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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 January 31, 2022  
PERMIT MODIFICATION APPROVAL  
New Drill / Modification

ANTERO RESOURCES CORPORATION  
1615 WYNKOOP STREET  
DENVER, CO 80202

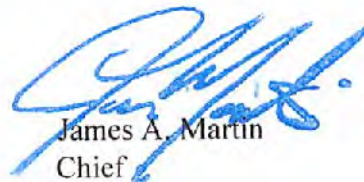
Re: Permit Modification Approval for WELDER UNIT 2H  
47-103-03462

**Extending Lateral**

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: WELDER UNIT 2H  
Farm Name: ANTERO RESOURCES CORPORATION  
U.S. WELL NUMBER: 47-103-03462  
New Drill Modification  
Date Modification Issued: 01/31/2022

Promoting a healthy environment.

03/04/2022

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

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

2) Operator's Well Number: Welder Unit 2H Well Pad Name: Journeyman Pad

3) Farm Name/Surface Owner: Antero Resources Corporation Public Road Access: Eight Mile Road

4) Elevation, current ground: 1,175' Elevation, proposed post-construction: 1,154'

5) Well Type (a) Gas  Oil  Underground Storage

Other

(b) If Gas Shallow  Deep

Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus Shale: 7400' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 7,400'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 27,100'

11) Proposed Horizontal Leg Length: 16,471'

12) Approximate Fresh Water Strata Depths: 52'

13) Method to Determine Fresh Water Depths: 103-00326, Depths have been adjusted according to surface elevations

14) Approximate Saltwater Depths: 1,642' (reference well 103-00326)

15) Approximate Coal Seam Depths: 960' (reference well 103-30927)

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

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

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

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WV Department of  
Environmental Protection

WW-6B  
(04/15)

API NO. 47- 103 - 03482 MOD  
 OPERATOR WELL NO. Welder Unit 2H  
 Well Pad Name: Journeyman Pad

18)

**CASING AND TUBING PROGRAM**

<u>TYPE</u>	<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	94#	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/K-55	36#	2500	2500	CTS, 1018 Cu. Ft.
Intermediate							
Production	5-1/2	New	PY-110	23#	27100	27100	CTS, 5901 Cu. Ft.
Tubing	2-3/8	New	N-80	4.7#			
Liners							

*Bryan Harris* 1/19/22

<u>TYPE</u>	<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"	0.438"	1530	50	Class A	~1.18
Fresh Water	13-3/8	17-1/2"	0.380"	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	8-3/8" & 8-1/2"	0.415"	12,630	9300		
Tubing	2-3/8	4.778"	0.190"	11,200		Lead-HPOZ & T&H	H/POZ-1.44 & H-1.8
Liners							

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**PACKERS**

WV Department of  
Environmental Protection

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.

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JAN 13 2022  
  
WV Department of  
Environmental Protection

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): 33.53

22) Area to be disturbed for well pad only, less access road (acres): 7.3

23) Describe centralizer placement for each casing string:

Conductor: No centralizers.  
Surface Casing: One centralizer 10' above the float shoe and one every 4th joint spaced up the hole to surface.  
Intermediate Casing: One centralizer above float joint, one centralizer 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.

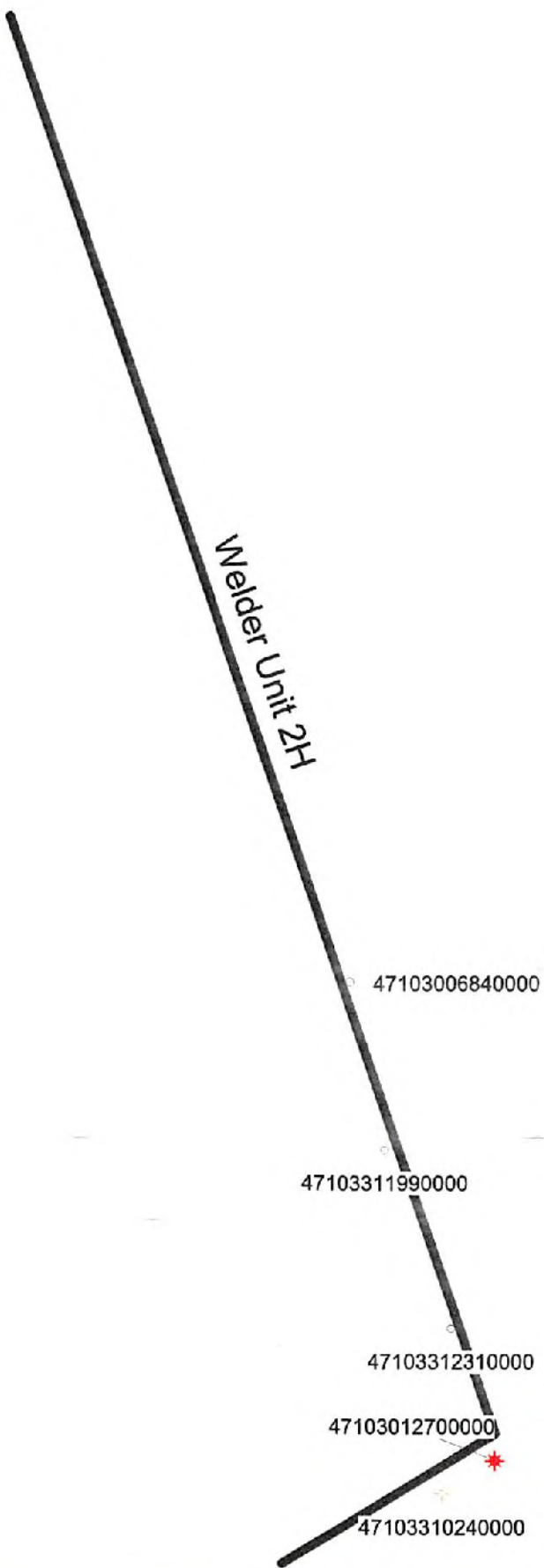
24) Describe all cement additives associated with each cement type:


Conductor: no additives, Class A cement.  
Surface Casing: Class A cement with 2-3% calcium chloride and 1/4 lb of flake.  
Intermediate Casing: Class A cement with 1/4 lb of flake, 5 gallons of clay treat.  
Production Casing 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 Casing Tail Cement: Class H + 45 PPS Calcium Carbonate + 1.0% Flake + 0.2% ACGB-47 + 0.05% ACSA-51 + 0.2% ACR-20.

