



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

Wednesday, November 8, 2023
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202


Re: Permit Modification Approval for ARENADO UNIT 1H
47-103-03600-00-00

Lateral Length Extended

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: ARENADO UNIT 1H
Farm Name: HAROLD S & CALANTHA A YOST
U.S. WELL NUMBER: 47-103-03600-00-00
Horizontal 6A New Drill
Date Modification Issued: 11/8/2023

Promoting a healthy environment.

11/10/2023

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

1) Well Operator: Antero Resources Corporation 494507062 103 - Wetzel Green Porters Falls 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Arenado Unit 1H MOD Well Pad Name: Big Run Pad

3) Farm Name/Surface Owner: Antero Resources Corporation Public Road Access: Wetzel Tyler Ridge Road

4) Elevation, current ground: 1250' - AS BUILT Elevation, proposed post-construction: _____

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: 7290' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 7290' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 30290' MD

11) Proposed Horizontal Leg Length: 20304'

12) Approximate Fresh Water Strata Depths: 31'

13) Method to Determine Fresh Water Depths: 47095027130000 Offset well records

14) Approximate Saltwater Depths: 2311'

15) Approximate Coal Seam Depths: None Anticipated

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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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 | J-55 | 94# | 100' | 100' | CTS, 96 Cu. Ft. |
| Fresh Water | 13-3/8" | New | J-55 | 54.5# | 300' | 300' | CTS, 313 Cu. Ft. |
| Coal | 9-5/8" | New | J-55 | 36# | 3350' | 3350' | CTS, 1364 Cu. Ft. |
| Intermediate | | | | | | | |
| Production | 5-1/2" | New | P-110 ICY | 23# | 30290' | 30290' | CTS, 6705 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" | 0.375" | 2250 | 50 | Class A/L | ~1.18 |
| Fresh Water | 13-3/8" | 17-1/2" | 0.38" | 2730 | 1000 | Class A/L | ~1.18 |
| Coal | 9-5/8" | 12-1/4" | 0.352" | 3520 | 1500 | Class A/L | ~1.18 |
| Intermediate | | | | | | | |
| Production | 5-1/2" | 8-3/4" & 8-1/2" | 0.415" | 14,360 | 2500 | Class G/H | ~1.8 |
| Tubing | 2-3/8" | 4.778" | 0.19" | 11,200 | | | |
| Liners | | | | | | | |

PACKERS

| | | | | | |
|-------------|-----|--|--|--|---|
| Kind: | N/A | | | | RECEIVED Office of Oil and Gas NOV 09 2023 WV Department of Environmental Protection |
| Sizes: | N/A | | | | |
| Depths Set: | N/A | | | | |

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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): 15.91 acres

22) Area to be disturbed for well pad only, less access road (acres): 9.35 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 G/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:

