

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

API 47-061-01947-00-00 County MONONGALIA District BATTELLE
Quad WADESTOWN Pad Name WDTN18 Field/Pool Name _____
Farm name CONSOL MINING CO. LLC Well Number WDTN18DHSM
Operator (as registered with the OOG) CNX GAS COMPANY LLC
Address 1000 HORIZON VUE 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 4393667.261 Easting 555023.787
Landing Point of Curve Northing 4393780.739 Easting 555003.872
Bottom Hole Northing 4398254.760 Easting 551760.539

Elevation (ft) 1,199' 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 11.13.2023 (modified) Date drilling commenced 12.01.2023 (spud) Date drilling ceased 02.26.2024
Date completion activities began 6.14.2024 Date completion activities ceased 9.23.2024
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 103', 111', 190', 243', 259', 325', 399' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2,415', 3,045', 3,210' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 448'-449', 537'-538', 612'-613', 614'-617', 873'-878', 960'-974' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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DEC 09 2024
WV Department of
Environmental Protection

APPROVED

Reviewed by:
[Signature]
03/14/2025

API 47-061 - 01947-00-00 Farm name CONSOL MINING CO. LLC Well number WDTN18DHSM

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	30"	20"	40'	NEW	94 lb/ft	N/A	GROUT TO SURFACE
Surface	17.5"	13.375"	1,095'	NEW	J-55 54.5 lb/ft	N/A	Y - CEMENT TO SURFACE
Coal							
Intermediate 1	12.25"	9.625"	2,706'	NEW	J-55 36 lb/ft	N/A	Y - CEMENT TO SURFACE
Intermediate 2							
Intermediate 3							
Production	8.75" & 8.5"	5.5"	26,438'	NEW	P-110 CY 23 lb/ft	N/A	Y - TOC @ 3,653'
Tubing							
Packer type and depth set							

Comment Details ALL DEPTHS ARE REFERENCED AT GROUND LEVEL ELEVATION

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	CLASS A	895	16.0	1.13	1,011	Surface	8
Coal							
Intermediate 1	CLASS A	885	15.6	1.19	1,053	Surface	8
Intermediate 2							
Intermediate 3							
Production	NEOCEM / NEOCEM	720 (LEAD) / 4,450 (TAIL)	15.0 / 15.0	1.18 (LEAD) / 1.17 (TAIL)	850 (LEAD) / 5,207 (TAIL)	3,653'	8
Tubing							

Drillers TD (ft) 26,477' Loggers TD (ft) 26,477'

Deepest formation penetrated MARCELLUS Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) Curve 7,126' (MD) 7,086' (TVD)

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; 13 total

INTERMEDIATE: Centralize every 3rd joint from shoe to surface; 21 total

PRODUCTION: Centralize every joint from shoe to TOC; 573 total

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS Plug and Perf

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

03/14/2025

API 47- 061 - 01947-00-00 Farm name CONSOL MINING CO. LLC Well number WDTN18DHSM

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMENT	1		

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

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)
	SEE	ATTACHMENT	2					

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Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
MARCELLUS	7,884'	TVD 8,948' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2000 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
 2016 mcfpd 0 bpd 0 bpd 2448 bpd Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
					(SEE ATTACHED FORMATION LOG)

Please insert additional pages as applicable.

Drilling Contractor PRECISION DRILLING COMPANY
 Address 125 TECHNOLOGY DRIVE City CANONSBURG State PA Zip 15317

Logging Company BAKER HUGHES
 Address 400 TECHNOLOGY DRIVE City CANONSBURG State PA Zip 15317

Cementing Company HALLIBURTON
 Address 1000 NOBLE ENERGY DRIVE, SUITE 400 City CANONSBURG State PA Zip 15317

Stimulating Company Evolution Well Services
 Address 1780 Hughes Landing Blvd Suite 125 City The Woodlands State TX Zip 77380

Please insert additional pages as applicable.

Completed by Mike Honce Telephone 304-406-8909
 Signature [Signature] Title Completions Superintendent Date 12/3/2024