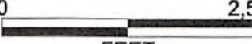
25) Proposed borehole conditioning procedures:



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**  
Welder Unit 2H - AOR

0  2,500  
FEET

**WELL SYMBOLS**  
Gas Well   
Plugged Gas Well 

January 17, 2022

03/04/2022

UWI (APINum)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Formation(s)	Producible Formation(s) not perf'd
47103012700000	WHEELING DOLLAR SAVINGS & TRUST	1	TATUM CHARLS R	TATUM CHARLS R	4,260	Berea, Gordon, Fifth, Warren, Balltown	Weir, Benson, Alexander
47103310240000	THOMAS O'BRIEN 1	1338	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT	2,630	Gordon	Weir, Benson, Alexander
47103312310000	THOMAS O'BRIEN	1337	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT		Gordon	Weir, Benson, Alexander
47103311990000	A F HIGGINS	2286	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT		Gordon	Weir, Benson, Alexander
47103006840000	U MILBURN	2224	EQUITABLE PROD CO	CONSOL GAS SUPPLY CRP	2,880	Gordon	Weir, Benson, Alexander

9,975' to Top Hole

1,202' to Bottom Hole

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

TOP HOLE LONGITUDE 80 - 42 - 30  
BTM HOLE LONGITUDE 80 - 45 - 00

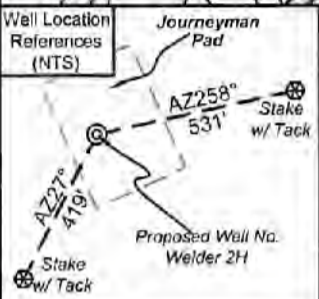
Antero Resources  
Well No. Welder 2H  
BHL MOD  
Antero Resources Corporation



Notes  
West Virginia Coordinate System  
of 1927, North Zone  
based upon Differential GPS Measurements.  
Well No. Welder Unit 2H Top Hole coordinates are  
N: 384,130.17' Latitude: 39°32'52.79"  
E: 1,649,294.98' Longitude: 80°44'37.35"  
Bottom Hole coordinates are  
N: 401,469.09' Latitude: 39°35'43.77"  
E: 1,646,555.86' Longitude: 80°45'15.41"  
UTM Zone 17, NAD 1983  
Top Hole Coordinates - Bottom Hole Coordinates  
N: 4,377,631.546m N: 4,382,900.036m  
E: 522,035.796m E: 521,113.254m  
Plat orientation and corner and well references  
are based upon the grid north meridian  
Well location references are based upon the magnetic  
meridian.

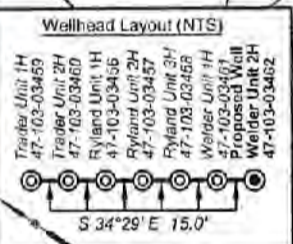
Notes:  
Well No. Welder Unit 2H  
UTM Zone 17, NAD 1927  
Top Hole Coordinates  
N: 14,361,564.10'  
E: 1,712,664.37'  
Point of Entry Coordinates  
N: 14,363,269.13'  
E: 1,714,963.89'  
Bottom Hole Coordinates  
N: 14,378,849.07'  
E: 1,709,637.00

Bearing	Dist.
L1 S 81°32' E	1,609.4'
L2 S 06°59' W	820.7'
L3 S 23°28' W	1,888.6'
L4 S 64°57' W	961.5'
L5 N 54°24' E	2,853.6'

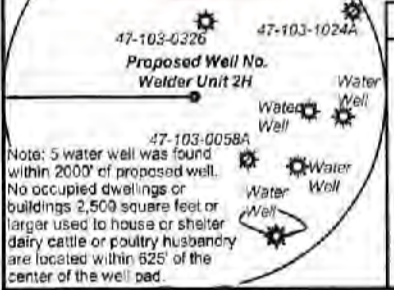


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Bradley D. Miller, P.S. 2167



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



FILE NO: 135-34-G-18  
DRAWING NO: Welder 2H BHL Mod  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: Submeter  
PROVEN SOURCE OF ELEVATION: CORS, Monroe County, OH

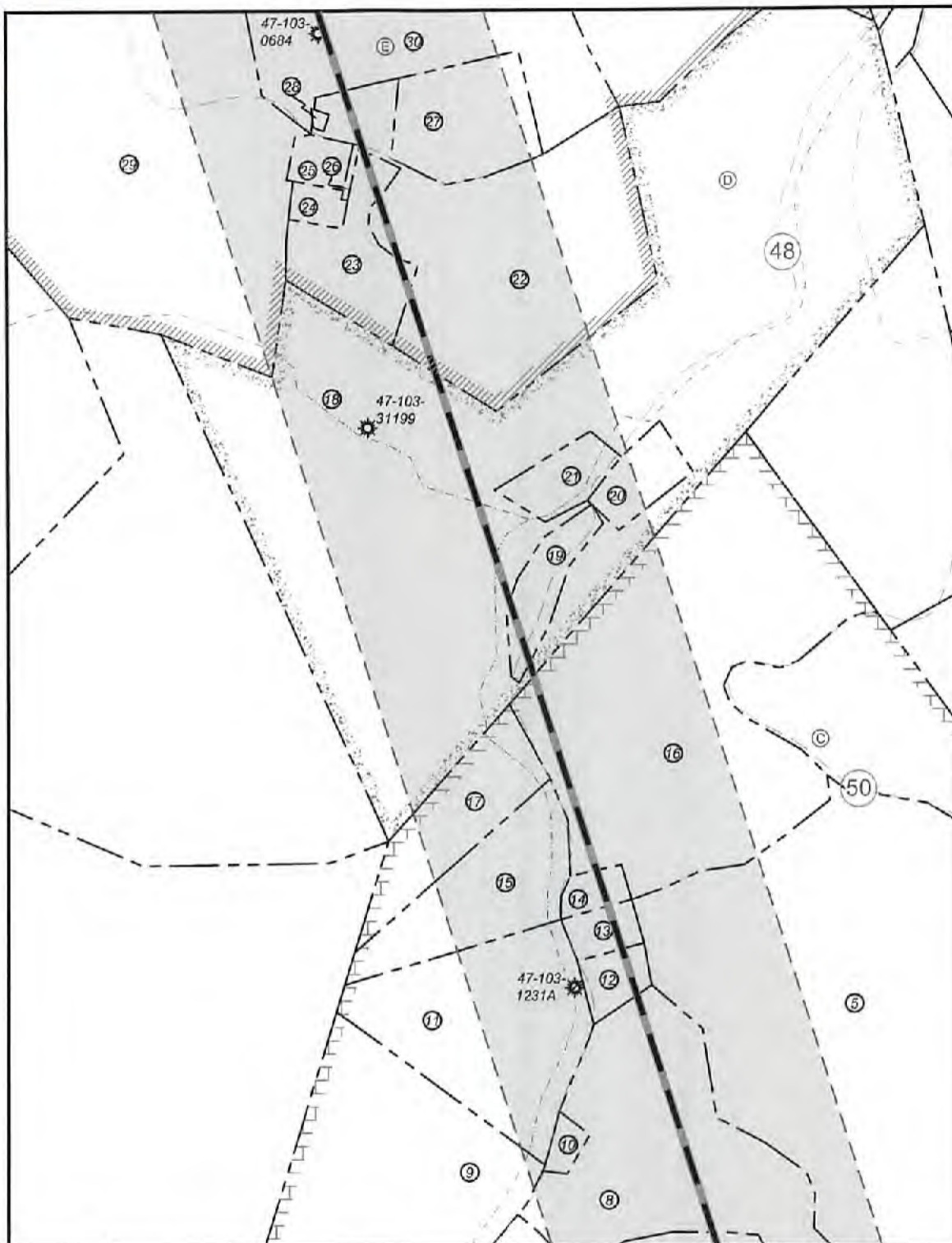
STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OIL AND GAS DIVISION

