



west virginia department of environmental protection

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

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

Tuesday, December 13, 2022
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202


Re: Permit Modification Approval for NOMAD UNIT 1H
47-095-02822-00-00

Extended Lateral Length

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: NOMAD UNIT 1H
Farm Name: DENNIS & CLISTA HEINTZMAN
U.S. WELL NUMBER: 47-095-02822-00-00
Horizontal 6A New Drill
Date Modification Issued: 12/13/2022

Promoting a healthy environment.

12/16/2022

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

1) Well Operator: Antero Resources Corporation 494507062 095 - Tyler Ellsworth Porter Falls 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Nomad Unit 1H MOD Well Pad Name: Heintzman Pad

3) Farm Name/Surface Owner: Dennis & Clista Heintzman Public Road Access: Elk Fork Rd

4) Elevation, current ground: 1215' Elevation, proposed post-construction: ~1193'

5) Well Type (a) Gas Oil _____ Underground Storage _____

Other _____

(b) If Gas Shallow Deep _____

Horizontal _____

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale: 7100' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 7100' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 26000' MD

11) Proposed Horizontal Leg Length: 16153.7'

12) Approximate Fresh Water Strata Depths: 420', 475'

13) Method to Determine Fresh Water Depths: 47-095-00269 Offset well records. Depths have been adjusted according to surface elevations.

14) Approximate Saltwater Depths: 1420'

15) Approximate Coal Seam Depths: 58'

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

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

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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Steve M...
11/30/22

12/16/2022

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	90	90	CTS, 86 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	525	525	CTS, 313 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2500	2500	CTS, 1018 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	23#	26000	26000	5634 Cu. Ft
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	24"	0.438"	1530	50	Class A	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	1000	Class A	~1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A	~1.18
Intermediate							
Production	5-1/2"	8-3/4" & 8-1/2"	0.415"	12,630	2500	CLASS H/POZ & T&I - H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners							

PACKERS

Kind:	N/A			
Sizes:	N/A			RECEIVED Office of Oil and Gas
Depths Set:	N/A			DEC 05 //

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WW-6B
(10/14)

API NO. 47-095 - 02822
OPERATOR WELL NO. Normad Unit 1H MOD
Well Pad Name: Heintzman Pad

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

Drill a new horizontal shallow well into the Marcellus Shale.

*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): 56.03 acres

22) Area to be disturbed for well pad only, less access road (acres): 7.82 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 cement.

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

Intermediate: Class A 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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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.

4709502822

Wetzel County
Tyler County

LEGEND

- Proposed gas well
- ⊗ Existing Well, as noted
- ⊗ Digitized Well, as noted



The orientation of this survey is Grid North, and its coordinate base is the West Virginia Coordinate System of 1927, North Zone

500' Buffer

Nomad Unit 1H

47-095-00690

47-095-00218

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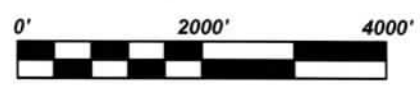


Bridgeport Office
Phone: (304) 848-5035
Fax: (304) 848-5037

172 Thompson Drive
Bridgeport, WV 26330

PARTY CHIEF: C. Lynch	DRAWN BY: J. Smith
RESEARCH: J. Miller	PREPARED: July 29, 2022
SURVEYED: Dec. 2016	PROJECT NO: 48-54-E-19
FIELD CREW: C.L., K.M.	DRAWING NO: Nomad 1H AOR

Sheet 1 of 1



Scale: 1 inch = 2000 feet 12/16/2022

4709502822

UWI (API Num)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Produced Formation(s) not perf'd
47095006900000	KIMBLE WILMA	2	EQT PRODUCTION CO MCBURNY GLEN F	CARTER-JONES LUMBER	3,622	2633 - 2641	Berea	Weir, Benson, Alexander
47095002180000	DAISY W MERCER	1	MCBURNY GLEN F	MCBURNY GLEN F	1,840		Big Injun	Weir, Benson, Alexander

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12/16/2022

10,500' to Bottom Hole

6,323' to Top Hole

LONGITUDE 80 - 50 - 00

12,866' to Bottom Hole
14,743' to Top Hole

Antero Resources
Well No. Nomad 1H
BHL MOD
Antero Resources Corporation

Page 1 of 3
Nomad Unit 1H
Bottom Hole

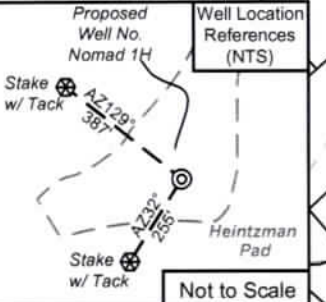
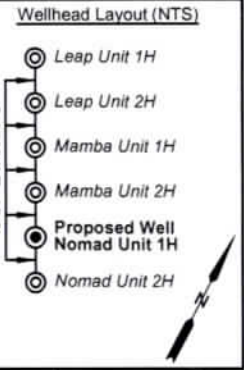
TOP HOLE LATITUDE 39 - 35 - 00
BTM HOLE LATITUDE 39 - 37 - 30



