

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

RECEIVED  
Office of Oil and Gas  
JUN 27 2023  
WV Department of  
Environmental Protection

API 47-061-01903 County MONONGALIA District BATTLE  
Quad WADESTOWN Pad Name WDTN19 Field/Pool Name \_\_\_\_\_  
Farm name CNX Gas Company LLC Well Number WDTN19EHSM  
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 4393944.871 Easting 556994.094  
Landing Point of Curve Northing 4393670.714 Easting 556921.827  
Bottom Hole Northing 4390106.414 Easting 559503.274

Elevation (ft) 1,264' 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 08.29.2022 Date drilling commenced 08.30.2022 (spud) Date drilling ceased 12.08.2022  
Date completion activities began 04.07.2023 Date completion activities ceased 05.02.2023  
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 125', 584', 845', 933', 938' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 2,419', 2,509', 3,139' Void(s) encountered (Y/N) depths None Anticipated  
Coal depth(s) ft 708'-711', 966'-972', 1029'-1031', 1054'-1059', 1060'-1068' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

**APPROVED**

Reviewed by:  
*MJK 6/29/2023*  
**09/15/2023**

API 47-061 - 01903 Farm name CNX Gas Company LLC Well number WDTN19EHSM

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"	100'	NEW	94lb/ft	N/A	GROUT TO SURFACE
Surface	17.5"	13.375"	1,202'	NEW	J-55 54.5lb/ft	N/A	Y - CEMENT TO SURFACE
Coal							
Intermediate 1	12.25"	9.625"	2,981'	NEW	J-55 36lb/ft	N/A	Y - CEMENT TO SURFACE
Intermediate 2							
Intermediate 3							
Production	8.75" & 8.5"	5.5"	22,972'	NEW	P-110 23lb/ft	N/A	Y - TOC @ 2,096'
Tubing							
Packer type and depth set							

Comment Details ALL DEPTHS ARE REFERENCED GLE = -28' KB

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	HALCEM	845	15.8	1.17	989	Surface	8
Coal							
Intermediate 1	HALCEM	970	15.8	1.15	1,116	Surface	8
Intermediate 2							
Intermediate 3							
Production	NEOCEM / NEOCEM	1,100(LEAD) / 3,755(TAIL)	15.0 / 15.0	1.13 (LEAD) / 1.12 (TAIL)	1,243(LEAD) / 4,208(TAIL)	2,096'	8
Tubing							

Drillers TD (ft) 23,026' Loggers TD (ft) 23,026'

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

Plug back procedure N/A

Kick off depth (ft) 7,155' (MD) 7,082' (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

INTERMEDIATE: Centralize every other joint from shoe to surface

PRODUCTION: Centralize every joint from shoe to TOC

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

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

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

API 47- 061 - 01903 Farm name CNX Gas Company LLC Well number WDTN19EHSM

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMENT 1	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 1	2				

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS		
MARCELLUS	7,984'	TVD	12,273' MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 2,150 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 1,439.6 mcfpd Oil 0 bpd NGL 0 bpd Water 3,440 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> 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 PATTERSON-UTI DRILLING COMPANY  
Address 100 GALAWAY DRIVE City EIGHTY FOUR State PA Zip 15330

Logging Company SCHLUMBERGER  
Address 3600 BRIARPARK DRIVE City HOUSTON State TX Zip 77042

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

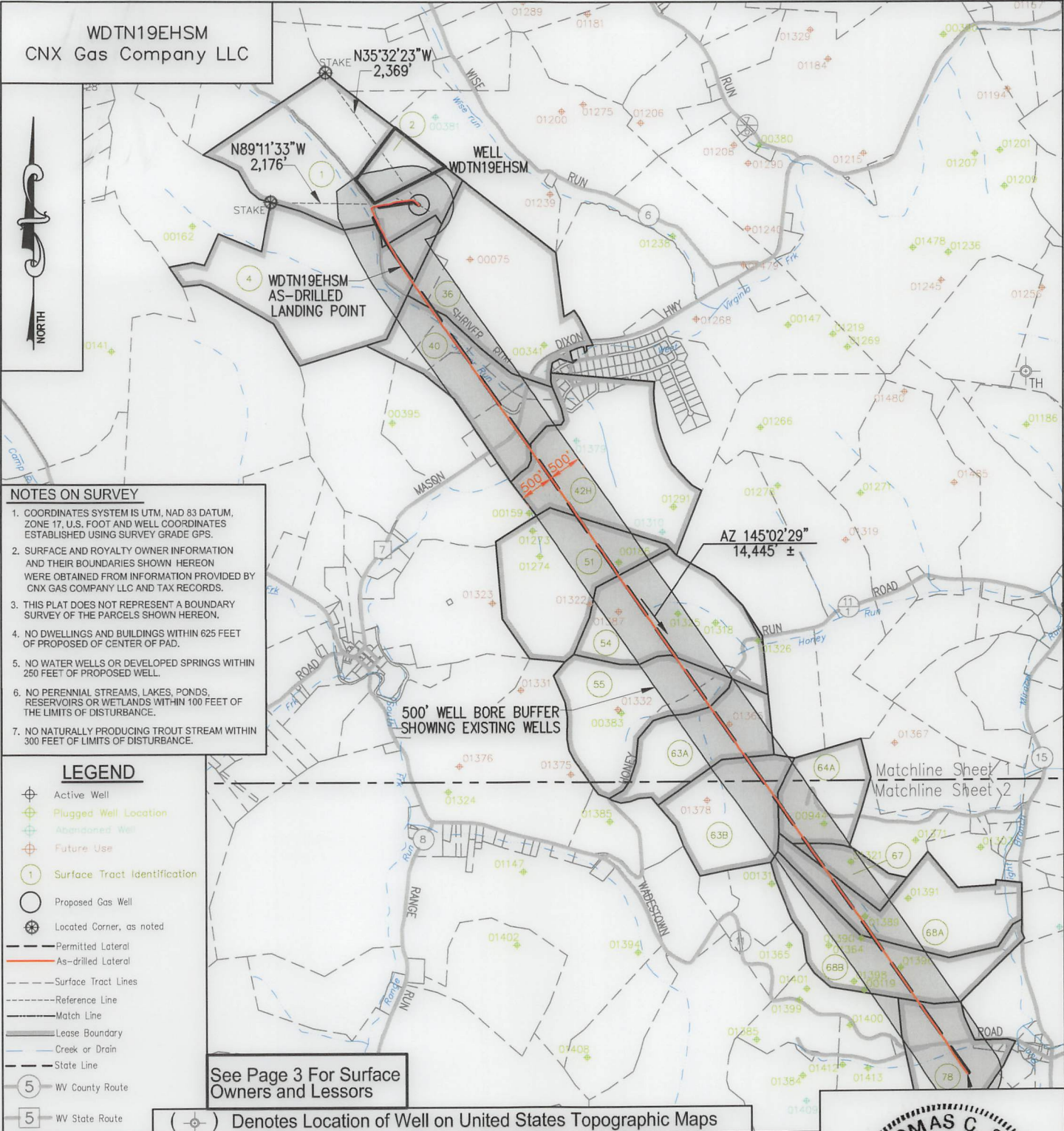
Stimulating Company EVOLUTION WELL SERVICE  
Address 1780 HUGHES LANDING BLVD., SUITE 125 City THE WOODLANDS State TX Zip 77380

Please insert additional pages as applicable.

Completed by Jarrett Jones Telephone 304-276-3970  
Signature *Jarrett Jones* Title Superintendent Completions Date 06-23-2023

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

09/15/2023



**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
  - ① Surface Tract Identification
  - Proposed Gas Well
  - ⊗ Located Corner, as noted
  - Permitted Lateral
  - As-Drilled Lateral
  - Surface Tract Lines
  - Reference Line
  - Match Line
  - Lease Boundary
  - Creek or Drain
  - State Line
  - ⑤ WV County Route
  - ⑤ 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.