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DEC 09 2024

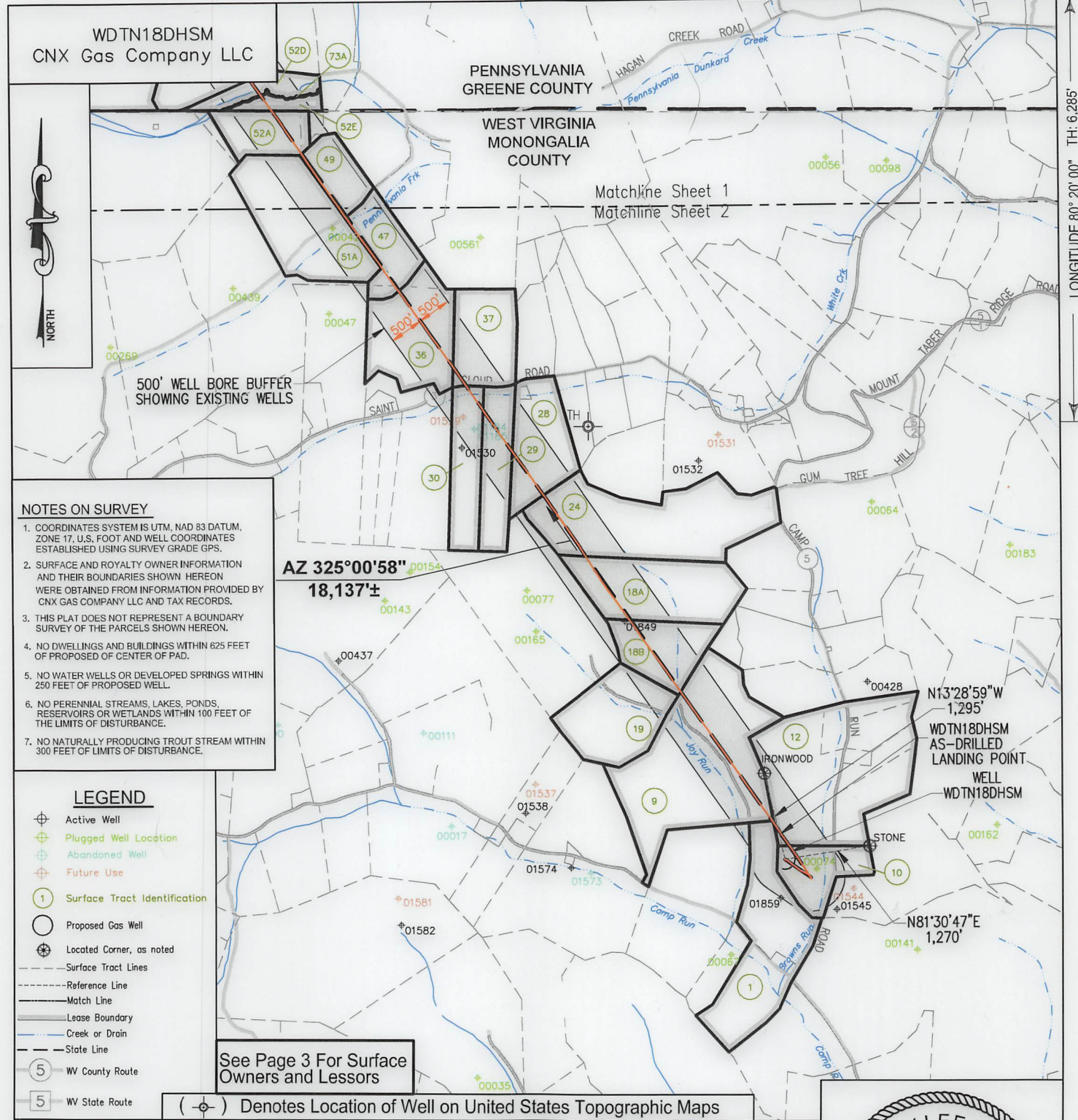
WV Department of
Environmental Protection

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

03/14/2025

LATITUDE 39° 42' 30" TH: 7,020'

LONGITUDE 80° 20' 00" TH: 6,285'



NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE OBTAINED FROM INFORMATION PROVIDED BY CNX GAS COMPANY LLC AND TAX RECORDS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

- LEGEND**
- Active Well
 - 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

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.

L. L. S. 687
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 24
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 ACRES: 46.75
ROYALTY OWNER: Bounty Minerals, LLC LEASE NO: 189033000 ACRES: 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

AS-DRILLED

LATITUDE 39° 45' 00" BH: 5.905'

LONGITUDE 80° 22' 30" BH: 6.335'

WDTN18DHSM
CNX Gas Company LLC



WDTN18DHSM
AS-DRILLED
BOTTOM HOLE

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LEGEND

- Active Well
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500' WELL BORE BUFFER
SHOWING EXISTING WELLS

AZ 325°00'58"
18,137±

PENNSYLVANIA
GREENE COUNTY

WEST VIRGINIA
MONONGALIA
COUNTY

Matchline Sheet 1
Matchline Sheet 2



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
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FILE NO: _____
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 MINIMUM DEGREE OF ACCURACY: 1:2500
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STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OIL AND GAS DIVISION



