000	Ralph Six	Antero Resources Corporation
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
4	1-2-16 1-2-16.2 p/o 1-2-16.1 p/o 1-2-17 p/o 1-2-17.1	188578000	XTO Energy, Inc.	CNX Gas Company, LLC
			Three Rivers Royalty II, LLC	CNX Gas Company, LLC
			Elizabeth A. Martineau, a/k/a, Elizabeth Ada Snyder, a/k/a/, Elizabeth Snyder Martineau	CNX Gas Company, LLC
			Rebecca Snyder Bromley, a/k/a Alice Rebecca Snyder Bromley	CNX Gas Company, LLC
			James Brant Snyder	CNX Gas Company, LLC
			Sharon White Bartholomew, a/k/a Sharon R. W. Bartholomew, a/k/a, Sharon Ruth White Bartholomew	CNX Gas Company, LLC
			David T. White and Sarah K. White, h/w, as JTROS	CNX Gas Company, LLC
			Glenn L. White, individually and as trustee of Glenn L. White Trust	CNX Gas Company, LLC
			Alice T. Boone	CNX Gas Company, LLC
			Eldon Bryant Tucker, et ux	CNX Gas Company, LLC
			Charles Tucker, et ux	CNX Gas Company, LLC
			Robert Earl, et ux	CNX Gas Company, LLC
			David Tucker	CNX Gas Company, LLC
			James Tucker, et ux	CNX Gas Company, LLC
			Cheryl Molesky	CNX Gas Company, LLC
			Laurence D. Hare	CNX Gas Company, LLC
			James F. Hare III, et ux	CNX Gas Company, LLC
			Lacy L. Adams, et vir	CNX Gas Company, LLC
			Donald Pelger	CNX Gas Company, LLC
			Carl L. Anderson, et ux	CNX Gas Company, LLC
David Wayne Anderson	CNX Gas Company, LLC			

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



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4 (CONT.)	1-2-16 1-2-16.2 p/o 1-2-16.1 p/o 1-2-17 p/o 1-2-17.1	188578000	Deborah Horton, Trustee and Beneficiary of the Ronald L. Horton Revocable Living Trust	CNX Gas Company, LLC			
			Chris Pelger	CNX Gas Company, LLC			
			Shannon Harker	CNX Gas Company, LLC			
			Chase Schwersenska	CNX Gas Company, LLC			
			John Pelger	CNX Gas Company, LLC			
			Holly Pelger	CNX Gas Company, LLC			
			Brenda Murphy	EQT Production Company			
			Vickie L. Simmons	EQT Production Company			
			Sherry C. McCoy	EQT Production Company			
			David C. Anderson	EQT Production Company			
			Kelly Dilbeck	CNX Gas Company, LLC			
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc			
5	1-2-17.2 p/o 1-2-17 p/o 1-2-17.1	239935000	XTO Energy, Inc.	CNX Gas Company, LLC			
			Three Rivers Royalty II, LLC	CNX Gas Company, LLC			
			Elizabeth A. Martineau, a/k/a, Elizabeth Ada Snyder, a/k/a/, Elizabeth Snyder Martineau	CNX Gas Company, LLC			
			Rebecca Snyder Bromley, a/k/a Alice Rebecca Snyder Bromley	CNX Gas Company, LLC			
			James Brant Snyder	CNX Gas Company, LLC			
			Sharon White Bartholomew, a/k/a Sharon R. W. Bartholomew, a/k/a, Sharon Ruth White Bartholomew	CNX Gas Company, LLC			
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			Eldon Bryant Tucker, et ux	CNX Gas Company, LLC			
			Charles Tucker, et ux	CNX Gas Company, LLC			
			Robert Earl, et ux	CNX Gas Company, LLC			
			David Tucker	CNX Gas Company, LLC			
			James Tucker, et ux	CNX Gas Company, LLC			
			Cheryl Molesky	CNX Gas Company, LLC			
			Laurence D. Hare	CNX Gas Company, LLC			
			James F. Hare III, et ux	CNX Gas Company, LLC			
			Lacy L. Adams, et vir	CNX Gas Company, LLC			
			Donald Pelger	CNX Gas Company, LLC			
			Carl L. Anderson, et ux	CNX Gas Company, LLC			
			David Wayne Anderson	CNX Gas Company, LLC			
			Deborah Horton, Trustee and Beneficiary of the Ronald L. Horton Revocable Living Trust	CNX Gas Company, LLC			
			Chris Pelger	CNX Gas Company, LLC			
			Shannon Harker	CNX Gas Company, LLC			
			Chase Schwersenska	CNX Gas Company, LLC			
			John Pelger	CNX Gas Company, LLC			
			Holly Pelger	CNX Gas Company, LLC			
			Brenda Murphy	EQT Production Company			
			Vickie L. Simmons	EQT Production Company			
			Sherry C. McCoy	EQT Production Company			
			David C. Anderson	EQT Production Company			
			Kelly Dilbeck	CNX Gas Company, LLC			
			Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
			6	1-2-14	188577000	XTO Energy, Inc.	CNX Gas Company, LLC
David Liming and Nancy Liming	CNX Gas Company, LLC						
Three Rivers Royalty II, LLC	CNX Gas Company, LLC						
Elizabeth A. Martineau, a/k/a, Elizabeth Ada Snyder, a/k/a/, Elizabeth Snyder Martineau	CNX Gas Company, LLC						
Rebecca Snyder Bromley, a/k/a Alice Rebecca Snyder Bromley	CNX Gas Company, LLC						
James Brant Snyder	CNX Gas Company, LLC						
Sharon White Bartholomew, a/k/a Sharon R. W. Bartholomew, a/k/a, Sharon Ruth White Bartholomew	CNX Gas Company, LLC						
David T. White and Sarah K. White, h/w, as JTROS	CNX Gas Company, LLC						
Glenn L. White, individually and as trustee of Glenn L. White Trust	CNX Gas Company, LLC						
Alice T. Boone	CNX Gas Company, LLC						
Eldon Bryant Tucker, et ux	CNX Gas Company, LLC						
Charles Tucker, et ux	CNX Gas Company, LLC						
Robert Earl, et ux	CNX Gas Company, LLC						
David Tucker	CNX Gas Company, LLC						
James Tucker, et ux	CNX Gas Company, LLC						
Cheryl Molesky	CNX Gas Company, LLC						
Laurence D. Hare	CNX Gas Company, LLC						
James F. Hare III, et ux	CNX Gas Company, LLC						
Lacy L. Adams, et vir	CNX Gas Company, LLC						
Donald Pelger	CNX Gas Company, LLC						
Carl L. Anderson, et ux	EQT Production Company						
David Wayne Anderson	CNX Gas Company, LLC						
Deborah Horton, Trustee and Beneficiary of the Ronald L. Horton Revocable Living Trust	CNX Gas Company, LLC						
Chris Pelger	CNX Gas Company, LLC						
Shannon Harker	CNX Gas Company, LLC						

