



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

Monday, November 1, 2021
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for ORNER UNIT 2H
47-103-03429-00-00

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.

A blue ink signature of James A. Martin, Chief, is written in a cursive style above his name and title.

James A. Martin
Chief

Operator's Well Number: ORNER UNIT 2H
Farm Name: DALLISON LUMBER, INC.
U.S. WELL NUMBER: 47-103-03429-00-00
Horizontal 6A New Drill
Date Modification Issued: 11/2/2021

Promoting a healthy environment.

11/05/2021



Antero Resources
1615 Wynkoop St.
Denver, CO 80202
Office: 303.357.7310
Fax: 303.357.7315

October 11, 2021

West Virginia Department of Environmental Protection
Office of Oil and Gas
Attn: James Martin
601 57th Street
Charleston, WV 25304

Mr. Martin:

Antero Resources Corporation (Antero) would like to submit the following applications for modifications of well work permits to explore/develop the Marcellus Shale. Our **White Oak** project is located in Ritchie County, WV. On the **existing Dogwood Pad** are **three (3) horizontal** shallow wells (Daags Unit 1H, Orner Unit 1H and Orner Unit 2H) that we are requesting approval to drill deeper to extend the laterals.

Attached you will find the following:

- Permit Application packages

If you have any questions please feel free to contact me at (304) 842-4153 or by email at mhamsher@anteroresources.com.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Melissa Hamsher", written over a blue ink scribble.

Melissa Hamsher
Permitting Agent
Antero Resources Corporation

RECEIVED
Office of Oil and Gas

OCT 14 2021

WV Department of
Environmental Protection

Enclosures

11/05/2021

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

1) Well Operator: Antero Resources Corporat 494507062 103-Wetzel Green Pine Grove 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Orner Unit 2H Well Pad Name: Dogwood Pad

3) Farm Name/Surface Owner: Dallison Lumber Inc. Public Road Access: CO. Route 50

4) Elevation, current ground: 1308' 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: 7600' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2800#

8) Proposed Total Vertical Depth: 7600' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 27100' MD

11) Proposed Horizontal Leg Length: 16258'

12) Approximate Fresh Water Strata Depths: 539'

13) Method to Determine Fresh Water Depths: 47-095-30941

14) Approximate Saltwater Depths: 2341' (47-095-30941)

15) Approximate Coal Seam Depths: 815' (47-103-31064)

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: _____

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# | 80 | 80 ✓ | CTS, 218 Cu. Ft. |
| Fresh Water | 13-3/8" | New | J-55 | 54.5# | 589 | 589 ✓ | CTS, 532 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# | 27100 | 27100 ✓ | 6470 Cu. Ft |
| Tubing | 2-3/8" | New | N-80 | 4.7# | | | |
| Liners | | | | | | | |

*Super Haven /
10-13-21*

| 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 | 9300 | Lead-HPOZ & Tail-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 | | | |
| 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): 35.9

22) Area to be disturbed for well pad only, less access road (acres): 15.40

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

25) Proposed borehole conditioning procedures:

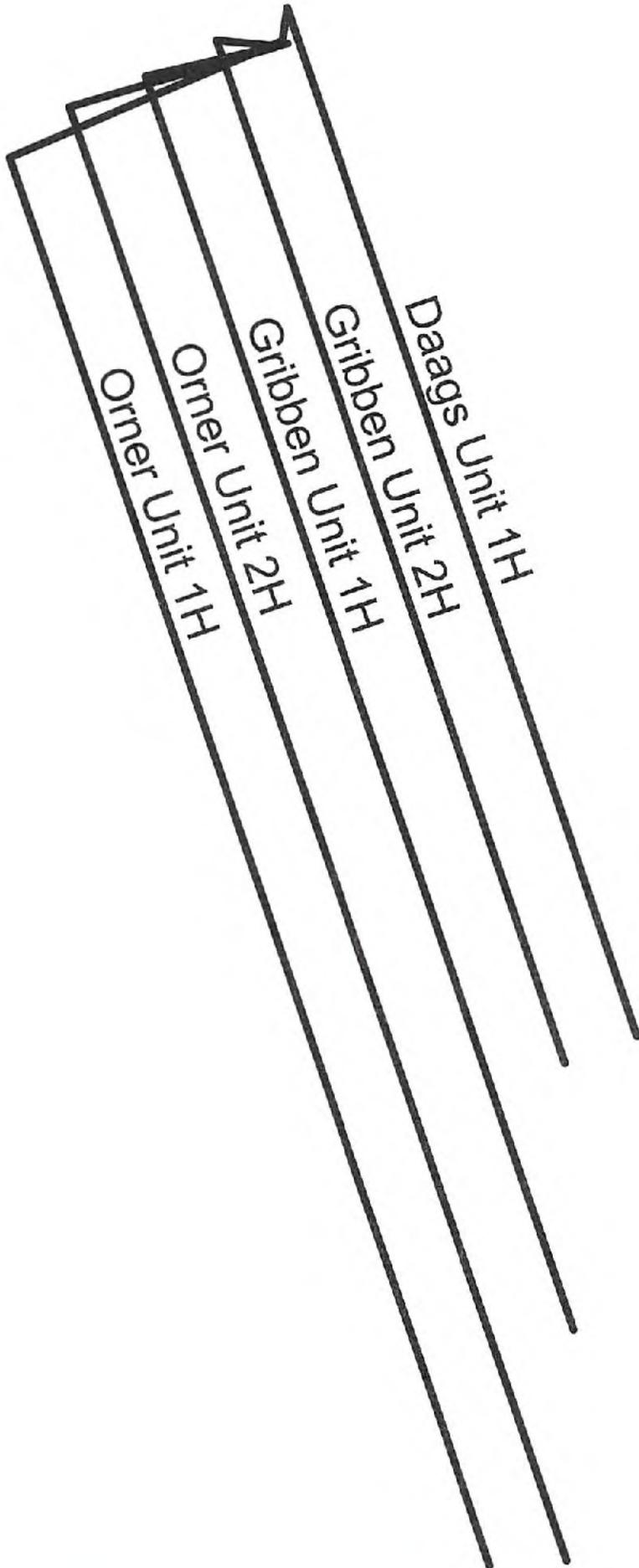
Conductor: blowhole clean with air, run casing, 10 bbls fresh water.

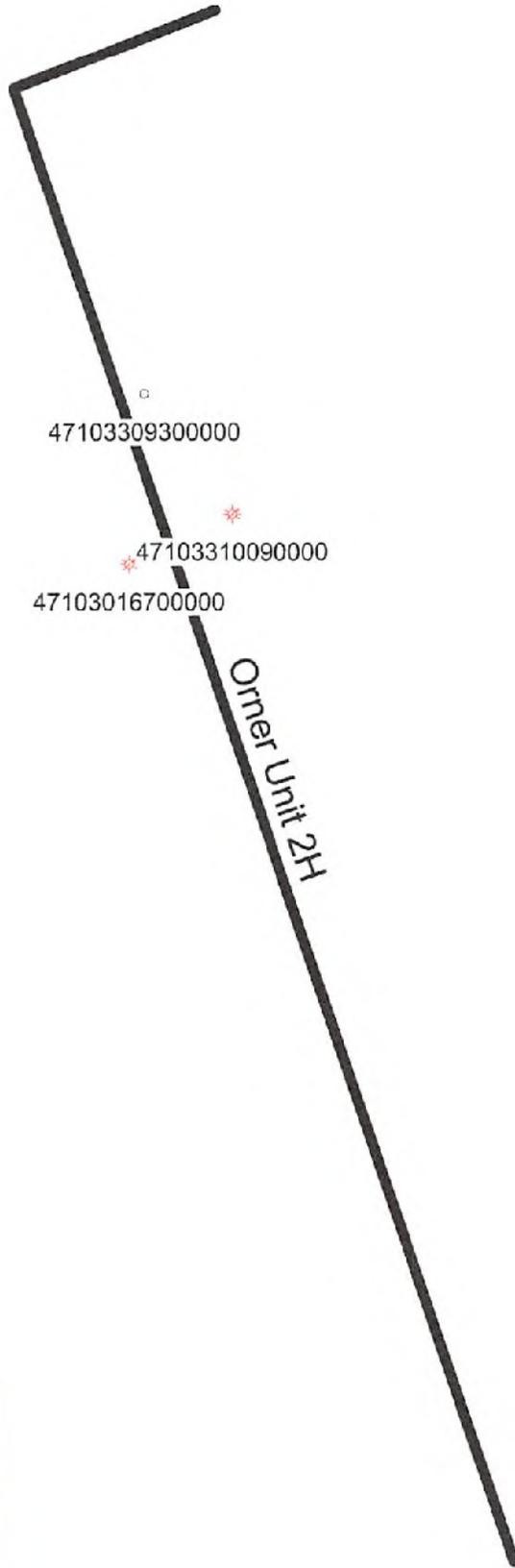
Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

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.





Antero Resources Corporation

Ormer Unit 2H - AOR



WELL SYMBOLS
Plugged Gas Well

October 29, 2021

11/05/2021

Ormer Unit 2H AOR

| UWI (API/Num) | Well Name | Well Number | Operator | Historical Operator | TD | Perforated Interval (shallowest, deepest) | Perforated Formation(s) | Producible Formation(s) not perf'd |
|-----------------|------------------|-------------|-----------------------|-----------------------|---------|---|-----------------------------|------------------------------------|
| 471033093000000 | LUCIUS HOGUE | 5402 | HOPE NATURAL GAS | HOPE NATURAL GAS | Unknown | Unknown | Big Lime, Big Injun, Gordon | Weir, Berra, Benson, Alexander |
| 471033100900000 | C & A ENGLE 2 | 1348 | MANUFACT LIGHT & HEAT | MANUFACT LIGHT & HEAT | 2,053 | Unknown | Maxton, Big Injun, Gordon | Weir, Berra, Benson, Alexander |
| 471030167000000 | KERNAN WILLIAM 1 | 2285 | MANUFACT LIGHT & HEAT | MANUFACT LIGHT & HEAT | 2,865 | 2842 - 2848 | Gordon | Weir, Berra, Benson, Alexander |

1,534' to Bottom Hole

4,587' to Top Hole

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

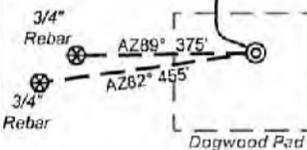
LONGITUDE 80 - 42 - 30

5,552' to Top Hole
6,759' to Bottom Hole

Antero Resources
Well No. Orner 2H
BHL MOD
Antero Resources Corporation



Well Location References (NTS)

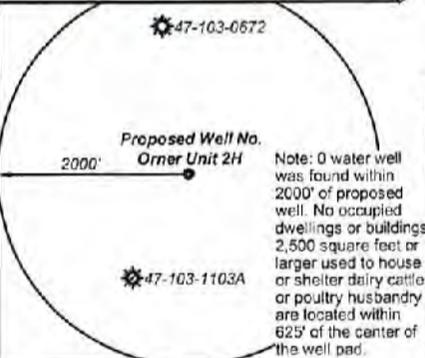


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

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



SEAL



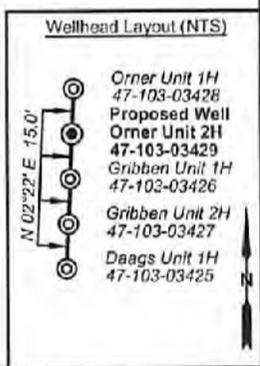
Legend

- 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.)

Notes
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Well No. Orner Unit 2H Top Hole coordinates are
N: 376,199.09' Latitude: 39°31'35.12"
E: 1,654,576.94' Longitude: 80°43'28.54"
Bottom Hole coordinates are
N: 359,776.37' Latitude: 39°28'53.20"
E: 1,657,410.09' Longitude: 80°42'49.58"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,375,242.179m N: 4,370,253.303m
E: 523,685.243m E: 524,631.780m
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. Orner Unit 2H
UTM Zone 17, NAD 1927
Top Hole Coordinates
N: 14,353,724.91'
E: 1,718,076.14'
Point of Entry Coordinates
N: 14,352,724.42'
E: 1,715,892.20'
Bottom Hole Coordinates
N: 14,337,357.26'
E: 1,721,181.92'

| Bearing | Dist. |
|---------------|----------|
| L1 S 10°02' E | 1,539.4' |
| L2 S 21°36' W | 1,603.9' |
| L3 N 70°10' W | 924.6' |
| L4 N 18°16' W | 1,326.5' |
| L5 S 66°21' W | 2,403.0' |



FILE NO: 329-34-G-17
DRAWING NO: Orner 2H BHL MOD
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Monroe County, OH

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

DATE: October 8 2021
OPERATOR'S WELL NO. Orner Unit 2H
API WELL NO MOD
47 - 103 - 03429
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1,308' WATERSHED: Fishing Creek QUADRANGLE: TH: Pine Grove; BH: Center Point
DISTRICT: Green Dallison COUNTY: Wayne
SURFACE OWNER: Lumber, Inc. ACREAGE: 208
ROYALTY OWNER: Jean B. Hoge Trust; Waco Oil & Gas Co. Inc.; Terry Bartrug, William J. Walker, LEASE NO: ACREAGE: 68.9563; 89; 244; 38.5
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
27,100' 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



| Leases | |
|--------|---------------------------------|
| A | Joan B. Hoge Trust |
| B | Waco Oil & Gas Company Inc. |
| C | BRC Appalachian Minerals I, LLC |
| D | Terry Bartrug |
| E | BRC Appalachian Minerals I, LLC |
| F | William J. Walker |
| G | Sandra D. Derby |
| H | J.M. Mayfield, et al |
| I | Tony Eugene Crabtree, et ux |
| J | Shiben Estates, Inc. |
| K | Shiben Estates, Inc. |
| L | Christian Engle, et ux |
| M | Robert Okey Whiting |
| N | BRC Appalachian Minerals I, LLC |
| O | Tribune Resources Minerals, LLC |
| P | Frank L. Straight |
| Q | Kimberly A. Hoskins, et vir |
| R | Sharon Hosey Seckman |
| S | Erwin Patterson |
| T | Edward A. Schulte Jr. |
| U | BRC Appalachian Minerals I, LLC |

| ID | TMP/Par | Owner | Bk/Pg | Acres |
|----|---------|--|----------|--------|
| 1 | 20-13 | Dallison Lumber Inc. | 440/243 | 208.00 |
| 2 | 20-12 | Terry Bartrug | 361/485 | 92.90 |
| 3 | 20-24 | Lloyd Conley | 355/553 | 89.00 |
| 4 | 20-31 | Tony E. & Marion L. Crabtree | 365/337 | 68.95 |
| 5 | 20-42 | Sandra D. Derby | 384/585 | 21.80 |
| 6 | 20-44 | Tony E. & Marion L. Crabtree | 365/337 | 4.50 |
| 7 | 22-40 | Robert L. Jr. & Donna Jones | 438/692 | 16.00 |
| 8 | 22-5 | Robert L. Jr. & Donna K. Jones | 297/500 | 76.00 |
| 9 | 22-14.1 | Tony E. & Marion L. Crabtree | 365/337 | 41.80 |
| 10 | 22-6 | Denzil W. Sloan | 305/582 | 21.23 |
| 11 | 22-19 | Coastal Forest Resources Co. | 444/105 | 155.30 |
| 12 | 22-20 | Lawrence J. Bish, et al | 420/736 | 63.23 |
| 13 | 22-29 | Timothy L. Yoho | 377/411 | 50.00 |
| 14 | 22-34 | Coastal Forest Resources Co. | 444/105 | 172.91 |
| 15 | 22-28 | Coastal Forest Resources Co. | 444/105 | 77.10 |
| 16 | 3-11 | Dominic J. & Delmer M. Kowalski | 317/307 | 106.94 |
| 17 | 25-2 | Coastal Forest Resources Co. | 444/105 | 61.93 |
| 18 | 25-3 | Coastal Forest Resources Co. | 444/105 | 32.00 |
| 19 | 25-5 | Christopher & Dennis Doyle | 410/80 | 39.36 |
| 20 | 3-12 | David Schulte, et al | WB14/440 | 80.73 |
| 21 | 25-9 | Christopher & Dennis Doyle | 410/80 | 2.00 |
| 22 | 25-8 | Christopher & Dennis Doyle | 410/80 | 3.30 |
| 23 | 25-6 | State of West Virginia Public Land Corp. | 331/497 | 216.30 |
| 24 | 25-10 | Christopher & Dennis Doyle | 410/80 | 13.00 |
| 25 | 25-13 | Christopher & Dennis Doyle | 410/80 | 38.50 |
| 26 | 25-16 | Coastal Forest Resources Co. | 444/105 | 139.57 |

FILE NO: 329-34-G-17
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Submeter
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CORS, Monroe County, OH



DATE: October 8 2021
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 API WELL NO MOD
47 — 103 — 03429
 STATE COUNTY PERMIT

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 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

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BH: Center Point
 DISTRICT: Green Dallison COUNTY: Well 4/05/2021
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 ROYALTY OWNER: Joan B. Hoge Trust; Waco Oil & Gas Co. Inc.; Terry Bartrug; William J. Walker; LEASE NO: _____ ACREAGE: 88.9563; 89; 244; 38.5

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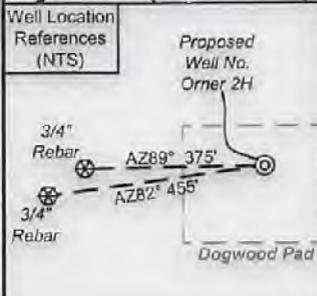


Sheet 1 of 2

47-103-672



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based upon Differential GPS Measurements.
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Well location references are based upon the magnetic
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I, the undersigned, hereby certify that this
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knowledge and belief and shows all the
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issued and prescribed by the
Department of Environmental Protection.

Bradley D. Miller, P.S. 2167

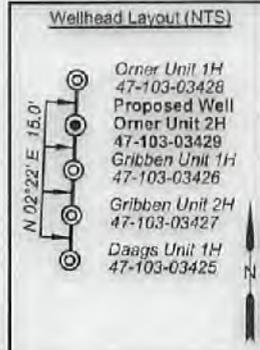


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API WELL NO ~~NWD~~
47 - 103 - 03429
STATE COUNTY PERMIT

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(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1,308' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove
DISTRICT: Green Dallison BRC Appalachian Minerals I, LLC (4) COUNTY: ~~Well~~ 7,9125;
SURFACE OWNER: Lumber, Inc. Sharon Hosey Seckman; Erwin Patterson; Christian Engle, et ux; Robert Okey Whiting; Kimberly A. Hoskins, et vir; J.M. Mayfield, et al; Tony Eugene Crabtree, et ux; Shiben Estates, Inc. (2); J. M. Mayfield, et al; Tony Eugene Crabtree, et ux; Shiben Estates, Inc. (2); LEASE NO: ACREAGE: 208 4.5; 76; 200; 50;
ROYALTY OWNER: Joan B. Hoge Trust; Waco Oil & Gas Co. Inc.; Terry Bartug; William J. Walker, LEASE NO: ACREAGE: 68,9563; 89; 244; 38.5 22.5; 39; 3.3; 47.5;
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Denver, CO 80202 Charleston, WV 25313



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| P | Frank L. Straight |
| Q | Kimberly A. Hoskins, et vir |
| R | Sharon Hosey Seckman |
| S | Erwin Patterson |
| T | Edward A. Schulte Jr. |
| U | BRC Appalachian Minerals I, LLC |

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| 8 | 22-5 | Robert L. Jr. & Donna K. Jones | 297/590 | 76.00 |
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| 11 | 22-19 | Coastal Forest Resources Co. | 444/105 | 155.30 |
| 12 | 22-20 | Lawrence J. Bish, et al | 420/736 | 63.23 |
| 13 | 22-29 | Timothy L. Yoho | 377/411 | 50.00 |
| 14 | 22-34 | Coastal Forest Resources Co. | 444/105 | 172.91 |
| 15 | 22-28 | Coastal Forest Resources Co. | 444/105 | 77.10 |
| 16 | 3-11 | Dominic J. & Dalmer M. Kowalski | 317/307 | 106.94 |
| 17 | 25-2 | Coastal Forest Resources Co. | 444/105 | 61.93 |
| 18 | 25-3 | Coastal Forest Resources Co. | 444/105 | 32.00 |
| 19 | 25-5 | Christopher & Dennis Doyle | 410/80 | 39.36 |
| 20 | 3-12 | David Schulte, et al | WB14/440 | 80.73 |
| 21 | 25-9 | Christopher & Dennis Doyle | 410/80 | 2.00 |
| 22 | 25-8 | Christopher & Dennis Doyle | 410/80 | 3.30 |
| 23 | 25-6 | State of West Virginia Public Land Corp. | 331/497 | 216.30 |
| 24 | 25-10 | Christopher & Dennis Doyle | 410/80 | 13.00 |
| 25 | 25-13 | Christopher & Dennis Doyle | 410/80 | 38.50 |
| 26 | 25-16 | Coastal Forest Resources Co. | 444/105 | 139.57 |

FILE NO: 329-34-G-17
DRAWING NO: Orner 2H BHL MOD
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Monroe County, OH

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

DATE: October 8 20 21
OPERATOR'S WELL NO. Orner Unit 2H
API WELL NO **MOD**
47 - 103 - 03429
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1,308' WATERSHED: Fishing Creek

QUADRANGLE: TH: Pine Grove
BH: Center Point

DISTRICT: Green Dallison

BRC Appalachian Minerals I, LLC (4)

COUNTY: Wayne

SURFACE OWNER: Lumber, Inc.

Sharon Hosey Seckman; Erwin Patterson;
Christian Engle, et ux; Robert Okey Whiting; Kimberly A. Hoskins, et vir;
J.M. Mayfield, et al; Tony Eugene Crabtree, et ux; Shiben Estates, Inc. (2);

ACREAGE: 208

ROYALTY OWNER: Joan B. Hoge Trust; Waco Oil & Gas Co. Inc.; Terry Bartrug; William J. Walker;

LEASE NO:

ACREAGE: 68.9563; 89; 244, 38.5

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
27,100' MD

WELL OPERATOR: Antero Resources Corporation

DESIGNATED AGENT: Dianna Stamper - CT Corporation System

ADDRESS: 1615 Wynkoop Street
Denver, CO 80202

ADDRESS: 5400 D Big Tyler Road
Charleston, WV 25313

WW-6A1

Operator's Well Number Orner Unit 2H

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 |
|---|---|--|---|
| B <u>Waco Oil & Gas, Inc. Lease</u> Waco Oil & Gas, Inc. | Antero Resources Corporation | 1/8+ | 0184/0741 |
| D <u>Terry Bartrug Lease</u> Terry Bartrug | Antero Resources Corporation | 1/8+ | 192A/0903 |
| C <u>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 Title Holder LLC SWN Production Company, LLC Antero Exchange Properties LLC | BRC Working Interest Company, LLC Chesapeake Appalachia, LLC Statoil USA Onshore Properties, Inc. SWN Exchange Title Holder LLC SWN Production Company, LLC Antero Exchange Properties LLC Antero Resources Corporation | 1/8+ Assignment Assignment Assignment Merger Assignment Merger | 102A/0505 103A/0470 120A/0109 158A/0801 0013/0296 177A/0533 0013/0311 |
| E <u>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 Title Holder LLC SWN Production Company, LLC Antero Exchange Properties LLC | BRC Working Interest Company, LLC Chesapeake Appalachia, LLC Statoil USA Onshore Properties, Inc. SWN Exchange Title Holder LLC SWN Production Company, LLC Antero Exchange Properties LLC Antero Resources Corporation | 1/8+ Assignment Assignment Assignment Merger Assignment Merger | 102A/0505 103A/0470 120A/0109 158A/0801 0013/0296 177A/0533 0013/0311 |
| F <u>William J. Walker Lease</u> William J. Walker | Antero Resources Corporation | 1/8+ | 197A/0361 |
| I <u>Tony Eugene Crabtree, et ux Lease</u> Tony Eugene Crabtree, et ux | Antero Resources Corporation | 1/8+ | 230A/0034 |
| H <u>J.M. Mayfield, et al Lease</u> J.M. Mayfield, et al Carnegie Natural Gas Company Perkins Oil and Gas Inc Stone Energy Corporation EQT Productions Company | Carnegie Natural Gas Company Perkins Oil and Gas Inc Stone Energy Corporation EQT Productions Company Antero Resources Corporation | 1/8 Assignment Assignment Assignment Assignment | 012A/0529 074A/0277 126A/0958 183A/0305 203A/0783 |
| J <u>Shiben Estates, Inc Lease</u> Shiben Estates, Inc | Antero Resources Corporation | 1/8+ | 257A/0029 |
| K <u>Shiben Estates, Inc Lease</u> Shiben Estates, Inc | Antero Resources Corporation | 1/8+ | 257A/0449 |

11/05/2021

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| | Grantor, lessor, etc. | Grantee, lessee, etc. | Royalty | Book/Page |
|---|---|---|------------|-----------|
| | <u>Christian Engle, et ux Lease</u> | | | |
| L | Christian Engle, et ux | C.B. Shaffer | 1/8 | 0055/0082 |
| | C.B. Shaffer | South Penn Oil Company | Assignment | UNKNOWN |
| | South Penn Oil Company | Tri State Gas Company | Assignment | 0059/0429 |
| | Tri State Gas Company | Manufacturers Light and Heat Company | Assignment | 009A/0141 |
| | Manufacturers Light and Heat Company | A.M Snider and Duane M Snider and Kathleen Rhinehart partners dba Hundred Gas Company | Assignment | 048A/0109 |
| | A.M Snider and Duane M Snider and Kathleen Rhinehart partners dba Hundred Gas Company | Hundred Gas Company | Assignment | 0256/0189 |
| | Hundred Gas Company | Carl D Perkins | Assignment | 055A/0062 |
| | Carl D Perkins | Perkins Oil and Gas Inc | Assignment | 075A/0621 |
| | Perkins Oil and Gas Inc | Stone Energy Corporation | Assignment | 126A/0958 |
| | Stone Energy Corporation | EQT Production Company | Assignment | 183A/0305 |
| | EQT Production Company | Antero Resources Corporation | Assignment | 203A/0783 |
| M | <u>Robert Okey Whiting Lease</u> | | | |
| | Robert Okey Whiting | Antero Resources Corporation | 1/8+ | 198A/0537 |
| | <u>BRC Appalachian Minerals I, LLC Lease</u> | | | |
| N | BRC Appalachian Minerals I, LLC | BRC Working Interest Company, LLC | 1/8+ | 102A/0505 |
| | BRC Working Interest Company, LLC | Chesapeake Appalachia, LLC | Assignment | 103A/0470 |
| | Chesapeake Appalachia, LLC | Statoil USA Onshore Properties, Inc. | Assignment | 120A/0109 |
| | Statoil USA Onshore Properties, Inc. | SWN Exchange Title Holder LLC | Assignment | 158A/0801 |
| | SWN Exchange Title Holder LLC | SWN Production Company, LLC | Merger | 0013/0296 |
| | SWN Production Company, LLC | Antero Exchange Properties LLC | Assignment | 177A/0533 |
| | Antero Exchange Properties LLC | Antero Resources Corporation | Merger | 0013/0311 |
| Q | <u>Kimberly A. Hoskins, et vir Lease</u> | | | |
| | Kimberly A. Hoskins, et vir | Antero Resources Corporation | 1/8+ | 219A/0932 |
| R | <u>Sharon Hosey Seckman Lease</u> | | | |
| | Sharon Hosey Seckman | Antero Resources Corporation | 1/8+ | 226A/0623 |
| | <u>BRC Appalachian Minerals I, LLC Lease</u> | | | |
| U | BRC Appalachian Minerals I, LLC | BRC Working Interest Company, LLC | 1/8+ | 102A/0505 |
| | BRC Working Interest Company, LLC | Chesapeake Appalachia, LLC | Assignment | 103A/0470 |
| | Chesapeake Appalachia, LLC | Statoil USA Onshore Properties, Inc. | Assignment | 120A/0109 |
| | Statoil USA Onshore Properties, Inc. | SWN Exchange Title Holder LLC | Assignment | 158A/0801 |
| | SWN Exchange Title Holder LLC | SWN Production Company, LLC | Merger | 0013/0296 |
| | SWN Production Company, LLC | Antero Exchange Properties LLC | Assignment | 177A/0533 |
| | Antero Exchange Properties LLC | Antero Resources Corporation | Merger | 0013/0311 |
| S | <u>Erwin Patterson Lease</u> | | | |
| | Erwin Patterson | Antero Resources Corporation | 1/8+ | 235A/0106 |

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Chapter 22, Article 6A, Section 5(a)(5)
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| Lease Name or Number | Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page |
|---------------------------------|--------------------------------------|--------------------------------------|------------|-----------|
| BRC Appalachian Minerals I, LLC | | | | |
| ✓ | BRC Appalachian Minerals I, LLC | BRC Working Interest Company, LLC | 1/8+ | 102A/0505 |
| | BRC Working Interest Company, LLC | Chesapeake Appalachia, LLC | Assignment | 103A/0470 |
| | Chesapeake Appalachia, LLC | Statoil USA Onshore Properties, Inc. | Assignment | 120A/0109 |
| | Statoil USA Onshore Properties, Inc. | SWN Exchange Title Holder LLC | Assignment | 158A/0801 |
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| | SWN Production Company, LLC | Antero Exchange Properties LLC | Assignment | 177A/0533 |
| | Antero Exchange Properties LLC | Antero Resources Corporation | Merger | 0013/0311 |

*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.

**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: VP of Land



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

Modification Horizontal H6A Well Work Permit (API: 47-103-03429)

1 message

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

Tue, Nov 2, 2021 at 9:02 AM

To: mhamsher@anteroresources.com, Dani DeVito <ddevito@shalepro.com>, Scott Lemley <slemley@wvassessor.com>, "Harris, Bryan O" <bryan.o.harris@wv.gov>

I have attached a copy of the newly issued well [permit](#) number "**ORNER UNIT 2H**". This will serve as your copy.

If you have any questions, then [please](#) contact us here at the Office of Oil and Gas.

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

 **47-103-03429 - mod.pdf**
1396K

11/05/2021