DATE: January 7 2022  
OPERATOR'S WELL NO. Welder Unit 2H  
API WELL NO  
47 - 103 - 03462  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION: ELEVATION: Existing 1,175' Proposed 1,154' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove 4,457; 537; 11875; Porter Falls 47.5; 167.650; 50;  
DISTRICT: Green Antero Resources Rocky G. Miracle, et ux; R. Kevin Hall & Ronald L. Hall, H. Don Higginbotham, et ux COUNTY: W 03/04/2022  
SURFACE OWNER: Corporation Jeffrey D. Brown; Judy Smith; Margaret Lancaster, et vir; Donald Ardell Howell; WDOH: 4.20; 2.77; 39.390;  
ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Antero Minerals, LLC; Dean H. Bucher. LEASE NO: ACREAGE: 47.5 0.604; 5.89; 1.25;  
PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD 7,400' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 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

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



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

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47 - 103 - 03462  
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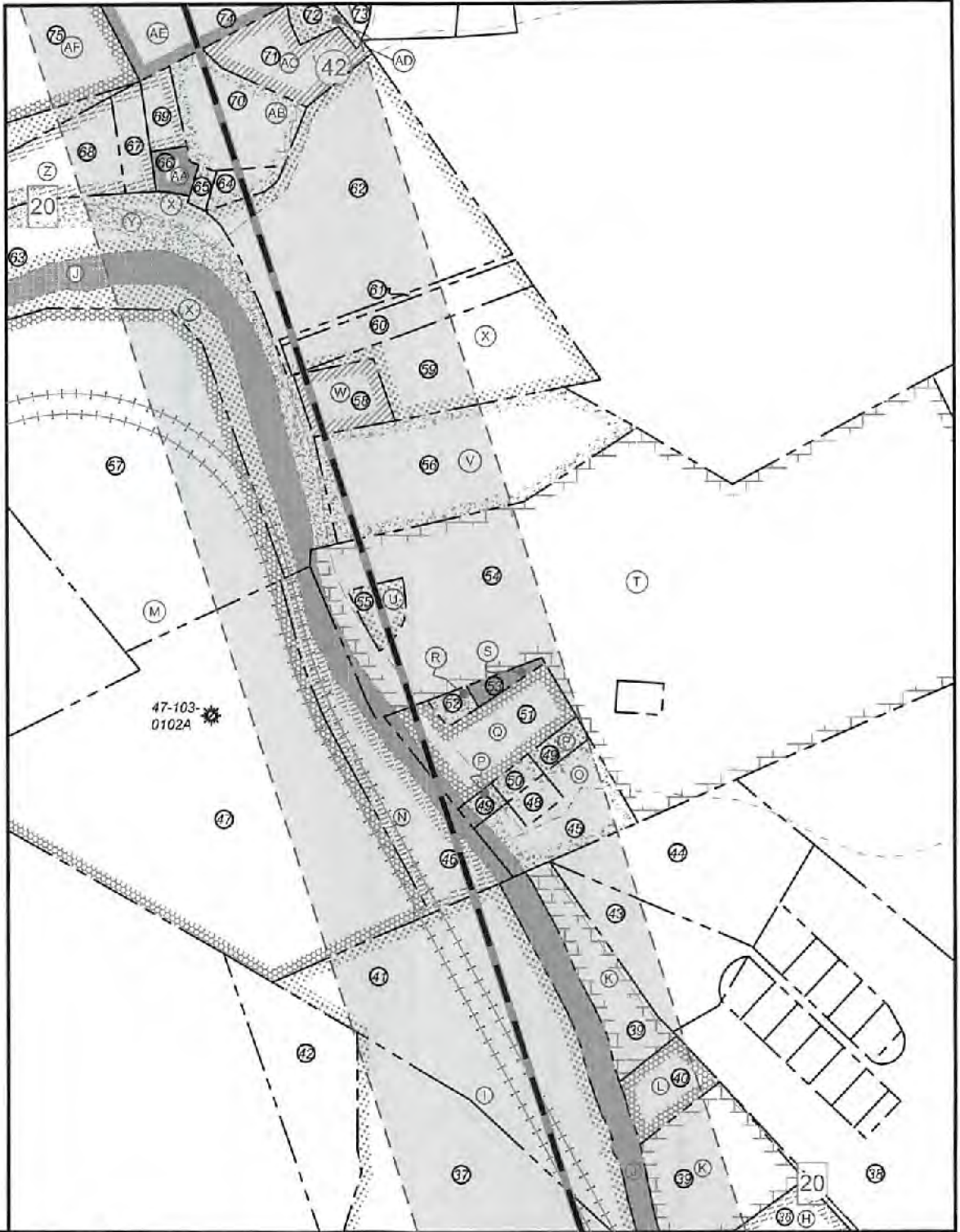
LOCATION: ELEVATION: Existing 1,175' Proposed 1,154' WATERSHED: Fishing Creek QUADRANGLE: TOP Hole: Pine Grove 4,457; 537,11875; 47,5; 187,650; 50; 42,0; 25; 42,25; 4,20; 2,71; 39,396; 0,604; 6,89; 1,25; 50,225; 57,38; 1,674; 3,19; 4,5; 76; 43,5  
 DISTRICT: Green Antero Resources Corporation WVDOH; Wilbur B. Dawson; Lloyd Lee King; Carolyn Jacobs Hampson; P&P Fujimo, LLC COUNTY: Wetzel  
 SURFACE OWNER: Corporation Rocky G. Miracle, et ux; R. Kevin Hall & Ronald L. Hall; H. Dom Higginbotham, et ux ACREAGE: 47.5  
 ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Antero Minerals, LLC; Dean H. Bucher; LEASE NO: \_\_\_\_\_ ACREAGE: \_\_\_\_\_