Wetzel County
Tyler County

Notes
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Well No. Nomad Unit 1H Top Hole coordinates are
N: 382,716.22' Latitude: 39°32'34.29"
E: 1,617,673.92' Longitude: 80°51'20.72"
Bottom Hole coordinates are
N: 399,830.62' Latitude: 39°35'22.84"
E: 1,613,750.51' Longitude: 80°52'14.13"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,377,039.698m N: 4,382,233.736m
E: 512,409.423m E: 511,127.250m
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Notes:
Well No. Nomad Unit 1H
UTM Zone 17, NAD 1927
Top Hole Coordinates
N: 14,359,623.17'
E: 1,681,081.99'
Point of Entry Coordinates
N: 14,361,401.49'
E: 1,682,149.75'
Bottom Hole Coordinates
N: 14,376,663.90'
E: 1,676,874.84'

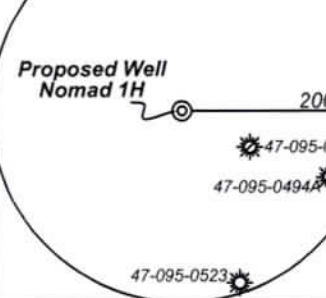


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Bradley D. Miller
Bradley D. Miller, P.S. 2167



Note: 0 water wells or springs were found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.



	Bearing	Dist.
L1	S 35°18' E	2,424.4'
L2	S 05°11' W	2,305.3'
L3	S 26°41' W	890.3'
L4	N 01°51' W	392.9'
L5	N 31°56' E	2,075.0'

- Legend**
- Proposed gas well
 - Monument, as noted
 - Existing Well, as noted
 - Digitized Well, as noted
 - Creek or Drain
 - Road
 - Surface boundary (approx.)
 - Interior surface tracts (approx.)
 - County Line

FILE NO: 48-54-E-19
DRAWING NO: Nomad Unit 1H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

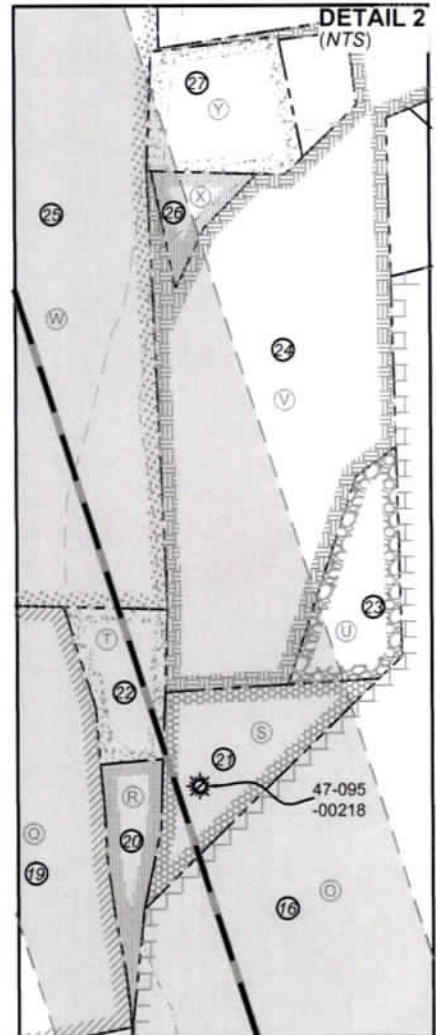
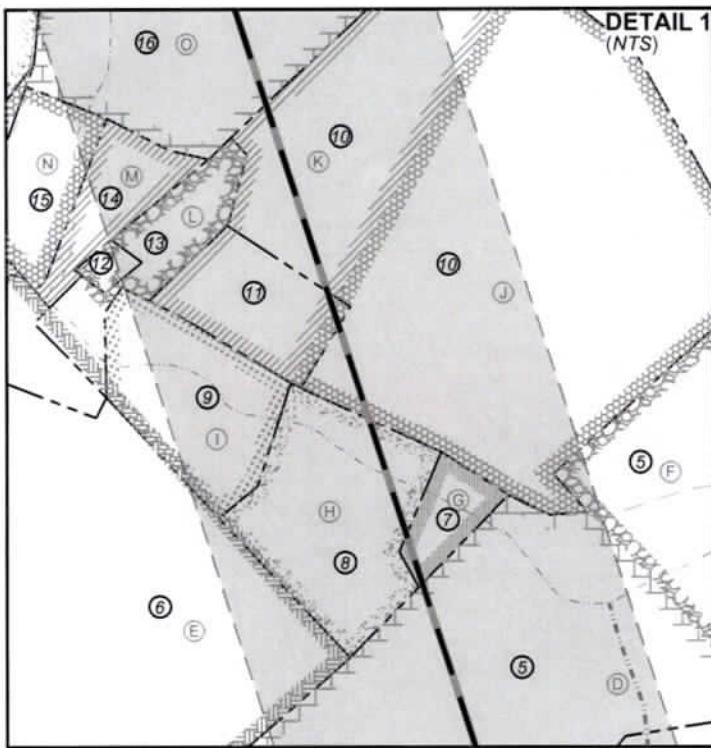
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: September 14 2022
OPERATOR'S WELL NO. Nomad Unit 1H
API WELL NO
47 - 095 -
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: Proposed 1193' Existing 1215' WATERSHED: Outlet Middle Island Creek QUADRANGLE: TH:Porter Falls 16.875; 1.06 20.94375; ??? BH:Paden City 68.7188; 2.28; 33.48125; 79.75; 33.48125; 79.75; 33.48125; 79.75;
DISTRICT: Ellsworth SURFACE OWNER: Dennis & Clista Heintzman COUNTY: Tyler 12/16/2022
ROYALTY OWNER: BRC Appalachian Minerals I, LLC (4); TMP Properties, LLC; Laura A. Richeson(2); LEASE NO: ACREAGE: 417.6 10.16; 164.28125 134; 33.25; 10; 20;
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD ESTIMATED DEPTH: 7,100' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 26,000' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System
ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
Denver, CO 80202 Charleston, WV 25313