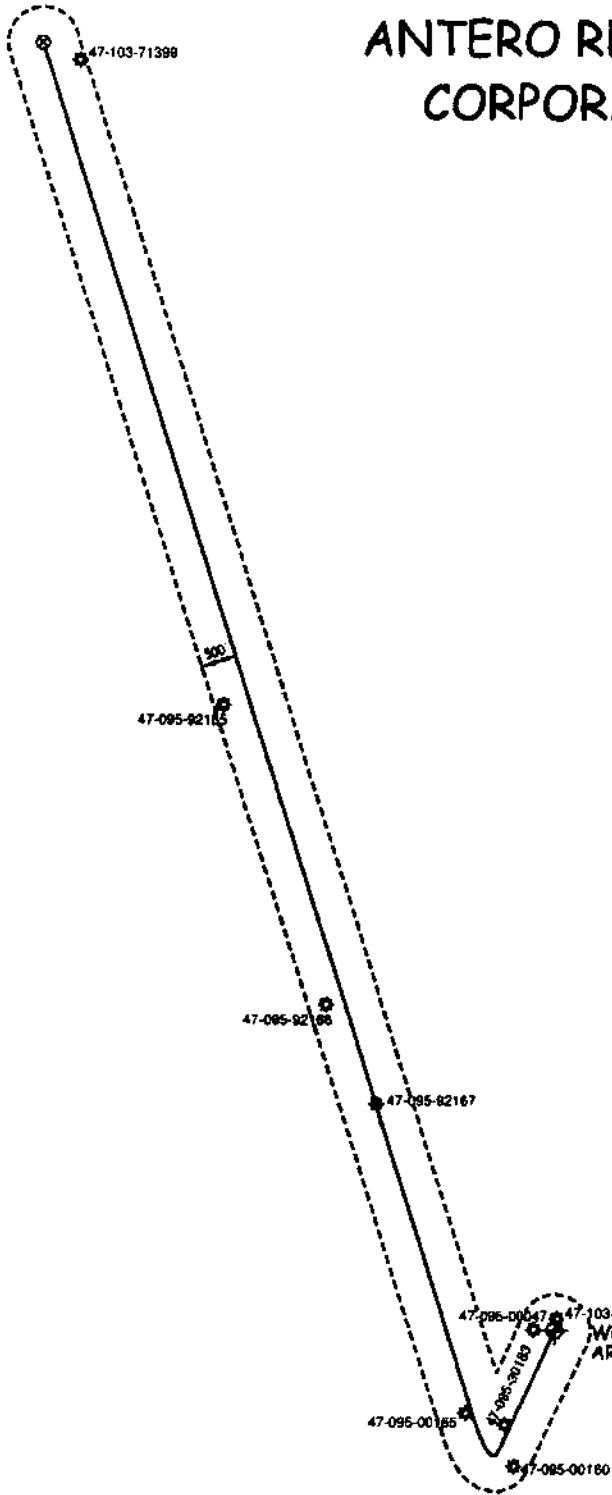
Conductor: blowhole clean with air, run casing, 10 bbls fresh water.
Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.
Intermediate: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

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47 103 03 000

BIG RUN PAD ANTERO RESOURCES CORPORATION



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Engineering & Surveying

| | | | |
|--|------------------|--|------------------------|
| WILLOW LAND SURVEYING, PLLC P.O. BOX 17, PENNSBORO, WV 26415 (304) 659-1717 | | SCALE : 1-INCH = 2400-FEET 0' 2400' 4800' 7200' | |
| DATE: 08/23/23 | DRAWN BY: D.R.R. | JOB #: 23-011WA | FILE: ARENADO1HAOR.DWG |

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| UWI (APINum) | Well Name | Well Number | Operator | Historical Operator | TD | Perforated Interval (shallowest, deepest) | Perforated Formation(s) | Produible Formation(s) not perf'd |
|----------------|-----------------------|-------------|-----------------------|-----------------------|-------|---|-------------------------|-----------------------------------|
| 47095001600000 | G MIDCAP/WHARTON/DOAK | 1 | METZ OIL CO | METZ OIL CO | 2,047 | | | Big Lime, Keener |
| 47095301830000 | A G BRIDGEMAN | 2 | UNKNOWN | UNKNOWN | | | | |
| 47095001650000 | WILEY MIDCAP | 1 | METZ OIL CO | METZ OIL CO | 2,070 | | | Salt Sands |
| 47095000470000 | WILEY MIDCAP | 1 | UNKNOWN | UNKNOWN | 3,027 | | | Keener |
| 47103035420000 | BIG RUN UNIT | 5V | ANTERO RESOURCES CORP | ANTERO RESOURCES CORP | | | | |
| 47095921670000 | | | | | | | | |
| 47095921660000 | | | | | | | | |
| 47095921650000 | | | | | | | | |
| 47103713990000 | JOSEPHA CLARK | 1 | UNKNOWN | UNKNOWN | | | | |

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471030350000

LATITUDE 39°35'00" 7,700'

LATITUDE 39°37'30" 3,477' TO BOTTOM HOLE

7,607' TO BOTTOM HOLE

10,381'

LONGITUDE 80°50'00"

LONGITUDE 80°47'30"

Antero Resources Corporation Well No. Arenado #1H

NOTE
NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.



