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west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, August 22, 2022  
PERMIT MODIFICATION APPROVAL  
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION  
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for READER 2H  
47-103-03497-00-00

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: READER 2H  
Farm Name: JAMES ALLEN SELL  
U.S. WELL NUMBER: 47-103-03497-00-00  
Horizontal 6A New Drill  
Date Modification Issued: 8/22/2022

Promoting a healthy environment.

08/26/2022

ck# 402206  
\$ 2,500

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

1) Well Operator: Antero Resources Corporation Operator ID: 494507062 County: 013-Wetzel District: Green Quadrangle: Pine Grove 7.5'

2) Operator's Well Number: Reader Unit 2H MOD ✓ Well Pad Name: Furbee Pad

3) Farm Name/Surface Owner: James Allen Sell Public Road Access: Furbee Ridge Road

4) Elevation, current ground: 1240' Elevation, proposed post-construction: ~1212'

5) Well Type (a) Gas X Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_  
Other \_\_\_\_\_  
(b) If Gas Shallow X Deep \_\_\_\_\_  
Horizontal X

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus Shale: 7600' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 7600' TVD ✓

9) Formation at Total Vertical Depth: Marcellus ✓

10) Proposed Total Measured Depth: 25500' MD ✓

11) Proposed Horizontal Leg Length: 15153.2' ✓

12) Approximate Fresh Water Strata Depths: 575' ✓

13) Method to Determine Fresh Water Depths: 47103308970000 ✓

14) Approximate Saltwater Depths: 2284' ✓

15) Approximate Coal Seam Depths: 973' ✓

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 X

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

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Environmental Protection

WW-6B  
(04/15)

API NO. 47- 103 - 03497  
 OPERATOR WELL NO. Reader Unit 2H MOD  
 Well Pad Name: Furbee Pad

18)

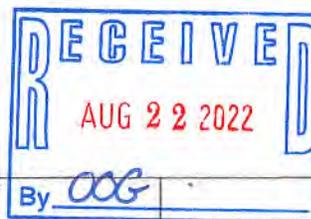
**CASING AND TUBING PROGRAM**

| 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    | 79#                    | 80                         | 80                           | CTS, 77 Cu. Ft.               |
| Fresh Water  | 13-3/8"   | New         | J/K-55  | 54.5#                  | 625                        | 625                          | CTS, 651 Cu. Ft.              |
| Coal         | 9-5/8"    | New         | J/K-55  | 36#                    | 2500                       | 2500                         | CTS, 1018 Cu. Ft.             |
| Intermediate |           |             |         |                        |                            |                              |                               |
| Production   | 5-1/2"    | New         | P-110CY | 20#                    | 25500                      | 25500                        | CTS, 5508 Cu. Ft.             |
| Tubing       | 2-3/8"    | New         | N-80    | 4.7#                   |                            |                              |                               |
| Liners       |           |             |         |                        |                            |                              |                               |

*Kimberly S. Reynolds*  
4-19-22

| 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     | ~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"              | 14,360               | 2500                                     | Class G/H   | ~1.18                    |
| Tubing       | 2-3/8"    | 4.778"                 | 0.19"               | 11,200               |  |             |                          |
| Liners       |           |                        |                     |                      |  |             |                          |

**PACKERS**



|             |     |  |  |  |
|-------------|-----|--|--|--|
| Kind:       | N/A |  |  |  |
| Sizes:      | N/A |  |  |  |
| Depths Set: | N/A |  |  |  |

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.

\*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): 30.09 acres

22) Area to be disturbed for well pad only, less access road (acres): 13.86 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.

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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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Office 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.

