



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, August 2, 2021
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for CHARLOTTE UNIT 2H
47-103-03408-00-00

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 handwritten signature in blue ink, appearing to read 'James A. Martin', is positioned above the printed name and title.

James A. Martin
Chief

Operator's Well Number: CHARLOTTE UNIT 2H
Farm Name: WILLIAM L. & DELORES J. GADD
U.S. WELL NUMBER: 47-103-03408-00-00
Horizontal 6A New Drill
Date Modification Issued: August 2, 2021

Promoting a healthy environment.

08/06/2021

CK # 231407
\$5000⁰⁰
7/8/21

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

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

2) Operator's Well Number: Charlotte Unit 2H MOD Well Pad Name: Gadd Pad

3) Farm Name/Surface Owner: William L. & Delores J. Gadd Public Road Access: Eightmile Road

4) Elevation, current ground: 1223.8' Elevation, proposed post-construction: ~1223.8

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

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale: 7500' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 7500' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 21000'

11) Proposed Horizontal Leg Length: 11226'

12) Approximate Fresh Water Strata Depths: 350'

13) Method to Determine Fresh Water Depths: 47-095-02266'

14) Approximate Saltwater Depths: 1887', 1917'

15) Approximate Coal Seam Depths: 656', 971'

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

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

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

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JUL 29 2021
WV Department of
Environmental Protection

18)

CASING AND TUBING PROGRAM

TYPE	<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, 86 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	400 *see #19	400 *see #19	CTS, 556 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#	21000	21000	5367 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

Bryan Harris
7-28-21

TYPE	<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"	0.38"	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	2500	Lead H/POZ & Tail H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners							

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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."

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Anticipated Max Pressure - 9300 lbs
Anticipated Max Rate - 80 bpm

WV Department of
Environmental Protection

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 34.16 acres

22) Area to be disturbed for well pad only, less access road (acres): 17.00 acres

23) Describe centralizer placement for each casing string:

Conductor: no centralizers

Surface Casing: one centralizer 10' above the float shoe, one on the insert float collar and one every 4th joint spaced up the hole to surface.

Intermediate Casing: one centralizer above float joint, one centralizer 5' above float collar and one every 4th collar to surface.

Production Casing: one centralizer at shoe joint and one every 3 joints to top of cement in intermediate casing.

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

Conductor: no additives, Class A 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

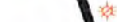
25) Proposed borehole conditioning procedures:

[Empty box for proposed borehole conditioning procedures]

*Note: Attach additional sheets as needed.



47103310210000



47103310270000

Charlotte Unit 2H

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Office of Oil and Gas

JUL 21 2021

WV Department of
Environmental Protection



47103310130000



Antero Resources Corporation

Charlotte Unit 2H - AOR



WELL SYMBOLS
Plugged Gas Well

July 15, 2021

08/06/2021

UWI (API Num)	Well Name	Well Number	Operator	Historical Operator	ID	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Productible Formation(s) not perf'd
4710310210000	THOMAS J FUNK 1	1349	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT	2,817	Unknown	Gordon	Weir, Berea, Benson, Alexander
4710310270000	ELIZABETH TENNANT	1832	HOPE NATURAL GAS	HOPE NATURAL GAS	2,135	Unknown	Big Injun	Alexander, Weir
4710310130000	WM CONLEY 1	1336	MANUFACT LIGHT & HEAT	MANUFACT LIGHT & HEAT	3,077	Unknown	Gordon	Weir, Berea, Benson, Alexander

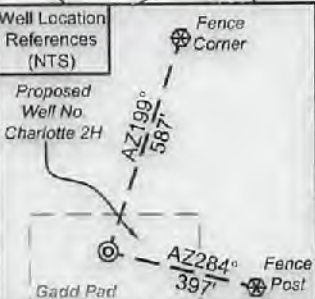
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JUL 21 2021

WV Department of
Environmental Protection

08/06/2021

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



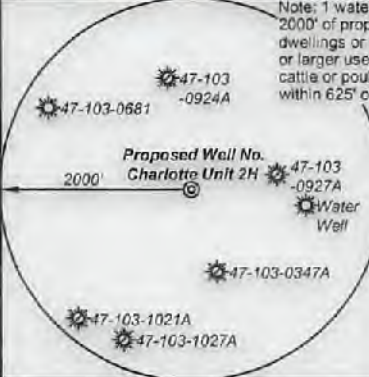
I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Kevin S. James
 Kevin S. James, P.S. 2305



SEAL

Note: 1 water well was found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.



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.)
- Railroad

10,874' to Bottom Hole

1,608' to Top Hole

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

Notes
 West Virginia Coordinate System of 1927, North Zone
 based upon Differential GPS Measurements.
 Well No. Charlotte Unit 2H Top Hole coordinates are
 N: 384,869.11' Latitude: 39°32'59.63"
 E: 1,645,925.28' Longitude: 80°45'20.50"
 Bottom Hole coordinates are
 N: 373,833.74' Latitude: 39°31'10.89"
 E: 1,648,255.45' Longitude: 80°44'48.79"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,377,839.506m N: 4,374,489.382m
 E: 521,005.433m E: 521,771.324m
 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. Charlotte Unit 2H
 UTM Zone 17, NAD 1927
 Top Hole Coordinates
 N: 14,362,246.46'
 E: 1,709,283.93'
 Point of Entry Coordinates
 N: 14,361,863.75'
 E: 1,708,139.53'
 Bottom Hole Coordinates
 N: 14,351,255.22'
 E: 1,711,797.19'

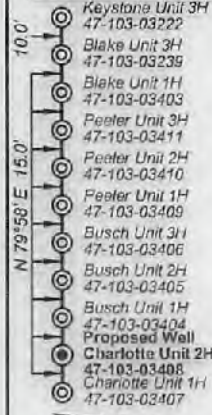
	Bearing	Dist.
L1	S 39°49' E	2,543.7'
L2	S 46°35' W	1,569.6'
L3	N 66°43' W	1,046.3'
L4	N 42°01' W	671.2'
L5	S 72°28' W	1,207.1'