4709502822



FILE NO: 48-54-E-19
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 BH:Paden City 20.94375; ???
 68.7188; 2.28;
 33.48125; 79.75;
 DISTRICT: Ellsworth COUNTY: Tyler 12/16/2022
 SURFACE OWNER: Dennis & Clista Heintzman ACREAGE: 417.6 10.16; 164.28125
 ROYALTY OWNER: BRC Appalachian Minerals I, LLC (4); TMP Properties, LLC; Laura A. Richeson(2); LEASE NO: ACREAGE: 67; 79.7375; 5.149;
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
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 Denver, CO 80202 Charleston, WV 25313



Leases			
A	BRC Appalachian Minerals I, LLC	U	Martha Elizabeth Matthews
B	Dennis R. & Clista A. Heintzman	V	Gary Willey, et ux
C	Rose Enterprises, LLC	W	Christina L. Ebert
D	TMP Properties, LLC	X	Sandra V. Smith
E	Judy P. Meyers	Y	Linda K. Hudson
F	BRC Appalachian Minerals I, LLC	Z	Lee Morgan
G	Laura Ann Richeson	AA	MAP2012-OK
H	Laura A. Richeson	AB	BRC Appalachian Minerals I, LLC
I	Bobby J. Dennis	AC	James D. VanCamp, et ux
J	BRC Appalachian Minerals I, LLC	AD	William G. Baker
K	BRC Appalachian Minerals I, LLC	AE	Cynthia K. Guthrie
L	Antero Minerals, LLC	AF	Gary A. Midcap, et ux
M	Martha Elizabeth Matthews	AG	Beverly Kay Campbell
N	David Wayne Vancamp, et ux	AH	Mary F. Mutschelknaus
O	Jon Keith Irvin	AI	Steven D. Higgins, et ux
P	James D. VanCamp	AJ	Cider Run Minerals Holdings, LLC
Q	David E. Bowyer	AK	Cider Run Minerals Holdings, LLC
R	Larry G. Rice	AL	Michael Stillwagner
S	Martha Elizabeth Matthews	AM	Don A. Stertzbach, et ux
T	Gary Willey, et ux	AN	Ridgetop Royalties, LLC
		AO	Ronald L. VanCamp, et al