*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: JUNE 08 20 23  
 OPERATORS WELL NO: \_\_\_\_\_  
 API WELL NO: 47 - 061 - 01903  
 STATE COUNTY PERMIT

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

LOCATION ELEVATION: 1264.30' WATERSHED: Dunkard Creek QUADRANGLE: Wadestown  
 DISTRICT: Batelle COUNTY: Monongalia

SURFACE OWNER: CNX Gas Company LLC ACREAGE: 96.91 ±  
 ROYALTY OWNER: Three Rivers Royalty II, LLC, et al LEASE NO: 205228000 ACREAGE: 96.91 ±

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: 7,913'

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

AS-DRILLED

WDTN19EHSM  
CNX Gas Company LLC



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( ) Denotes Location of Well on United States Topographic Maps

500' WELL BORE BUFFER  
SHOWING EXISTING WELLS

AZ 145°02'29"  
14,445' ±

WDTN19EHSM  
AS-DRILLED  
BOTTOM HOLE



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'  
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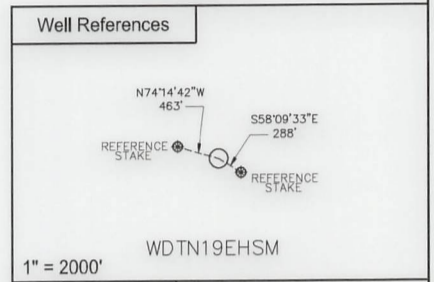
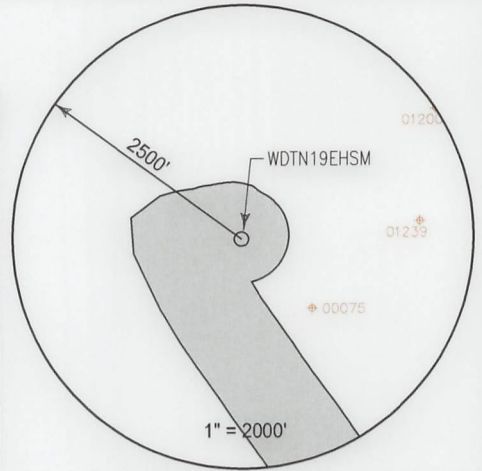
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ADDRESS: 1000 Horizon Vue Drive ADDRESS: 1000 Horizon Vue Drive  
Canonsburg, PA 15317 Canonsburg, PA 15317

AS-DRILLED

TRACT ID	SURFACE OWNER	LESSOR	PIN
1	CNX Gas Company LLC	Hugh Kirkland Jack T. Livengood and Mary Jo Livengood Barbara Haning Diane H. Gonclaves, individually and co-executor of the Edward Lee North Estate Patrick Lee North Melissa Kubishke Catherine C. Kirkland Louise H. Berg, as Trustee of the The Louise H. Berg Revocable Trust Sherry Lemons Christine A. Kirkland, as Trustee of the Christine A. Kirkland Trust Pamela Jayne Brewer, as Trustee of the Pamela Jayne Brewer Revocable Trust Stephen D. Kirkland and Julie D. Kirkland, Trustees of the Kirkland Family Revocable Trust dated 9/2/1998 Catherine Haning Coleman, f/k/a Catherine G. Haning Zachary C. Haning Mary Hennen A. E. Hennen, III Morgan Haning Sarah C. Sheridan Kathleen Farmer Anne W. Haning David Michael Hennen John K. Hennen Robert Douglas Hennen Elizabeth L. March Three Rivers Royalty, II, LLC Deborah Rae Manning, a/k/a Deborah R. Manning, a/k/a Deborah R. Manning and Robert Manning, w/h Kathryn Rew Becker and Michael Compton, w/h BOKF, N.A. as Sole Trustee of the Alma Kirkland Revocable Trust Gail T. Bellucci Northeast Natural Energy LLC	1-8-9
2	CNX Gas Company LLC	Three Rivers Royalty, II, LLC Jack T. Livengood and Mary Jo Livengood Elizabeth L. March Deborah Rae Manning, a/k/a Deborah R. Manning, a/k/a Deborah R. Manning and Robert Manning Kathryn Rew Becker and Michael Compton	1-8-9
4	David Troy Beckner, et al	Mary Jane Beckner, Life Estate, widow and Troy David Beckner and Janet Lee Smith, Remaindermen, JTROS Antero Resources Corporation	1-8-10



SURFACE HOLE LOCATION (SHL)	
UTM 17 NAD 83	
N: 4393944.871	
E: 556994.094	
NAD 83, WV NORTH	
N: 435781.455	
E: 1733461.600	
LAT/LON DATUM NAD 83	
LAT: 39°41'36.408"	
LON: 80°20'06.981"	
LANDING POINT	
UTM 17 NAD 83	
N: 4393670.714	
E: 556921.827	
NAD 83, WV NORTH	
N: 434885.809	
E: 1733209.433	
LAT/LON DATUM NAD 83	
LAT: 39°41'27.534"	
LON: 80°20'10.100"	

WDTN19 WELL PAD		BOTTOM HOLE LOCATION (BHL)	
○ WDN19EHSM		UTM 17 NAD 83	
○ WDN19DHSM	○ WDN19BHSM	N: 4390106.414	
○ WDN19CHSM	○ WDN19FHSM	E: 559503.274	
○ WDN19AHSM	○ WDN19RHSM	NAD 83, WV NORTH	
		N: 423048.550	
		E: 1741484.691	
		LAT/LON DATUM NAD 83	
		LAT: 39°39'31.293"	
		LON: 80°18'22.881"	



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

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



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Canonsburg, PA 15317 Canonsburg, PA 15317

TRACT ID	SURFACE OWNER	LESSOR	PIN
36	George D. Six, et al	William B. Richardson	1-8-11 1-8-11.1 1-13-24 1-13-25 1-13B-81 1-13B-85 1-13B-86 1-13B-87
		CNG Producing Company Dominion Exploration and Production, Inc. Antero Resources Appalachian Corporation Dominion Exploration and Production, Inc. Consol Gas Company CNX Gas Company LLC Noble Energy, Inc.	
40	David K. Tennant, et ux, et al	James B. Reeder, in his capacity as the incumbent and currently acting Trustee of the Jim Bob Revocable Trust	1-13-23 1-13-23.1 THROUGH 1-13-23.8
		Carolyn R. Greiner, in her capacity as agent and attorney-in-fact for and on behalf of William F. Reeder Stephen B. Ferguson, in his capacity as the incumbent and currently acting Trustee of the Margaret R. Ferguson Revocable Trust Carolyn R. Greiner, in her capacity as the incumbent and currently acting trustee of the Carolyn R. Greiner Trust of 1999 Louise Reeder Seeton, in her capacity as the incumbent and currently acting trustee of the Louise Reeder Seeton Trust, a Revocable inter vivos trust created 8/13/1993 Thomas Bradley Reeder, in his capacity as the incumbent and currently acting trustee of the Reeder Living Trust of 2008 Carolyn R. Greiner, in her capacity as agent and attorney-in-fact for and on behalf of Susan Reeder Ruffatto, aka, Susan Reeder Ruffatto	
42H	CNX RCPC LLC, et al	Norman Core, Gregory Shriver, and Francis M. Bland, Trustees of West Warren Baptist Church	1-13-24 1-13-25 1-13B-41 THROUGH 1-13B-54
		CNG Producing Company Dominion Exploration and Production, Inc. Antero Resources Appalachian Corporation Dominion Exploration and Production, Inc. Consol Gas Company CNX Gas Company LLC Noble Energy, Inc.	
51	Thomas W. Sanders	Ronald W. Wade Northeast Natural Energy LLC	1-13-26
54	Jacqueline Carol Cowell	Ginger L. Brookover Douglas Haught Keith Haught Michael Haught Jacqueline Carol Cowell, widow	1-13-27
55	Jacqueline Carol Cowell	Ginger L. Brookover Douglas Haught Keith Haught Michael Haught Jacqueline Carol Cowell, widow	1-13-27
63A	Richard A. Bartolomew, et al	William G. and Betty J. Cross, his wife CNG Producing Company Dominion Exploration and Production, Inc. Antero Resources Appalachian Corporation Dominion Exploration and Production, Inc. Consol Gas Company CNX Gas Company LLC Noble Energy, Inc.	1-13-28
63B	Richard A. Bartolomew, et al	William G. and Betty J. Cross, his wife	1-13-28 1-13-29
		CNG Producing Company Dominion Exploration and Production, Inc. Antero Resources Appalachian Corporation Dominion Exploration and Production, Inc. Consol Gas Company CNX Gas Company LLC Noble Energy, Inc.	