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

12,179' to Top Hole

8,005' to Bottom Hole

Wellhead Layout (NTS)



FILE NO: 323-34-G-17
 DRAWING NO: Charlotte 2H Well Plat
 SCALE: 1" = 1500'
 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

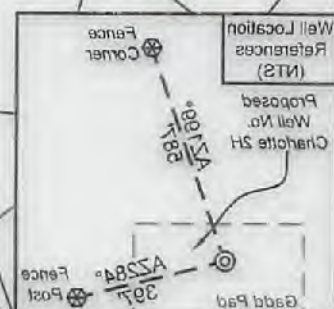
DATE: July 14 2021
 OPERATOR'S WELL NO. Charlotte Unit 2H
 API WELL NO. MOD
 47 - 103 - 03408
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built 1,223.8' WATERSHED: Fishing Creek QUADRANGLE: Top Hole: Porter Falls
 DISTRICT: Green William L. & SURFACE OWNER: Delores J. Gadd Hary K. Eastman, et ux; Eight Mile Ridge Church of Christ; H. Dorn Higginbotham, Perry Dale Thorne, Jr., et ux; Stone Hill Minerals Holdings, LLC; BRC Appalachian Minerals I, LLC; David E. Bowyer, Christenson Family Trust; Thomas M. Slackhouse; Chesapeake Appalachia, LLC; Edwin D. & Jane C. Michael; Gladys E. Conley Trust; Sandra Rose Conley; Michael Tennant; Richard L. Tennant; LEASE NO: COUNTY: W-08/06/2021
 ROYALTY OWNER: John W. Bertram, Susie T. Grimm, Suzann Marie Stoehr, et al; Howard M. Henderson; ACREAGE: 60.5
 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: 7,500' TVD
 21,000' MD

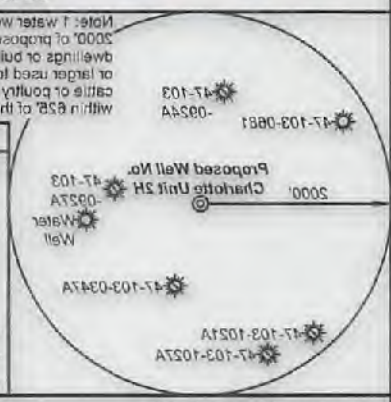
WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System
 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
 Denver, CO 80202 Charleston, WV 25313

Antero Resources
Well No. Charlotte 2H
BHL MOD



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.

Kevin S. James, P.E. 2305



Note: Water well was found within 200' of proposed well. No occupied dwellings or buildings, 2,500 square feet or larger used for house or other daily cattle or poultry husbandry are located within 850' of the center of the well pad.

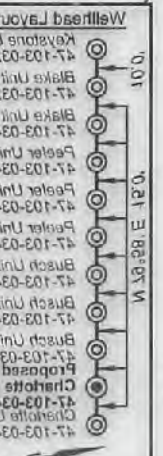
Legend

- 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.)
- Railroad

Notes:
Well location references are based upon the magnetic meridian.
Top Hole Coordinates: Bottom Hole Coordinates
N: 4,374,839.508m E: 821,008.433m
N: 4,374,489.362m E: 821,771.324m
Bottom Hole Coordinates: UTM Zone 17 NAD 1983
N: 373,833.74m E: 1,648,252.45m
Latitude: 39°31'10.89" Longitude: 80°44'48.78"
Bottom Hole coordinates are based upon Differential GPS Measurements
N: 384,868.11m E: 1,648,925.28m
Latitude: 39°32'58.88" Longitude: 80°44'50.50"
Well No. Charlotte Unit 2H Top Hole coordinates are based upon Differential GPS Measurements
West Virginia Coordinate System of 1927, North Zone

Notes:
Well No. Charlotte Unit 2H UTM Zone 17 NAD 1927
Top Hole Coordinates: N: 14,382,248.48 E: 1,708,293.93
Point of Entry Coordinates: N: 14,361,663.75 E: 1,708,139.83
Bottom Hole Coordinates: N: 14,381,252.22 E: 1,717,797.19

Dist	Bearing
L1	S 39.49° E 2.543.7'
L2	S 48.32° W 1.589.8'
L3	N 68.43° W 1.046.3'
L4	N 42.01° W 871.5'
L5	S 25.28° W 1.207.1'



10,874' to Bottom Hole
1,608' to Top Hole
TOP HOLE LATITUDE 39 - 32 - 30
BTM HOLE LATITUDE 39 - 32 - 30
TOP HOLE LONGITUDE 80 - 44 - 50
BTM HOLE LONGITUDE 80 - 44 - 50

1571.51' to Top of 281.51' 8"

DATE: July 14 2021
OPERATOR'S WELL NO. Charlotte Unit 2H
API WELL NO MOD
STATE 47 COUNTY 103 PERMIT 03408

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

FILE NO.: 323-34-G-17
DRAWING NO. Charlotte 2H Well Plat
SCALE: 1" = 1500'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION:
CORR. MONITOR COUNTY, OH

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

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: 24,000' MD
7,500' TVD

ROYALTY OWNER: John W. Behrman, Susie T. Grimm, Suzanne Marie Steiner, et al; Howard M. Henderson; LEASE NO.:
SURFACE OWNER: Delores J. Gadd
DISTRICT: 1608/80
LOCATION: ELEVATION: Aa-Built 1,233.8' WATERSHED: Fishing Creek
QUADRANGLE: BTM Hole: Pine Grove 0 90825; 4 8875; 60.5 149 08125; 12; 30.5 143.3; 12; 38; 105; COUNTY: Wetzel
ACREAGE: 60.5 SURFACE AREA: 24.58125; 32.5 22; 40; 24.58125; 45.72; 60.35; 22.5; AVERAGE: 0.23750; 25.2875; 80;