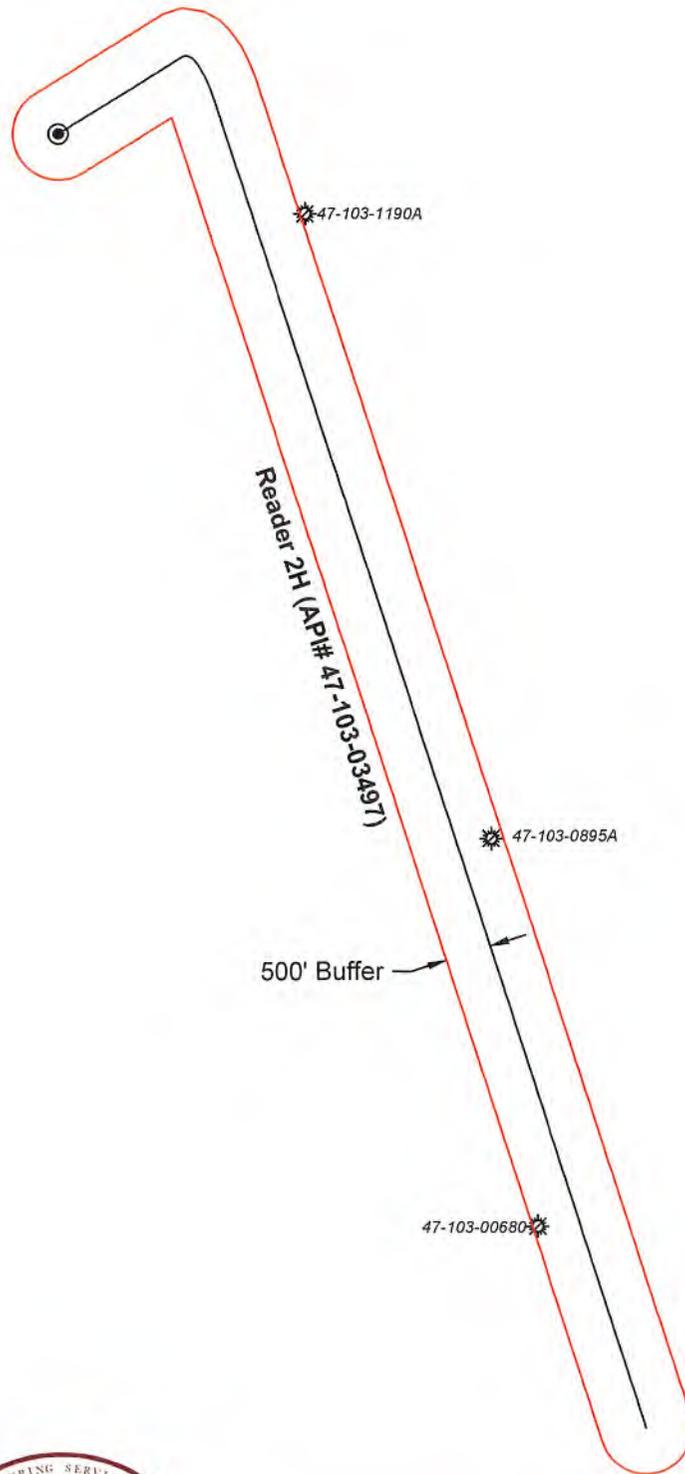
\*Note: Attach additional sheets as needed.

**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



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AUG 11 2022  
West Virginia Department of  
Environmental Protection



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: August 4, 2022       |
| SURVEYED: Dec. 2016    | PROJECT NO: 120-34-G-18        |
| FIELD CREW: C.L., K.M. | DRAWING NO: Reader 2H BHLM AOR |

Sheet 1 of 1



Scale: 1 inch = 2000 feet 08/26/2022

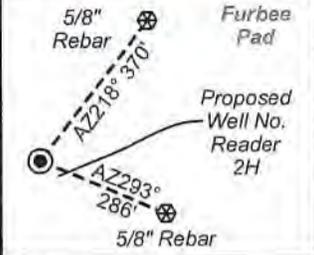
| UWI (APINum)   | Well Name           | Well Number | Operator              | Historical Operator   | TD    | Perforated Interval (shallowest, deepest) | Perforated Formation(s) | Producible Formation(s) not perf'd |
|----------------|---------------------|-------------|-----------------------|-----------------------|-------|---|-------------------------|------------------------------------|
| 47103311900000 | F M STREIGHT ETAL 2 | 2457        | MANUFACT LIGHT & HEAT | MANUFACT LIGHT & HEAT |       |   |                         |                                    |
| 47103308950000 | AARON BASSETT       | 4223        | HOPE NATURAL GAS      | HOPE NATURAL GAS      | 2,804 |   | Big Injun, Gordon       | Weir, Benson, Alexander            |
| 47103006800000 | J.BRAST             | 1055        | EQT PRODUCTION CO     | CONSOL GAS SUPPLY CRP | 2,166 |   | Big Injun               | Weir, Benson, Alexander            |

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 Environmental Protection

**Antero Resources**  
**Well No. Reader 2H**  
**BHL MOD**  
 Antero Resources Corporation



Well Location References (NTS)