09/15/2023



TRACT ID	SURFACE OWNER	LESSOR	PIN
64A	Eric Dale Chisler	John Marvin Douthat and Edith Anette Douthat	1-13-29
		Amy Mowrey and Greg L. Mowrey	
		Robert L. Fordyce and Lynda Fordyce	
		Kevin Davis	
		T. Charles Truscott	
		Barbara Ann Renfroe and Travis L. Renfroe	
		William A. Douthat	
		Virginia Sibley Walker, by Bryan Adris Robison, II, as her Agent	
		Jean T. Eberly, f/k/a Jean Craig Eberly	
		Janis L. Truscott	
		Mary Gray Walker	
		Virginia May Oliveto and Joseph F. Oliveto	
		Margaret M. Collins and Vincent A. Collins	
		Kelly Ann King Boggia f/k/a Kelly King and Michael J. Boggia, w/h	
		Richard R. Morris and Robin T. Morris	
		John H. Morris, Jr. and Susan H. Morris	
		Harold C. Moore and Darlene E. Moore	
		Helen Fox	
		Holly Swartz and Jeff N. Swartz	
		Steven T. Truscott and Carol A. Truscott	
		Lawrence P. Scarnechia and Christine Lynn Scarnechia	
		Samuel L. Scarnechia and Tami J. Scarnechia	
		Vera K. Hoskinson, f/k/a Vera Matthews and Ronald L. Hoskinson	
		Krystal Tarkenton and Brian J. Tarkenton, w/h	
		Toni Ann Swoyer and David W. Swoyer	
		JoAnn Barzanti and Terry W. Barzanti	
		Lawrence Morris and Danneal Morris	
		Lenard Paul Fordyce	
		Brian Fox and Lisa D. Fox	
		Hartzell D. Fordyce and Mary A. Fordyce	
		Clydie Ray Fordyce and Connie Lou Fordyce	
		Shirley Cain and Victor F. Cain	
		Carolyn J. Butts, f/k/a Carolyn Fordyce and Bernard E. Butts	
		Gareald Fordyce and Carol L. Fordyce	
		Thomas M. Truscott and Nancy P. Truscott	
		Floriene Dulaney and Danny J. Dulaney	
		Anna P. Carpenter f/k/a Anna Pearl Efaw and Kenneth E. Carpenter	
		William J. Taylor	
		Margaret Kovalcheck	
		Cecilia J. Reynolds and John E. Reynolds	
		Richard Calvin Fordyce	
		Patricia A. Lemley and Ronald G. Lemley	
		Clarence C. David and Patricia Davis	
		Leanna Bosley	
		Peggy Catherine Mcl, a/k/a Peggy Fox Mcl	
		Liane M. Culver	
		Curtis Earl Fordyce	
		Janet C. Johnson and Richard B. Johnson	
		James Russell Cornelius and Julie K. O'Brien	
		Ralph Parks Cornelius and Laura D. Corneliu	
		William Terrell Cornelius	
		Keith Alltucker	
		Scott Mick	
		Shirley Cornelius Hipp and Richard A. Hipp	
		Janet Casteel and Donald L. Casteel	
		Louis Frederick Morris and Carol L. Morris	
		Debra Lough a/k/a Deborah M. Lough	
		Joann Coffman and Darrel L. Coffman	
		Judith Lynn Hawkins and John F. Hawkins	
		Kevin Mick and Linda K. Mick, h/w	
		Barbara F. Roberts	
		Marsha J. Newton	
		Suzanne M. Switalski and Dale R. Switalski	
		Kimberly S. Fox and John J. Gula	
		Scott B. Roberts and M. Teresa Roberts	
		Sara Katherin Van Gilder, a/k/a Kathy Van Gilder	
		Donald L. Lockhart and Diane M. Lockhart, h/w	
		Alvin Mick	

09/15/2023

TRACT ID	SURFACE OWNER	LESSOR	PIN
		Nodena Sloan	
		Brad Lee Miller	
		Dennis R. Roberts and Barbara R. Roberts	
		Eric S. Sowden	
		Larry P. Sowden	
		Walter Lloyd Rinehart	
		Robert Leo Fordyce	
		Jeffrey Harman and Janet Harman	
		Rosalie Leanne Martin	
		David S. Sowden, Jr.	
		Steven M. Anders and Diane M. Anders	
		Brandy Conner	
		Nancy Dean Holt and Gary K. Holt	
		Jeri Lee Mullins	
		Rebecca Ann Goczny	
		Tonya D. Bering	
		James C. W. White	
		Steve A. Konya	
		John L. Harman and Kathleen F. Harman	
		Peter Love	
		David R. Sturgiss, Jr.	
		Sally Warrington	
		Joseph Johnston	
		Susan Gawdyda, f/k/a Susan L. Jackson	
		Lydia Darlene Janson, a/k/a Darlene Janson	
		Mary C. Roy	
		Revis D. Johnston and Llanda Johnston, h/w	
		Verneda C. King, by Sandra L. Ruhl, Attorney-in-Fact	
		Richard L. Carlson	
		Angela Denise Fulton	
		Junior Lee Fordyce	
		Michael C. Fluharty and Kathryn A. Fluharty	
		Wanda Faye Blaney	
		Roberta L. King-Crapo	
		Daniel O. Toothman	
		Katherine A. Kulish, f/k/a Katherine A. Webb Fordyce	
		Carol Yvonne Jones, single, f/k/a Carol Yvonne Campbell	
		D'Amico	
		Paul J. Oates	
		Wendell Wayne Knight	
		Lisa Jo Barnette	
		Leonard R. Oates, Jr.	
		Eric B. Oates	
		Aida M. Everhart, a/k/a Ida M. Everhart	
		James V. Hall, Sr.	
		Nancy J. Bock	
		Peter A. Nicoletti and Joetta K. Nicoletti	
		Lisa Dawn Lucas	
		Kelly Dale Knight	
		Kevin W. Alltucker	
		Valerie Hayes and Richard A. Hayes	
		Bryan Carter	
		Renee Rutter	
		Irene Harvey	
		Kip Foster Knight	
		Eric Dale Chisler and Cassandra Ann Chisler	
		Carol J. Freeze	
		Ashlee N. White	
		Shuman Inc.	
		Janet Sue Beveridge	
		Jerri Doreen Richards	
		Debra N. Straight	
		Cynthia H. Jones, f/k/a Cynthia H. Carpenter	
		Dennis L. Efaw	
		Beth Sanders	
		Douglas K. Efaw	
		Ruth Brady	
		Gary D. Harker	
		Beverly Workman	

09/15/2023

TRACT ID	SURFACE OWNER	LESSOR	PIN
		Velma Luttrell	
		Crystal A. Brennan	
		Suzanne Jean Pace	
		Marvin M. Carter	
		Mary Ruth Efaw	
		Marjorie Efaw	
		Jean Karstetter a/k/a Jeanne Karstetter	
		Andrea McDaniel	
		Edward Garner	
		Dailor Fox	
		Adam Carpenter	
		Alcinda Jean Sanders	
		Amelia Jacques Fluharty	
		Anita C. Mire	
		Ashley Ice	
		Autumn Gissing	
		Barry Miller	
		Becca Sanders	
		Becky Newman	
		Betty Jean Huffman	
		Billy Haddix	
		Darlene Bonnie Martin	
		Brenda Price	
		Bruce Miller	
		Carol Jean Mendicino	
		Christopher Allen Harbert	
		Corrine Parker Bates	
		Cynthia Denise Schum	
		Daniel Jason Widen	
		Darren Sloan	
		Diane Santana	
		Dottie Lou Maltarich, f/k/a Dottie Lou Lowery, f/k/a Dottie Lou Fordyce	
		Ethel Elizabeth Snider	
		Eugene Amos Holland II	
		Fred Fordyce	
		Greg Anders	
		Heather Obleada	
		Janet Cernuska	
		Jeremy Jamison	
		Jo Billy Fluharty	
		Joanne Girard	
		Jody Ice	
		John W. Hawkins	
		Kathy Locke	
		Larry L. Eddy	
		Lawrence Lee Hayes	
		Levi Sanders	
		Linda Junice Jamison	
		Michael J. Alltucker	
		Mike Haddix	
		Miranda Jamison	
		Nancy Berkheiser	
		Nathan White	
		Pamela Erickson	
		Patricia Williamson	
		Patricia Stentz	
		Paul Reed Anders	
		Paul Ice	
		Paul Harn	
		Paula Wukovich	
		Paula Eddy	
		Peggy Perkins	
		Rachel Elizabeth Campbell	
		Rachael Jamison	
		Raemon Earl Everhart	
		Ralph H. King	
		Rebecca Smith	
		Scott V. Alltucker	
		Sharon L. Smith	