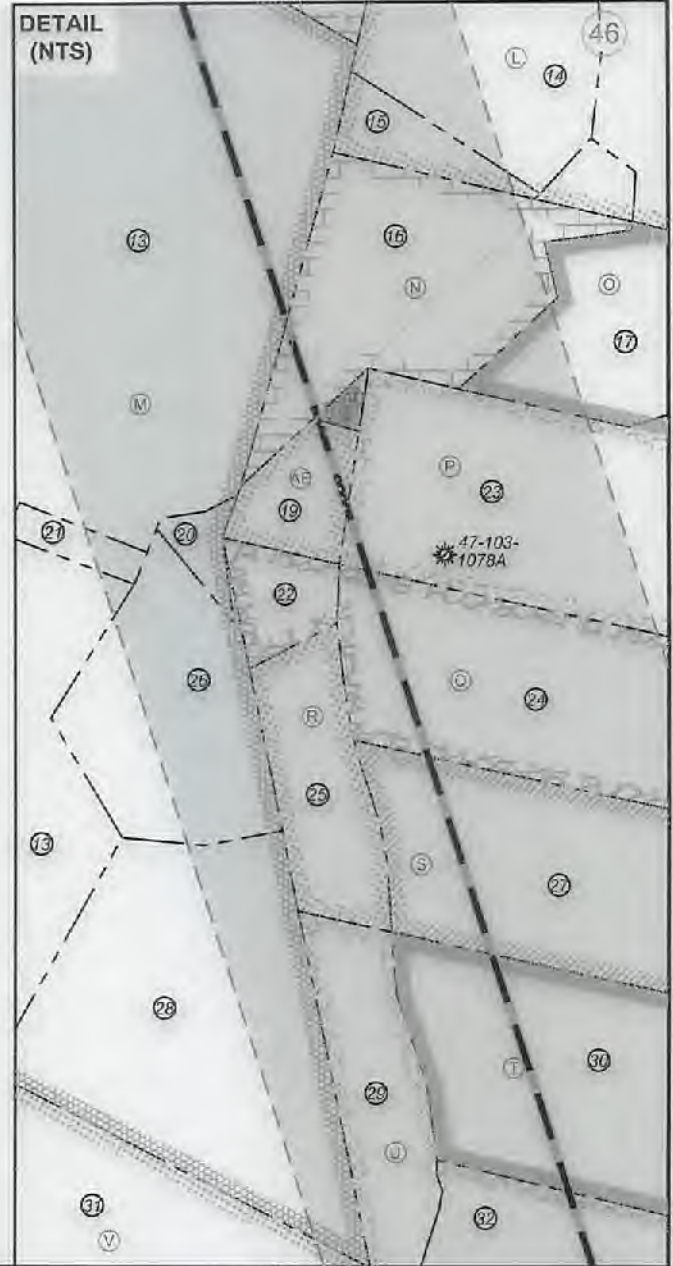
DESIGNATED AGENT: Diana Stampler - CT Corporation System
WELL OPERATOR: Antero Resources Corporation
ADDRESS: 1615 Wynkoop Street Denver, CO 80202
ADDRESS: 5400 D Big Tyler Road Charleston, WV 25313

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



Leases			
A	Shiben Estates, Inc	P	BRC Appalachian Minerals I, LLC
B	Ellen W. & Mark L. VanDyne	Q	David E. Bowyer
C	John W. Bertram	R	Ronald Hall
D	BRC Appalachian Minerals I, LLC	S	Stone Hill Minerals Holdings, LLC
E	Gladys E. Conley Trust	T	Edwin D. & Jane C. Michael
F	Sandra Rose Conley	U	H. Dorn Higginbotham
G	Richard Lee Tennant	V	Chesapeake Appalachia, LLC
H	Michael Tennant	W	Perry Dale Thorne, Jr., et ux
I	Shiben Estates, Inc.	X	Sally Lou Anderson
J	Susie T. Grimm	Y	Faye Ann Skinner, et al
K	Thomas M. Stackhouse	Z	Jim R. McHenry
L	Acropolis, Inc	AA	Christenson Family Trust
M	Chesapeake Appalachia, LLC	AB	Howard M. Henderson
N	Richard L. Tennant	AC	Suzann Marie Stoehr, et al
O	Emma Lee Rine	AD	Harry K. Eastman, et ux
		AE	Eight Mile Ridge Church of Christ

ID	TM/Par	Owner	Bk/Pg	Acres
1	16-22	William L. & Delores J. Gadd	348/169	60.50
2	16-23	Kenneth E. Butler	331/110	50.97
3	16-31	William L. & Delores J. Gadd	348/169	2.65
4	16-30	William L. & Delores J. Gadd	348/169	14.00
5	16-21	Mildred E. Caseman	WB45/398	40.00
6	16-47	William M. Greenwalt & Lee A. Niezgoda	387/1	12.00
7	16-38	Silas Tennant	137/85	15.50
8	16-45	James E. Newman	400/234	18.50
9	16-39	Silas & William A. Tennant	WB27/97	23.30
10	16-40	William M. Greenwalt & Lee A. Niezgoda	387/1	18.00
11	16-46	Joyce Ann Haught, et al	WB37/335	23.50
12	16-56	James L. & Mariha Jo Stewart	288/330	23.33
13	16-81	Michael L. & Tina M. Adams	444/427	67.96
14	16-58.1	Harry K. & Shirley M. Eastham	438/3	7.21
15	16-52	Harry K. & Shirley M. Eastham	325/101	0.98
16	16-58	Harry K. & Shirley M. Eastham	325/101	4.70
17	16-54	Mark & Michael Difore	406/241	6.60
18	16-89	Harry K. & Shirley M. Eastham	331/245	0.24
19	16-87	Church of Christ	208/201	0.64
20	16-81.2	Harry K. Eastham	299/450	0.38
21	16-61.1	Church of Christ	218/337	0.42
22	19-8	Church of Eight Mile Ridge	248/434	0.99
23	16-71	Michael L. & Tina M. Adams	437/722	30.50
24	19-8.1	Edwin D. & Jane C. Michael	275/42	36.84
25	19-8.4	Ronald Hall	385/85	2.17
26	19-81.3	Michael L. & Tina M. Adams	346/443	3.83
27	19-8.2	Edwin D. & Jane C. Michael	275/42	22.00
28	19-81.4	Michael L. & Tina M. Adams	377/309	7.91
29	19-17.2	Timothy J. Horner	444/381	2.76
30	19-8.3	Edwin D. & Jane C. Michael	275/42	24.50
31	19-16	Richard R. & Mary J. Scyoc	443/336	73.96
32	19-17	John R. & Mary Ann Horner	416/853	47.55
33	19-25	Perry Dale, Jr. & Martha Jo Thorne	348/298	5.34
34	19-26	Perry Dale, Jr. & Martha Jo Thorne	348/298	25.00
35	19-36	Perry Dale, Jr. & Martha Jo Thorne	348/298	20.00
36	19-27	Ronald L. & Sharon Christenson Family Trust	439/377	25.00
37	19-35	Sharon M. & Ronald L. Christenson	439/373	20.00
38	19-41	Sharon M. & Ronald L. Christenson	439/373	18.50
39	19-42	Sharon M. & Ronald L. Christenson	363/101	22.50
40	19-46	Sharon M. & Ronald L. Christenson	439/373	25.28
41	19-47	Suzann M. Stoehr, et al	WB48/422	80.00
42	19-50	Ronald H. Eastham, et al	424/70	40.00



FILE NO: 323-34-G-17
 DRAWING NO: Charlotte 2H Well Plat
 SCALE: 1" = 1500'
 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: July 14 2021
 OPERATOR'S WELL NO. Charlotte Unit 2H
 API WELL NO **409**
 47 - 103 - 03408
 STATE COUNTY PERMIT

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

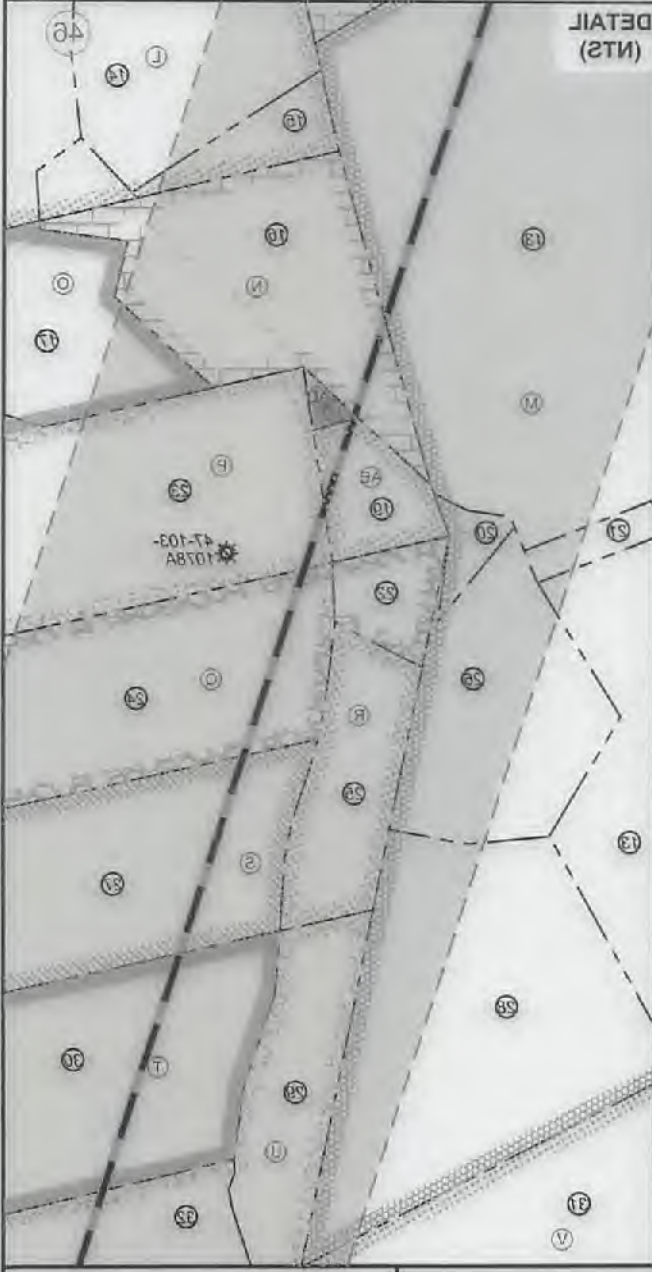
LOCATION: ELEVATION: As-Built 1,223.8' WATERSHED: Fishing Creek QUADRANGLE: Top Hole: Porter Falls
 DISTRICT: Green William L. & SURFACE OWNER: Delores J. Gadd H. K. Eastman, et ux; Eight Mile Ridge Church of Christ; H. Dorn Higginbotham; Perry Dale Thorne, Jr., et ux; Stone Hill Minerals Holdings, LLC; BRC Appalachian Minerals I, LLC; David E. Bowyer; Christenson Family Trust; Thomas M. Stackhouse; Chesapeake Appalachia, LLC; Edwin D. & Jane C. Michael; Gladys E. Conley Trust; Sandra Rose Conley; Michael Tennant; Richard L. Tennant; Susie T. Grimm; Suzann Marie Stoehr, et al; Howard M. Henderson; LEASE NO: COUNTY: **09/06/2021**
 ROYALTY OWNER: John W. Bertram; Susie T. Grimm; Suzann Marie Stoehr, et al; Howard M. Henderson; ACREAGE: 60.5 30.5; 22; 40; 24.58126; 45.72; 50.35; 22.5; 0.23750; 25.2875; 80;

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: 7,500' TVD 21,000' 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



Acres	Owner	BMFg
42	Ronald H. Eastman et al	424720
41	Suzann Marie Stehr et al	WB481422
40	Sharon M. & Ronald L. Christianson	430873
39	Sharon M. & Ronald L. Christianson	363101
38	Sharon M. & Ronald L. Christianson	430873
37	Sharon M. & Ronald L. Christianson	430873
36	Christanson Family Trust	430877
35	Perry Dale, Jr. & Martha Jo Thome	348298
34	Perry Dale, Jr. & Martha Jo Thome	348298
33	Perry Dale, Jr. & Martha Jo Thome	348298
32	John R. & Mary Ann Homer	418823
31	Richard R. & Mary J. Spyc	443336
30	Edwin D. & Jane C. Michael	272142
29	Edwin D. & Jane C. Michael	272142
28	Michael L. & Tina M. Adams	377309
27	Edwin D. & Jane C. Michael	272142
26	Michael L. & Tina M. Adams	348143
25	Michael L. & Tina M. Adams	348143
24	Edwin D. & Jane C. Michael	272142
23	Michael L. & Tina M. Adams	444427
22	James L. & Martha Jo Steinhilber	288230
21	Joyce Ann Haudt et al	WB371325
20	William M. Greenwalt & Lee A. Niezgodz	38711
19	James E. Newman	400724
18	James E. Newman	400724
17	Shias Tennant	137182
16	William M. Greenwalt & Lee A. Niezgodz	38711
15	Shias Tennant	137182
14	William L. & Delores J. Gadd	348169
13	William L. & Delores J. Gadd	348169
12	Kenneth E. Butler	337110
11	William L. & Delores J. Gadd	348169
10	William L. & Delores J. Gadd	348169
9	Shias & William A. Tennant	WB27187
8	James E. Newman	400724
7	Shias Tennant	137182
6	Mildred E. Caseman	WB42388
5	William L. & Delores J. Gadd	348169
4	William L. & Delores J. Gadd	348169
3	William L. & Delores J. Gadd	348169
2	Kenneth E. Butler	337110
1	William L. & Delores J. Gadd	348169



ID	TMF#	Owner	BMFg	Acres
1	18-22	William L. & Delores J. Gadd	348169	60.50
2	18-23	Kenneth E. Butler	337110	50.97
3	18-31	William L. & Delores J. Gadd	348169	2.62
4	18-30	William L. & Delores J. Gadd	348169	14.00
5	18-21	Mildred E. Caseman	WB42388	40.00
6	18-47	William M. Greenwalt & Lee A. Niezgodz	38711	12.00
7	18-38	Shias Tennant	137182	12.50
8	18-48	James E. Newman	400724	18.50
9	18-39	Shias & William A. Tennant	WB27187	23.30
10	18-40	William M. Greenwalt & Lee A. Niezgodz	38711	18.00
11	18-46	Joyce Ann Haudt et al	WB371325	23.50
12	18-26	James L. & Martha Jo Steinhilber	288230	23.33
13	18-81	Michael L. & Tina M. Adams	444427	67.96
14	18-81	Harry K. & Shirley M. Eastman	43813	7.21
15	18-22	Harry K. & Shirley M. Eastman	325101	0.88
16	18-88	Harry K. & Shirley M. Eastman	325101	4.70
17	18-84	Mark & Michael Dione	408241	6.60
18	18-89	Harry K. & Shirley M. Eastman	321248	0.24
19	18-87	Church of Christ	208201	0.64
20	18-81	Harry K. Eastman	269450	0.38
21	18-81	Church of Christ	218237	0.42
22	18-8	Church of Eight Mile Ridge	248434	0.99
23	18-71	Michael L. & Tina M. Adams	437222	30.50
24	18-81	Edwin D. & Jane C. Michael	272142	36.84
25	18-84	Ronald Hall	38285	2.17
26	18-83	Michael L. & Tina M. Adams	348143	3.83
27	18-82	Edwin D. & Jane C. Michael	272142	22.00
28	18-84	Michael L. & Tina M. Adams	377309	7.81
29	18-72	Timothy J. Homer	444381	2.78
30	18-83	Edwin D. & Jane C. Michael	272142	24.50
31	18-16	Richard R. & Mary J. Spyc	443336	23.96
32	18-17	John R. & Mary Ann Homer	418823	47.22
33	18-25	Perry Dale, Jr. & Martha Jo Thome	348298	5.34
34	18-26	Perry Dale, Jr. & Martha Jo Thome	348298	25.00
35	18-36	Perry Dale, Jr. & Martha Jo Thome	348298	20.00
36	18-27	Ronald L. & Sharon Christianson Family Trust	430877	25.00
37	18-36	Sharon M. & Ronald L. Christianson	430873	20.00
38	18-41	Sharon M. & Ronald L. Christianson	430873	18.50
39	18-42	Sharon M. & Ronald L. Christianson	363101	22.50
40	18-46	Sharon M. & Ronald L. Christianson	430873	25.28
41	18-47	Suzann Marie Stehr et al	WB481422	80.00
42	18-20	Ronald H. Eastman et al	424720	40.00

FILE NO: 323-34-G-17
DRAWING NO: Charlotte 2H Well Plat
SCALE: 1" = 1500'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION:
COR: Monroe County, OH

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

DATE: July 14 2021
OPERATOR'S WELL NO: Charlotte Unit 2H
API WELL NO: 47-103-10788
STATE: OH COUNTY: PERMIT: 03408

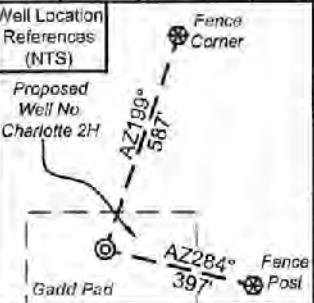
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: As-Built: 1223.8' WATERSHED: Fishing Creek
DISTRICT: 1202100/80
SURFACE OWNER: Delores J. Gadd & William L. & Shirley M. Eastman
ROYALTY OWNER: John W. Barham; Susie T. Grimm; Suzann Marie Stehr et al; Howard M. Henderson
LEASE NO: 47-103-10788
ACREAGE: 60.5
COUNTY: Wetzel
QUADRANGLE: BTM Hole, Pine Grove 0.90625; 4.6875; 80.5; 119.03125; 12.234375; 17.2; 38; 105; 23.4738; 42.5; 40; 24.68125; 30.5; 22; 40; 24.68125; 42.72; 50.32; 22.5; 0.23750; 22.2875; 80.

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: 21,000' MD
7,500' TVD

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

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

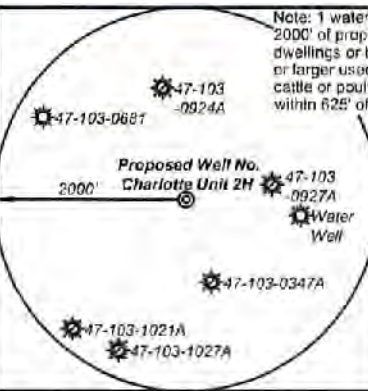


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Kevin S. James
 Kevin S. James, P.S. 2305



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.)
- Railroad

10,874' to Bottom Hole

1,608' to Top Hole
 TOP HOLE LATITUDE 39 - 35 - 00
 BTM HOLD LATITUDE 39 - 32 - 30

Notes
 West Virginia Coordinate System of 1927, North Zone
 based upon Differential GPS Measurements.
 Well No. Charlotte Unit 2H Top Hole coordinates are
 N: 384,869.11' Longitude: 80°45'20.50"
 E: 1,645,925.28'
 Bottom Hole coordinates are
 N: 373,833.74' Longitude: 80°44'48.79"
 E: 1,648,255.45'
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,377,839.806m N: 4,374,489.362m
 E: 521,005.433m E: 521,771.324m
 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. Charlotte Unit 2H
 UTM Zone 17, NAD 1927
 Top Hole Coordinates
 N: 14,362,246.46'
 E: 1,709,283.93'
 Point of Entry Coordinates
 N: 14,381,863.75'
 E: 1,708,139.53'
 Bottom Hole Coordinates
 N: 14,351,255.22'
 E: 1,711,797.19'

	Bearing	Dist.
L1	S 39°49' E	2,543.7'
L2	S 46°35' W	1,569.6'
L3	N 65°43' W	1,046.3'
L4	N 42°01' W	871.2'
L5	S 72°28' W	1,207.1'

GRID NORTH

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

12,179' to Top Hole

8,005' to Bottom Hole



See Detail Page 2

Department of Environmental Protection

Charlotte Unit 2H Bottom Hole

500' Buffer

Top Hole 7.5' Spot

47-103-0988A

47-103-1132A

47-103-1013A

47-103-1022A

47-103-0924A

47-103-0927A

47-103-0347A

47-103-1021A

47-103-1027A

47-103-0714

47-103-0540A

47-103-1021A

47-103-1027A

47-103-1122A

47-103-0924A

47-103-0927A

47-103-0347A

47-103-1021A

47-103-1027A

47-103-0714

47-103-0540A

47-103-1021A

47-103-1027A

47-103-1122A

47-103-0924A

47-103-0927A

47-103-0347A

47-103-1021A

47-103-1027A

FILE NO: 323-34-G-17
 DRAWING NO: Charlotte 2H Well Plat
 SCALE: 1" = 1500'
 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: July 14 2021
 OPERATOR'S WELL NO. Charlotte Unit 2H
 API WELL NO MoD
 47 - 103 - 03408
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Built 1,223.8' WATERSHED: Fishing Creek QUADRANGLE: Top Hole: Porter Falls
 DISTRICT: Green William L. & SURFACE OWNER: Delores J. Gadd H. Dom Higginbotham, Perry Dale Thorne, Jr., et ux; Stone Hill Minerals Holdings, LLC; BRC Appalachian Minerals I, LLC; David E. Bowyer; Christenson Family Trust; Thomas M. Slackhouse; Chesapeake Appalachia, LLC; Edwin D. & Jane C. Michael; Glady's E. Conley Trust; Sandra Rose Conley; Michael Tennant; Richard L. Tennant; LEASE NO: COUNTY: Wayne
 ROYALTY OWNER: John W. Bertram; Susie T. Grimm; Suzann Marie Sloehr, et al; Howard M. Henderson; ACREAGE: 60.5 30.5; 22; 40; 24.58125; 45.72; 50.35; 22.5; 0.23750; 25.2875; 80;

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: 7,500' TVD 21,000' 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

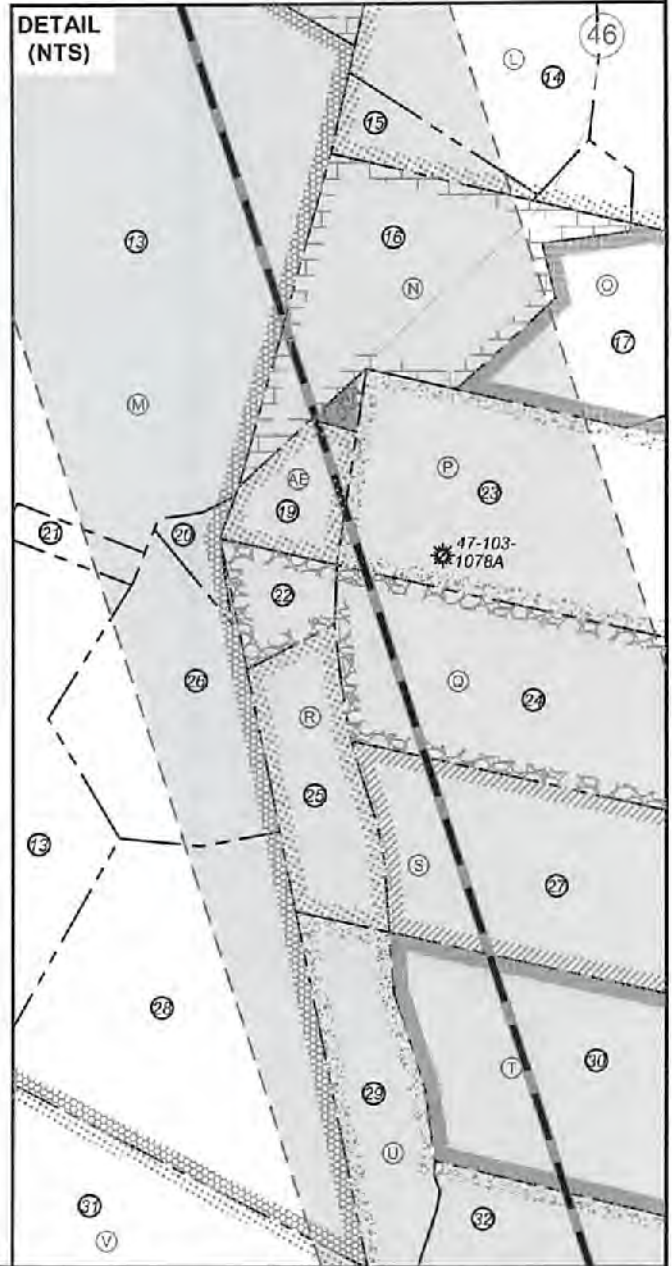
Antero Resources
Well No. Charlotte 2H
BHL MOD
 Antero Resources Corporation



Leases			
A	Shiben Estates, Inc.	P	BRC Appalachian Minerals I, LLC
B	Ellen W. & Mark L. VanDyne	Q	David E. Bowyer
C	John W. Bertram	R	Ronald Hall
D	BRC Appalachian Minerals I, LLC	S	Stone Hill Minerals Holdings, LLC
E	Gladys E. Conley Trust	T	Edwin D. & Jane C. Michael
F	Sandra Rose Conley	U	H. Dorn Higginbotham
G	Richard Lee Tennant	V	Chesapeake Appalachia, LLC
H	Michael Tennant	W	Perry Dale Thorne, Jr., et ux
I	Shiben Estates, Inc.	X	Sally Lou Anderson
J	Susie T. Grimm	Y	Faye Ann Skinner, et al
K	Thomas M. Stackhouse	Z	Jim R. McHenry
L	Acropolis, Inc	AA	Christenson Family Trust
M	Chesapeake Appalachia, LLC	AB	Howard M. Henderson
N	Richard L. Tennant	AC	Suzann Marie Stoehr, et al
O	Emma Lee Rine	AD	Harry K. Eastman, et ux
		AE	Eight Mile Ridge Church of Christ

RECEIVED
 Office of Oil and Gas
 JUL 21 2021
 WV Department of
 Environmental Protection

ID	TM/Par	Owner	B/C/P	Acres
1	16-22	William L. & Delores J. Gadd	348/169	60.50
2	16-23	Kenneth E. Butler	331/110	50.97
3	16-31	William L. & Delores J. Gadd	348/169	2.65
4	16-30	William L. & Delores J. Gadd	348/169	14.00
5	16-21	Mildred E. Caseman	WB45/396	40.00
6	16-47	William M. Greenwalt & Lee A. Nieszgoda	387/1	12.00
7	16-38	Silas Tennant	137/85	15.50
8	16-45	James E. Newman	400/234	18.50
9	16-39	Silas & William A. Tennant	WB27/97	23.30
10	16-40	William M. Greenwalt & Lee A. Nieszgoda	387/1	18.00
11	16-46	Joyce Ann Haught, et al	WB37/335	23.50
12	16-56	James L. & Martha Jo Stewart	288/330	23.33
13	16-61	Michael L. & Tina M. Adams	444/427	87.96
14	16-58.1	Harry K. & Shirley M. Eastham	438/3	7.21
15	16-62	Harry K. & Shirley M. Eastham	325/101	0.86
16	16-68	Harry K. & Shirley M. Eastham	325/101	4.70
17	16-64	Mark & Michael DiFiore	406/241	6.90
18	16-69	Harry K. & Shirley M. Eastham	331/245	0.24
19	16-67	Church of Christ	208/201	0.64
20	16-61.2	Harry K. Eastham	299/450	0.36
21	16-61.1	Church of Christ	218/337	0.42
22	19-8	Church of Eight Mile Ridge	248/434	0.99
23	16-71	Michael L. & Tina M. Adams	437/722	30.50
24	19-8.1	Edwin D. & Jane C. Michael	275/42	36.84
25	19-8.4	Ronald Hall	385/65	2.17
26	19-61.3	Michael L. & Tina M. Adams	346/443	3.83
27	19-8.2	Edwin D. & Jane C. Michael	275/42	22.00
28	19-61.4	Michael L. & Tina M. Adams	377/309	7.91
29	19-17.2	Timothy J. Homer	444/381	2.76
30	19-8.3	Edwin D. & Jane C. Michael	275/42	24.50
31	19-16	Richard R. & Mary J. Scyoc	443/336	73.96
32	19-17	John R. & Mary Ann Horner	416/853	47.55
33	19-25	Perry Dale, Jr. & Martha Jo Thorne	348/298	5.34
34	19-26	Perry Dale, Jr. & Martha Jo Thorne	348/298	25.00
35	19-36	Perry Dale, Jr. & Martha Jo Thorne	348/298	20.00
36	19-27	Ronald L. & Sharon Christenson Family Trust	439/377	25.00
37	19-35	Sharon M. & Ronald L. Christenson	439/373	20.00
38	19-41	Sharon M. & Ronald L. Christenson	439/373	18.50
39	19-42	Sharon M. & Ronald L. Christenson	363/101	22.50
40	19-46	Sharon M. & Ronald L. Christenson	439/373	25.28
41	19-47	Suzann M. Stoehr, et al	WB49/422	80.00
42	19-50	Ronald H. Eastham, et al	424/70	40.00



FILE NO: 323-34-G-17
 DRAWING NO: Charlotte 2H Well Plat
 SCALE: 1" = 1500'
 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: July 14 2021
 OPERATOR'S WELL NO. Charlotte Unit 2H
 API WELL NO **MoP**
 47 - 103 - 03408
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Built 1,223.8' WATERSHED: Fishing Creek QUADRANGLE: Top Hole: Porter Falls
 DISTRICT: Green William L. & SURFACE OWNER: Delores J. Gadd H. Dorn Higginbotham; Perry Dale Thorne, Jr., et ux; Stone Hill Minerals Holdings, LLC; BRC Appalachian Minerals I, LLC; David E. Bowyer; Christenson Family Trust; Thomas M. Stackhouse; Chesapeake Appalachia, LLC; Edwin D. & Jane C. Michael; Gladys E. Conley Trust; Sandra Rose Conley; Michael Tennant; Richard L. Tennant; John W. Bertram; Susie T. Grimm; Suzann Marie Stoehr, et al; Howard M. Henderson; LEASE NO: COUNTY: WV ACREAGE: 60.5
 ROYALTY OWNER: John W. Bertram; Susie T. Grimm; Suzann Marie Stoehr, et al; Howard M. Henderson; ACREAGE: 30.5; 22; 40; 24.58125; 45.72; 50.35; 22.5; 0.23750; 25.2875; 60;
 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: 7,500' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 21,000' 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

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
A	<u>Shiben Estates Inc. Lease (TM 16 PCL 22)</u> Shiben Estates Inc.	Antero Resources Corporation	1/8+	0176/0467
E	<u>Gladys E. Conley Trust Lease</u> Gladys E. Conley Trust	Antero Resources Corporation	1/8+	0180/0443
F	<u>Sandra Rose Conley Lease</u> Sandra Rose Conley SWN Production Company Antero Exchange Properties LLC	SWN Production Company Antero Exchange Properties LLC Antero Resources Corporation	1/8+ Assignment Merger	0157/0540 0177/0533 0013/0311
G	<u>Richard Lee Tennant Lease</u> Richard Lee Tennant	Antero Resources Corporation	1/8	0173/0237
H	<u>Michael Tennant Lease</u> Michael Tennant	Antero Resources Corporation	1/8+	0183/0821
K	<u>Thomas M. Stackhouse Lease</u> Thomas M. Stackhouse	Antero Resources Corporation	1/8+	0186/0110
J	<u>Susie T. Grimm Lease</u> Susie T. Grimm	Antero Resources Corporation	1/8+	198A/607
M	<u>Chesapeake Appalachia LLC Lease</u> Chesapeake Appalachia LLC SWN Production Company Antero Exchange Properties	SWN Production Company Antero Exchange Properties Antero Resources Corporation	1/8 Assignment Merger	0157/0640 0177/0533 0013/0311
AD	<u>Harry K. Eastman et ux Lease</u> Harry K. Eastman et ux	Antero Resources Corporation	1/8+	0188/0351
AE	<u>Eight Mile Ridge Church of Christ Lease</u> Eight Mile Ridge Church of Christ	Antero Resources Corporation	1/8+	203A/587
P	<u>BRC Appalachian Minerals I LLC Lease</u> BRC Appalachian Minerals I LLC BRC Working Interest Company LLC Chesapeake Appalachia LLC SWN Production Company Antero Exchange Properties LLC	BRC Working Interest Company LLC Chesapeake Appalachia LLC SWN Production Company Antero Exchange Properties LLC Antero Resources Corporation	1/8+ Assignment Assignment Assignment Merger	102A/505 103A/470 157A/540 177A/533 13/311
Q	<u>David E. Bowyer Lease</u> David E. Bowyer	Antero Resources Corporation	1/8+	177A/105

RECEIVED
Office of Oil and Gas
JUL 21 2021
WV Department of
Environmental Protection

*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.

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
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- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

	Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
S	<u>Stone Hill Minerals Holdings LLC Lease</u> Stone Hill Minerals Holdings LLC	Antero Resources Corporation	1/8+	259A/769
T	<u>Edwin D. & Jane C. Michael Lease</u> Edwin D. & Jane C. Michael	Antero Resources Corporation	1/8+	191A/245
U	<u>H. Dorn Higginbotham Lease</u> H. Dorn Higginbotham	Antero Resources Corporation	1/8+	178A/647
W	<u>Perry Dale Thorne JR. et ux Lease</u> Perry Dale Thorne JR et ux	Antero Resources Corporation	1/8+	135A/318
AA	<u>Christenson Family Trust Lease</u> Christenson Family Trust	Antero Resources Corporation	1/8+	186A/581
AB	<u>Howard M. Henderson Lease</u> Howard M. Henderson Gastar Exploration USA Inc Statoil USA Onshore Properties Inc Statoil USA Onshore Properties Inc SWN Exchange Titleholder LLC SWN Exchange Titleholder LLC SWN Production Company LLC SWN Production Company LLC Antero Exchange Properties LLC	Gastar Exploration USA Inc Statoil USA Onshore Properties Inc SWN Exchange Titleholder LLC SWN Production Company LLC Antero Exchange Properties LLC Antero Resources Corporation	1/8 Assignment Assignment Merger Assignment Merger	109A/916 132A/259 158A/801 13/296 177A/533 13/311

*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.

**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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- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
AC Susann Marie Stoehr Lease	Susann Marie Stoehr	Antero Resources Corporation	1/8+	203A/550

*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

Office of Oil and Gas
JUL 21 2021
WV Department of Environmental Protection

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

*Co-tenancy utilization – At least 7 mineral owners in tract. At least 75% of the royalty owners have executed a lease on the tract. The interests of the remaining co-tenants were acquired pursuant to the Co-tenancy Modernization and Majority Protection Act

Well Operator: Antero Resources Corporation
 By: Tim Rady
 Its: VP of Land



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

Expedited Modification H6A Horizontal Well Work Permit (API: 47-103-03408)

1 message

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

Tue, Aug 3, 2021 at 7:41 AM

To: Mallory Stanton <mstanton@anteroresources.com>, Dani DeVito <ddevito@shalepro.com>

Cc: "Harris, Bryan O" <bryan.o.harris@wv.gov>, Scott Lemley <slemley@wvassessor.com>

I have attached a copy of the newly issued well [permit](#) number "CHARLOTTE UNIT 2H", API (47-103-03408). 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


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 **47-103-03408 - mod.pdf**
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