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
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**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**OIL AND GAS DIVISION**

DATE: January 7 2022  
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47 - 103 - 03462  
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DISTRICT: Green Antero Resources Corporation WVDNR; Wilbur B. Dawson; Lloyd Lee King; Carolyn Jacobs Hampson; P&P Fujimo, LLC COUNTY: Wetzel DATE: 03/04/2022  
 SURFACE OWNER: Corporation Rocky G. Miracle, et ux; R. Kevin Hall & Ronald L. Hall; H. Don Higginbotham, et ux  
 ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Steinaker; Antero Minerals, LLC; Dean H. Bucher; ACREAGE: 47.5 4,20; 2,71; 39,396; 0,604; 6,89; 1,25; 50,225; 57,38; 1,674; 3,19; 4,5; 76; 43,5

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

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



Leases	
A	Pamela Ann Palmer Emch
B	BRC Appalachian Minerals I LLC
C	William R. Stalnaker
D	Antero Minerals LLC
E	Dean H. Bucher
F	Melody Ree Posey
G	Coastal Forest Resources Co.
H	Nofa Jean Parks
I	Terry Lee Cummings
J	WVDNR
K	Betty C. Long
L	Gary R. Partridge, et ux
M	Dwain Ray Brown
N	Jeffrey D. Brown
O	Timothy L. McDiffitt, et ux
P	Daniel S. Brown
Q	Judy Smith
R	Margaret Lancaster

Leases	
S	Margaret Lancaster
T	Margaret Lancaster, et vir
U	Doris L. West
V	Rocky G. Miracle, et ux
W	R. Kevin Hall & Ronald L. Hall
X	H. Dorn Higginbotham, et ux
Y	WVDOH
Z	David L. Anderson
AA	Ray G. Ice, et ux
AB	Wilbur B. Dawson
AC	Donald Ardell Howell
AD	Samuel R. Haught, et ux
AE	Lloyd Lee King
AF	BRC Appalachian Minerals I LLC
AG	Lillian Friscilla Grimm
AH	Carolyn Jacobs Hampson
AI	P&P Fujimo LLC
AJ	Merla Delta Estrada
AK	Linda Headlee Malone, et vir

ID	TM/Par	Owner	Bk/Pg	Acres	ID	TM/Par	Owner	Bk/Pg	Acres
1	16-26	Antero Resources Corporation	474/713	47.50	43	13-19.3	Roger L. & Sarah M. Harrison	455/399	3.01
2	16-25	Antero Resources Corporation	474/713	39.00	44	13-19.2	Roger D. & Kimmie L. Long	313/183	4.99
3	17-22	Perry D. Bucher	411/759	37.65	45	13-12.3	Timothy L. & Tammy D. McDiffitt	441/68	2.24
4	17-68	Pennie Baker	411/735	42.41	46	13-12.5	Jeffrey D. Brown	383/701	4.20
5	17-23	Michael Steven Blinkman	461/443	40.10	47	13-12.8	Dwain Ray Brown	421/897	15.00
6	17-56	Pennie R. & Richard K. Bauer	368/273	1.83	48	13-12.2	Timothy L. & Tammy D. McDiffitt	441/69	0.34
7	17-60	Ross Bucher	411/765	79.00	49	13-12.4	Bradley Keith & Daniel Scott Brown	440/781	0.48
8	17-69	Pennie Baker	446/344	12.51	50	13-12.1	Timothy L. & Tammy D. McDiffitt	441/68	0.27
9	17-16.1	Douglas Alan & Shirley Joann Bucher	442/718	12.41	51	13-12	Judy Smith	341/320	2.71
10	17-15.8	Ross William Bucher, Jr.	411/765	0.37	52	13-3	Phillip Dale Haught	455/207	0.29
11	17-15.7	Jeremy & Terry Bucher	365/108	7.37	53	13-4	Phillip Dale Haught	465/207	0.32
12	17-15.2	Ross William Bucher, Jr.	411/765	0.84	54	13-6	Margaret Lancaster	333/440	39.40
13	17-15.3	Ross William Bucher, Jr.	292/329	0.73	55	13-6.1	Doris L. West	442/411	0.60
14	17-15.4	Steven C. & Bertie G. Blinkman	292/332	0.57	56	13-85	Rocky G. & Vicki S. Miracle	325/11	6.89
15	17-15.6	Jeremy & Terry Bucher	365/108	4.14	57	8-42	Dwain Ray Brown	421/897	22.00
16	17-57	Steven C. & Bertie G. Blinkman	368/243	20.60	58	8-38.4	Kevin R. & Ronald L. Hall	360/124	1.25
17	17-15.5	Jeremy & Terry Bucher	427/509	2.13	59	8-38.6	Kevin R. & Ronald L. Hall	360/124	4.25
18	13-69	Donald L. Mason	410/759	69.61	60	8-38.7	Robert & Carolyn Kocher	259/420	1.66
19	13-69.4	David P. & Jami D. Morris	450/428	1.47	61	8-38.10	Robert P. & Carolyn J. Kocher	484/459	0.36
20	13-69.3	David P. & Jami D. Morris	384/9	1.25	62	8-38.2	H. Dorn Higginbotham & Janet L. Workman Higginbotham	286/386	10.32
21	13-69.2	Carol S. Bishop	344/568	1.25	63	8-38.9	H. Dorn Higginbotham & Janet L. Workman Higginbotham	363/197	5.00
22	13-69	John Ronald & Johanna Shay Harter	437/867	14.62	64	8-38.3	Wilbur B. Dawson & Loretta P. Ueltschy	378/108	0.48
23	13-68.2	John R. & Johanna S. Harter	437/873	2.87	65	8-38.12	Wilbur B. Dawson & Loretta P. Ueltschy	378/108	0.19
24	XX-XX	Milburn Cemetery Association	299/524	0.52	66	8-38	Ray G. & Thelma L. Ice	387/290	2.00
25	13-68	Milburn Cemetery Association	---	0.84	67	8-38.8	David L. Anderson	340/578	0.77
26	13-68.3	Milburn Cemetery Association	440/710	0.07	68	8-38.1	David L. Anderson	340/578	2.25
27	13-68.1	Charles M. Haught	315/642	3.44	69	8-38.11	David L. Anderson	340/578	0.63
28	XX-XX	Wetzel County Public Service District	433/849	0.06	70	8-38.5	Wilbur B. Dawson & Loretta P. Ueltschy	378/108	2.53
29	13-65	John P. Workman, Jr	W53/535	48.97	71	8-40	Donald A. Howell & Glenda D. Jackson	403/415	1.75
30	13-43	John R. & Johanna S. Harter	437/867	48.25	72	8-40.1	Clara M. & Samuel R. Haught	403/411	0.58
31	13-90	Coastal Forest Resources Co.	444/105	36.13	73	8-28.2	Theresa A. Ice	347/368	0.85
32	13-36	Coastal Forest Resources Co.	444/105	50.00	74	8-36	John F. King	25/264	4.50
33	13-28	Coastal Forest Resources Co.	444/105	46.25	75	8-29	James L. Scott, Sr., et al	431/50	64.76
34	28-8	John C. & Wilma Jean Brown	212/387	1.85	76	8-33	Lloyd L. King	319/55	20.35
35	28-7.1	Gloria D. & Eugene Mason, Jr.	261/373	1.24	77	8-30	Michael L. & Erin M. Greathouse	363/91	76.00
36	28-7	William C. & Blanchie Kocher	196/423	8.35	78	8-22	John D. & Connie J. Morgan	417/944	40.00
37	13-19	John F. Long Estate, et al	442/101	19.25	79	8-21	BP Mineral Holdings II LLC & Somerset Minerals LP	425/427	43.50
38	13-19.1	Michael Paul & Tamatha Lynn Melott	379/128	23.95	80	8-20.2	Loraine M. Williams	383/463	15.00
39	13-20	Betty Long	191/288	6.94	81	8-20.1	Loraine M. Williams	383/463	26.80
40	13-20.1	Gary R. & Angela E. Partridge	451/425	1.39					
41	13-88	John F. Long Estate, et al	442/101	26.00					
42	13-87	Raymond P. & Pamela J. Gaston	429/227	4.45					