09/15/2023



API WELL NO  
47 - 061 - 01903  
STATE COUNTY PERMIT

TRACT ID	SURFACE OWNER	LESSOR	PIN
		Sharon Gailey	
		Sharon McCluskey	
		Sharon Rose Romanowski	
		Shirley Yoho	
		Stanton Sloan	
		Susan Jean Bering	
		Susan Lynn Burcham	
		Terry White	
		Troy Bilick	
		Virgil Lee Conners	
		William S. Reed	
		Mark Shane Ice	
		Mark Lane Hayes, Sr.	
		Mary Rebecca Jamison	
		Mathew Jamison	
		Matthew Sloan	
		Stephen Carter	
		Ernest Ray Connors	
		Rhonda K. Streets	
		Lonnie Irvin Howard	
		Martha D. King	
		Margaret Underwood	
		Mary Francis Murphy Warren	
		Kenneth Murphy	
		David C. Sloan	
		Owen White, Jr.	
		Mary Sue (Suzanna) White Wirth	
		Marilyn B. Thorpe	
TRACT ID	SURFACE OWNER	LESSOR	PIN
67	Roy D. Chisler, et ux	Kimeric and Company, LLC Northeast Natural Energy LLC	1-18-9
68A	Roy D. Chisler, et ux	Raymond P. Gaston, aka Ray Gaston, aka Ray Parish Gaston, and Pamela J. Gaston P&P Fujimo LLC R. Parrish Gaston Paul R. Gaston EQT Production Company  Janet Watkins Rose Marie Shape Ruth Ann Tallman Juanita Ely Benjamin C. Wirick Vivian Petoskey Morris Mountaineer Oil and Gas LLC Sidney Austin Smith Trust LLC Thomas E. Ross Richard M. Ross Debra L. Mason and Richard A. Mason Carol Curtis Dwight E. Jackson Judy Wirick Dwight Herd Michael Delbert Herd Christine Ann Boyd Charles Patrick Herd and Leane C. Herd Bruce A. Davie, Jr. Polly Anna Eddy Morrison Fryman Robert W. Davie and Lisa D. Davie Jerry L. Hoffman Cheryl J. Bosse Rodney A. Bosse Clarence S. Willard JPMorgan Chase Bank, N.A. Trustee of the Will E. Morris Heirs Trust U/A dated November 15, 1988 Gary A. Spragg Richard A. Stewart Joyce Lydic Thomas L. Hoffman Kyle J. Davie Summer G. Johnson	1-18-9 1-18-10

09/15/2023

TRACT ID	SURFACE OWNER	LESSOR	PIN
		Jessica L. Baum a/k/a Jessica L. Gerwells	
		James Eric Davie	
		Susan Kimbrell	
		Wendy Dawn Lemley	
		Randall M. Spragg and Lisa M. Spragg, Co-Trustees under Revocable Trust Agreement of Randall M. Spragg, dated October 24, 2007	
		Toledo Animal Shelter	
		Roy Dale Chisler and Twyla Leah Chisler	
		WV Minerals, Inc.	
		Sharon M. Flann	
		Stephen J. Dawson	
		Martha E. Menzies and William S. Menzies	
		Andrew T. Stewart and Cathy Stewart	
		Betty Pitcock	
		Kelly J. Kelly and Dennis Kelly	
		Charlene K. Crapnell and Larry E. Crapnell	
		Darlene Newson and Michael Newson	
		Ricky Kaye Peaslee	
		Maxine Wirick	
		Staci L. Dawson	
		Wilma J. Ross	
		Amber N. Cubberly and Dustin Cubberly, her husband	
		Christina K. Benson and James B. Benson, her husband	
		James E. Eddy and Ronda S. Eddy, his wife	
		Kenneth R. Eddy and Natalie A. Eddy, his wife	
		Mary Lou Verbosky	
		Louise A. Stewart England	
		Michael J. Eddy and Natilie A. Eddy, h/w	
		Northeast Natural Energy LLC	
		Waco Oil & Gas Co., Inc.; I.L. Morris, Mike Ross, Inc.; Mike Ross	
		XTO Energy Inc.	

TRACT ID	SURFACE OWNER	LESSOR	PIN
68B	Opal Howard	Bounty Minerals, LLC	1-18-8
		Lola Drilling I, LLC	
		Rice Drilling B LLC	
		Raymond P. Gaston, aka Ray Gaston, aka Ray Parish Gaston, and Pamela J. Gaston	
		P&P Fujimo LLC	
		R. Parrish Gaston	
		Paul R. Gaston	
		EQT Production Company	
		Janet Watkins	
		Rose Marie Shape	
		Ruth Ann Tallman	
		Juanita Ely	
		Benjamin C. Wirick	
		Vivian Petoskey	
		Morris Mountaineer Oil and Gas LLC	
		Sidney Austin Smith Trust LLC	
		Thomas E. Ross	
		Richard M. Ross	
		Debra L. Mason and Richard A. Mason	
		Carol Curtis	
		Dwight E. Jackson	
		Judy Wirick	
		Dwight Herd	
		Michael Delbert Herd	
		Christine Ann Boyd	
		Charles Patrick Herd and Leane C. Herd	
		Bruce A. Davie, Jr.	
		Polly Anna Eddy Morrison Fryman	
		Robert W. Davie and Lisa D. Davie	
		Jerry L. Hoffman	
		Cheryl J. Bosse	
		Rodney A. Bosse	
		Clarence S. Willard	
		JPMorgan Chase Bank, N.A. Trustee of the Will E. Morris Heirs Trust U/A dated November 15, 1988	

09/15/2023

TRACT ID	SURFACE OWNER	LESSOR	PIN
		Jessica L. Baum a/k/a Jessica L. Gerwells	
		James Eric Davie	
		Susan Kimbrell	
		Wendy Dawn Lemley	
		Randall M. Spragg and Lisa M. Spragg, Co-Trustees under Revocable Trust Agreement of Randall M. Spragg, dated October 24, 2007	
		Toledo Animal Shelter	
		Roy Dale Chisler and Twyla Leah Chisler	
		WV Minerals, Inc.	
		Sharon M. Flann	
		Stephen J. Dawson	
		Martha E. Menzies and William S. Menzies	
		Andrew T. Stewart and Cathy Stewart	
		Betty Pitcock	
		Kelly J. Kelly and Dennis Kelly	
		Charlene K. Crapnell and Larry E. Crapnell	
		Darlene Newson and Michael Newson	
		Ricky Kaye Peaslee	
		Maxine Wirick	
		Staci L. Dawson	
		Wilma J. Ross	
		Amber N. Cubberly and Dustin Cubberly, her husband	
		Christina K. Benson and James B. Benson, her husband	
		James E. Eddy and Ronda S. Eddy, his wife	
		Kenneth R. Eddy and Natalie A. Eddy, his wife	
		Mary Lou Verbosky	
		Louise A. Stewart England	
		Michael J. Eddy and Natilie A. Eddy, h/w	
		Northeast Natural Energy LLC	
		Waco Oil & Gas Co., Inc.; I.L. Morris, Mike Ross, Inc.; Mike Ross	
		XTO Energy Inc.	

TRACT ID	SURFACE OWNER	LESSOR	PIN
68B	Opal Howard	Bounty Minerals, LLC	1-18-8
		Lola Drilling I, LLC	
		Rice Drilling B LLC	
		Raymond P. Gaston, aka Ray Gaston, aka Ray Parish Gaston, and Pamela J. Gaston	
		P&P Fujimo LLC	
		R. Parrish Gaston	
		Paul R. Gaston	
		EQT Production Company	
		Janet Watkins	
		Rose Marie Shape	
		Ruth Ann Tallman	
		Juanita Ely	
		Benjamin C. Wirick	
		Vivian Petoskey	
		Morris Mountaineer Oil and Gas LLC	
		Sidney Austin Smith Trust LLC	
		Thomas E. Ross	
		Richard M. Ross	
		Debra L. Mason and Richard A. Mason	
		Carol Curtis	
		Dwight E. Jackson	
		Judy Wirick	
		Dwight Herd	
		Michael Delbert Herd	
		Christine Ann Boyd	
		Charles Patrick Herd and Leane C. Herd	
		Bruce A. Davie, Jr.	
		Polly Anna Eddy Morrison Fryman	
		Robert W. Davie and Lisa D. Davie	
		Jerry L. Hoffman	
		Cheryl J. Bosse	
		Rodney A. Bosse	
		Clarence S. Willard	
		JPMorgan Chase Bank, N.A. Trustee of the Will E. Morris Heirs Trust U/A dated November 15, 1988	

09/15/2023

TRACT ID	SURFACE OWNER	LESSOR	PIN
		Gary A. Spragg	
		Richard A. Stewart	
		Joyce Lydic	
		Thomas L. Hoffman	
		Kyle J. Davie	
		Summer G. Johnson	
		Jessica L. Baum a/k/a Jessica L. Gerwells	
		James Eric Davie	
		Susan Kimbrell	
		Daniel Bailes	
		Joel Bailes	
		Randall M. Spragg and Lisa M. Spragg, Co-Trustees under Revocable Trust Agreement of Randall M. Spragg, dated October 24, 2007	
		Toledo Animal Shelter	
		WV Minerals, Inc.	
		Sharon M. Flann	
		Stephen J. Dawson	
		Martha E. Menzies and William S. Menzies	
		Andrew T. Stewart and Cathy Stewart	
		Betty Pitcock	
		Kelly J. Kelly and Dennis Kelly	
		Charlene K. Crapnell and Larry E. Crapnell	
		Darlene Newson and Michael Newson	
		Ricky Kaye Peaslee	
		Opal Howard	
		Maxine Wirick	
		Staci L. Dawson	
		Wilma J. Ross	
		Amber N. Cubberly and Dustin Cubberly, her husband	
		Christina K. Benson and James B. Benson, her husband	
		James E. Eddy and Ronda S. Eddy, his wife	
		Kenneth R. Eddy and Natalie A. Eddy, his wife	
		Mary Lou Verbosky	
		Louise A. Stewart England	
		Michael J. Eddy and Natilie A. Eddy, h/w	
		Judy Ann Heston	
		Donna Fay Hibbs	
		Denzil Ray Hibbs	
		Janie Loise Gram	
		Northeast Natural Energy LLC	
		Waco Oil & Gas Co., Inc.; I.L. Morris, Mike Ross, Inc.; Mike Ross	
		XTO Energy Inc.	
TRACT ID	SURFACE OWNER	LESSOR	PIN
78	Harry Bradley, et ux, et al	Bounty Minerals II Acquisitions, LLC	1-18-14 1-18-14.1 THROUGH 1-18-14.5
		Lola Drilling I, LLC	
		Rice Drilling B LLC	
		Virginia L. Law	
		Janet Watkins	
		Juanita Ely	
		Rose Marie Shape	
		Walter M. Stewart II	
		Vivian Petoskey	
		Benjamin Wirick	
		Kelly J. Kelly	
		Ruth Ann Tallman	
		B. Eleanor Crowley	
		Betty Pitcock	
		Darlene Newsom	
		Diane R. Kalafsky	
		William H. Mace	
		Daniel R. Crowley	
		Charlene Crapnell	
		Harold P. Stewart, Jr.	
		Diana Lynn Stewart	
		Louise A. Stewart England	
		Byron E. Stewart, II	
		John A. Eddy	

09/15/2023

TRACT ID	SURFACE OWNER	LESSOR	PIN
		Paula Kalafsky	
		Laraine Metheny	
		Thomas William Crowley	
		Brentyn M. Mace	
		Greg W. Mace	
		Janet Boord	
		Martha Menzies and Harold D. Rogers, as trustees of the Martha Menzies Trust	
		Morris Mountaineer Oil and Gas LLC	
		Sidney Austin Smith Trust LLC	
		Thomas E. Ross	
		Richard M. Ross	
		Debra L. Mason	
		Carol Curtis	
		Dwight E. Jackson	
		Judy Wirick	
		Dwight Herd	
		Michael Delbert Herd	
		Christine Ann Boyd	
		Charles Patrick Herd	
		Bruce A. Davie, Jr.	
		Polly Fryman	
		Robert W. Davie	
		Jerry L. Hoffman	
		Cheryl J. Bosse	
		Rodney A. Bosse	
		JPMorgan Chase Bank, N.A. Trustee of the Will E. Morris Heirs Trust U/A dated November 15, 1988	
		Robert Lee Mace III	
		Jeffrey R. Mace	
		Kyle J. Davie	
		Summer G. Johnson	
		Jessica L. Baum, a/k/a Jessica L. Gerwells	
		James Eric Davie	
		Susan Kimbrell	
		Richard A. Stewart	
		Andrew T. Stewart	
		Joyce Lydic	
		Thomas L. Hoffman	
		Lois Esspeshade	
		Judith Gashie	
		Margo Urbany Joyce	
		Hyla N. Urbany	
		Toledo Animal Shelter	
		Waco Oil & Gas Co., Inc.; I.L. Morris, Mike Ross, Inc.; Mike Ross	
		XTO Energy Inc.	