ID	TM/Par	Owner	Bk/Pg	Acres	ID	TM/Par	Owner	Bk/Pg	Acres
1	6-36	Dennis & Clista Heintzman	297/640	417.60	24	3-36	Gary J. & Tammie S. Willey	290/503	43.26
2	6-49	Dennis & Clista A. Heintzman	297/637	45.00	25	6-8	Matthew T. Ebert	361/219	98.50
3	10-4	Stefan L. & Alberta B. Smolksi	356/467	56.08	26	6-10	Linda K. Hudson	WB32/447	0.83
4	6-30.1	Larry M. & Amy B. Adams	369/344	150.33	27	6-9	Linda K. Hudson	WB32/447	2.28
5	6-30	Larry G. Rice	333/682	64.61	28	3-35	Harold W. & Sandra L. Schaeffer	341/730	9.98
6	6-27	Ronnie L. VanCamp, et al	568/32	69.88	29	3-34.1	Gary J. Jr. & Tammie S. Willey	515/823	1.20
7	6-27.1	Larry G. Rice	333/682	0.81	30	3-34	Charlotte Terry, et al	WB76/367	57.19
8	6-27.3	Laura A. Richeson	365/34	5.14	31	3-27	Herbert & Phyllis Glendinning	349/827	33.25
9	6-27.4	Joseph M. & Tammy A. Rice	634/778	3.79	32	3-28	Rhoda & Lawrence Morgan Est	317/413	61.33
10	6-21	Larry G. Rice	333/682	30.15	33	3-28.7	Thomas & Sally Ash	308/008	1.09
11	6-21.2	Richard E. Leek	OR147/27	3.15	34	3-28.6	Thomas & Sally Ash	308/69	1.06
12	6-21.3	Richard E. Leek	OR147/27	0.28	35	3-28.5	Lori D. Staley	330/53	10.00
13	6-21.1	Richard E. Leek	391/533	2.74	36	3-25.1	Gary A. & Penny K. Midcap	304/230	33.48
14	6-29	Richard Leek	402/216	1.00	37	3-25	Gary A. & Penny K. Midcap	301/265	42.47
15	6-28	David Wayne & Virginia VanCamp	395/557	2.00	38	3-20	Tonya Shuler & Beth Simpkins	OR5/371	21.70
16	6-11	Jeffrey A. & Joann E. Seckman	343/153-A	68.72	39	3-19	Gary A. & Penny K. Midcap	301/265	20.94
17	6-20.2	Hiram Groves	98/195	7.50	40	3-9	Steven D. & Brenda M. Higgins	313/623	163.34
18	6-20.1	Jeffrey Seckman	545/70	2.52	41	3-10	Steven D. & Brenda M. Higgins	313/623	79.75
19	6-20	Jeffrey Seckman	545/70	36.15	42	3-10.1	Steven D. & Brenda M. Higgins	313/623	10.16
20	6-20.3	Jeffrey A. & Joann E. Seckman	343/153-A	2.28	43	1-11	Daniel A. Witschey	541/326	122.81
21	6-11.4	Jeffrey A. & Joann E. Seckman	343/153-A	2.05	44	1-16	Daniel A. & Amy J. Witschey	602/421	20.00
22	6-11.5	Gary & Tammy Willey	407/608	36.15	45	17-15	Don A. Stertzbach	367/623	37.90
23	6-11.2	Jeffrey A. & Joann E. Seckman	343/153-A	2.39	46	17-13	MB Investments	334/56	40.26

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 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
 Denver, CO 80202 Charleston, WV 25313