FILE NO: 136-34-G-18  
 DRAWING NO: Welder 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: January 7 20 22  
 OPERATOR'S WELL NO. Welder Unit 2H  
 API WELL NO  
 47 - 103 - 03462  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: Existing 1,175' Proposed 1,154' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove 4,467; 537, 11875; Porter Falls 47.5; 167, 650; 50;

DISTRICT: Green Antero Resources COUNTY: Wayne 42, 6, 256; 42, 25; 4, 20; 2, 71; 39, 398;

SURFACE OWNER: Corporation LEASE NO: ACREAGE: 47.5 0.604; 8.89; 1.25;

ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Antero Minerals, LLC; Dean H. Bucher; Melody Ree Posey; Coastal Forest Resources Co.; Terry Lee Cummings; Doris L. West; ESTIMATED DEPTH: 27,100' MD 50, 228; 57, 38; 1, 674; 3, 19; 4, 5, 76; 43, 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: 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

9,975' to Top Hole

1,202' to Bottom Hole

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

TOP HOLE LONGITUDE 80 - 42 - 30  
BTM HOLE LONGITUDE 80 - 45 - 00

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



**Notes**  
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.  
Well No. Welder Unit 2H Top Hole coordinates are  
N: 384,130.17' Latitude: 39°32'52.79"  
E: 1,649,294.99' Longitude: 80°44'37.35"  
Bottom Hole coordinates are  
N: 401,469.09' Latitude: 39°35'43.77"  
E: 1,646,555.86' Longitude: 80°45'15.41"  
UTM Zone 17, NAD 1983  
Top Hole Coordinates Bottom Hole Coordinates  
N: 4,377,631.546m N: 4,382,900.036m  
E: 522,035.796m E: 521,113.254m  
Plat orientation and corner and well references are based upon the grid north meridian.  
Well location references are based upon the magnetic meridian.

47-103-0138A

47-103-00398

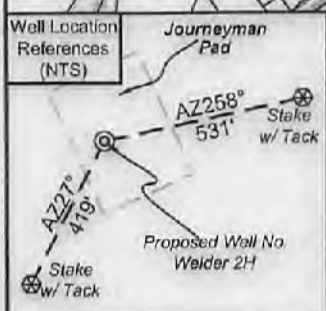
Welder Unit 2H Bottom Hole

500' Buffer

See Detail Page 3

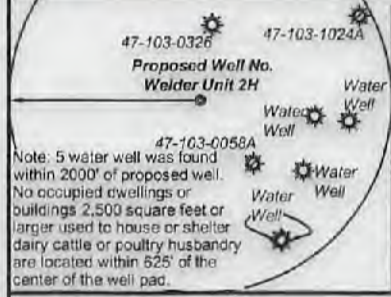
**Notes:**  
Well No. Welder Unit 2H UTM Zone 17, NAD 1927  
Top Hole Coordinates  
N: 14,361,564.10'  
E: 1,712,664.37'  
Point of Entry Coordinates  
N: 14,363,269.13'  
E: 1,714,963.89'  
Bottom Hole Coordinates  
N: 14,378,849.07'  
E: 1,709,637.00'

Bearing	Dist.
L1 S 81°32' E	1,609.4'
L2 S 06°59' W	820.7'
L3 S 23°26' W	1,888.6'
L4 S 64°57' W	961.5'
L5 N 54°24' E	2,863.6'



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, P.S. 2167



**Legend**

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

See Detail Page 2

FILE NO: 135-34-G-18  
DRAWING NO: Welder 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: January 7 2022  
OPERATOR'S WELL NO. Welder Unit 2H  
API WELL NO. MOD  
47 - 103 - 03462  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION: ELEVATION: Existing 1,175' Proposed 1,154' WATERSHED: Fishing Creek QUADRANGLE: TOP Hole: Pine Grove 4,457; 537,11875; BTM Hole: Porter Falls 47,5; 167,650; 50;  
DISTRICT: Green Antero Resources Rocky G. Miracle, et ux; R. Kevin Hall & Ronald L. Hall; H. Dom Higginbotham, et ux COUNTY: Wayne 03/04/2022  
SURFACE OWNER: Corporation Jeffrey D. Brown; Judy Smith; Margaret Lancaster, et vir; Donald Ardell Howell; WVDOH: ACREAGE: 47.5 4.20; 2.71; 39.368;  
ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Antero Minerals, LLC; Dean H. Bucher. LEASE NO: ACREAGE: 0.604; 6.89; 1.25; 50.225; 57.38; 1.674; 3.19; 4.5; 76; 43.5  
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: 7,400' 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

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



FILE NO: 135-34-G-18  
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**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**OIL AND GAS DIVISION**

DATE: January 7 20 22  
 OPERATOR'S WELL NO. Welder Unit 2H  
**API WELL NO MOD**  
47 - 103 - 03462  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: Existing 1,175' Proposed 1,154' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove TOP Hole: 4,457; 537; 11875;  
 DISTRICT: Green Antero Resources Rocky G. Miracle, et ux; R. Kevin Hall & Ronald L. Hall; H. Don Higginbotham, et ux COUNTY: Wetzel BTM Hole: Porter Falls 47.5; 167.950; 50;  
 SURFACE OWNER: Corporation Jeffrey D. Brown; Judy Smith; Margaret Lancaster, et vir; Donald Ardell Howell; WVDOH; ACREAGE: 47.5 4.2; 0.25; 42.25;  
 ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Antero Minerals, LLC; Dean H. Bucher; LEASE NO: \_\_\_\_\_ ACREAGE: 3.19; 4.5; 78; 43.5  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD ESTIMATED DEPTH: 7,400' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 27,100' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System  
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**Antero Resources**  
**Well No. Welder 2H**  
**BHL MOD**  
 Antero Resources Corporation



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

FILE NO: 135-34-G-18  
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Submeter  
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CORS, Monroe County, OH

DATE: January 7 20 22  
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47 - 103 - 03462  
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 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

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 DISTRICT: Green Antero Resources Rocky G. Miracle, et ux; R. Kevin Hall & Ronald L. Hall; H. Dom Higginbotham, et ux COUNTY: Wetzel 47.5; 167,650; 50;  
 SURFACE OWNER: Corporation Jeffrey D. Brown; Judy Smith; Margeret Lancaster, et vlr; Donald Ardell Howell; WVDOH; 42.25;  
 ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Antero Minerals, LLC; Dean H. Bucher; LEASE NO: \_\_\_\_\_ ACREAGE: 47.5 4.20; 2.71; 39,396;  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD ACREAGE: 47.5 0.604; 6.89; 1.25;  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,400' TVD 50,225; 57,38; 1,674,  
27,100' MD 3.19; 4.5; 76; 43.5

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

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



Leases	
A	Pamela Ann Palmer Emch
B	BRC Appalachian Minerals I LLC
C	William R. Stalnaker
D	Antero Minerals LLC
E	Dean H. Bucher
F	Melody Ree Posey
G	Coastal Forest Resources Co.
H	Nola Jean Parks
I	Terry Lee Cummings
J	WVDNR
K	Betty C. Long
L	Gary R. Partridge, et ux
M	Dwain Ray Brown
N	Jeffrey D. Brown
O	Timothy L. McDiffitt, et ux
P	Daniel S. Brown
Q	Judy Smith
R	Margaret Lancaster

Leases	
S	Margaret Lancaster
T	Margaret Lancaster, et vir
U	Doris L. West
V	Rocky G. Miracle, et ux
W	R. Kevin Hall & Ronald L. Hall
X	H. Dorn Higginbotham, et ux
Y	WVDOH
Z	David L. Anderson
AA	Ray G. Ice, et ux
AB	Wilbur B. Dawson
AC	Donald Ardell Howell
AD	Samuel R. Haught, et ux
AE	Lloyd Lee King
AF	BRC Appalachian Minerals I LLC
AG	Lillian Priscilla Grimm
AH	Carolyn Jacobs Hampson
AI	P&P Fujimo LLC
AJ	Maria Delia Estrada
AK	Linda Headlee Malone, et vir