09/15/2023



ATTACHMENT 1: WDTN19EHSM 47-061-01903

Well Name	Perf Stage Numer	Date	Top Depth	Bottom Depth	Perfs Open	Reservoir Zone
WDTN19EHSM	1	4/7/2023	22,821.15	22,918.00	24	Marcellus Shale
WDTN19EHSM	2	4/13/2023	22,640.15	22,762.00	32	Marcellus Shale
WDTN19EHSM	3	4/13/2023	22,480.15	22,602.00	32	Marcellus Shale
WDTN19EHSM	4	4/14/2023	22,320.15	22,442.00	32	Marcellus Shale
WDTN19EHSM	5	4/14/2023	22,160.15	22,282.00	32	Marcellus Shale
WDTN19EHSM	6	4/14/2023	22,000.15	22,122.00	32	Marcellus Shale
WDTN19EHSM	7	4/14/2023	21,840.15	21,962.00	32	Marcellus Shale
WDTN19EHSM	8	4/14/2023	21,680.15	21,802.00	32	Marcellus Shale
WDTN19EHSM	9	4/14/2023	21,520.15	21,642.00	32	Marcellus Shale
WDTN19EHSM	10	4/15/2023	21,360.15	21,482.00	32	Marcellus Shale
WDTN19EHSM	11	4/15/2023	21,200.15	21,322.00	32	Marcellus Shale
WDTN19EHSM	12	4/15/2023	21,040.15	21,162.00	32	Marcellus Shale
WDTN19EHSM	13	4/15/2023	20,880.15	21,002.00	32	Marcellus Shale
WDTN19EHSM	14	4/15/2023	20,720.15	20,842.00	32	Marcellus Shale
WDTN19EHSM	15	4/15/2023	20,560.15	20,682.00	32	Marcellus Shale
WDTN19EHSM	16	4/15/2023	20,400.15	20,522.00	32	Marcellus Shale
WDTN19EHSM	17	4/16/2023	20,240.15	20,362.00	32	Marcellus Shale
WDTN19EHSM	18	4/16/2023	20,080.15	20,202.00	32	Marcellus Shale
WDTN19EHSM	19	4/16/2023	19,920.15	20,042.00	32	Marcellus Shale
WDTN19EHSM	20	4/16/2023	19,720.15	19,882.00	40	Marcellus Shale
WDTN19EHSM	21	4/16/2023	19,520.15	19,682.00	40	Marcellus Shale
WDTN19EHSM	22	4/16/2023	19,320.15	19,482.00	40	Marcellus Shale
WDTN19EHSM	23	4/17/2023	19,120.15	19,282.00	40	Marcellus Shale
WDTN19EHSM	24	4/17/2023	18,920.15	19,082.00	40	Marcellus Shale
WDTN19EHSM	25	4/17/2023	18,720.15	18,882.00	40	Marcellus Shale
WDTN19EHSM	26	4/17/2023	18,520.15	18,682.00	40	Marcellus Shale
WDTN19EHSM	27	4/17/2023	18,320.15	18,482.00	40	Marcellus Shale
WDTN19EHSM	28	4/17/2023	18,120.15	18,282.00	40	Marcellus Shale
WDTN19EHSM	29	4/18/2023	17,920.15	18,082.00	40	Marcellus Shale
WDTN19EHSM	30	4/18/2023	17,720.15	17,882.00	40	Marcellus Shale
WDTN19EHSM	31	4/18/2023	17,520.15	17,682.00	40	Marcellus Shale
WDTN19EHSM	32	4/18/2023	17,320.15	17,482.00	40	Marcellus Shale
WDTN19EHSM	33	4/19/2023	17,120.15	17,282.00	40	Marcellus Shale
WDTN19EHSM	34	4/19/2023	16,920.15	17,082.00	40	Marcellus Shale
WDTN19EHSM	35	4/19/2023	16,720.15	16,882.00	40	Marcellus Shale
WDTN19EHSM	36	4/19/2023	16,520.15	16,682.00	40	Marcellus Shale
WDTN19EHSM	37	4/20/2023	16,320.15	16,482.00	40	Marcellus Shale
WDTN19EHSM	38	4/20/2023	16,120.15	16,282.00	40	Marcellus Shale
WDTN19EHSM	39	4/20/2023	15,920.15	16,082.00	40	Marcellus Shale
WDTN19EHSM	40	4/20/2023	15,720.15	15,882.00	40	Marcellus Shale
WDTN19EHSM	41	4/20/2023	15,520.15	15,682.00	40	Marcellus Shale
WDTN19EHSM	42	4/20/2023	15,320.15	15,482.00	40	Marcellus Shale
WDTN19EHSM	43	4/21/2023	15,120.15	15,282.00	40	Marcellus Shale
WDTN19EHSM	44	4/21/2023	14,920.15	15,082.00	40	Marcellus Shale
WDTN19EHSM	45	4/21/2023	14,720.15	14,882.00	40	Marcellus Shale
WDTN19EHSM	46	4/21/2023	14,520.15	14,682.00	40	Marcellus Shale

09/15/2023

ATTACHMENT 1: WDTN19EHSM 47-061-01903

Well Name	Perf Stage Numer	Date	Top Depth	Bottom Depth	Perfs Open	Reservoir Zone
WDTN19EHSM	47	4/21/2023	14,320.15	14,482.00	40	Marcellus Shale
WDTN19EHSM	48	4/22/2023	14,120.15	14,282.00	40	Marcellus Shale
WDTN19EHSM	49	4/22/2023	13,920.15	14,082.00	40	Marcellus Shale
WDTN19EHSM	50	4/22/2023	13,720.15	13,882.00	40	Marcellus Shale
WDTN19EHSM	51	4/23/2023	13,520.15	13,682.00	40	Marcellus Shale
WDTN19EHSM	52	4/23/2023	13,320.15	13,482.00	40	Marcellus Shale
WDTN19EHSM	53	4/24/2023	13,120.15	13,282.00	40	Marcellus Shale
WDTN19EHSM	54	4/24/2023	12,920.15	13,082.00	40	Marcellus Shale
WDTN19EHSM	55	4/25/2023	12,720.15	12,882.00	40	Marcellus Shale
WDTN19EHSM	56	4/25/2023	12,520.15	12,682.00	40	Marcellus Shale
WDTN19EHSM	57	4/26/2023	12,320.15	12,482.00	40	Marcellus Shale
WDTN19EHSM	58	4/26/2023	12,120.15	12,282.00	40	Marcellus Shale
WDTN19EHSM	59	4/26/2023	11,920.15	12,082.00	40	Marcellus Shale
WDTN19EHSM	60	4/26/2023	11,720.15	11,882.00	40	Marcellus Shale
WDTN19EHSM	61	4/27/2023	11,520.15	11,682.00	40	Marcellus Shale
WDTN19EHSM	62	4/27/2023	11,320.15	11,482.00	40	Marcellus Shale
WDTN19EHSM	63	4/27/2023	11,120.15	11,282.00	40	Marcellus Shale
WDTN19EHSM	64	4/27/2023	10,920.15	11,082.00	40	Marcellus Shale
WDTN19EHSM	65	4/28/2023	10,720.15	10,882.00	40	Marcellus Shale
WDTN19EHSM	66	4/28/2023	10,520.15	10,682.00	40	Marcellus Shale
WDTN19EHSM	67	4/28/2023	10,320.15	10,482.00	40	Marcellus Shale
WDTN19EHSM	68	4/29/2023	10,120.15	10,282.00	40	Marcellus Shale
WDTN19EHSM	69	4/29/2023	9,919.25	10,082.00	40	Marcellus Shale
WDTN19EHSM	70	4/29/2023	9,718.25	9,881.00	40	Marcellus Shale
WDTN19EHSM	71	4/29/2023	9,517.25	9,680.00	40	Marcellus Shale
WDTN19EHSM	72	4/30/2023	9,316.25	9,479.00	40	Marcellus Shale
WDTN19EHSM	73	4/30/2023	9,115.25	9,278.00	40	Marcellus Shale
WDTN19EHSM	74	4/30/2023	8,914.25	9,077.00	40	Marcellus Shale
WDTN19EHSM	75	5/1/2023	8,713.25	8,876.00	40	Marcellus Shale
WDTN19EHSM	76	5/1/2023	8,512.25	8,675.00	40	Marcellus Shale
WDTN19EHSM	77	5/1/2023	8,311.25	8,474.00	40	Marcellus Shale

09/15/2023

ATTACHMENT 2; WDTN19EHSM 47-061-01903

Well Name	Stage #	Start Date	Slurry Rate Avg (bbl/min)	Treat Pressure Avg (psi)	Breakdown Pressure (psi)	Instantaneous Shut-In Pressure (psi)	Proppant Total (lb)	Volume Clean Total (bbl)
WDTN19EHSM	1	4/7/2023	91	10,857.00	7,256.00	5,630.00	319,110.10	7,089.98
WDTN19EHSM	2	4/13/2023	86	10,824.00	6,636.00	5,890.00	377,557.50	11,370.07
WDTN19EHSM	3	4/13/2023	89	11,022.00	7,070.00	5,409.00	371,741.70	6,896.98
WDTN19EHSM	4	4/14/2023	87	10,967.00	7,006.00	5,812.00	386,308.20	7,120.07
WDTN19EHSM	5	4/14/2023	88	11,135.00	7,627.00	5,926.00	379,262.90	6,811.00
WDTN19EHSM	6	4/14/2023	87	11,125.00	8,194.00	5,642.00	371,864.00	6,688.95
WDTN19EHSM	7	4/14/2023	86	11,113.00	8,539.00	6,256.00	369,441.40	6,811.05
WDTN19EHSM	8	4/14/2023	88	11,078.00	7,836.00	5,598.00	371,463.90	6,854.95
WDTN19EHSM	9	4/14/2023	89	11,024.00	7,763.00	6,323.00	376,924.60	6,877.98
WDTN19EHSM	10	4/15/2023	88	11,169.00	7,809.00	6,324.00	370,114.20	6,694.00
WDTN19EHSM	11	4/15/2023	92	11,032.00	7,693.00	6,359.00	386,110.10	6,849.02
WDTN19EHSM	12	4/15/2023	94	11,158.00	7,694.00	6,101.00	384,266.00	6,651.88
WDTN19EHSM	13	4/15/2023	95	11,138.00	7,777.00	6,313.00	401,349.30	6,870.02
WDTN19EHSM	14	4/15/2023	93	11,130.00	7,378.00	5,900.00	382,552.20	6,750.05
WDTN19EHSM	15	4/15/2023	94	11,118.00	7,134.00	6,170.00	379,918.40	6,743.02
WDTN19EHSM	16	4/16/2023	92	11,151.00	7,249.00	5,999.00	375,421.20	6,647.00
WDTN19EHSM	17	4/16/2023	95	11,141.00	7,479.00	6,388.00	382,342.50	6,669.05
WDTN19EHSM	18	4/16/2023	95	11,053.00	7,443.00	6,108.00	387,016.20	6,637.95
WDTN19EHSM	19	4/16/2023	95	11,107.00	7,552.00	6,093.00	393,682.60	6,686.95
WDTN19EHSM	20	4/16/2023	97	11,161.00	7,886.00	6,045.00	483,827.10	7,799.02
WDTN19EHSM	21	4/16/2023	96	11,102.00	7,350.00	6,104.00	462,972.60	7,705.05
WDTN19EHSM	22	4/16/2023	95	11,057.00	6,996.00	6,388.00	470,354.70	7,665.95
WDTN19EHSM	23	4/17/2023	97	11,061.00	7,270.00	6,171.00	474,595.90	7,747.98
WDTN19EHSM	24	4/17/2023	99	10,869.00	6,950.00	6,140.00	478,932.90	7,477.05
WDTN19EHSM	25	4/17/2023	99	10,879.00	7,749.00	6,111.00	482,735.20	7,814.98
WDTN19EHSM	26	4/17/2023	98	10,872.00	7,469.00	6,191.00	480,404.70	7,755.02
WDTN19EHSM	27	4/17/2023	96	11,058.00	6,654.00	6,101.00	467,354.70	7,653.93
WDTN19EHSM	28	4/18/2023	99	10,890.00	7,013.00	6,182.00	472,004.20	7,584.02
WDTN19EHSM	29	4/18/2023	99	10,913.00	6,689.00	5,894.00	490,861.50	7,693.00
WDTN19EHSM	30	4/18/2023	99	10,838.00	6,879.00	6,010.00	497,698.60	7,718.02
WDTN19EHSM	31	4/18/2023	99	10,922.00	6,633.00	6,240.00	481,438.30	7,691.00
WDTN19EHSM	32	4/19/2023	98	10,875.00	7,858.00	6,136.00	483,461.20	7,779.07
WDTN19EHSM	33	4/19/2023	98	10,816.00	8,020.00	5,723.00	484,407.50	7,693.02
WDTN19EHSM	34	4/19/2023	98	11,044.00	7,302.00	6,057.00	480,102.50	7,618.05
WDTN19EHSM	35	4/19/2023	98	11,083.00	8,035.00	5,792.00	480,329.10	7,731.98
WDTN19EHSM	36	4/19/2023	98	10,907.00	7,407.00	6,089.00	475,829.00	7,609.95
WDTN19EHSM	37	4/20/2023	99	10,859.00	5,965.00	5,362.00	479,134.20	7,647.00
WDTN19EHSM	38	4/20/2023	99	10,796.00	6,517.00	6,306.00	486,668.90	7,682.98
WDTN19EHSM	39	4/20/2023	99	11,101.00	6,175.00	6,216.00	491,485.60	7,618.00
WDTN19EHSM	40	4/20/2023	93	10,478.00	7,795.00	6,076.00	485,142.20	8,301.98
WDTN19EHSM	41	4/20/2023	98	11,138.00	8,277.00	6,337.00	475,436.90	7,506.00
WDTN19EHSM	42	4/20/2023	98	10,783.00	8,209.00	5,968.00	486,346.20	7,663.05
WDTN19EHSM	43	4/21/2023	95	10,645.00	8,561.00	5,477.00	451,985.80	7,413.00
WDTN19EHSM	44	4/21/2023	100	10,817.00	8,367.00	5,930.00	492,225.50	7,660.02

09/15/2023

ATTACHMENT 2: WDTN19EHSM 47-061-01903

Well Name	Stage #	Start Date	Slurry Rate Avg (bbl/min)	Treat Pressure Avg (psi)	Breakdown Pressure (psi)	Instantaneous Shut-In Pressure (psi)	Proppant Total (lb)	Volume Clean Total (bbl)
WDTN19EHSM	45	4/21/2023	99	10,663.00	7,206.00	5,970.00	474,172.90	7,584.00
WDTN19EHSM	46	4/21/2023	100	10,850.00	7,402.00	5,781.00	481,801.40	7,501.02
WDTN19EHSM	47	4/22/2023	100	10,832.00	7,849.00	5,573.00	488,730.40	7,617.95
WDTN19EHSM	48	4/22/2023	100	10,819.00	7,221.00	5,399.00	490,839.10	7,550.02
WDTN19EHSM	49	4/22/2023	100	10,844.00	7,524.00	6,274.00	486,738.10	7,503.00
WDTN19EHSM	50	4/22/2023	100	10,573.00	7,918.00	6,444.00	484,673.30	7,487.00
WDTN19EHSM	51	4/23/2023	100	10,806.00	7,371.00	6,195.00	489,006.50	7,523.98
WDTN19EHSM	52	4/24/2023	100	10,561.00	7,372.00	6,477.00	482,375.80	7,492.98
WDTN19EHSM	53	4/24/2023	100	10,759.00	7,212.00	5,938.00	479,790.10	7,451.00
WDTN19EHSM	54	4/24/2023	100	10,668.00	8,461.00	6,147.00	470,635.30	7,439.07
WDTN19EHSM	55	4/25/2023	99	10,580.00	7,426.00	5,169.00	484,576.60	7,576.00
WDTN19EHSM	56	4/25/2023	100	10,627.00	7,693.00	5,559.00	452,449.50	7,299.00
WDTN19EHSM	57	4/26/2023	101	10,457.00	6,685.00	6,495.00	492,914.00	7,474.00
WDTN19EHSM	58	4/26/2023	100	10,580.00	7,907.00	6,273.00	497,395.10	7,500.05
WDTN19EHSM	59	4/26/2023	100	10,772.00	7,144.00	6,424.00	482,604.00	7,400.02
WDTN19EHSM	60	4/26/2023	101	10,767.00	7,723.00	6,366.00	473,315.50	7,382.00
WDTN19EHSM	61	4/27/2023	100	10,232.00	8,095.00	6,647.00	495,420.90	7,563.07
WDTN19EHSM	62	4/27/2023	101	10,506.00	7,448.00	6,425.00	493,011.70	7,444.00
WDTN19EHSM	63	4/27/2023	101	10,709.00	7,054.00	5,699.00	486,426.90	7,403.02
WDTN19EHSM	64	4/27/2023	101	10,593.00	7,143.00	6,363.00	483,996.80	7,363.02
WDTN19EHSM	65	4/28/2023	101	10,358.00	7,473.00	5,598.00	481,412.10	7,291.02
WDTN19EHSM	66	4/28/2023	102	10,750.00	6,817.00	5,179.00	471,078.90	7,251.93
WDTN19EHSM	67	4/28/2023	101	10,239.00	7,010.00	5,527.00	477,377.80	7,310.02
WDTN19EHSM	68	4/29/2023	102	9,870.00	5,710.00	5,574.00	482,981.50	7,051.00
WDTN19EHSM	69	4/29/2023	102	9,833.00	5,924.00	5,708.00	501,114.70	7,193.05
WDTN19EHSM	70	4/29/2023	102	9,881.00	5,633.00	5,863.00	488,847.90	7,139.98
WDTN19EHSM	71	4/30/2023	101	9,849.00	6,168.00	6,411.00	497,319.40	7,146.98
WDTN19EHSM	72	4/30/2023	102	9,563.00	6,900.00	5,686.00	483,792.70	7,079.98
WDTN19EHSM	73	4/30/2023	102	9,614.00	6,544.00	5,381.00	492,672.90	7,145.95
WDTN19EHSM	74	5/1/2023	102	9,505.00	6,208.00	5,099.00	487,289.90	7,643.05
WDTN19EHSM	75	5/1/2023	102	9,209.00	6,405.00	6,532.00	494,133.20	7,112.02
WDTN19EHSM	76	5/1/2023	102	8,942.00	7,361.00	6,597.00	491,639.70	7,087.02

