

west virginia department of environmental protection

02/10/2023

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

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

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

ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for MARCELLINA UNIT 1H

47-095-02829-00-00

Lateral Extension

#### ANTERO RESOURCES CORPORATION

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin

Chief

Operator's Well Number: MARCELLINA UNIT 1H

Farm Name: CLARA SUZANNE WALLACE & RICKIE WALLAGUS. WELL NUMBER: 47-095-02829-00-00

Horizontal 6A New Drill

Date Modification Issued: 2/6/2023

Promoting a healthy environment.

API NO. 47- 095	_ 02829	
OPERATOR W	/ELL NO.	Marcellina Unit 1H MOD
Well Pad Nar	me. Thin A	ir Pad

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

						02/	10/2023
1) Well Operator	r: Antero Res	sources Corpor	MAR .	095-Tyler <	Ellsworth	Porter I	Falls 7.5'
			Operator ID	County	District	Quadran	igle
2) Operator's We	ell Number: Ma	arcellina Unit 1	H MOD Well Pa	ad Name: Thin A	Air Pad		
3) Farm Name/S	urface Owner:	Clara Suzanne Wallace & R	Public Ro	ad Access: CR	11		
4) Elevation, cur	rent ground:	1200'as-built I	Elevation, proposed	l post-construction	on:		
5) Well Type (	(a) Gas X	Oil _		derground Storag			
(	Other						
(		allow X	Deep				
		rizontal X	-				
6) Existing Pad:	_			_			
7) Proposed Targ	get Formation(s le: 7400' TVD, A	), Depth(s), Anti Inticipated Thickn	cipated Thickness ess- 55 feet, Assoc	and Expected Pr iated Pressure- 2	essure(s): 950#		
8) Proposed Tota	l Vertical Dept	h: 7400' TVD					
9) Formation at 7	Total Vertical D	epth: Marcellu	IS				
10) Proposed Tot	tal Measured D	epth: 25600' N	MD /				
11) Proposed Ho	rizontal Leg Le	ngth: 16924'	/				
12) Approximate	Fresh Water S	trata Depths:	328'			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
13) Method to De	etermine Fresh	Water Depths:	47-095-02266 /				
14) Approximate	Saltwater Dept	ths: 1660'					
15) Approximate	Coal Seam De	pths: None Ide	ntified				
16) Approximate	Depth to Possi	ble Void (coal m	nine, karst, other):	None Anticipate	ed		
17) Does Propose directly overlying			Yes	No	X	-	
(a) If Yes, provi	ide Mine Info:	Name:					
		Depth:			10	REC	EIVED
		Seam:			(	Office of C	Dil and Gas
		Owner:			ű	FEB	6 2023
					En	WV Depa vironment	artment of al Protection
		OKA	4616734				
		CIC	\$ 4616734 \$ 2500 \$		P	age <b>1</b> of 3	3
			4 1500		Parameter and		
						boled	9
					2	13/2	3

OPERATOR WELL NO. Marcellina Unit 1H MOD
Well Pad Name: Thin Air Pad

18)

# CASING AND TUBING PROGRAM

TYPE	Cina	New		***		INTERVALS:	CEMENT:	
	Size (in)	or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	Left in Well	Fi <b>02</b> /10/	2023
		Used				<u>(ft)</u>	(Cu. Ft.)/CTS	
Conductor	20"	New	X-60	78.67#	100	100 /	CTS, 96 Cu. Ft.	
Fresh Water	13-3/8"	New	J-55	54.5#	380	380 /	CTS, 396 Cu. Ft.	
Coal	9-5/8"	New	J-55	36#	3100	3100	CTS, 1262 Cu. Ft.	
Intermediate						0.00	010, 1202 00.11.	
Production	5-1/2"	New	P-110HP	23#	25600	25600	5523 Cu. Ft	
Tubing	2-3/8"	New	N-80	4.7#	20000	20000	3323 Cu. Ft	
Liners								

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	24"	0.438"	1530	50	Class A/L	
Fresh Water	13-3/8"	17-1/2"	0.38"/0.33"	2730/1730	1000	Class A/L	1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1	Class A/L	1.18
Intermediate					1000	Oldos FVL	1.10
Production	5-1/2"	8-3/4" & 8-1/2"	0.361"	12,630	2500	Lead-H/POZ & Tail - H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners				, 200			

## **PACKERS**

Kind:	N/A	
Sizes:	N/A	
Depths Set:	N/A	Office of Oil and Ga
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		WV Department of Environmental Protes

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213123

OPERATOR WELL NO. Marcellina Unit 1H MOD Well Pad Name: Thin Air Pad

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill, perforate, fracture a new horizontal shallow well and complete Marcellus Shale.