DATE: OCTOBER 17 20 24
 OPERATORS WELL NO: _____
 API WELL NO: 47 - 061 - 01947
 STATE COUNTY PERMIT

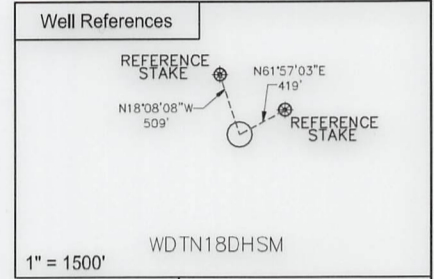
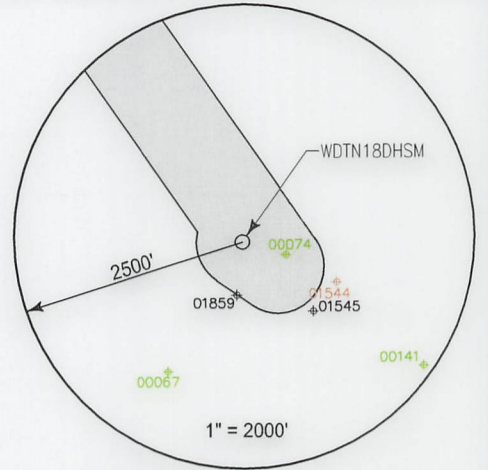
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 Canonsburg, PA 15317 Fairmont, WV 26554

03/14/2025

AS-DRILLED

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 Umbaugh					
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: 4393667.261	
E: 555023.787	
NAD 83, WV NORTH	
N: 434978.542	
E: 1726981.076	
LAT/LON DATUM NAD 83	
LAT: 39°41'27.869"	
LON: 80°21'29.787"	
LANDING POINT	
UTM 17 NAD 83	
N: 4393780.739	
E: 555003.872	
NAD 83, WV NORTH	
N: 435351.998	
E: 1726921.948	
LAT/LON DATUM NAD 83	
LAT: 39°41'31.555"	
LON: 80°21'30.589"	
BOTTOM HOLE LOCATION (BHL)	
UTM 17 NAD 83	
N: 4398254.760	
E: 551760.539	
NAD 83, WV NORTH	
N: 450210.821	
E: 1716524.668	
LAT/LON DATUM NAD 83	
LAT: 39°43'57.400"	
LON: 80°23'45.492"	

WDTN18 WELL PAD	
WDTN18AHSM	WDTN18UHSM
WDTN18BHSM	WDTN18EHSM
WDTN18CHSM	WDTN18DHSM



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TRACT ID	SURFACE OWNER	LESSOR	PIN
18B	CNX RCPC LLC	Kimeric and Company LLC	1-9-20
		Antero Resources Corporation	
19	Consol Mining Company LLC	Bounty Minerals, LLC	1-9-31
		John E. Stankola	
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	1-9-5
		Consolidation Coal Company	
		CONSOL Mining Company LLC	
		CNX Resource Holdings LLC	
30	Seth Allen Moore	Douglas A. Church	1-9-4
		Terra Firma Company	
		CNX Land LLC	
36	Wolfe Kids LLC	XTO Energy Inc.	1-2-6
		Shuman Inc.	
		Noumenon Corporation	
		O-Max Coal Company	
37	Mike J. Prendergast, et ux	Mike J. Prendergast and Thelma M. Prendergast	1-2-7
47	Consol Mining Company LLC	Shuman Inc.	1-2-5
		Noumenon Corporation	
		O-Max Coal Company	
		Flossie Kimble; Denzle Kimble and Olive Irene Wright Kimble	
		Consolidation Coal Company	
49	Consol Mining Company LLC	David L. McGowan and Brenda J. McGowan	1-2-3
		Barbara A. Berry	
		Rand L. Martin and Jeannetta I. Martin	
		Salvatore Veltri and Janis M. Veltri	
		Bessie Eden Wise	
		Consolidation Coal Company	
51A	Monongalia County Coal Resources Inc.	XTO Energy, Inc.	1-2-1
		Regina Schrimper	
		Latricia 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	

03/14/2025

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	

03/14/2025

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	06/15/2024
Job End Date:	07/16/2024
State:	West Virginia
County:	Monongalia
API Number:	47-061-01947-00-00
Operator Name:	CNX Gas Company LLC
Well Name and Number:	WDTN18DHSM
Latitude:	39.689299
Longitude:	-80.358286
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7865
Total Base Water Volume (gal)*:	26401746
Total Base Non Water Volume:	0



Water Source	Percent
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Office Of Oil and Gas

NOV 13 2024

West Virginia Department of
Environmental Protection

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
ACI-150	PVS-Nolwood Chemicals	Acid corrosion inhibitor					
Citric Acid 50%	PVS-Nolwood Chemicals	Iron Control					
Clearal 268	Chemstream	Biocide					
FDP-S1435-21	Halliburton	Friction Reducer					
HCL Acid (28%)	CHEMSTREAM	Acid					
Sand	US Silica	Proppant					
StimSTREAM FR 9800	Chemstream	Friction Reducer					
StimSTREAM SC 405	Chemstream	Scale Control					
Water	CNX	Carrier/Base Fluid					

Items above are Trade Names. Items below are the individual ingredients.