NOTES:
WELL 1H TOP HOLE INFORMATION:
N: 386,923ft E: 1,628,109ft
LAT: 39°33'17.40" LON: 80°49'08.31"
BOTTOM HOLE INFORMATION:
N: 404,955ft E: 1,620,801ft
LAT: 39°36'14.54" LON: 80°50'45.06"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT.
PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

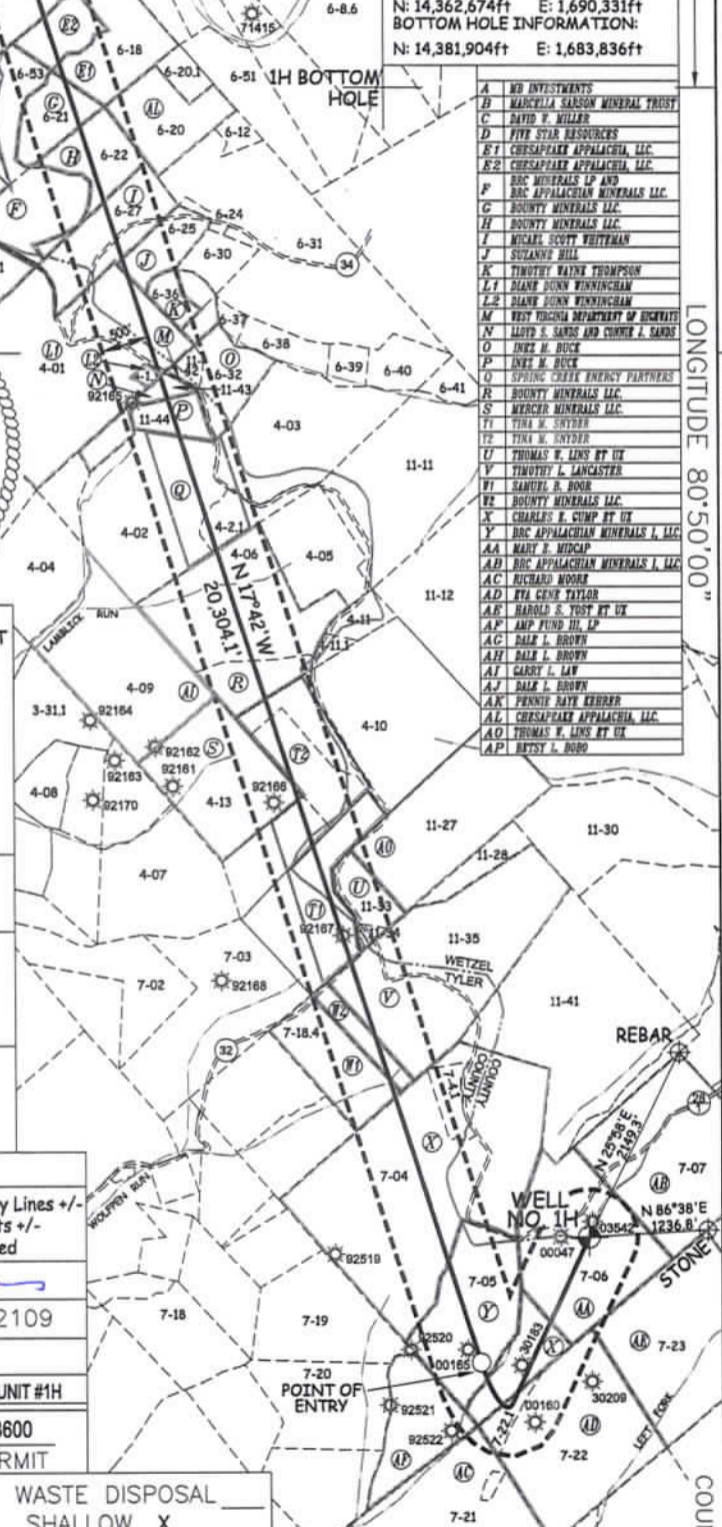
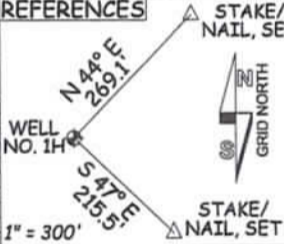
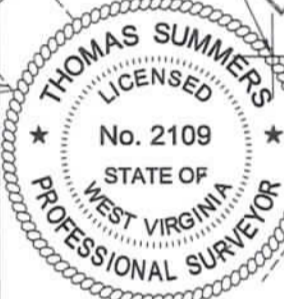
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 4,378,374m E: 515,567m
BOTTOM HOLE INFORMATION:
N: 4,383,831m E: 513,249m