02/10/2023

\*Antero will be air drilling the fresh water string which makes it difficult to determine when fresh water is encountered. Therefore, we have built in a buffer for the casing setting depth which helps to ensure that all fresh water zones are covered.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Antero plans to pump Slickwater into the Marcellus Shale formation in order to ready the well for production. The fluid will be comprised of approximately 99 percent water and sand, with less than 1 percent special-purpose additives as shown in the attached "List of Anticipated Additives Used for Fracturing or Stimulating Well."

Anticipated Max Pressure - 9300 lbs Anticipated Max Rate - 80 bpm

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 45.05 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 17.67 acres

23) Describe centralizer placement for each casing string:

Conductor: no centralizers

Surface Casing: one centralizer 10' above the float shoe, one on the insert float collar and one every 4th joint spaced up the hole to surface.

Intermediate Casing: one centralizer above float joint, one centralizer 5' above float collar and one every 4th collar to surface. Production Casing: one centralizer at shoe joint and one every 3 joints to top of cement in intermediate casing.

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

Conductor: no additives, Class A/L cement.

Surface: Class A/L cement with 2-3% calcium chloride and 1/4 lb of flake

Intermediate: Class A/L cement with 1/4 lb of flake, 5 gallons of clay treat

Production: Lead cement- 50/50 Class H/Poz + 1.5% salt + 1% C-45 + 0.5% C-16a + 0.2% C-12 + 0.45% C-20 + 0.05% C-51 Production: Tail cement- Class H + 45 PPS Calcium Carbonate + 1.0% FL-160 + 0.2% ACGB-47 + 0.05% ACSA-51 + 0.2% ACR-20

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Office of Oil and Gas

FEB 6 2023

WV Department of Environmental Protection

25) Proposed borehole conditioning procedures:

Conductor: blowhole clean with air, run casing, 10 bbls fresh water.

Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

Intermediate: blowhole clean with air, trip to surface casing shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate 40 bbls brine water followed by 10 bbls fresh water and 25 bbls bentonite mud, pump 10 bbls fresh water.

Production: circulate with 14 lb/gal NaCl mud, trip to middle of lateral, circulate, pump high viscosity sweep, trip to base of curve, pump high viscosity sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbls fresh water, pump 48 bbls barite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water.

\*Note: Attach additional sheets as needed.

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02/10/2023

January 24, 2023

West Virginia Office of Oil and Gas Attn: Taylor Brewer 601 57<sup>th</sup> St SE Charleston, WV 25304

RE: Request for Variance – Class L Cement Marcellina Unit 1H-2H

Marcellina Unit 1H-Tyler County, WV

Mr. Brewer:

Pursuant to 35CSR8 Section 9.2.h.8, Antero Resources Corporation ("Antero") would like to implement the variance to allow Class L Cement in place of Class A cement relating to the construction of the following horizontal wells (Marcellina Unit 1H-2H) on the Thin Air pad.

Antero only plans to use this method if Class A cement is not available to be use due to supply issues. Please see Order No 2022-14 attached.

If you have any questions or need further information, please feel free to contact Mallory Turco, Permitting Manager, at (303) 357-7182 or email at <a href="mailto:sgaspar@anteroresources.com">sgaspar@anteroresources.com</a>.