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



Sheffler & Company, Inc.
ENGINEERING • SURVEYING
1712 Mount Nebo Road Sewickley, PA 15143 Phone: 412-219-4509 Email: info@shefflerCo.com

DATE: September 21, 2018, Rev. July 9, 2019

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

OPERATOR'S WELL #: WDTN5GHSU
API WELL # 47 061 01923
STATE COUNTY PERMIT

WATERSHED: DUNKARD CREEK ELEVATION: 1412'
COUNTY/DISTRICT: MONONGALIA / BATTELLE QUADRANGLE: WADESTOWN, WV
SURFACE OWNER: JOHN M. WISE, ET UX., ET AL. ACREAGE: 207.36
OIL & GAS ROYALTY OWNER: RICHARD W. WISE, ET AL. ACREAGE: 207.36

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

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 7,715' ± TMD: 17,991' ±
WELL OPERATOR: CNX GAS COMPANY, LLC DESIGNATED AGENT: CHRIS TURNER
Address: 1000 CONSOL ENERGY DRIVE Address: 1 DOMINION DRIVE
City CANONSBURG State PA Zip Code 15317 City JANE LEW State WV Zip Code 26378

Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
6 (CONT.)	1-2-14	188577000	Chase Schwersenska	CNX Gas Company, LLC
			John Pelger	CNX Gas Company, LLC
			Holly Pelger	CNX Gas Company, LLC
			Brenda Murphy	EQT Production Company
			Vickie L. Simmons	EQT Production Company
			Sherry C. McCoy	EQT Production Company
			David C. Anderson	EQT Production Company
			Kelly Dilbeck	CNX Gas Company, LLC
Tract ID	Tax Map & Parcel	Title Opinion QLS #	Grantor, Lessor, etc	Grantee, Lessee, etc
7	1-2-13	188610000	Ralph Six Huskie Lumber Co., Inc.	CNX Gas Company LLC Antero Resources Corporation

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API WELL # 47 061 01823
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