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)
Sand/Siltstone	0	513	0	513	SANDSTONE / TRACES OF SILTSTONE & LIMESTONE & COAL
Washington Coal Seam	513	515	513	515	COAL
Sand/Siltstone	515	603	515	603	SANDSTONE / TRACES OF GRAY SHALE, COAL, QUARTZ & SILTSTONE
Waynesburg A Coal Seam	603	604	603	604	COAL
Sand/Siltstone	604	677	604	677	SANDSTONE & SHALE
Waynesburg B2 Coal Seam	677	679	677	679	COAL
Sand/Siltstone	679	679	679	679	SANDSTONE / TRACES OF SILTSTONE & PYRITE
Waynesburg B1 Coal Seam	679	683	679	683	COAL
Sand/Siltstone	683	938	683	938	SANDSTONE AND SILTSTONE
Sewickley Coal Seam	938	943	938	943	COAL
Sand/Siltstone	943	1,000	943	1,000	SANDSTONE
Roof Coal	1,000	1,002	1,000	1,002	COAL
Sand/Siltstone	1,002	1,025	1,002	1,025	GRAY SHALE
Roof Coal Zone	1,025	1,030	1,025	1,030	COAL
Sand/Siltstone	1,030	1,031	1,030	1,031	GRAY SHALE / TRACES OF SILTSTONE
Pittsburgh Coal Seam	1,031	1,038	1,031	1,038	COAL
Sand/Siltstone	1,038	1,401	1,038	1,401	BLACK SHALE, GAS SHOW
Bakers Town	1,401	1,402	1,401	1,402	GRAY SHALE
Sand/Siltstone	1,402	1,506	1,402	1,506	GRAY SHALE & LIMESTONE
Brush Creek	1,506	1,507	1,506	1,507	BLACK SHALE
Sand/Siltstone	1,507	1,565	1,507	1,565	BLACK SHALE, GAS SHOW
Mahoning	1,565	1,566	1,565	1,566	COAL
Sand/Siltstone	1,566	1,616	1,566	1,616	GRAY SHALE / TRACES OF SILTSTONE
Upper Freeport	1,616	1,616	1,616	1,616	COAL
Gas Sand	1,616	1,656	1,616	1,656	SANDSTONE
Lower Freeport	1,656	1,658	1,656	1,658	COAL
1st Salt Sand	1,658	1,780	1,658	1,780	SANDSTONE
Middle Kittanning Coal Seam	1,780	1,781	1,780	1,781	COAL
Sand/Siltstone	1,781	1,881	1,781	1,881	GRAY SHALE / TRACES OF SILTSTONE
2nd Salt Sand	1,881	2,015	1,881	2,015	SANDSTONE
3rd Salt Sand	2,015	2,255	2,015	2,255	SANDSTONE
Big Lime	2,255	2,339	2,255	2,339	LIMESTONE
Big Injun Top	2,339	2,532	2,339	2,532	SANDSTONE
Big Injun Base	2,532	2,977	2,532	2,977	SILTSTONE
Gantz	2,977	3,018	2,977	3,018	SANDSTONE / SILTSTONE

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)
Gant Base	3,018	3,110	3,018	3,110	SILTSTONE
50 Foot Sand	3,110	3,170	3,110	3,170	SANDSTONE / SILTSTONE
50 Foot Sand Base	3,170	3,206	3,170	3,206	SILTSTONE
30 Foot Sand	3,206	3,236	3,206	3,236	SANDSTONE
30 Foot Sand Base	3,236	3,272	3,236	3,272	SILTSTONE
Gordon Sand	3,272	3,343	3,272	3,343	SANDSTONE
Gordon Base	3,343	3,396	3,343	3,396	SILTSTONE
Fourth Sand	3,396	3,401	3,396	3,401	SANDSTONE
Fourth Sand Base	3,401	3,568	3,401	3,569	SILTSTONE
Fifth Sand	3,568	3,653	3,569	3,655	SANDSTONE
Fifth Sand Base	3,653	4,924	3,655	4,945	SILTSTONE
Bradford	4,924	5,608	4,945	5,642	SANDSTONE
Elk	5,608	5,844	5,642	5,882	SILTSTONE / GREY SHALE
2nd Elk	5,844	7,022	5,882	7,083	SILTSTONE / GREY SHALE
Rhinestreet	7,022	7,180	7,083	7,243	GREY SHALE
Cashaqua	7,180	7,391	7,243	7,461	GREY SHALE
Middlesex	7,391	7,462	7,461	7,538	GREY SHALE
West River	7,462	7,649	7,538	7,765	GREY SHALE
Burket Shale	7,649	7,676	7,765	7,802	GREY SHALE
Tully Limestone	7,676	7,716	7,802	7,861	LIMESTONE / GRAY SHALE
Hamilton Shale	7,716	7,839	7,861	8,233	GREY SHALE
Upper Marcellus	7,839	7,858	8,233	8,359	BLACK SHALE
Middle Marcellus	7,858	7,867	8,359	8,431	BLACK SHALE
Cherry Valley	7,867	7,880	8,431	8,574	LIMESTONE
Lower Middle Marcellus	7,880		8,574		BLACK SHALE
Onondaga Limestone					LIMESTONE

TD

## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/7/2023
Job End Date:	5/1/2023
State:	West Virginia
County:	Monongalia
API Number:	47-061-01903-00-00
Operator Name:	CNX Gas Company LLC
Well Name and Number:	WDTN19EHSM
Latitude:	39.69344700
Longitude:	-80.33527300
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,984
Total Base Water Volume (gal):	23,801,064
Total Base Non Water Volume:	0



### 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
Water	CNX	Carrier/Base Fluid	Water	7732-18-5	100.00000	84.78426	None
Sand	US Silica	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	99.90000	14.96374	None
StimSTREAM 9800	CHEMSTREAM	Friction Reducer	Alkanes, C16-20-iso-	90622-59-6	25.00000	0.02178	None
			Butene, homopolymer	9003-29-6	25.00000	0.02178	None
			Ethoxylated alcohols	68213-23-0	3.00000	0.00261	None
HCL Acid (28%)	CHEMSTREAM	Acidizing	Hydrochloric Acid	7647-01-0	28.00000	0.03301	None
Clearal 268	CHEMSTREAM	Biocide	Glutaraldehyde	111-30-8	20.00000	0.00221	None
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00033	None
			Alkyl dimethyl benzyl ammonium chloride	68391-01-5	3.00000	0.00033	None
StimStream SC 398	CHEMSTREAM	Scale Inhibitor					

			Bis(HexaMethylene Triamine Penta(Methylene Phosphonic Acid) (BHMT)	34690-00-1	10.00000	0.00195	None
ACI-250	CHEMSTREAM	Acid corrosion inhibitor					
			Methanol	67-56-1	45.00000	0.00028	None
			Ethylene glycol	107-21-1	20.00000	0.00012	None
			Trade Secret	72480-70-7	15.00000	0.00009	None
			N,N-Dimethylformamide	68-12-2	10.00000	0.00006	None
			2-Butoxyethanol	111-76-2	5.00000	0.00003	None
Citric Acid 50%	CHEMSTREAM	Iron Control Agent					
			citric acid	77-92-9	50.50000	0.00042	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					
			Butene, homopolymer	9003-29-6	25.00000	0.02178	
			Ethoxylated alcohols	68213-23-0	3.00000	0.00261	
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00033	
			Alkyl dimethyl benzyl ammonium chloride	68391-01-5	3.00000	0.00033	
			Ethylene glycol	107-21-1	20.00000	0.00012	
			Trade Secret	72480-70-7	15.00000	0.00009	
			N,N-Dimethylformamide	68-12-2	10.00000	0.00006	
			2-Butoxyethanol	111-76-2	5.00000	0.00003	
			Trade Secret	14808-60-7	3.00000		
			Guar Gum	9000-30-0	50.00000		
			Trade Secret	9043-30-5	5.00000		
			Trade Secret	1338-43-8	3.00000		

\* 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)