ID	TM/Par	Owner	Bk/Pg	Acres	ID	TM/Par	Owner	Bk/Pg	Acres
1	16-26	Antero Resources Corporation	474/713	47.50	43	13-19.3	Roger L. & Sarah M. Harrison	455/899	3.01
2	16-25	Antero Resources Corporation	474/713	39.00	44	13-19.2	Roger D. & Kimmie L. Long	313/183	4.99
3	17-22	Perry D. Bucher	411/759	37.65	45	13-12.3	Timothy L. & Tammy D. McDiffitt	441/68	2.24
4	17-58	Pennie Baker	411/735	42.41	46	13-12.5	Jeffrey D. Brown	363/701	4.20
5	17-23	Michael Steven Blinkman	461/443	40.10	47	13-12.6	Dwain Ray Brown	421/897	15.00
6	17-56	Pennie R. & Richard K. Bauer	366/273	1.63	48	13-12.2	Timothy L. & Tammy D. McDiffitt	441/68	0.34
7	17-60	Ross Bucher	411/765	79.00	49	13-12.4	Bradley Keith & Daniel Scott Brown	440/781	0.48
8	17-59	Pennie Baker	446/344	12.51	50	13-12.1	Timothy L. & Tammy D. McDiffitt	441/68	0.27
9	17-15.1	Douglas Alan & Shirley Joann Bucher	442/718	12.41	51	13-12	Judy Smith	341/320	2.71
10	17-15.8	Ross William Bucher, Jr.	411/765	0.37	52	13-3	Phillip Dale Haught	465/207	0.29
11	17-15.7	Jeremy & Terry Bucher	365/108	7.37	53	13-4	Phillip Dale Haught	465/207	0.32
12	17-15.2	Ross William Bucher, Jr.	411/765	0.84	54	13-6	Margaret Lancaster	333/440	39.40
13	17-15.3	Ross William Bucher, Jr.	292/329	0.73	55	13-6.1	Doris L. West	442/411	0.60
14	17-15.4	Steven C. & Bertie G. Blinkman	292/332	0.57	56	13-85	Rocky G. & Vicki S. Miracle	325/11	6.89
15	17-15.6	Jeremy & Terry Bucher	365/108	4.14	57	3-42	Dwain Ray Brown	421/897	22.00
16	17-57	Steven C. & Bertie G. Blinkman	389/243	20.60	58	8-38.4	Kevin R. & Ronald L. Hall	360/124	1.25
17	17-15.5	Jeremy & Terry Bucher	427/509	2.13	59	8-38.6	Kevin R. & Ronald L. Hall	360/124	4.25
18	13-69	Donald L. Mason	410/759	69.61	60	8-38.7	Robert & Carolyn Kocher	269/420	1.86
19	13-69.4	David P. & Jami D. Morris	450/428	1.47	61	8-38.10	Robert P. & Carolyn J. Kocher	484/459	0.36
20	13-69.3	David P. & Jami D. Morris	364/9	1.25	62	8-38.2	H. Dorn Higginbotham & Janet L. Workman Higginbotham	286/386	10.32
21	13-69.2	Carol S. Bishop	344/568	1.25	63	8-36.9	H. Dorn Higginbotham & Janet L. Workman Higginbotham	363/197	5.00
22	13-68	John Ronald & Johnna Shay Harter	437/867	14.62	64	8-36.3	Wilbur B. Dawson & Loretta P. Ueltschy	378/108	0.48
23	13-68.2	John R. & Johnna S. Harter	437/873	2.87	65	8-38.12	Wilbur B. Dawson & Loretta P. Ueltschy	378/108	0.19
24	XX-XX	Milburn Cemetery Association	299/524	0.52	66	8-38	Ray G. & Thelma L. Ice	367/290	2.00
25	13-56	Milburn Cemetery Association	---/---	0.64	67	8-38.8	David L. Anderson	340/578	0.77
26	13-68.3	Milburn Cemetery Association	440/710	0.07	68	8-38.1	David L. Anderson	340/578	2.25
27	13-68.1	Charles M. Haught	315/642	3.44	69	8-38.11	David L. Anderson	340/578	0.63
28	XX-XX	Wetzel County Public Service District	433/849	0.06	70	8-38.5	Wilbur B. Dawson & Loretta P. Ueltschy	378/108	2.53
29	13-55	John P. Workman, Jr.	W53/535	48.97	71	8-40	Donald A. Howell & Glenda D. Jackson	403/415	1.75
30	13-43	John R. & Johnna S. Harter	437/867	46.25	72	8-40.1	Clara M. & Samuel R. Haught	403/411	0.58
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32	13-36	Coastal Forest Resources Co.	444/105	50.00	74	8-39	John F. King	25/264	4.50
33	13-28	Coastal Forest Resources Co.	444/105	46.25	75	8-29	James L. Scott, Sr., et al	431/50	64.76
34	28-8	John C. & Wilma Jean Brown	212/367	1.85	76	8-33	Lloyd L. King	319/55	20.35
35	28-7.1	Gloria D. & Eugene Mason, Jr.	261/373	1.24	77	8-30	Michael L. & Erin M. Greathouse	363/91	76.00
36	28-7	William C. & Blanche Kocher	196/423	8.35	78	8-22	John D. & Connie J. Morgan	417/944	40.00
37	13-19	John F. Long Estate, et al	442/101	19.25	79	8-21	BP Mineral Holdings II LLC & Somerset Minerals LP	425/427	43.50
38	13-19.1	Michael Paul & Tamatha Lynn Melott	379/128	23.95	80	8-20.2	Loraine M. Williams	383/463	15.00
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40	13-20.1	Gary R. & Angela E. Partridge	451/425	1.39					
41	13-88	John F. Long Estate, et al	442/101	26.00					
42	13-67	Raymond P. & Pamela J. Gaston	429/227	4.45					

FILE NO: 135-34-G-18

DRAWING NO: Welder 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: January 7 2022

OPERATOR'S WELL NO. Welder Unit 2H

API WELL NO

47 - 103 - 03462  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: Existing 1,175' Proposed 1,154' WATERSHED: Fishing Creek

TOP Hole: Pine Grove 4,457; 537,11875;  
 QUADRANGLE: BTM Hole: Porter Falls 47.5; 167,650; 50;

DISTRICT: Green Antero Resources Corporation  
 SURFACE OWNER: Corporation  
 ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Antero Minerals, LLC; Dean H. Bucher;

COUNTY: W 03/04/2022  
 ACREAGE: 47.5  
 LEASE NO: \_\_\_\_\_ ACREAGE: \_\_\_\_\_

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: 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

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>A</b>	<u>Pamala Ann Palmer Emch Lease</u> Pamala Ann Palmer Emch Chesapeake Appalachia LLC SWN Production Company Antero Exchange Properties, Inc	Chesapeake Appalachia LLC SWN Production Company Antero Exchange Properties, Inc <b>Antero Resources Corporation</b>	1/8+ Assignment Assignment Merger	129A/0350 157A/0540 177A/0533 0013/0311
<b>C</b>	<u>William R. Stalnaker Lease</u> William R. Stalnaker	<b>Antero Resources Corporation</b>	1/8+	179A/0069
<b>D</b>	<u>Antero Minerals, LLC Lease</u> Antero Minerals, LLC	<b>Antero Resources Corporation</b>	1/8+	250A/0795
<b>E</b>	<u>Dean H Bucher Lease</u> Dean H Bucher	<b>Antero Resources Corporation</b>	1/8+	262A/198
<b>F</b>	<u>Melody Ree Posey Lease</u> Melody Ree Posey	<b>Antero Resources Corporation</b>	1/8+	187A/395
<b>G</b>	<u>Coastal Forest Resources Co Lease</u> Coastal Forest Resources Co	<b>Antero Resources Corporation</b>	1/8+	273A/764
<b>H</b>	<u>Terry Lee Cummings Lease</u> Terry Lee Cummings	<b>Antero Resources Corporation</b>	1/8+	235A/811
<b>I</b>	<u>WVDNR Lease</u> WVDNR	<b>Antero Resources Corporation</b>	1/8	206A/420
<b>J</b>	<u>Jeffrey D Brown Lease</u> Jeffrey D Brown Mason Resources Inc	Mason Resources Inc <b>Antero Resources Corporation</b>	1/8+ Assignment	162A/269 168/639
<b>K</b>	<u>Judy Smith Lease</u> Judy Smith	<b>Antero Resources Corporation</b>	1/8+	185A/210
<b>L</b>	<u>Margaret Lancaster, et vir Lease</u> Margaret Lancaster, et vir	<b>Antero Resources Corporation</b>	1/8+	195A/597
<b>M</b>	<u>Doris L West Lease</u> Doris L West	<b>Antero Resources Corporation</b>	1/8+	192A/168
<b>N</b>	<u>Rocky G Miracle et ux Lease</u> Rocky G Miracle et ux	<b>Antero Resources Corporation</b>	1/8+	193A/753
<b>O</b>	<u>H. Dorn Higginbotham et ux Lease</u> H. Dorn Higginbotham et ux	<b>Antero Resources Corporation</b>	1/8+	274A/792