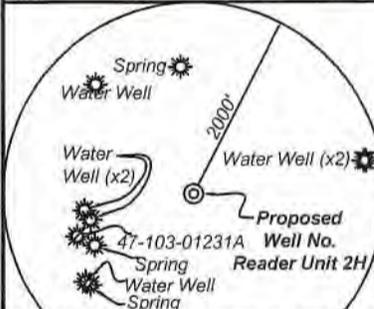


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

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



SEAL



Note: 6 water wells and 3 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 75°13' W | 1,920.8' |
| L2 | N 83°01' W | 2,091.2' |
| L3 | N 74°58' E | 1,559.1' |
| L4 | N 80°12' E | 1,561.7' |
| L5 | N 77°19' E | 1,730.1' |

Legend

- Proposed gas well
- Monument, as noted
- Existing Well, as noted
- Digitized Well, as noted
- Creek or Drain
- Road
- Railroad Right-of-Way
- Surface boundary (approx.)
- Interior surface tracts (approx.)

6,516' to Top Hole

11,724' to Bottom Hole

TOP HOLE LATITUDE 39 - 35 - 00  
 BTM HOLE LATITUDE 39 - 32 - 30

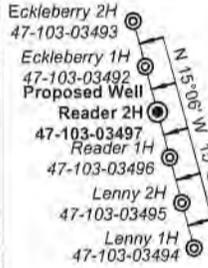
**Notes**  
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.  
 Well No. Reader Unit 2H Top Hole coordinates are  
 N: 387,434.77' Latitude: 39°33'25.93"  
 E: 1,652,799.39' Longitude: 80°43'53.19"  
 Bottom Hole coordinates are  
 N: 373,399.14' Latitude: 39°31'08.06"  
 E: 1,659,157.78' Longitude: 80°42'29.61"  
 UTM Zone 17, NAD 1983  
 Top Hole Coordinates Bottom Hole Coordinates  
 N: 4,378,656.170m N: 4,374,412.480m  
 E: 523,086.689m E: 525,095.057m  
 Plat orientation and corner and well references are based upon the grid north meridian.  
 Well location references are based upon the magnetic meridian.

TOP HOLE LONGITUDE 80 - 42 - 30  
 BTM HOLE LONGITUDE 80 - 40 - 00

8,290' to Bottom Hole  
 9,519' to Top Hole

**Notes:**  
 Well No. Reader Unit 2H UTM Zone 17, NAD 1927  
 Top Hole Coordinates  
 N: 14,364,925.60'  
 E: 1,716,111.97'  
 Point of Entry Coordinates  
 N: 14,365,333.47'  
 E: 1,717,792.74'  
 Bottom Hole Coordinates  
 N: 14,351,002.71'  
 E: 1,722,701.52'

Wellhead Layout (NTS)



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

FILE NO: 129-34-G-18  
 DRAWING NO: Reader Unit 2H Well Plat  
 SCALE: 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY: Submeter  
 PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

DATE: August 4 2022  
 OPERATOR'S WELL NO. Reader Unit 2H  
 API WELL NO Mod  
 47 - 103 - 03497  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION: ELEVATION: Existing 1240' Proposed 1212' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove  
 DISTRICT: Green James COUNTY: Wetzel  
 SURFACE OWNER: A. Sell Josephine Brast, et al ACREAGE: 58.1  
 ROYALTY OWNER: James Allen Sell; Marilyn Halley Seeley; Shibden Estates, Inc.; AMP Fund, II LP; LEASE NO: ACREAGE: 257; 300  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL\_MOD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,600' TVD  
 25,500' MD

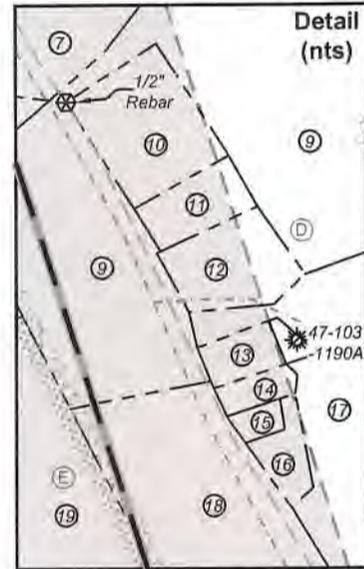
WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System  
 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road  
 Denver, CO 80202 Charleston, WV 25313

08/26/2022



| Leases |                                 |
|--------|---------------------------------|
| A      | James Allen Sell                |
| B      | William R. Stalnaker            |
| C      | Marilyn Halley Seeley           |
| D      | Tribune Resources Minerals, LLC |
| E      | Shiben Estates, Inc.            |
| F      | BRC Appalachian Minerals I, LLC |
| G      | AMP Fund II, LP                 |
| H      | AMP Fund II, LP                 |
| I      | Michael M. Holman               |
| J      | BRC Appalachian Minerals I, LLC |
| K      | Tribune Resources Minerals, LLC |
| L      | Joshua R. Edgell, et al         |
| M      | Josephine Brast, et al          |
| N      | Shiben Estates, Inc.            |

| ID | TM-Par  | Owner                              | Bk/Pg   | Acres  |
|----|---------|------------------------------------|---------|--------|
| 1  | 17-12   | James Allen Sell                   | 370/148 | 58.10  |
| 2  | 17-60   | Ross Bucher                        | 411/765 | 79.00  |
| 3  | 17-1    | James Allen Sell                   | 370/148 | 15.35  |
| 4  | 13-71   | Charles R. & Kay L. Blair          | 387/577 | 63.11  |
| 5  | 17-71.1 | Clarence L. & Carol J. Lancaster   | 387/266 | 19.19  |
| 6  | 17-3.1  | Bradford D. Highley                | 386/607 | 1.00   |
| 7  | 17-3    | Bradford Highley                   | 386/607 | 17.00  |
| 8  | 17-2    | Clarence & Carol Lancaster         | 287/357 | 0.50   |
| 9  | 17-14   | Bradford Highley                   | 386/607 | 18.53  |
| 10 | 17-14.2 | Michael & Tammy Lemasters          | 384/10  | 2.18   |
| 11 | 17-14.1 | Michael Lemasters                  | 331/413 | 0.93   |
| 12 | 17-13   | Russell & Carol Walls              | 416/637 | 1.53   |
| 13 | 17-19.4 | Everett Haught                     | 293/243 | 0.52   |
| 14 | 17-19.1 | Lloyd Bassett                      | 270/106 | 0.35   |
| 15 | 17-19.5 | Mitchel Eddy                       | 415/429 | 0.24   |
| 16 | 17-19.3 | Howard & Patricia Bassett          | 280/136 | 0.81   |
| 17 | 17-19   | Donna Bassett                      | 299/614 | 19.10  |
| 18 | 17-18   | Samuel Highley                     | 387/408 | 12.07  |
| 19 | 17-17   | James Allen Sell                   | 370/148 | 70.00  |
| 20 | 17-27   | Eliza Louiza Highley               | 303/352 | 2.70   |
| 21 | 17-29   | Leslie & Georgia Bassett           | 319/394 | 66.00  |
| 22 | 17-26   | Heartland Forest Land Fund VII, LP | 431/936 | 75.50  |
| 23 | 17-29.2 | Michael & Teresa Bassett           | 336/110 | 1.56   |
| 24 | 17-29.1 | Robert & Kathy Bassett             | 336/427 | 1.92   |
| 25 | 17-36   | Heartland Forest Land Fund VII, LP | 431/936 | 0.49   |
| 26 | 17-37   | Heartland Forest Land Fund VII, LP | 431/936 | 5.00   |
| 27 | 17-38   | Heartland Forest Land Fund VII, LP | 431/936 | 60.00  |
| 28 | 17-31   | Heartland Forest Land Fund VII, LP | 431/936 | 120.33 |
| 29 | 17-49   | Heartland Forest Land Fund VII, LP | 431/936 | 20.90  |
| 30 | 17-50   | EIP III, West Virginia LLC         | 463/193 | 69.00  |
| 31 | 20-14   | Robert Bassett                     | 371/32  | 126.74 |
| 32 | 20-14.4 | Matthew D. Bassett, et al          | 421/365 | 97.18  |
| 33 | 20-14.2 | Coastal Forest Resources Co.       | 444/105 | 37.40  |
| 34 | 20-14.1 | Coastal Forest Resources Co.       | 444/105 | 49.25  |
| 35 | 20-21   | Coastal Forest Resources Co.       | 444/105 | 29.00  |
| 36 | 20-20.1 | Robert Bassett                     | 371/32  | 0.44   |
| 37 | 20-19   | Coastal Forest Resources Co.       | 444/105 | 16.44  |
| 38 | 20-20   | Coastal Forest Resources Co.       | 444/105 | 26.00  |
| 39 | 20-19.2 | Coastal Forest Resources Co.       | 444/105 | 35.56  |
| 40 | 20-37   | Coastal Forest Resources Co.       | 444/105 | 246.84 |