Sincerely,

Stefan Gaspar Permitting Agent

Antero Resources Corporation

Office of

JAN 27

Environment



west virginia department of environmental protection

02/10/2023

Office of Oil and Gas 601 57<sup>th</sup> Street, SE Charleston, WV 25304 Phone (304) 926-0450 Harold D. Ward, Cabinet Secretary dep.wv.gov

# BEFORE THE OFFICE OF OIL AND GAS DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE OF WEST VIRGINIA

IN THE MATTER OF A VARIANCE FROM	)		
LEGISLATIVE RULE 35CSR4	)	ORDER NO.	
SECTION 11.5 AND LEGISLATIVE RULE	)		RECEIVEL
35CSR8 SECTION 9.2.h.8.,	)		Office of Oil and Gas
RELATING TO THE CEMENTING	)		JAN 27 2023
OF OIL AND GAS WELLS	)		8 8 2023
			WV Department of Environmental Procession

#### REPORT OF THE OFFICE

In response to industry requests, the West Virginia Department of Environmental Protection, Office of Oil and Gas has reviewed the proposed use of American Petroleum Institute (API) Class L cement to be used in place of API Class A cement for well construction.

#### FINDINGS OF FACT

- 1. On July 14, 2022, Northeast Natural Energy (NNE) submitted a variance request from Legislative Rule 35CSR8 Section 9.2.h.8., for the use of API Class L cement in place of API Class A cement, relating to the construction of horizontal wells.
- Laboratory analysis submitted by NNE on July 14, 2022, indicates API Class L cement is comparable to API Class A cement and thereby satisfies the requirements of the West Virginia Code.
- 3. Contemporaneously, the Chief of the Office of Oil and Gas also chose to consider a variance to Legislative Rule 35CSR4 Section 11.5., for the use of API Class L cement in place of API Class A cement, relating to the construction of vertical wells.

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 On August 18, 2022, the Office of Oil and Gas provided public notice of acceptance of public comments on the variance consideration. During the 20-day public comment period, no comments were received.

#### **CONCLUSIONS OF LAW**

02/10/2023

Pursuant to Article 6 and Article 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to Legislative Rule 35CSR4, Section 18 and Legislative Rule 35CSR8, Section 14, the Chief of the Office of Oil and Gas may grant a variance from any requirement of these rules.

#### **ORDER**

It is ordered that the Class L cement product approved and monogramed by API is approved for use in place of API Class A cement for well construction subject to the provisions of Legislative Rule 35CSR4 and Legislative Rule 35CSR8.

Dated this, the 13th day of September, 2022.

IN THE NAME OF THE STATE OF WEST VIRGINIA

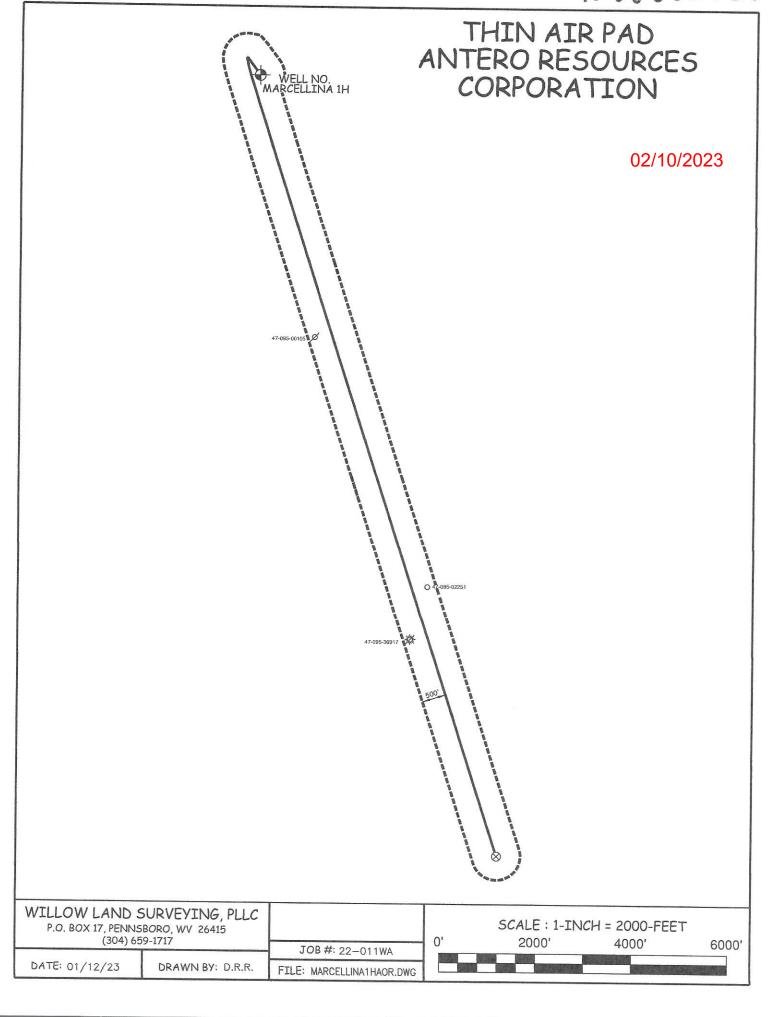
OFFICE OF OIL AND GAS DEPARTMENT OF ENVIRONMENTAL PROTECTION OF THE STATE OF WEST VIRGINIA