03/14/2025

			Water	7732-18-5	100.00000	82.95426	None
			Crystalline Silica in the form of Quartz	14808-60-7	99.90000	16.90062	None
			Acrylamide-Chloride Salt of Trimethylammonio-Ethyl Acrylate Copolymer	69418-26-4	40.00000	0.03077	None
			Alkanes, C12-26-Branched and Linear	90622-53-0	40.00000	0.03077	None
			Hydrogen chloride	7647-01-0	28.00000	0.01419	None
			Acrylic Polymer	9003-05-8	100.00000	0.00765	None
			Ethoxylated Alcohols (C12-16)	68551-12-2	5.00000	0.00385	None
			Glutaraldehyde	111-30-8	20.00000	0.00203	None
			AA/Maleic Anhydride Co-polymer	9003-04-7	5.00000	0.00063	None
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00063	None
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00030	None
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00030	None
			Citric acid	77-92-9	50.50000	0.00018	None
			Methyl alcohol	67-56-1	70.00000	0.00017	None
			Ethanol	64-17-5	1.50000	0.00015	None
			Ethylene glycol	107-21-1	20.00000	0.00005	None
			N,N-Dimethylformamide	68-12-2	10.00000	0.00002	None
			Cinnamaldehyde	104-55-2	5.00000	0.00001	None
			2-Butoxyethanol	111-76-2	5.00000	0.00001	None
			Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched	127087-87-0	5.00000	0.00001	None
			Tar Bases, quinoline derivs, benzyl chloride-quat	72480-70-7	5.00000	0.00001	None

* Total Water Volume sources may include various types of water including fresh water, produced water, and 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)

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API:47-061-01947

CNX RESOURCES LLC

WELL NAME: WDTN18DHSM

All depths are referenced to GLE

LITHOLOGIES

LITHOLOGY / FORMATION NAME	TOP DEPTH IN FT 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, H2S, ETC)
Un-named Shale-Sand	0	448	0	448	Shale/Sandstone
Washington Coal Seam	448	450	448	450	Coal
un-named red shale siltstone and sand	450	538	450	538	Shale/Sandstone/Siltstone
Waynesburg A Coal Seam	538	539	538	539	Coal
Un-named shale and sand	539	612	539	612	Shale/Sandstone
Waynesburg B2 Coal Seam	612	614	612	614	Coal
Un-named shale and sand	614	614	614	614	Shale/Sandstone
Waynesburg B1 Coal Seam	614	618	614	618	Coal
Un-named shale and sand	618	873	618	873	Shale/Sandstone
Sewickley Coal Seam	873	878	873	878	Coal
Un-named shale and sand	878	978	878	978	Shale/Sandstone
Pittsburgh Coal Seam	978	984	978	984	Coal
un-named shale and sand	984	1336	984	1336	Shale/Sandstone
Bakers Town	1336	1337	1336	1337	Coal
un-named shale and sand	1337	1441	1337	1441	Shale/Sandstone
Brush Creek	1441	1442	1441	1442	Coal
un-named shale and sand	1442	1500	1442	1500	Shale/Sandstone
Mahoning	1500	1501	1500	1501	Coal
un-named shale and sand	1501	1551	1501	1551	Shale/Sandstone
Upper Freeport	1551	1551	1551	1551	Coal
Gas Sand	1551	1591	1551	1591	Sandstone
Lower Freeport	1591	1593	1591	1593	Coal
1st Salt Sand	1593	1715	1593	1715	Sandstone
Middle Kittanning Coal Seam	1715	1716	1715	1716	Coal
un-named shale and sand	1716	1834	1716	1834	Shale/Sandstone
2nd Salt Sand	1834	1919	1834	1919	Sandstone
un-named shale and sand	1919	1979	1919	1979	Shale/Sandstone
3rd Salt Sand	1979	2009	1979	2009	Sandstone
Big Lime	2189	2415	2189	2415	Limestone
Big Injun	2415	2503	2415	2503	Sandstone