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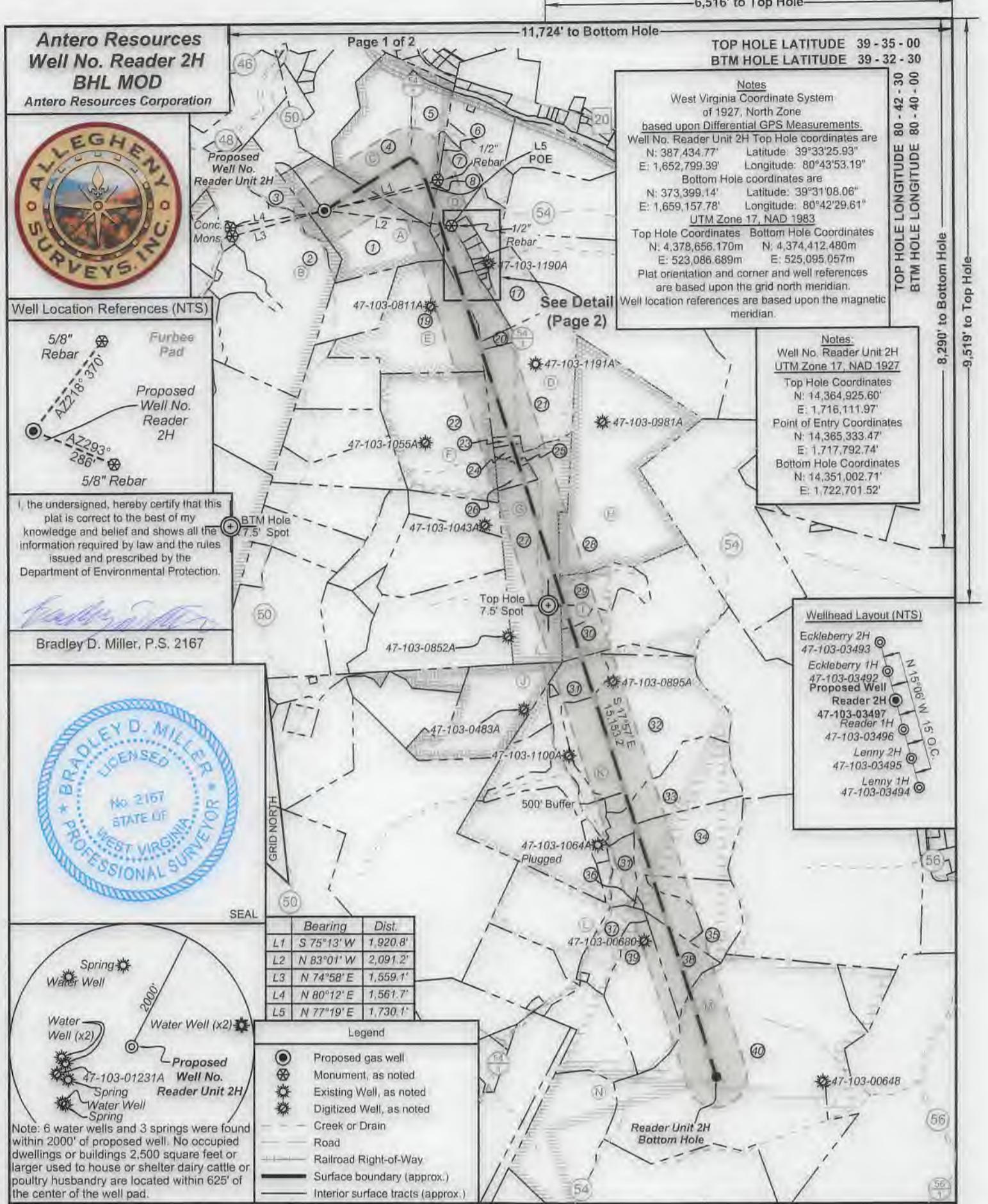


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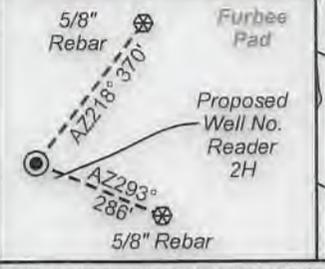
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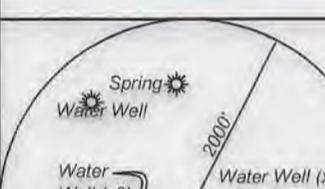