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
W	<u>R. Kevin Hall and Ronald L Hall Lease</u> R. Kevin Hall and Ronald H Hall	Antero Resources Corporation	1/8+	189A/786
AB	<u>Wilbur B Dawson Lease</u> Wilbur B Dawson	Antero Resources Corporation	1/8+	183A/71
AC	<u>Donald Ardell Howell Lease</u> Donald Ardell Howell	Antero Resources Corporation	1/8+	187A/849
AE	<u>Lloyd Lee King Lease</u> Lloyd Lee King	Antero Resources Corporation	1/8+	239A/120
AH	<u>Carolyn Jacobs Hampson Lease</u> Carolyn Jacobs Hampson	Antero Resources Corporation	1/8+	196A/766

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 WV Department of  
 Environmental Protection



WW-6A1  
(5/13)

Operator's Well No. Welder Unit 2H MOD

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

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**AT** Lease Name or  
P & P Fujimo LLC Lease

P & P Fujimo LLC

Antero Resources Corporation

1/8+

210A/529

\*Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

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Office of Oil and Gas

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WV Department of  
Environmental Protection

**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



Antero Resources  
1615 Wynkoop Street  
Denver, CO 80202  
Office 303.357.7310  
Fax 303.357.7315

January 12, 2022

West Virginia Department of Environmental Protection  
Office of Oil and Gas  
Attn: Mr. Taylor Brewer  
601 57<sup>th</sup> Street  
Charleston, WV 25304

Mr. Brewer:

Antero Resources Corporation (Antero) would like to submit the following permit modifications for approved well on the existing Journeyman Pad: Welder Unit 2H (47-103-03462) Expedited.

Attached you will find the following:

- Revised Form WW-6B
- Revised Form WW-6A1
- Revised Mylar Plat
- AOR

\$ 5,000  
CK# 4003840

If you have any questions please feel free to contact me at (303) 357-7182.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in blue ink that appears to read "M Stanton".

Mallory Stanton  
Permitting Supervisor  
Antero Resources Corporation

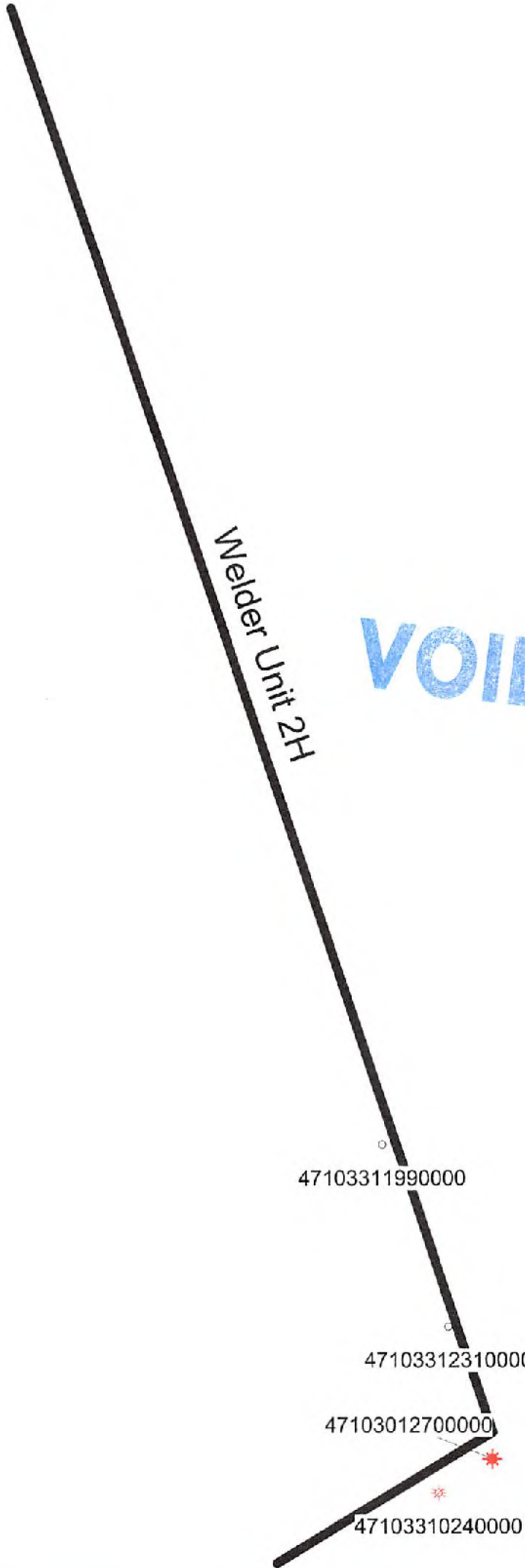
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Office of Oil and Gas

JAN 13 2022

WV Department of  
Environmental Protection

Enclosures

03/04/2022



Antero Resources Corporation

Welder Unit 2H - AOR



- WELL SYMBOLS
- Gas Well
  - Plugged Gas Well

January 17, 2022

03/04/2022

UWI (API Num)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Produible Formation(s) not perf'd
47103012700000	WHEELING DOLLAR SAVINGS & TRUST	1	TATUM CHARLS R	TATUM CHARLS R	4,260		Berea, Gordon, Fifth, Warren, Balltown	Weir, Benson, Alexander
47103310240000	THOMAS OBRIEN 1	1338	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT	2,630		Gordon	Weir, Benson, Alexander
47103312310000	THOMAS O'BRIEN	1337	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT			Gordon	Weir, Benson, Alexander
47103311990000	A F HIGGINS	2286	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT			Gordon	Weir, Benson, Alexander

VOID



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

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**Expedited Horizontal H6A Well Work Permit API: 47-103-03461, 03462)**

1 message

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

Wed, Feb 2, 2022 at 7:06 AM

To: Mallory Stanton &lt;mstanton@anteroresources.com&gt;, Dani DeVito &lt;ddevito@shalepro.com&gt;, "Harris, Bryan O" &lt;bryan.o.harris@wv.gov&gt;, Scott Lemley &lt;slemley@wvassessor.com&gt;

I have attached a copy of the newly issued well [permit](#) number. This will serve as your copy.

**47-103-03461 - WELDER UNIT 1H**  
**47-103-03462 - WELDER UNIT 2H**

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

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**2 attachments**

 **47-103-03461 - Copy.pdf**  
1304K

 **47-103-03462 - Copy.pdf**  
2122K

**03/04/2022**