API:47-061-01947

CNX RESOURCES LLC

WELL NAME: WDTN18DHSM

All depths are referenced to GLE

LITHOLOGIES

LITHOLOGY / FORMATION NAME	TOP DEPTH IN FT 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, H2S, ETC)
Big Injun Base	2503	2916	2503	2916	Siltstone/Shale
Gantz	2916	3012	2916	3012	Sandstone
Gantz Base	3012	3029	3012	3029	Siltstone/Shale
50 Foot	3029	3104	3029	3104	Sandstone
Fifty Foot Base	3104	3137	3104	3137	Siltstone/Shale
30 Foot	3137	3178	3137	3178	Sandstone
30 Foot Base	3178	3213	3178	3213	Siltstone/Shale
Gordon	3213	3279	3213	3279	Sandstone
Gordon Base	3279	3392	3279	3392	Siltstone/Shale

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ATTACHMENT 1: WDTN18DHSM 47-061-01947

WELLNAME	Stage	date_perfed	From_TMD	To_TMD	Shots	Formation
WDTN18DHSM	1	6/15/2024	26,345.0	26,396.0	16	MARCELLUS
WDTN18DHSM	2	6/15/2024	26,079.6	26,290.7	48	MARCELLUS
WDTN18DHSM	3	6/17/2024	25,840.1	26,051.2	48	MARCELLUS
WDTN18DHSM	4	6/18/2024	25,600.6	25,811.7	48	MARCELLUS
WDTN18DHSM	5	6/18/2024	25,361.1	25,572.2	48	MARCELLUS
WDTN18DHSM	6	6/18/2024	25,121.6	25,332.7	48	MARCELLUS
WDTN18DHSM	7	6/18/2024	24,882.1	25,093.2	48	MARCELLUS
WDTN18DHSM	8	6/19/2024	24,642.6	24,853.7	48	MARCELLUS
WDTN18DHSM	9	6/19/2024	24,403.1	24,614.2	48	MARCELLUS
WDTN18DHSM	10	6/19/2024	24,163.6	24,374.7	48	MARCELLUS
WDTN18DHSM	11	6/20/2024	23,924.1	24,135.2	48	MARCELLUS
WDTN18DHSM	12	6/20/2024	23,684.6	23,895.7	48	MARCELLUS
WDTN18DHSM	13	6/20/2024	23,445.1	23,656.2	48	MARCELLUS
WDTN18DHSM	14	6/21/2024	23,205.6	23,416.7	48	MARCELLUS
WDTN18DHSM	15	6/28/2024	22,966.1	23,177.2	48	MARCELLUS
WDTN18DHSM	16	6/28/2024	22,726.6	22,937.7	48	MARCELLUS
WDTN18DHSM	17	6/29/2024	22,487.1	22,698.2	48	MARCELLUS
WDTN18DHSM	18	6/29/2024	22,247.6	22,458.7	48	MARCELLUS
WDTN18DHSM	19	6/30/2024	22,008.1	22,219.2	48	MARCELLUS
WDTN18DHSM	20	6/30/2024	21,768.6	21,979.7	48	MARCELLUS
WDTN18DHSM	21	6/30/2024	21,529.1	21,740.2	48	MARCELLUS
WDTN18DHSM	22	6/30/2024	21,289.6	21,500.7	48	MARCELLUS
WDTN18DHSM	23	7/1/2024	21,050.1	21,261.2	48	MARCELLUS
WDTN18DHSM	24	7/1/2024	20,810.6	21,021.7	48	MARCELLUS
WDTN18DHSM	25	7/1/2024	20,571.1	20,782.2	48	MARCELLUS
WDTN18DHSM	26	7/2/2024	20,331.6	20,542.7	48	MARCELLUS
WDTN18DHSM	27	7/2/2024	20,092.1	20,303.2	48	MARCELLUS
WDTN18DHSM	28	7/2/2024	19,852.6	20,063.7	48	MARCELLUS
WDTN18DHSM	29	7/2/2024	19,613.1	19,824.2	48	MARCELLUS
WDTN18DHSM	30	7/3/2024	19,373.6	19,584.7	48	MARCELLUS
WDTN18DHSM	31	7/3/2024	19,134.1	19,345.2	48	MARCELLUS
WDTN18DHSM	32	7/3/2024	18,894.6	19,105.7	48	MARCELLUS
WDTN18DHSM	33	7/4/2024	18,655.1	18,866.2	48	MARCELLUS
WDTN18DHSM	34	7/4/2024	18,415.6	18,626.7	48	MARCELLUS
WDTN18DHSM	35	7/4/2024	18,176.1	18,387.2	48	MARCELLUS
WDTN18DHSM	36	7/5/2024	17,936.6	18,147.7	48	MARCELLUS
WDTN18DHSM	37	7/5/2024	17,697.1	17,908.2	48	MARCELLUS
WDTN18DHSM	38	7/5/2024	17,457.6	17,668.7	48	MARCELLUS
WDTN18DHSM	39	7/5/2024	17,218.1	17,429.2	48	MARCELLUS
WDTN18DHSM	40	7/6/2024	16,978.6	17,189.7	48	MARCELLUS
WDTN18DHSM	41	7/6/2024	16,739.1	16,950.2	48	MARCELLUS
WDTN18DHSM	42	7/6/2024	16,499.6	16,710.7	48	MARCELLUS

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ATTACHMENT 1: WDTN18DHSM 47-061-01947

WELLNAME	Stage	date_perfed	From_TMD	To_TMD	Shots	Formation
WDTN18DHSM	43	7/7/2024	16,260.1	16,471.2	48	MARCELLUS
WDTN18DHSM	44	7/7/2024	16,020.6	16,231.7	48	MARCELLUS
WDTN18DHSM	45	7/7/2024	15,781.1	15,992.2	48	MARCELLUS
WDTN18DHSM	46	7/8/2024	15,541.6	15,752.7	48	MARCELLUS
WDTN18DHSM	47	7/8/2024	15,302.1	15,513.2	48	MARCELLUS
WDTN18DHSM	48	7/8/2024	15,062.6	15,273.7	48	MARCELLUS
WDTN18DHSM	49	7/8/2024	14,823.1	15,034.2	48	MARCELLUS
WDTN18DHSM	50	7/9/2024	14,583.6	14,794.7	48	MARCELLUS
WDTN18DHSM	51	7/11/2024	14,344.1	14,555.2	48	MARCELLUS
WDTN18DHSM	52	7/11/2024	14,104.6	14,315.7	48	MARCELLUS
WDTN18DHSM	53	7/11/2024	13,865.1	14,076.2	48	MARCELLUS
WDTN18DHSM	54	7/11/2024	13,627.8	13,836.7	48	MARCELLUS
WDTN18DHSM	55	7/11/2024	13,390.5	13,599.4	48	MARCELLUS
WDTN18DHSM	56	7/12/2024	13,153.2	13,362.1	48	MARCELLUS
WDTN18DHSM	57	7/12/2024	12,915.9	13,124.8	48	MARCELLUS
WDTN18DHSM	58	7/12/2024	12,678.6	12,887.5	48	MARCELLUS
WDTN18DHSM	59	7/12/2024	12,441.3	12,650.2	48	MARCELLUS
WDTN18DHSM	60	7/12/2024	12,204.0	12,412.9	48	MARCELLUS
WDTN18DHSM	61	7/12/2024	11,966.7	12,175.6	48	MARCELLUS
WDTN18DHSM	62	7/13/2024	11,729.4	11,930.0	48	MARCELLUS
WDTN18DHSM	63	7/13/2024	11,492.1	11,701.0	48	MARCELLUS
WDTN18DHSM	64	7/13/2024	11,254.8	11,463.7	48	MARCELLUS
WDTN18DHSM	65	7/13/2024	11,017.5	11,226.4	48	MARCELLUS
WDTN18DHSM	66	7/13/2024	10,780.2	10,989.1	48	MARCELLUS
WDTN18DHSM	67	7/14/2024	10,542.9	10,751.8	48	MARCELLUS
WDTN18DHSM	68	7/14/2024	10,305.6	10,514.5	48	MARCELLUS
WDTN18DHSM	69	7/14/2024	10,068.3	10,277.2	48	MARCELLUS
WDTN18DHSM	70	7/15/2024	9,831.0	10,039.9	48	MARCELLUS
WDTN18DHSM	71	7/15/2024	9,593.7	9,802.6	48	MARCELLUS
WDTN18DHSM	72	7/15/2024	9,356.4	9,565.3	48	MARCELLUS
WDTN18DHSM	73	7/15/2024	9,119.1	9,328.0	48	MARCELLUS
WDTN18DHSM	74	7/15/2024	8,881.8	9,090.7	48	MARCELLUS
WDTN18DHSM	75	7/16/2024	8,644.5	8,853.4	48	MARCELLUS
WDTN18DHSM	76	7/16/2024	8,407.2	8,616.1	48	MARCELLUS
WDTN18DHSM	77	7/16/2024	8,169.9	8,378.8	48	MARCELLUS

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ATTACHMENT 2: WDTN18DHSM 47-061-01947

wellname	IntRefNo	date_stim	avg_rate	avg_press	max_press	ISIP	Prop_Type	Prop_sz
WDTN18DHSM	1	6/15/2024	83	11,329.9	11,826.0	5,195.0	sand	100/100
WDTN18DHSM	1	6/15/2024	84	11,337.8	11,826.0	5,044.0	sand	100/100
WDTN18DHSM	2	6/17/2024	86	11,272.4	11,823.0	5,509.0	sand	100/100
WDTN18DHSM	3	6/17/2024	89	11,871.3	12,049.0	4,983.0	sand	100/100
WDTN18DHSM	4	6/18/2024	84	11,638.9	11,921.0	5,772.0	sand	100/100
WDTN18DHSM	5	6/18/2024	85	11,683.0	11,824.0	5,915.0	sand	100/100
WDTN18DHSM	6	6/18/2024	85	11,764.0	12,070.0	5,346.0	sand	100/100
WDTN18DHSM	7	6/19/2024	85	11,711.8	12,003.0	5,182.0	sand	100/100
WDTN18DHSM	8	6/19/2024	85	11,823.3	12,005.0	6,070.0	sand	100/100
WDTN18DHSM	9	6/19/2024	88	11,854.0	12,060.0	5,185.0	sand	100/100
WDTN18DHSM	10	6/20/2024	93	11,806.0	12,045.0	6,464.9	sand	100/100
WDTN18DHSM	11	6/20/2024	94	11,742.5	12,011.0	6,531.0	sand	100/100
WDTN18DHSM	12	6/20/2024	89	11,891.1	12,039.4	6,086.3	sand	100/100
WDTN18DHSM	13	6/21/2024	88	11,903.7	12,057.0	6,030.9	sand	100/100
WDTN18DHSM	14	6/28/2024	88	11,334.1	11,955.6	5,391.3	sand	100/100
WDTN18DHSM	15	6/28/2024	95	11,872.7	12,085.0	5,512.0	sand	100/100
WDTN18DHSM	16	6/29/2024	95	11,594.8	11,898.0	6,006.0	sand	100/100
WDTN18DHSM	17	6/29/2024	99	11,816.4	12,100.0	6,242.0	sand	100/100
WDTN18DHSM	18	6/30/2024	97	11,902.6	12,080.0	6,354.9	sand	100/100
WDTN18DHSM	19	6/30/2024	92	11,866.4	12,026.0	6,483.0	sand	100/100
WDTN18DHSM	20	6/30/2024	91	11,849.0	12,013.0	6,623.0	sand	100/100
WDTN18DHSM	21	6/30/2024	98	11,864.4	12,059.0	6,144.0	sand	100/100
WDTN18DHSM	22	7/1/2024	90	11,840.6	12,057.0	5,661.0	sand	100/100
WDTN18DHSM	23	7/1/2024	90	11,791.1	12,041.0	5,635.0	sand	100/100
WDTN18DHSM	24	7/1/2024	100	11,785.8	12,049.0	6,062.0	sand	100/100
WDTN18DHSM	25	7/1/2024	93	11,805.5	12,054.0	5,922.0	sand	100/100
WDTN18DHSM	26	7/2/2024	92	11,700.0	11,970.0	6,091.1	sand	100/100
WDTN18DHSM	27	7/2/2024	90	11,678.6	12,025.0	5,699.0	sand	100/100
WDTN18DHSM	28	7/2/2024	97	11,789.2	12,077.0	6,080.0	sand	100/100
WDTN18DHSM	29	7/3/2024	100	11,835.2	12,034.0	6,033.9	sand	100/100
WDTN18DHSM	30	7/3/2024	101	11,564.7	12,010.0	6,259.0	sand	100/100
WDTN18DHSM	31	7/3/2024	100	11,755.9	12,029.0	6,093.0	sand	100/100
WDTN18DHSM	32	7/3/2024	100	11,584.6	12,044.0	5,979.0	sand	100/100
WDTN18DHSM	33	7/4/2024	102	11,346.9	11,919.0	5,768.9	sand	100/100
WDTN18DHSM	34	7/4/2024	101	11,464.8	11,894.0	5,493.0	sand	100/100
WDTN18DHSM	35	7/4/2024	101	11,610.5	11,983.0	6,131.1	sand	100/100
WDTN18DHSM	36	7/5/2024	101	11,166.6	11,863.0	5,683.0	sand	100/100
WDTN18DHSM	37	7/5/2024	102	11,501.9	11,943.6	6,212.0	sand	100/100
WDTN18DHSM	38	7/5/2024	102	11,619.4	12,025.0	6,393.0	sand	100/100
WDTN18DHSM	39	7/6/2024	101	11,242.8	11,974.0	5,746.8	sand	100/100
WDTN18DHSM	40	7/6/2024	102	11,311.3	11,914.0	5,711.9	sand	100/100
WDTN18DHSM	41	7/6/2024	100	11,454.8	12,025.0	6,220.0	sand	100/100