James Martin, Chief Office of Oil and Gas

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Office of Oil and Gas

JAN 27 2023

WV Department of Environmental Protection



Producible Formation(s) not perf'd
Berea, Weir, Alexander
Berea, Weir, Alexander
Berea, Weir, Alexander

Big Injun Big Injun, Gordon, Bayard, Warren, Speechley

 TD
 Perforated interval (shallowest, deepest)

 2,010
 4,050

 2,075
 2249 - 3759

Historical Operator

Operator

Well Number

UWI (APINum) Well Name
47095001050000 | L LEMASTERS
4709502510000 YURIGAN
47095309170000 JOHN HENDERSON 1

1 UNKNOWN 1V BOWYER DAVID 1315 MANUFACT LIGHT &HEAT

UNKNOWN
ALLIANCE PETR CORP
MANUFACT LIGHT &HEAT

Perforated Formation(s)

02/10/2023

Office of Old And Control

WV Departmen: or Environmental Protection Operator's Well Number

Marcellina Unit 1H MOD

JAN 27 2023

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

WV Department of Environmental Protection

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that  $-\frac{02}{10}$ 

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

Philip K. George Lease Philip K. George Statoil USA Onshore Properties EQT Production Company  Carol Ann Poole Lease Carol Ann Poole Statoil USA Onshore Properties Inc. EQT Production Company  Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	Statoil USA Onshore Properties EQT Production Company Antero Resources Corporation  Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	1/8 Assignment Assignment  1/8 Assignment Assignment Assignment  1/8+ Assignment	0466/0193 0539/0239 0663/0001 0456/0804 0539/0239 0663/0001
Statoil USA Onshore Properties EQT Production Company  Carol Ann Poole Lease Carol Ann Poole Statoil USA Onshore Properties Inc. EQT Production Company  Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	EQT Production Company Antero Resources Corporation  Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	Assignment  1/8 Assignment Assignment Assignment 1/8+	0539/0239 0663/0001 0456/0804 0539/0239 0663/0001
Statoil USA Onshore Properties EQT Production Company  Carol Ann Poole Lease Carol Ann Poole Statoil USA Onshore Properties Inc. EQT Production Company  Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	EQT Production Company Antero Resources Corporation  Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	Assignment  1/8 Assignment Assignment Assignment 1/8+	0539/0239 0663/0001 0456/0804 0539/0239 0663/0001
EQT Production Company  Carol Ann Poole Lease Carol Ann Poole Statoil USA Onshore Properties Inc. EQT Production Company  Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	Antero Resources Corporation  Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	1/8 Assignment Assignment Assignment 1/8+	0456/0804 0539/0239 0663/0001
Carol Ann Poole Lease Carol Ann Poole Statoil USA Onshore Properties Inc. EQT Production Company  Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	1/8 Assignment Assignment  1/8+	0456/0804 0539/0239 <b>0663/0001</b>