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Bradley D. Miller, P.S. 2167



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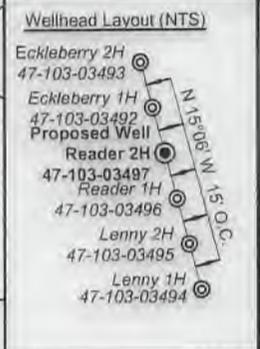
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 BTM HOLE LATITUDE 39 - 32 - 30

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DATE: August 4 20 22  
 OPERATOR'S WELL NO. Reader Unit 2H  
 API WELL NO MOD  
 47 - 103 - 03497  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION: ELEVATION: Existing 1240' PROPOSED 1212' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove  
 DISTRICT: Green James COUNTY: Wetzel  
 SURFACE OWNER: A. Sell Josephine Brast, et al 109.83125;  
 ROYALTY OWNER: James Allen Sell; Marilyn Halley Seeley; Shiben Estates, Inc.; AMP Fund, II LP; LEASE NO: ACREAGE: 58.1 65,4875; 22;  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL\_MOD 7,600' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,500' MD

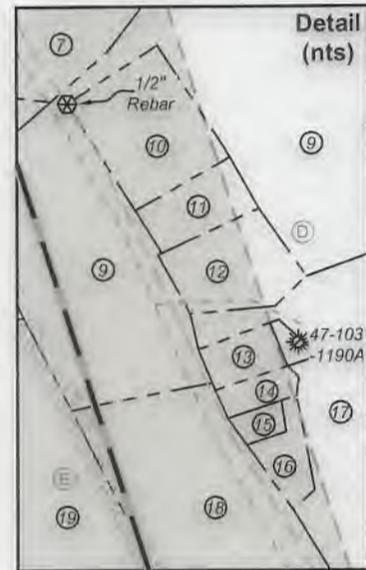
WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System  
 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road  
 Denver, CO 80202 Charleston, WV 25313

08/26/2022



| Leases |                                 |
|--------|---------------------------------|
| A      | James Allen Sell                |
| B      | William R. Stalnaker            |
| C      | Marilyn Halley Seeley           |
| D      | Tribune Resources Minerals, LLC |
| E      | Shiben Estates, Inc.            |
| F      | BRC Appalachian Minerals I, LLC |
| G      | AMP Fund II, LP                 |
| H      | AMP Fund II, LP                 |
| I      | Michael M. Holman               |
| J      | BRC Appalachian Minerals I, LLC |
| K      | Tribune Resources Minerals, LLC |
| L      | Joshua R. Edgell, et al         |
| M      | Josephine Brast, et al          |
| N      | Shiben Estates, Inc.            |

| ID | TM-Par  | Owner                              | Bk/Pg   | Acres  |
|----|---------|------------------------------------|---------|--------|
| 1  | 17-12   | James Allen Sell                   | 370/148 | 58.10  |
| 2  | 17-60   | Ross Bucher                        | 411/765 | 79.00  |
| 3  | 17-1    | James Allen Sell                   | 370/148 | 15.35  |
| 4  | 13-71   | Charles R. & Kay L. Blair          | 387/577 | 63.11  |
| 5  | 17-71.1 | Clarence L. & Carol J. Lancaster   | 387/266 | 19.19  |
| 6  | 17-3.1  | Bradford D. Highley                | 386/607 | 1.00   |
| 7  | 17-3    | Bradford Highley                   | 386/607 | 17.00  |
| 8  | 17-2    | Clarence & Carol Lancaster         | 287/357 | 0.50   |
| 9  | 17-14   | Bradford Highley                   | 386/607 | 18.53  |
| 10 | 17-14.2 | Michael & Tammy Lemasters          | 384/10  | 2.18   |
| 11 | 17-14.1 | Michael Lemasters                  | 331/413 | 0.93   |
| 12 | 17-13   | Russell & Carol Walls              | 416/637 | 1.53   |
| 13 | 17-19.4 | Everett Haught                     | 293/243 | 0.52   |
| 14 | 17-19.1 | Lloyd Bassett                      | 270/106 | 0.35   |
| 15 | 17-19.5 | Mitchel Eddy                       | 415/429 | 0.24   |
| 16 | 17-19.3 | Howard & Patricia Bassett          | 280/136 | 0.81   |
| 17 | 17-19   | Donna Bassett                      | 299/614 | 19.10  |
| 18 | 17-18   | Samuel Highley                     | 387/408 | 12.07  |
| 19 | 17-17   | James Allen Sell                   | 370/148 | 70.00  |
| 20 | 17-27   | Eliza Louiza Highley               | 303/352 | 2.70   |
| 21 | 17-29   | Leslie & Georgia Bassett           | 319/394 | 66.00  |
| 22 | 17-26   | Heartland Forest Land Fund VII, LP | 431/936 | 75.50  |
| 23 | 17-29.2 | Michael & Teresa Bassett           | 336/110 | 1.56   |
| 24 | 17-29.1 | Robert & Kathy Bassett             | 336/427 | 1.92   |
| 25 | 17-36   | Heartland Forest Land Fund VII, LP | 431/936 | 0.49   |
| 26 | 17-37   | Heartland Forest Land Fund VII, LP | 431/936 | 5.00   |
| 27 | 17-38   | Heartland Forest Land Fund VII, LP | 431/936 | 60.00  |
| 28 | 17-31   | Heartland Forest Land Fund VII, LP | 431/936 | 120.33 |
| 29 | 17-49   | Heartland Forest Land Fund VII, LP | 431/936 | 20.90  |
| 30 | 17-50   | EIP III, West Virginia LLC         | 463/193 | 69.00  |
| 31 | 20-14   | Robert Bassett                     | 371/32  | 126.74 |
| 32 | 20-14.4 | Matthew D. Bassett, et al          | 421/365 | 97.18  |
| 33 | 20-14.2 | Coastal Forest Resources Co.       | 444/105 | 37.40  |
| 34 | 20-14.1 | Coastal Forest Resources Co.       | 444/105 | 49.25  |
| 35 | 20-21   | Coastal Forest Resources Co.       | 444/105 | 29.00  |
| 36 | 20-20.1 | Robert Bassett                     | 371/32  | 0.44   |
| 37 | 20-19   | Coastal Forest Resources Co.       | 444/105 | 16.44  |
| 38 | 20-20   | Coastal Forest Resources Co.       | 444/105 | 26.00  |
| 39 | 20-19.2 | Coastal Forest Resources Co.       | 444/105 | 35.56  |
| 40 | 20-37   | Coastal Forest Resources Co.       | 444/105 | 246.84 |



FILE NO: 129-34-G-18  
 DRAWING NO: Reader Unit 2H 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: August 4 20 22  
 OPERATOR'S WELL NO. Reader Unit 2H  
 API WELL NO **MAD**  
 47 - 103 - 03497  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 Proposed 1212'  
 LOCATION: ELEVATION: Existing 1240' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove  
 DISTRICT: Green James COUNTY: Wetzel  
 SURFACE OWNER: A. Sell Josephine Brast, et al ACREAGE: 58.1  
 ROYALTY OWNER: James Allen Sell; Marilyn Halley Seeley; Shiben Estates, Inc.; AMP Fund, II LP; LEASE NO: ACREAGE: 257; 300  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL\_MOD 7,600' TVD  
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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

08/26/2022

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: James Allen Sell Lease</u><br>James Allen Sell  | Antero Resources Corporation                           | 1/8+               | 258A/0467              |
| <u>C: Marilyn Halley Seeley Lease</u><br>Marilyn Halley Seeley<br>EQT Production Company  | EQT Production Company<br>Antero Resources Corporation | 1/8+<br>Assignment | 148A/0831<br>230A/0801 |
| <u>D: Tribune Resources Minerals, LLC Lease</u><br>Tribune Resources Minerals, LLC fka Ascent<br>Resources Marcellus Minerals LLC<br>Tribune Resources, LLC | Tribune Resources, LLC<br>Antero Resources Corporation | 1/8<br>Assignment  | 218A/0791<br>219A/0322 |
| <u>E: Shiben Estates, Inc Lease</u><br>Shiben Estates, Inc.   | Antero Resources Corporation                           | 1/8+               | 202A/0230              |
| <u>D: Tribune Resources Minerals, LLC Lease</u><br>Tribune Resources Minerals, LLC fka Ascent<br>Resources Marcellus Minerals LLC<br>Tribune Resources, LLC | Tribune Resources, LLC<br>Antero Resources Corporation | 1/8<br>Assignment  | 218A/0791<br>219A/0322 |
| <u>G: AMP Fund II, LP Lease</u><br>AMP Fund II, LP  | Antero Resources Corporation                           | 1/8+               | 255A/0685              |
| <u>I: Michael M. Holman Lease</u><br>Michael M Holman, Heir of Sarah Louisa Highley   | Antero Resources Corporation                           | 1/8+               | 247A/0722              |
| <u>K: Tribune Resources Minerals, LLC Lease</u><br>Tribune Resources Minerals, LLC<br>Tribune Resources, LLC  | Tribune Resources, LLC<br>Antero Resources Corporation | 1/8+<br>Assignment | 218A/0803<br>219A/0322 |