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WDTN18DHSM 47-061-01947

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ATTACHMENT 2: WDTN18DHSM 47-061-01947

wellname	IntRefNo	date_stlm	avg_rate	avg_press	max_press	ISIP	Prop_Type	Prop_sz
WDTN18DHSM	42	7/7/2024	102	10,958.8	11,974.9	5,814.0	sand	100/100
WDTN18DHSM	43	7/7/2024	100	10,690.7	11,899.0	5,707.8	sand	100/100
WDTN18DHSM	44	7/7/2024	102	11,613.6	11,971.5	5,746.0	sand	100/100
WDTN18DHSM	45	7/8/2024	102	11,565.5	12,005.5	6,132.0	sand	100/100
WDTN18DHSM	46	7/8/2024	103	11,310.1	11,917.0	6,013.0	sand	100/100
WDTN18DHSM	47	7/8/2024	102	11,383.3	11,874.0	6,211.9	sand	100/100
WDTN18DHSM	48	7/8/2024	103	11,189.1	11,987.0	5,828.9	sand	100/100
WDTN18DHSM	49	7/9/2024	103	10,801.1	11,947.0	6,162.0	sand	100/100
WDTN18DHSM	50	7/11/2024	102	11,395.8	11,781.0	5,965.0	sand	100/100
WDTN18DHSM	51	7/11/2024	103	11,297.3	11,720.0	5,945.0	sand	100/100
WDTN18DHSM	52	7/11/2024	103	11,282.4	11,690.0	5,796.0	sand	100/100
WDTN18DHSM	53	7/11/2024	102	11,226.1	11,834.0	5,784.0	sand	100/100
WDTN18DHSM	54	7/11/2024	103	11,195.2	11,853.0	6,334.0	sand	100/100
WDTN18DHSM	55	7/12/2024	103	11,294.3	12,011.0	6,084.0	sand	100/100
WDTN18DHSM	56	7/12/2024	103	10,899.2	11,949.0	5,904.0	sand	100/100
WDTN18DHSM	57	7/12/2024	103	10,916.3	11,802.0	5,993.0	sand	100/100
WDTN18DHSM	58	7/12/2024	103	10,974.8	11,711.0	6,018.9	sand	100/100
WDTN18DHSM	59	7/12/2024	103	10,544.9	11,433.0	6,266.0	sand	100/100
WDTN18DHSM	60	7/12/2024	103	10,429.9	11,939.0	5,975.0	sand	100/100
WDTN18DHSM	61	7/13/2024	104	10,864.0	11,881.0	5,786.0	sand	100/100
WDTN18DHSM	62	7/13/2024	103	11,107.3	11,712.0	5,733.0	sand	100/100
WDTN18DHSM	63	7/13/2024	103	11,217.6	11,721.0	5,730.7	sand	100/100
WDTN18DHSM	64	7/13/2024	103	11,212.6	11,799.0	6,047.1	sand	100/100
WDTN18DHSM	65	7/13/2024	104	11,043.1	11,781.0	5,713.0	sand	100/100
WDTN18DHSM	66	7/14/2024	102	10,592.6	11,329.0	6,093.0	sand	100/100
WDTN18DHSM	67	7/14/2024	103	10,635.0	11,633.0	6,251.0	sand	100/100
WDTN18DHSM	68	7/14/2024	103	10,716.8	11,539.0	6,028.0	sand	100/100
WDTN18DHSM	69	7/14/2024	104	11,108.1	11,900.0	6,044.0	sand	100/100
WDTN18DHSM	70	7/15/2024	104	10,732.9	11,598.0	5,930.0	sand	100/100
WDTN18DHSM	71	7/15/2024	104	10,698.4	11,366.0	5,705.0	sand	100/100
WDTN18DHSM	72	7/15/2024	104	11,017.4	11,572.0	5,973.0	sand	100/100
WDTN18DHSM	73	7/15/2024	104	11,141.0	11,833.0	6,212.0	sand	100/100
WDTN18DHSM	74	7/15/2024	104	10,652.9	11,807.0	6,066.0	sand	100/100
WDTN18DHSM	75	7/16/2024	104	10,334.2	11,571.0	6,028.0	sand	100/100
WDTN18DHSM	76	7/16/2024	104	10,549.3	11,278.0	5,916.9	sand	100/100
WDTN18DHSM	77	7/16/2024	103	10,408.0	11,432.0	5,495.0	sand	100/100

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