(NAD) 27 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 14,364,002ft E: 1,691,442ft
POINT OF ENTRY INFORMATION:
N: 14,362,674ft E: 1,690,331ft
BOTTOM HOLE INFORMATION:
N: 14,381,904ft E: 1,683,836ft

| |
|-----------------------------------|
| Magnolia District - Wetzel County |
| 12-125 Barbara McAdams |
| 12-128 Jacob Morgan |
| 12-134 M B Investments |
| 12-136 Jacob Morgan |
| Green District - Wetzel County |
| 1-30.4 Keith Ritz |
| 6-01 Mark Loy |
| 6-11 M B Investments |
| 6-03 Daniel Witschey |
| 6-04 Daniel Witschey |
| 6-05 Charles White |
| 6-05 M B Investments |
| 6-08 Brian Thomas |
| 6-8.6 David Thomas |
| 6-10 Christel Steele |
| 6-10.1 John Steale |
| 6-10.2 Sven Rabel |
| 6-11 William Brookover |
| 6-12 Michael Whiteman |
| 6-16 Michael Hurley |
| 6-17 Michael Hurley |
| 6-18 Brian Thomas |
| 6-20 Anthony Thomas |
| 6-20.1 William Thomas |
| 6-21 Brian Thomas |
| 6-22 Brian Thomas |
| 6-24 Michael Whiteman |
| 6-25 Michael Whiteman |
| 6-27 Michael Whiteman |
| 6-30 Michael Whiteman |
| 6-31 Michael Whiteman |
| 6-32 Benjamin McPherson |
| 6-33 M B Investments |
| 6-34 William Brookover |
| 6-35 Elsie Taylor |
| 6-36 Timothy Thompson |
| 6-37 Timothy Thompson |
| 6-38 Timothy Thompson |
| 6-39 Amanda McPherson |
| 6-40 Debbie Thomas |
| 6-41 Timothy Thompson |
| 6-50 Mary Woble |
| 6-51 Brian Thomas |
| 6-53 Christina Thomas |
| 11-11 Schrumen Family Inv. LLC |
| 11-12 Keith Pyles |
| 11-27 Raymond Young |
| 11-26 Raymond Young |
| 11-30 Gregory Fisharty |
| 11-33 Raymond Young |
| 11-34 Zachary Thorpe |
| 11-35 Timothy Lancaster |
| 11-41 Charles Gump |
| 11-42 Benjamin McPherson |
| 11-43 Melissa White |
| 11-44 Tnez Buck |

| |
|----------------------|
| 15' PRESELEY UNIT 1H |
| 15' ARENADO UNIT 1H |
| 15' GUMP UNIT 1H |
| 15' SPROUSE UNIT 1H |

| |
|-----------------------------------|
| Ellsworth District - Tyler County |
| 1-04 Daniel Witschey |
| 1-05 Daniel Witschey |
| 1-5.1 Mark Loy |
| 1-10 Christel Steele |
| 1-5.2 Mark Loy |
| 1-5.3 Mark Loy |
| 3-07 Joyce Morris |
| 3-7.1 John Broady |
| 3-7.2 Jeffrey Shade |
| 3-15 JCW Inc. |
| 3-17 Witschey Realty Inc. |
| 3-17.1 Angel Hines |
| 3-23.1 David Miller |
| 3-31 Robert McNamee |
| 3-31.1 Danny Tanley |
| 4-01 Debra Lay |
| 4-1.1 Melissa White |
| 4-02 Delbert Neazy |
| 4-2.1 Helen Earley |
| 4-03 Gary Wilson |
| 4-04 Gary Law |
| 4-05 Ray Litton |
| 4-05 Douglas Markach |
| 4-07 Roger Antill |
| 4-08 Paul Strickland |
| 4-09 Gary Law |
| 4-10 Douglas Markach |
| 4-11 David Stab |
| 4-11.1 Truman Dawson |
| 4-12 Nancy Mercer |
| 7-02 Nancy Mercer |
| 7-03 Myron Nottingham |
| 7-04 Charles Gump |
| 7-4.1 Terry Gump |
| 7-05 Antero Resources |
| 7-06 Harold Yast |
| 7-07 Charles Gump |
| 7-18 Lucille Guley |
| 7-18.4 Myron Nottingham |
| 7-19 Albert Rice |
| 7-20 Wash Beatty |
| 7-21 Gladys Conley |
| 7-22 Charles Gump |
| 7-22.1 Charles Gump |
| 7-23 Harold Yast |



WW-6A1

Operator's Well Number Arenado 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>AA: Mary E. Midcap Lease</u> Mary E. Midcap | Antero Resources Corporation | 1/8+ | 0555/0175 |
| <u>X: Charles E. Gump Et Ux Lease</u> Charles E. Gump Et Ux | Antero Resources Corporation | 1/8+ | 0626/0333 |
| <u>AD: Eva Gene Taylor Lease</u> Eva Gene Taylor | Antero Resources Corporation | 1/8+ | 0575/0413 |
| <u>X: Charles E. Gump Et Ux Lease</u> Charles E. Gump Et Ux | Antero Resources Corporation | 1/8+ | 0626/0333 |
| <u>Y: BRC Appalachian Minerals I, LLC Lease</u> BRC Appalachian Minerals I, LLC BRC Working Interest Company LLC Chesapeake Appalachia LLC Statoil USA Onshore Properties Inc. SWN Exchange Titleholder LLC SWN Production Company LLC Antero Exchange Properties LLC | BRC Working Interest Company LLC Chesapeake Appalachia LLC Statoil USA Onshore Properties Inc. SWN Exchange Titleholder LLC SWN Production Company LLC Antero Exchange Properties LLC | 1/8+ Assignment Assignment Assignment Merger Assignment Merger | 0369/0300 0369/0784 0378/0764 0470/0668 0009/0404 0544/0242 0525/0315 |
| <u>X: Charles E. Gump Et Ux Lease</u> Charles E. Gump Et Ux | Antero Resources Corporation | 1/8+ | 0626/0333 |
| <u>W1: Samuel B. Boor Lease</u> Samuel B. Boor | Antero Resources Corporation | 1/8+ | 0272/0219 |
| <u>W2: Bounty Minerals LLC Lease</u> Bounty Minerals LLC | Antero Resources Corporation | 1/8+ | 0177/0028 |
| <u>V: Timothy L. Lancaster Lease</u> Timothy L. Lancaster | Antero Resources Corporation | 1/8+ | 263A/0616 |
| <u>T1: Tina M. Snyder Lease</u> Tina M. Snyder | Antero Resources Corporation | 1/8+ | 0186/0747 |
| <u>T2: Tina M. Snyder Lease</u> Tina M. Snyder | Antero Resources Corporation | 1/8+ | 0186/0747 |
| <u>S: Mercer Minerals LLC Lease</u> Mercer Minerals LLC | Antero Resources Corporation | 1/8+ | 0547/0637 |
| <u>T2: Tina M. Snyder Lease</u> Tina M. Snyder | Antero Resources Corporation | 1/8+ | 0186/0747 |
| <u>R: Bounty Minerals LLC Lease</u> Bounty Minerals LLC | Antero Resources Corporation | 1/8+ | 0177/0034 |
| <u>Q: Spring Creek Energy Partners Lease</u> Spring Creek Energy Partners | Antero Resources Corporation | 1/8+ | 0208/0732 |

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| Grantor, lessor, etc. | Grantee, lessee, etc. | Royalty | Book/Page |
|---|--|-----------------------------|-------------------------------------|
| P: Inez M. Buck Lease Inez M. Buck | Antero Resources Corporation | 1/8+ | 328A/0545 |
| N: Lloyd S. Sands and Connie J. Sands Lease Lloyd S. Sands and Connie J. Sands | Antero Resources Corporation | 1/8+ | 0260/0737 |
| L2: Diane Dunn Winningham Lease Diane Dunn Winningham | Antero Resources Corporation | 1/8+ | 0217/0180 |
| M: West Virginia Department of Highways Lease West Virginia Department of Highways | Antero Resources Corporation | 1/8+ | 0272/0686 |
| L1: Diane Dunn Winningham Lease Diane Dunn Winningham | Antero Resources Corporation | 1/8+ | 0217/0180 |
| J: Suzanne Hill Lease Suzanne Hill | Antero Resources Corporation | 1/8+ | 329A/0239 |
| I: Michael Scott Whiteman Lease Michael Scott Whiteman | Antero Resources Corporation | 1/8+ | 342A/0457 |
| H: Bounty Minerals LLC Lease Bounty Minerals LLC | Antero Resources Corporation | 1/8+ | 329A/0814 |
| G: Bounty Minerals LLC Lease Bounty Minerals LLC | Antero Resources Corporation | 1/8+ | 286A/0781 |
| E1: Chesapeake Appalachia, LLC Lease Chesapeake Appalachia, LLC SWN Production Company LLC Antero Exchange Properties LLC | SWN Production Company LLC Antero Exchange Properties LLC Antero Resources Corporation | 1/8 Assignment Merger | 157A/0640 177A/0533 0013/0311 |
| E2: Chesapeake Appalachia, LLC Lease Chesapeake Appalachia, LLC SWN Production Company LLC Antero Exchange Properties LLC | SWN Production Company LLC Antero Exchange Properties LLC Antero Resources Corporation | 1/8 Assignment Merger | 157A/0640 177A/0533 0013/0311 |
| D: Five Star Resources Lease Five Star Resources | Antero Resources Corporation | 1/8+ | 218A/0472 |
| C: David W. Miller Lease David W. Miller | Antero Resources Corporation | 1/8+ | 330A/0458 |
| B: Marcella Sarson Mineral Trust Lease Marcella Sarson Mineral Trust | Antero Resources Corporation | 1/8+ | 287A/0206 |

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Operator's Well Number Arenado Unit 1H MOD

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| Grantor, lessor, etc. | Grantee, lessee, etc. | Royalty | Book/Page |
|-----------------------|-----------------------|---------|-----------|
|-----------------------|-----------------------|---------|-----------|

*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.

*Co-tenancy utilization – Antero is utilizing the Co-tenancy Modernization and Majority Protection Act to proceed with development of certain royalty owners' interests in this tract.

*Pooling/Unitization – Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool certain owners in this tract.

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WW-6A1
(5/13)

Operator's Well No. Arenado Unit 1H MOD

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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 |
|--------------------------------|-----------------------|------------------------------|---------|-----------|
| A: MB Investments Lease | | | | |
| | MB Investments | Antero Resources Corporation | 1/8+ | 341A/0117 |

*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.

*Co-tenancy utilization – Antero is utilizing the Co-tenancy Modernization and Majority Protection Act to proceed with the development of certain royalty owners' interests in this tract.

**Pooling/Unitization – Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool certain owners in this tract.

**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

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OCT 25 2023

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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