



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, January 8, 2024
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for Gowland 1H
47-103-03614-00-00

Lateral Extension

ANTERO RESOURCES CORPORATION

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

A blue ink signature of James A. Martin, Chief, is written over the name and title.

James A. Martin
Chief

Operator's Well Number: Gowland 1H
Farm Name: Kenneth E & Vicky A VanDyne
U.S. WELL NUMBER: 47-103-03614-00-00
Horizontal 6A New Drill
Date Modification Issued: 01/08/2024

Promoting a healthy environment.

01/12/2024

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

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

2) Operator's Well Number: Gowland Unit 1H MOD Well Pad Name: Cedar Pad

3) Farm Name/Surface Owner: Kenneth E. & Vicky A. Vandyne Public Road Access: CR 52

4) Elevation, current ground: 1276' Elevation, proposed post-construction: 1248'

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: 7600' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 7600' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 27,500' MD

11) Proposed Horizontal Leg Length: 18,769'

12) Approximate Fresh Water Strata Depths: 612'

13) Method to Determine Fresh Water Depths: 47103308970000 Offset well records. Depths have been adjusted according to surface elevations.

14) Approximate Saltwater Depths: 2193'

15) Approximate Coal Seam Depths: 1010'

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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[Handwritten signature]
1-4-24

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	100'	100' /	CTS, 96 Cu. Ft. /
Fresh Water	13-3/8"	New	J-55	54.5#	662'	662' /	CTS, 690 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	3450'	3450' /	CTS, 1405 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P110-ICY	23#	27,500'	27,500' /	CTS, 6002Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	24"	0.375"	2250	50	Class A/L	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	1000	Class A/L	~1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A/L	~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			

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Over
14-24

01/12/2024

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): 71.85 acres

22) Area to be disturbed for well pad only, less access road (acres): 18.45 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/L cement.
Surface: Class A/L cement with 2-3% calcium chloride and 1/4 lb of flake
Intermediate: Class A/L 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 G/H + 45 PPS Calcium Carbonate + 1.0% FL-160 + 0.2% ACGB-47 + 0.05% ACSA-51 + 0.2% ACR-20

25) Proposed borehole conditioning procedures:

Conductor: blowhole clean with air, run casing, 10 bbls fresh water.
Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.
Intermediate: blowhole clean with air, trip to surface casing shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate 40 bbls brine water followed by 10 bbls fresh water and 25 bbls bentonite mud, pump 10 bbls fresh water.
Production: circulate with 14 lb/gal NaCl mud, trip to middle of lateral, circulate, pump high viscosity sweep, trip to base of curve, pump high viscosity sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbls fresh water, pump 48 bbls barite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water.

*Note: Attach additional sheets as needed.

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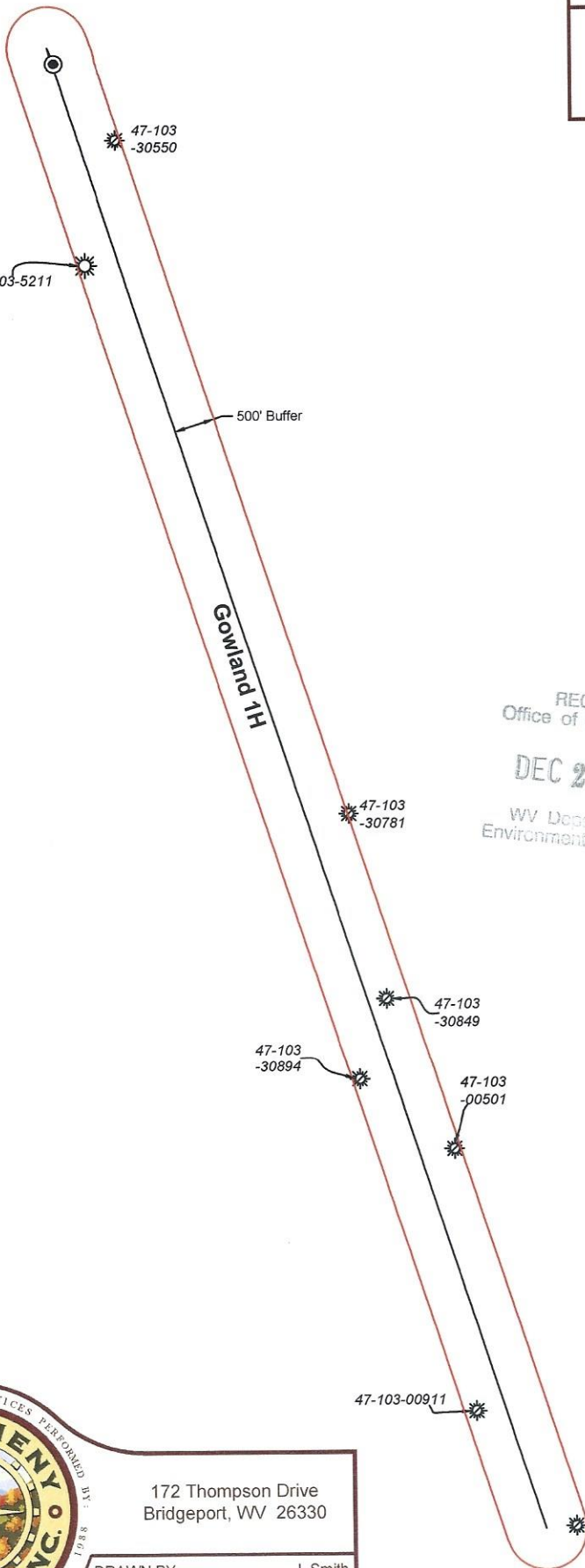
01/12/2024

LEGEND

- ⊙ Proposed gas well
- ☼ Existing Well, as noted
- ☼ Digitized Well, as noted



The orientation of this survey is Grid North, and its coordinate base is the West Virginia Coordinate System of 1927, North Zone



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Bridgeport Office
Phone: (304) 848-5035
Fax: (304) 848-5037

172 Thompson Drive
Bridgeport, WV 26330

PARTY CHIEF: C. Lynch	DRAWN BY: J. Smith
RESEARCH: J. Miller	PREPARED: October 23, 2023
SURVEYED: Dec. 2016	PROJECT NO: 122-34-G-18
FIELD CREW: C.L., K.M.	DRAWING NO: Gowland 1H AOR

Sheet 1 of 1



Scale: 1 inch = 2000 feet

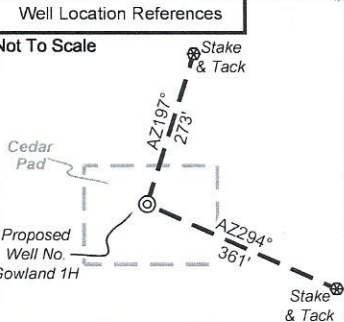
01/12/2024

UWI (API Num)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Producible Formation(s) not perf'd
47103305000000	JENKINS MILLER 1	5393	UNKNOWN	UNKNOWN	2,975			Weir, Berea, Benson, Alexander
4710352110000	M A & A E BRAS	40	HOPE NATURAL GAS	HOPE NATURAL GAS	3,420		Gordon Stray	Weir, Berea, Benson, Alexander
47103308490000	M A & A E BRAS	28	HOPE NATURAL GAS	HOPE NATURAL GAS	2,624		Gordon	Weir, Berea, Benson, Alexander
47103308940000	A E BRAS	4932	HOPE NATURAL GAS	HOPE NATURAL GAS	2,879		2nd Salt, Gordon Stray, Gordon	Weir, Berea, Benson, Alexander
47103005010000	JOSEPH SHIBEN 2	18-11	UN CRBDE OLEFINS DIV	UN CRBDE OLEFINS DIV	2,002		Big Injun, Gordon Stray, Gordon	Weir, Berea, Benson, Alexander
47103009110000	L J FLUHARTY	3	TRIBUNE RESOURCES LLC	PENNZOIL CO INC	2,620		Gordon, Gordon Stray	Weir, Berea, Benson, Alexander
47103019910000								

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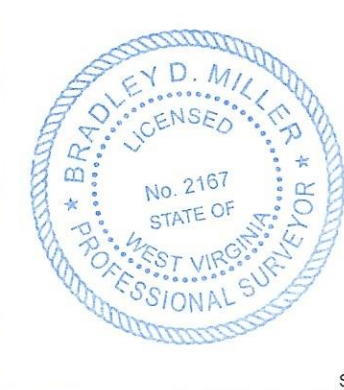
Antero Resources
Well No. Gowland 1H
BHL MOD
Antero Resources Corporation



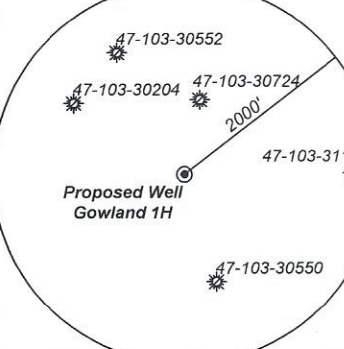
I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Bradley D. Miller

Bradley D. Miller, P.S. 2167



Note: 0 water wells were found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.



	Bearing	Dist.
L1	N 83°25' E	1,594.7'
L2	N 46°21' W	2,733.8'
L3	N 08°22' W	2,508.8'
L4	N 16°30' E	2,432.6'
L5	S 14°36' E	311.5'

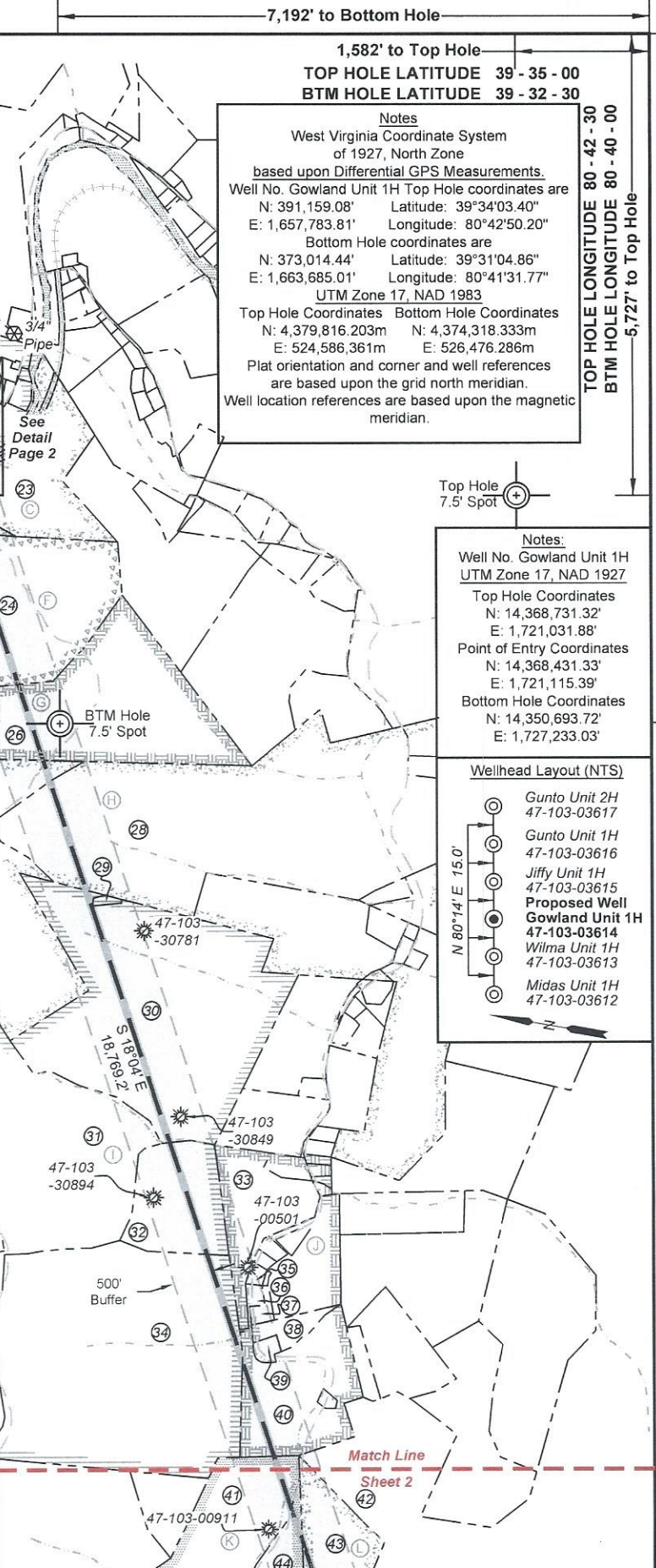
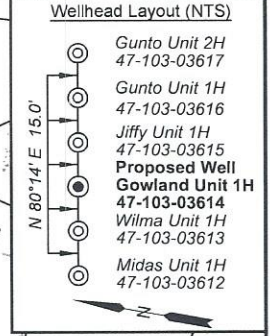
- Legend
- Proposed gas well
 - Monument, as noted
 - Existing Well, as noted
 - Digitized Well, as noted
 - Creek or Drain
 - Road
 - Railroad
 - Surface boundary (approx.)
 - Interior surface tracts (approx.)

1,582' to Top Hole
 TOP HOLE LATITUDE 39 - 35 - 00
 BTM HOLE LATITUDE 39 - 32 - 30

Notes
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Gowland Unit 1H Top Hole coordinates are
 N: 391,159.08' Latitude: 39°34'03.40"
 E: 1,657,783.81' Longitude: 80°42'50.20"
 Bottom Hole coordinates are
 N: 373,014.44' Latitude: 39°31'04.86"
 E: 1,663,685.01' Longitude: 80°41'31.77"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,379,816.203m N: 4,374,318.333m
 E: 524,586,361m E: 526,476.286m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

TOP HOLE LONGITUDE 80 - 42 - 30
 BTM HOLE LONGITUDE 80 - 40 - 00
 5,727' to Top Hole
 8,615' to Bottom Hole

Notes:
 Well No. Gowland Unit 1H UTM Zone 17, NAD 1927
 Top Hole Coordinates
 N: 14,368,731.32'
 E: 1,721,031.88'
 Point of Entry Coordinates
 N: 14,368,431.33'
 E: 1,721,115.39'
 Bottom Hole Coordinates
 N: 14,350,693.72'
 E: 1,727,233.03'



FILE NO: 122-34-G-18
 DRAWING NO: Gowland 1H BHL MOD Plat
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: Submeter
 PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

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

DATE: January 3 2024
 OPERATOR'S WELL NO. Gowland 1H
 API WELL NO
 47 - 103 - 03614
 STATE COUNTY PERMIT

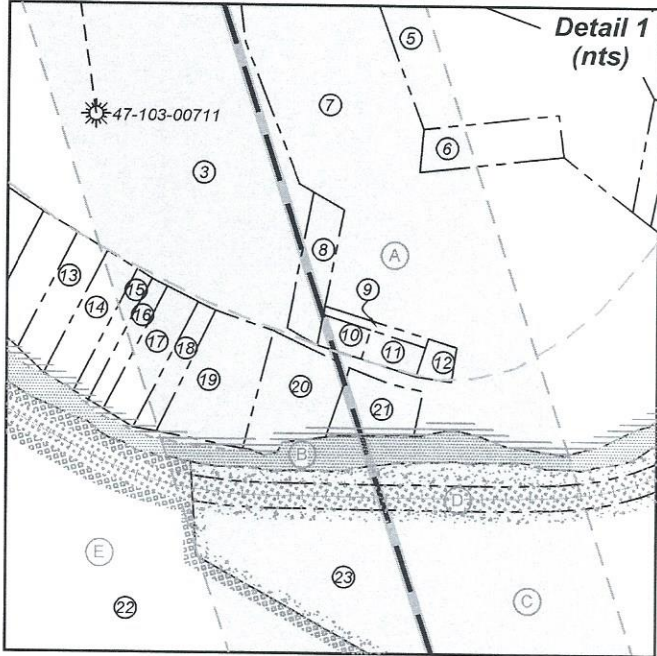
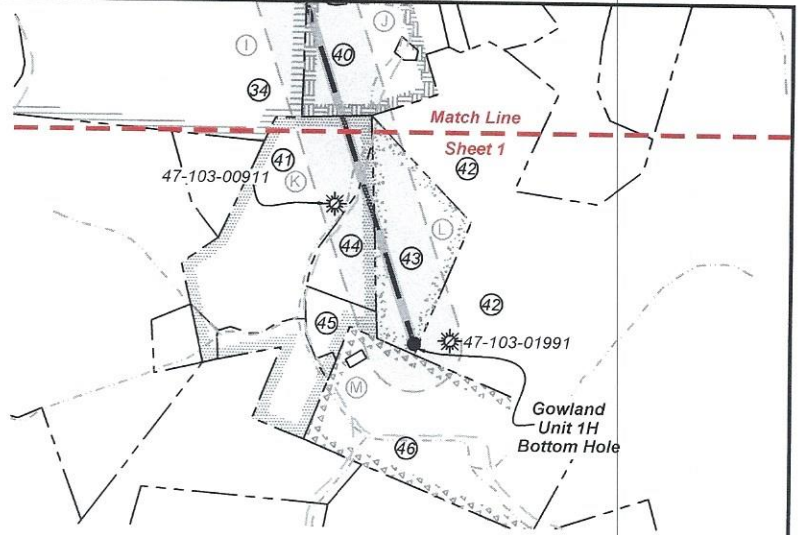
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: Proposed: 1,248' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove
 DISTRICT: Green Dallison Lumber COUNTY: Wetzel
 SURFACE OWNER: Company ACREAGE: 51.5
 ROYALTY OWNER: Jenkins Miller LEASE NO: ACREAGE: 200

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,600' TVD 27,500' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Kevin Ellis
 ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.
 Denver, CO 80202 Bridgeport, WV 26330

01/12/2024



Leases	
A	Jenkins Miller
B	WVDNR
C	Coastal Forest Resources Co.
D	CSX Transportation, