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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 29, 2022  
PERMIT MODIFICATION APPROVAL  
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION  
1615 WYNKOOP STREET

DENVER, CO 80202


Re: Permit Modification Approval for REDWOOD 2H  
47-017-06931-00-00

Lateral Extension, Drilling near other laterals

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: REDWOOD 2H  
Farm Name: MICHAEL R BRITTON & ANGELA D PRATT  
U.S. WELL NUMBER: 47-017-06931-00-00  
Horizontal 6A New Drill  
Date Modification Issued: 8/29/2022

Promoting a healthy environment.

09/02/2022

Ch#  
4012208  
\$5000  
Exp Mod

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

- 1) Well Operator: Antero Resources Corporation 494507062 017 - Doddri West Uni West Union 7.5'  
Operator ID County District Quadrangle
- 2) Operator's Well Number: Redwood Unit 2H MOD Well Pad Name: Oxford 98 Pad
- 3) Farm Name/Surface Owner: Michael R. Britton & Angela D. Prall Public Road Access: CR 11/4
- 4) Elevation, current ground: 1120' AS-BUILT Elevation, proposed post-construction: \_\_\_\_\_
- 5) Well Type (a) Gas  Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_  
Other \_\_\_\_\_  
(b) If Gas Shallow  Deep \_\_\_\_\_  
Horizontal  *SPU*  
*8/25/2022*
- 6) Existing Pad: Yes or No Yes
- 7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus Shale: 6600' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#
- 8) Proposed Total Vertical Depth: 6600' TVD
- 9) Formation at Total Vertical Depth: Marcellus
- 10) Proposed Total Measured Depth: 16400'
- 11) Proposed Horizontal Leg Length: 7195.3'
- 12) Approximate Fresh Water Strata Depths: 123'
- 13) Method to Determine Fresh Water Depths: 47-017-02837, 47-017-06326 Offset well records. Depths have been adjusted according to surface elevations.
- 14) Approximate Saltwater Depths: 1653'
- 15) Approximate Coal Seam Depths: 120'
- 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**

<b>TYPE</b>	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	20"	New	H-40	79#	80'	80'	CTS, 77 Cu. Ft.
Fresh Water	13-3/8"	New	J/K-55	54.5#	300'	300'	CTS, 313 Cu. Ft.
Coal	9-5/8"	New	J-/K55	36#	2500'	2500'	CTS, 1018 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110CY	20#	16400'	16400'	CTS, 3215 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

*SOW  
8/25/2022*

<b>TYPE</b>	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
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	~1.8
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 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): 24.47 acres

22) Area to be disturbed for well pad only, less access road (acres): 5.73 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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Office of Oil and Gas

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

AUG 18 2022

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

WV Department of Environmental Protection

25) Proposed borehole conditioning procedures:

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

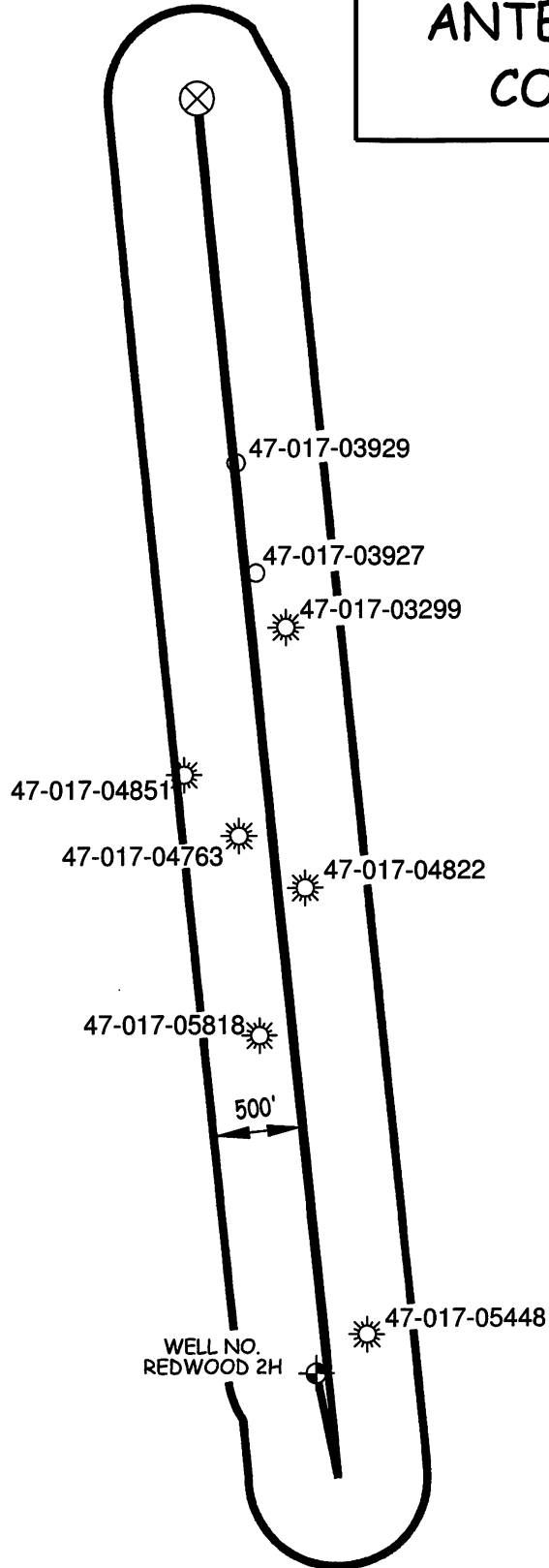
Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

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


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

\*Note: Attach additional sheets as needed.

# OXFORD 98 PAD ANTERO RESOURCES CORPORATION



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Office of Oil and Gas  
**AUG 18 2022**  
West Virginia Department of  
Environmental Protection

<b>WILLOW LAND SURVEYING, PLLC</b> P.O. BOX 17, PENNSBORO, WV 26415 (304) 659-1717	JOB #: 22-005WA	<b>SCALE : 1-INCH = 1000-FEET</b> 0'                      1000'                      2000'                      3000' 
DATE: 08/04/22	DRAWN BY: D.L.P.	FILE: REDWOOD2HAOR.DWG

09/02/2022

Redwood 2H

UWI (API Num)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Producible Formation(s) not perf'd
47017032990000	NETZER J S HEIRS	454	DIVERSIFIED PROD LLC	CNG DEVELOPMENT CO	5,185	4928 - 4971	Gordon, Speechley, Baittown, Alexander	Weir, Berea, Benson
47017048510000	FLEMING	7	KEY OIL CO	KEY OIL CO	5,280	3133 - 5094	Speechley, Riley, Benson, Alexander	Weir, Berea
47017047630000	FLEMING	3	KEY OIL CO	KEY OIL CO	5,476	3415 - 5346	Warren, Speechley, Baittown, Riley, Benson, Alexander	Weir, Berea
47017048220000	FLEMING	6	KEY OIL CO	KEY OIL CO	2,743	1931 - 2600	Big Injun, Gordon	Weir, Berea, Benson
47017058180000	DEPI	15127	DIVERSIFIED PROD LLC	DOMINION EXPL&PROD	5,327	3274 - 5209	Warren, Baittown, Riley, Alexander	Weir, Berea, Benson
47017054480000	DEPI	15129	DIVERSIFIED PROD LLC	DOMINION EXPL&PROD	5,310	2589 - 5174	Gordon, Warren, Riley, Alexander	Weir, Berea, Benson
47017039270000	ANDREW GAINS	1	DILMUR OIL	DILMUR OIL				Weir, Berea, Benson
47017039290000	ANDREW GAINS	1	TARGA DEV INC	DILMUR OIL				Weir, Berea, Benson

LATITUDE 39°17'30"

2,254'

LATITUDE 39°17'30"

2,992' TO BOTTOM HOLE

6,952' TO BOTTOM HOLE

14,039'

LONGITUDE 80°47'30"

Antero Resources Corporation Well No. Redwood 2H

NOTES:

WELL 2H TOP HOLE INFORMATION: N: 276,964ft E: 1,631,974ft LAT: 39°15'11.24" LON: 80°47'58.66" BOTTOM HOLE INFORMATION: N: 284,061ft E: 1,631,339ft LAT: 39°16'21.29" LON: 80°48'08.04" 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.

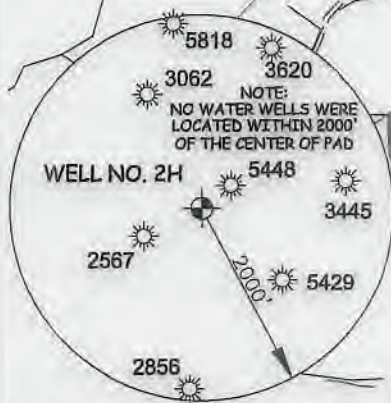
(NAD) 83 (UTM) ZONE 17 COORDS: WELL 2H TOP HOLE INFORMATION: N: 4,344,895m E: 517,303m BOTTOM HOLE INFORMATION: N: 4,347,054m E: 517,074m

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 2H TOP HOLE INFORMATION: N: 14,254,161ft E: 1,697,139ft POINT OF ENTRY INFORMATION: N: 14,254,099ft E: 1,697,211ft BOTTOM HOLE INFORMATION: N: 14,261,244ft E: 1,696,386ft

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.

Table listing landowners and lease information for the West Union District, including names like Alfred Perine, Gail DeBerry, Lisa Meyer, Dennis Hayes, Marvin Rollins, Glenn Whitehair, Mark Smith, Michael Mignaneli, Richard Leggett, Richard Leggett, Richard Leggett, Mary Neeler, Danny Harris, Roger Batten, Danny Harris, Coastal Forest Resources Co, Doddridge County Board of Education, Coastal Forest Resources Co, Coastal Forest Resources Co, Coastal Forest Resources Co, Drexelene Perrine, Michael Wilkinson, John Trent, Loren Smith, Kenneth Hughes, Glade Perine, Donald Perine, EQM Gathering OPCO LLC, Michael Britton, Russell Nielson, Arnold Creek UB Church, Michael Wilkinson, Loren Smith, EQM Gathering OPCO LLC, Loren Smith, Jessie Vanscoy, Loren Smith, Diane Bennett, CNE Transmission Corp, Loren Smith, Mary Sechrist.

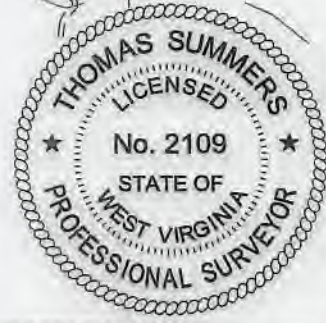
WV NORTH ZONE GRID NORTH



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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

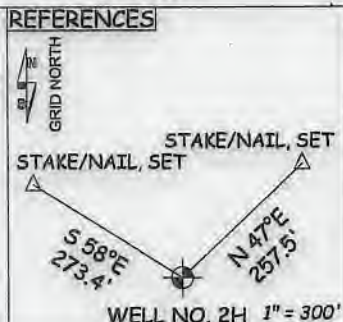
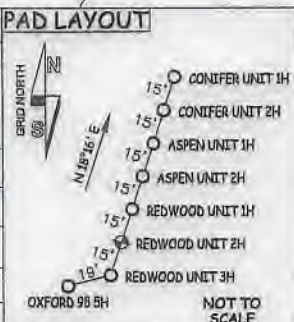


STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS. WILLOW LAND SURVEYING PLLC, 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415.



JOB # 19-039WA DRAWING # REDWOOD2H SCALE 1" = 2000' MINIMUM DEGREE OF ACCURACY SUBMETER PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

LEGEND: Surface Owner Boundary Lines +/-, Adjoining Surface Tracts +/-, Found monument, as noted. Signature of Thomas Summers, P.S. 2109. DATE 08/04/22 OPERATOR'S WELL # REDWOOD 2H



WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_ 47 - 017 - 06931 (IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X STATE COUNTY PERMIT LOCATION: ELEVATION 1,120' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK QUADRANGLE WEST UNION 7.5 DISTRICT WEST UNION COUNTY DODDRIDGE SURFACE OWNER MICHAEL R. BRITTON & ANGELA D. PRATT ACREAGE 136.56 ACRES +/- OIL & GAS ROYALTY OWNER MICHAEL S. FRANCIS ET AL; RICHARD W. MINNIS ET AL; LEASE ACREAGE 173 AC±; 69 AC±; JAMES P. GAINES ET UX; SHIRLEY W. FLEMING; FRANKLIN L. BUTLER; J.S.NETZER ET UX; 200 AC±; 29 AC±; 109 AC±; 85 AC±; WILMER ROLLINS ET UX; EMORY ROLLINS ET UX; A. K. ROLLINS ET UX; 75 AC±; 44 AC±; 40 AC± PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER X REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) MOD-BHL PLUG & ABANDON CLEAN OUT & REPLUG TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,600' TVD 16,400' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

09/02/2022

COUNTY NAME

PERMIT

LATITUDE 39°17'30"

2,254'

LATITUDE 39°17'30"

2,992' TO BOTTOM HOLE

Antero Resources Corporation  
Well No. Redwood 2H

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14-02	Alfred Perrine
14-03	Gail DeBerry
14-06	Lisa Meyer
14-07	Dennis Hayes
14-09	Marvin Rollins
14-16	Glenn Whitehair
14-17	Mark Smith
14-18	Michael Mignaneli
14-19.1	Richard Leggett
14-19.3	Richard Leggett
14-19.4	Richard Leggett
14-20	Mary Nesler
15-01	Danny Harris
15-11	Roger Barton
15-02	Danny Harris
15-06	Coastal Forest Resources Co
15-6.1	Doddridge County Board of Education
15-09	Coastal Forest Resources Co
15-10	Coastal Forest Resources Co
15-11	Coastal Forest Resources Co
15-12	Drexelene Parrine
15-12.1	Michael Wilkison
15-12.2	Michael Wilkison
15-12.4	John Trent
15-13	Loren Smith
15-14	Kenneth Hughes
15-16	Glide Perrine
19-09	Donald Perrine
19-10	EQM Gathering OPCO LLC
19-15	Michael Britton
19-23.2	Russell Nelson
20-01	Arnolds Creek UB Church
20-02	Michael Wilkison
20-03	Loren Smith
20-04	EQM Gathering OPCO LLC
20-05	Loren Smith
20-08	Loren Smith
20-8.1	Jessie Vanacoy
20-09	Loren Smith
20-11	Diane Bennett
20-12	CNG Transmission Corp
20-13	Loren Smith
20-14	Mary Secrist

WV NORTH ZONE  
GRID NORTH

6,952' TO BOTTOM HOLE

LONGITUDE 80°47'30"

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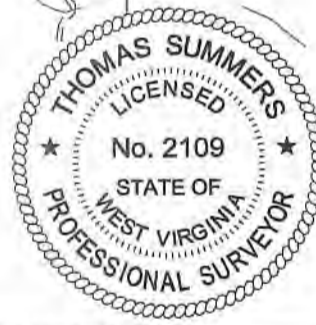


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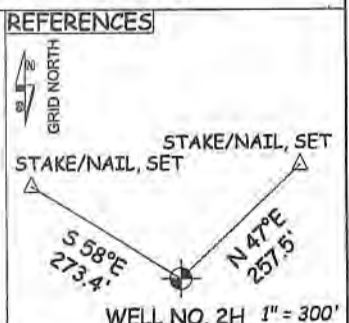
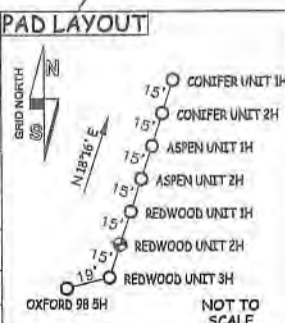
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC  
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415



JOB # 19-039WA  
DRAWING # REDWOOD2H  
SCALE 1" = 2000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND  
— — — Surface Owner Boundary Lines +/-  
- - - - - Adjoining Surface Tracts +/-  
⊕ Found monument, as noted



STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

THOMAS SUMMERS P.S. 2109  
DATE 08/04/22  
OPERATOR'S WELL# REDWOOD 2H

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  47 - 017 - 06931  
(IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW  STATE COUNTY PERMIT  
LOCATION: ELEVATION 1,120' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK  
QUADRANGLE WEST UNION 7.5' DISTRICT WEST UNION COUNTY DODDRIDGE  
SURFACE OWNER MICHAEL R. BRITTON & ANGELA D. PRATT ACREAGE 136.56 ACRES +/- 09/02/2022  
OIL & GAS ROYALTY OWNER MICHAEL S. FRANCIS ET AL; RICHARD W. MINNIS ET AL; LEASE ACREAGE 173 AC±; 69 AC±;  
JAMES P. GAINES ET UX; SHIRLEY W. FLEMING; FRANKLIN L. BUTLER; J.S. NETZER ET UX; 200 AC±; 29 AC±; 109 AC±; 85 AC±;  
WILMER ROLLINS ET UX; EMORY ROLLINS ET UX; A. K. ROLLINS ET UX; 75 AC±; 44 AC±; 40 AC±

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL  
(SPECIFY) MOD-BHL PLUG & ABANDON CLEAN OUT & REPLUG  
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,600' TVD 16,400' MD  
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM  
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD  
DENVER, CO 80202 CHARLESTON, WV 25313



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>Michael S. Francis, et al Lease</u></b>			
Michael Francis, et al	Key Oil Company	1/8	0106/0273
Key Oil Company	Columbia Gas Transmission Corporation	Assignment	0115/0436
Columbia Gas Transmission Corporation	Columbia Natural Resources Inc	Assignment	0161/0068
Columbia Natural Resources Inc	Columbia Natural Resources LLC	Name Change	0256/0588
Columbia Natural Resources LLC	Chesapeake Appalachia LLC	Merger	0264/0447
Chesapeake Appalachia LLC	CNX Gas Company	Assignment	0372/0585
<b>CNX Gas Company</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0387/0216</b>
<b><u>Richard W. Minnis, et al Lease</u></b>			
Richard W. Minnis, et al	Consolidated Gas Supply Corporation	1/8	0095/0706
Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	0135/0583
Consolidated Gas Transmission Corporation	CNG Development Company	Assignment	0139/0041
CNG Development Company	Dominion Exploration & Production Inc	Name Change	WV SOS
Dominion Exploration & Production Inc	Dominion Transmission Inc	Assignment	0244/0528
Dominion Transmission Inc	CONSOL Gas Company	Name Change	0292/0469
CONSOL Gas Company	CNX Gas Company, LLC	Name Change	0293/0252
<b>CNX Gas Company, LLC</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0325/0507</b>
<b><u>Michael S. Francis, et al Lease</u></b>			
Michael Francis, et al	Key Oil Company	1/8	0106/0273
Key Oil Company	Columbia Gas Transmission Corporation	Assignment	0115/0436
Columbia Gas Transmission Corporation	Columbia Natural Resources Inc	Assignment	0161/0068
Columbia Natural Resources Inc	Columbia Natural Resources LLC	Name Change	0256/0588
Columbia Natural Resources LLC	Chesapeake Appalachia LLC	Merger	0264/0447
Chesapeake Appalachia LLC	CNX Gas Company	Assignment	0372/0585
<b>CNX Gas Company</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0387/0216</b>
<b><u>James P. Gaines, et ux Lease</u></b>			
James P. Gaines, et ux	Hope Natural Gas Company	1/8	0022/0228
Hope Natural Company	Consolidated Gas Supply Corporation	Assignment	0143/0345
Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	0135/0583
Consolidated Gas Transmission Corporation	CNG Transmission Corporation	Assignment	0332/0563
CNG Transmission Corporation	Dominion Transmission Inc	Assignment	0332/0570
Dominion Transmission Inc	CNX Gas Company LLC	Assignment	0325/0517
<b>CNX Gas Company LLC</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0628/0257</b>

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>Shirley W. Flemming Lease</u></b>			
Shirley W. Fleming	Key Oil Company	1/8	0107/0313
Key Oil Company	J & J Enterprises, Inc	Assignment	0111/0326
J & J Enterprises, Inc	Eastern American Energy Corporation	Merger	0211/0137
Eastern American Energy Corporation	Energy Corporation of America	Merger	0283/0431
Energy Corporation of America	Antero Resources Appalachian Corporation	Assignment	0272/0307
<b>Antero Resources Appalachian Corporation</b>	<b>Antero Resources Corporation</b>	<b>Name Change</b>	<b>0046/0523</b>
<b><u>Franklin L. Butler Lease</u></b>			
Franklin L. Butler	Key Oil Company	1/8	0195/0445
Key Oil Company	Antero Resources Appalachian Corporation	Assignment	0256/0285
<b>Antero Resources Appalachian Corporation</b>	<b>Antero Resources Corporation</b>	<b>Name Change</b>	<b>0046/0523</b>
<b><u>J.S. Netzer, et ux Lease</u></b>			
J.S. Netzer, et ux	Hope Natural Gas Company	1/8	0035/0362
Hope Natural Gas Company	Consolidated Gas Supply Corporation	Merger	0143/0345
Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	0135/0583
Consolidated Gas Transmission Corporation	CNG Development Company	Assignment	0139/0041
CNG Development Company	Dominion Exploration & Production Inc.	Name Change	WV SOS
Dominion Exploration & Production Inc.	Dominion Transmission Inc	Assignment	0244/0528
Dominion Transmission Inc	CONSOL Gas Company	Name Change	0292/0469
CONSOL Gas Company	CNX Gas Company, LLC	Name Change	0293/0252
<b>CNX Gas Company, LLC</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0628/0257</b>
<b><u>Wilmer Rollins, et ux Lease</u></b>			
Wilmer Rollins, et ux	C.H. Pigott	1/8	0031/0431
C.H. Pigott	Murphey Oil Company	Assignment	0040/0443
Murphey Oil Company	Dilmur Oil Company	Assignment	0091/0742
Dilmur Oil Company	Targa Development, Inc	Assignment	0165/0428
Targa Development, Inc	Antero Resources Corporation	Assignment	0257/0362
Antero Resources Corporation	CNX Gas Company	Assignment	0411/0160
<b>CNX Gas Company</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0387/0180</b>
<b><u>Emory K. Rollins, et ux Lease</u></b>			
Emory Rollins, et ux	Key Oil Company	1/8	0108/0768
Key Oil Company	Columbia Gas Transmission Corporation	Assignment	0115/0436
Columbia Gas Transmission Corporation	Columbia Natural Resources Inc	Assignment	0191/0085

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Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
Columbia Natural Resources Inc	Columbia Natural Resources LLC	Name Change	0256/0588
Columbia Natural Resources LLC	Chesapeake Appalachia LLC	Merger	0264/0447
Chesapeake Appalachia LLC	CNX Gas Company	Assignment	0372/0585
<b>CNX Gas Company</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0387/0216</b>
<b><u>A.K. Rollins, et ux Lease</u></b>			
A.K. Rollins, et ux	C.H. Pigott	1/8	0031/0433
C.H. Pigott	Murphey Oil Company	Assignment	0040/0443
Murphey Oil Company	Dilmur Oil Company	Assignment	0091/0742
Dilmur Oil Company	Targa Development, Inc	Assignment	0165/0428
Targa Development, Inc	Antero Resources Corporation	Assignment	0257/0362
Antero Resources Corporation	CNX Gas Company	Assignment	0411/0160
<b>CNX Gas Company</b>	<b>Antero Resources Corporation</b>	<b>Assignment</b>	<b>0387/0180</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.**



Stansberry, Wade A &lt;wade.a.stansberry@wv.gov&gt;

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**Expedited Modification Horizontal H6A Well Work Permits API: (47-017-06926, 06930, 06931, 06932)**

1 message

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

Tue, Aug 30, 2022 at 10:51 AM

To: Mallory Stanton &lt;mstanton@anteroresources.com&gt;, Diane Blair &lt;dblair@anteroresources.com&gt;, Dani DeVito &lt;ddevito@shalepro.com&gt;, "Blevins, Cragin" &lt;cragin.blevins@wv.gov&gt;, David Sponaugle &lt;dsponaug@assessor.state.wv.us&gt;, "Ward, Samuel D" &lt;samuel.d.ward@wv.gov&gt;

I have attached a copy of the newly issued well [permit](#) numbers:

**47-017-06926 - ASPEN 1H**  
**47-017-06930 - REDWOOD 1H**  
**47-017-06931 - REDWOOD 2H**  
**47-017-06932 - REDWOOD 3H**

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)**


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**4 attachments**

 **47-017-06926 - mod.pdf**  
1635K

 **47-017-06930 - mod.pdf**  
997K

 **47-017-06931 - mod.pdf**  
989K

 **47-017-06932 - mod.pdf**  
1058K

**09/02/2022**