RECEIVED  
Office of Oil and Gas  
AUG 11 2022  
West Virginia Department of  
Environmental Protection

08/26/2022

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
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| Lease Name or Number                   | Grantor, Lessor, etc.  | Grantee, Lessee, etc.   | Royalty           | Book/Page        |
|--|--|---|-------------------|------------------|
| <b>M: Josephine Brast, et al Lease</b> |  |   |                   |                  |
|  | Josephine Brast, et al   | South Penn Oil Co.  | 1/8               | 0049/0591        |
|  | South Penn Oil Co.   | Hope Natural Gas Company  | Assignment        | 009A/0230        |
|  | Hope Natural Gas Company   | Consolidated Gas Supply Corporation   | Assignment        | 0233/0387        |
|  | Consolidated Gas Supply Corporation  | Consolidated Gas Transmission Corporation   | Assignment        | 066A/0069        |
|  | Consolidated Gas Transmission Corporation  | CNG Transmission Corporation  | Name Change       | 0013/0151        |
|  | CNG Transmission Corporation   | Eastern States Oil & Gas Inc  | Assignment        | 076A/0232        |
|  | Eastern States Oil & Gas Inc   | Equitable Production-Eastern States Inc   | Name Change       | 0013/0014        |
|  | Equitable Production-Eastern States Inc  | Equitable Production Company  | Merger            | 0013/0014        |
|  | Equitable Production Company   | EQT Production Company  | Name Change       | 0013/0014        |
|  | EQT Production Company   | Tribune Resources successor in interest of Ascent Resources-Marcellus LLC fka American Energy-Marcellus LLC | Assignment        | 179A/0653        |
|  | <b>Tribune Resources successor in interest of Ascent Resources-Marcellus LLC fka American Energy-Marcellus LLC</b> | <b>Antero Resources Corporation</b>   | <b>Assignment</b> | <b>219A/0322</b> |

\*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 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

RECEIVED  
Office of Oil and Gas

AUG 11 2022

WV Department of  
Environmental Protection

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 VP of Land



Stansberry, Wade A <wade.a.stansberry@wv.gov>

**Modification Horizontal H6A Well Work Permits API: (47-103-03492, 03494, 03495, 03496, & 03497)**

1 message

**Stansberry, Wade A** <wade.a.stansberry@wv.gov>

Tue, Aug 23, 2022 at 5:53 PM

To: Mallory Stanton <mstanton@anteroresources.com>, Diane Blair <dblair@anteroresources.com>, Dani DeVito <ddevito@shalepro.com>, Scott Lemley <slemley@wvassessor.com>, "Greynolds, Kenneth L" <kenneth.l.greynolds@wv.gov>

I have attached a copy of the newly issued well permit numbers:

- 47-103-03492 - ECKLEBERRY UNIT 1H
- 47-103-03494 - LENNY UNIT 1H
- 47-103-03495 - LENNY UNIT 2H
- 47-103-03496 - READER 1H
- 47-103-03497 - READER 2H

These will serve as your copy.

Thank you,

**Wade A. Stansberry**

**Environmental Resource Specialist 3**

**West Virginia Department of Environmental Protection**

**Office of Oil & Gas**

**601 57th St. SE**

**Charleston, WV 25304**

**(304) 926-0499 ext. 41115**

**(304) 926-0452 fax**

**[Wade.A.Stansberry@wv.gov](mailto:Wade.A.Stansberry@wv.gov)**

**5 attachments**

-  **47-103-03492 - mod.pdf**  
1310K
-  **47-103-03494 - mod.pdf**  
1287K
-  **47-103-03495 - mod.pdf**  
1225K
-  **47-103-03496 - mod.pdf**  
1243K
-  **47-103-03497 -mod.pdf**  
1185K

**08/26/2022**