WW-6A1

Operator's Well Number Nomad Unit 1H MOD

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

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

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

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>A: BRC Appalachian Minerals I LLC Lease</u>			
BRC Appalachian Minerals I LLC	BRC Working Interest Company LLC	1/8	0369/0300
BRC Working Interest Company LLC	Chesapeake Appalachia LLC	Assignment	0369/0784
Chesapeake Appalachia LLC	Statoil USA Onshore Properties Inc	Assignment	0378/0764
Statoil USA Onshore Properties Inc	SWN Exchange Titleholder LLC	Assignment	0470/0668
SWN Exchange Titleholder LLC	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
<u>C: Rose Enterprises, LLC Lease</u>			
Rose Enterprises, LLC	Antero Resources Corporation	1/8+	0599/0765
<u>D: TMP Properties, LLC Lease</u>			
TMP Properties, LLC	Antero Resources Corporation	1/8+	0070/0197
<u>G: Laura Ann Richeson Lease</u>			
Laura A. Richeson	Antero Resources Corporation	1/8+	0070/0177
<u>H: Laura A. Richeson Lease</u>			
Laura A. Richeson	Antero Resources Corporation	1/8+	0606/0331
<u>J: BRC Appalachian Minerals I LLC Lease</u>			
BRC Appalachian Minerals I LLC	BRC Working Interest Company LLC	1/8	0369/0300
BRC Working Interest Company LLC	Chesapeake Appalachia LLC	Assignment	0369/0784
Chesapeake Appalachia LLC	Statoil USA Onshore Properties Inc	Assignment	0378/0764
Statoil USA Onshore Properties Inc	SWN Exchange Titleholder LLC	Assignment	0470/0668
SWN Exchange Titleholder LLC	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
<u>K: BRC Appalachian Minerals I LLC Lease</u>			
BRC Appalachian Minerals I LLC	BRC Working Interest Company LLC	1/8	0369/0300
BRC Working Interest Company LLC	Chesapeake Appalachia LLC	Assignment	0369/0784
Chesapeake Appalachia LLC	Statoil USA Onshore Properties Inc	Assignment	0378/0764
Statoil USA Onshore Properties Inc	SWN Exchange Titleholder LLC	Assignment	0470/0668
SWN Exchange Titleholder LLC	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
<u>O: Jon Keith Irvin Lease</u>			
Jon Keith Irvin	Antero Resources Corporation	1/8+	0044/0556
<u>S: Martha Elizabeth Matthews Lease</u>			
Martha Elizabeth Matthews	Antero Resources Corporation	1/8+	0096/0023
<u>R: Larry G. Rice Lease</u>			
Larry G. Rice	Antero Resources Corporation	1/8+	0064/0497

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12/16/2022

WW-6A1

Operator's Well Number Nomad Unit 1H MOD

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

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

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

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>T: Gary Willey, et ux Lease</u>			
Gary Willey, et ux	Stone Energy Corporation	1/8	0435/0258
Stone Energy Corporation	EQT Production Company	Assignment	0556/0132
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
<u>W: Christina L. Ebert Lease</u>			
Christina L. Ebert	Antero Resources Corporation	RECEIVED 1/8+ Office of Oil and Gas	0106/0557
<u>Z: Lee Morgan Lease</u>			
Lee Morgan	Antero Resources Corporation	NOV 11 2022 1/8+	0106/0557
<u>AA: MAP2012-OK Lease</u>			
MAP2012-OK	Antero Resources Corporation	WV Department of Environmental Protection 1/8+	0016/0488
<u>AB: BRC Appalachian Minerals I LLC Lease</u>			
BRC Appalachian Minerals I LLC	BRC Working Interest Company LLC	1/8	0369/0300
BRC Working Interest Company LLC	Chesapeake Appalachia LLC	Assignment	0369/0784
Chesapeake Appalachia LLC	Statoil USA Onshore Properties Inc	Assignment	0378/0764
Statoil USA Onshore Properties Inc	SWN Exchange Titleholder LLC	Assignment	0470/0668
SWN Exchange Titleholder LLC	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
<u>AC: James D. VanCamp, et ux Lease</u>			
James D. Van Camp, et ux	Antero Resources Corporation	1/8+	0664/0478
<u>AA: MAP2012-OK Lease</u>			
MAP2012-OK	Antero Resources Corporation	1/8+	0016/0488
<u>AF: Gary A. Midcap, et ux Lease</u>			
Gary A. Midcap, et ux	Antero Resources Corporation	1/8+	0108/0694
<u>AG: Beverly Kay Campbell Lease</u>			
Beverly Kay Campbell	Antero Resources Corporation	1/8+	0012/0572
<u>AH: Mary F. Mutschelknaus Lease</u>			
Mary F. Mutschelknaus	Antero Resources Corporation	1/8	0076/0257
<u>AI: Steven D. Higgins, et ux Lease</u>			
Steven D. Higgins, et ux	Stone Energy Corporation	1/8	0400/0253
Stone Energy Corporation	EQT Production Company	Assignment	0556/0132
EQT Production Company	Antero Resources Corporation	Assignment	0663/0686

12/16/2022

WW-6A1

Operator's Well Number Nomad Unit 1H MOD

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)

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Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>AJ: Cider Run Mineral Holdings, LLC Lease</u> Cider Run Mineral Holdings, LLC	Antero Resources Corporation	1/8+	0177/0165

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*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.

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(5/13)

Operator's Well No. Nomad Unit 1H MOD

**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)**

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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:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>AM: Don A. Stertzbach, et ux Lease</u>	Don A. Stertzbach, et ux Stone Energy Corporation EQT Production Company	Stone Energy Corporation EQT Production Company Antero Resources Corporation	1/8 Assignment Assignment	0419/0667 0556/0132 0663/0686

*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.

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**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

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

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