Carol Ann Poole Statoil USA Onshore Properties Inc. EQT Production Company  Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	Assignment Assignment  1/8+	0539/0239 0663/0001 0175/0749
Statoil USA Onshore Properties Inc. EQT Production Company  Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	Assignment Assignment  1/8+	0539/0239 0663/0001 0175/0749
Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	EQT Production Company Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	Assignment Assignment  1/8+	0539/0239 0663/0001 0175/0749
Ridgetop Capital, LP Lease Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	Antero Resources Corporation  Antero Resources Corporation  Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	<b>1/8</b> + <b>1/8</b> +	0663/0001 0175/0749
Ridgetop Capital, LP  Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	1/8+	
Elaine L. Oiler Lease Elaine L. Oiler Petroedge Energy LLC	Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	1/8+	
Elaine L. Oiler Petroedge Energy LLC	Statoil USA Onshore Properties Inc. EQT Production Company	1/8+	
Elaine L. Oiler Petroedge Energy LLC	Statoil USA Onshore Properties Inc. EQT Production Company		0/00/0105
Petroedge Energy LLC	Statoil USA Onshore Properties Inc. EQT Production Company		0/100/0105
Chahail LICA O. I. B	EQT Production Company		
Statoil USA Onshore Properties Inc.	* C. C. C. S.		0406/0147
EQT Production Company	Antero Resources Corporation	Assignment	0539/0239
	Antero Resources Corporation	Assignment	0663/0001
Robert Stamm Lease			
Robert Stamm	Petroedge Energy LLC	1/8	0411/0103
Petroedge Energy LLC	Statoil USA Onshore Properties Inc.	Assignment	0436/0001
Statoil USA Onshore Properties Inc.	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
Carolyn Diane Myers, et vir Lease			
Carolyn Diane Myers, et vir	Petroedge Energy LLC	1/8	2225/244
Petroedge Energy LLC	Statoil USA Onshore Properties Inc.	Assignment	0396/0112
Statoil USA Onshore Properties Inc.	EQT Production Company	Assignment	0408/0066
EQT Production Company	Antero Resources Corporation	Assignment	0539/0239 <b>0663/0001</b>
Carl J. Wilcox, et ux Lease			
Carl J. Wilcox, et ux	Potroodes Engravitic		
Petroedge Energy LLC	Petroedge Energy LLC	1/8	0392/0445
Statoil USA Onshore Properties Inc.	Statoil USA Onshore Properties Inc.	Assignment	0406/0147
EQT Production Company	EQT Production Company	Assignment	0539/0239
- Company	Antero Resources Corporation	Assignment	0663/0001
Carolyn Diane Myers, et vir Lease			
Carolyn Diane Myers, et vir	Petroedge Energy LLC	1/8	0396/0112
Petroedge Energy LLC	Statoil USA Onshore Properties Inc.	Assignment	0408/0066
Statoil USA Onshore Properties Inc.	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
Heritage Resources - Marcellus Minerals LLC Lease	Antero Resources Corporation	1/8+	0195/0091

47095028 2-QIVED

Operator's Well Number

Marcellina Unit 1H MOD

Office of Oil and Gas JAN 27 2023

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

WV Department of

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

			San Company San	
10	Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
	Carolyn Diane Myers, et vir Lease			95
/	Carolyn Diane Myers, et vir	Patrandan Francis II C		
	Petroedge Energy LLC	Petroedge Energy LLC Statoil USA Onshore Properties Inc.	1/8	0392/0204
	Statoil USA Onshore Properties Inc.	EQT Production Company	Assignment	0406/0147
	<b>EQT Production Company</b>	Antero Resources Corporation	Assignment	0539/0239
		Antero Resources Corporation	Assignment	0663/0001
,	Cathy Jo Ash Lease			
1	Cathy Jo Ash	Petroedge Energy LLC	1/8+	
	Petroedge Energy LLC	Statoil USA Onshore Properties Inc.	Assignment	0415/0247
	Statoil USA Onshore Properties Inc.	EQT Production Company	Assignment	0406/0147
	<b>EQT Production Company</b>	Antero Resources Corporation	Assignment	0539/0239
			Assignment	0663/0001
-	Hammett Land & Minerals Lease			
	Hammett Land & Minerals	Antero Resources Corporation	1/8+	0182/0388
	Sheldon Ferrell Lease		3.5	0102/0386
	Sheldon Ferrell			
	Petroedge Energy LLC	Petroedge Energy LLC	1/8+	0384/0728
	Statoil USA Onshore Properties Inc.	Statoil USA Onshore Properties Inc.	Assignment	0406/0147
	EQT Production Company	EQT Production Company	Assignment	0539/0239
	- Constitution company	Antero Resources Corporation	Assignment	0663/0001
1	Rockford Energy LLC Lease			
•	Rockford Energy LLC	Statoil USA Onshore Properties Inc.	5000 <b>-</b> 5000	
	Statoil USA Onshore Properties Inc.	EQT Production Company	1/8	0493/0007
	<b>EQT Production Company</b>	Antero Resources Corporation	Assignment	0539/0239
		of the state of th	Assignment	Permission to Permit
	Marjorie Jean Staley Lease		× ×	
	Marjorie Jean Staley	Antero Resources Corporation	1/8+	0005 (0004
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	Richard Neff, et ux Lease			
	Richard Neff, et ux	Petroedge Energy LLC	1/8	0392/0443
,	Petroedge Energy LLC Statoil USA Onshore Properties Inc.	Statoil USA Onshore Properties Inc.	Assignment	0406/0147
ì	EQT Production Company	EQT Production Company	Assignment	0539/0239
	EQT Froduction Company	Antero Resources Corporation	Assignment	0663/0001
-	H3 LLC Lease			
1	H3 LLC	Dotronder Francisco		
	Petroedge Energy LLC	Petroedge Energy LLC	1/8+	0388/0044
5	Statoil USA Onshore Properties Inc.	Statoil USA Onshore Properties Inc. EQT Production Company	Assignment	0406/0147
E	EQT Production Company	Antero Resources Corporation	Assignment	0539/0239
	. ,	Antero Resources Corporation	Assignment	0663/0001
	Denver E. Haught Lease			
	Denver E. Haught	Petroedge Energy LLC	1/0	
P	Petroedge Energy LLC	Statoil USA Onshore Properties Inc.	1/8 Assignment	0380/0762
S	Statoil USA Onshore Properties Inc.	EQT Production Company	Assignment	0406/0147
Е	EQT Production Company	Antero Resources Corporation	Assignment	0539/0239
		***************************************	, toolgrinient	0663/0001

Operator's Well Number

Marcellina Unit 1H MOD

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- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

	Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
/	Mary Virginia McCullough Lease Mary Virginia McCullough Petroedge Energy LLC Statoil USA Onshore Properties EQT Production Company	Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation	1/8 Assignment Assignment <b>Assignment</b>	0391/0504 0406/0147 0539/0239 <b>0663/0001</b>
1	Antero Minerals LLC Lease Antero Minerals LLC	Antero Resources Corporation	1/8+	0067/0546
1	<u>Lorraine B. Weekley Lease</u> Lorraine B. Weekley	Antero Resources Corporation	1/8+	0176/0660
-	Fred L. Glover, et ux Lease Fred L. Glover, et ux Statoil USA Onshore Properties Inc. EQT Production Company	Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation	1/8 Assignment <b>Assignment</b>	0449/0433 0539/0239 <b>0662/0671</b>
~	Larry Mark Adams Lease Larry Mark Adams Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company	Petroedge Energy LLC Statoil USA Onshore Properties Inc. EQT Production Company Antero Resources Corporation	1/8+ Assignment Assignment Assignment	0400/0026 0406/0147 0539/0239 <b>0663/0001</b>

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

Under the oath required to make the verification on page 1 of this Notice and Application 2023 depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Shelia Lynn Guy Lease			reguity	Book rage
	Shelia Lynn Guy	Statoil USA Onshore Properties Inc.	1/8	0449/0406
	Statoil USA Onshore Properties Inc.	<b>EQT Production Company</b>	Assignment	0539/0239
	<b>EQT Production Company</b>	Antero Resources Corporation	Assignment	0662/0671

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WV Department of Environmental Protection

\*Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

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

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

Well Operator: Antero Resources Corporation

By: Tim Rady

Its: Senior Vice President of Land

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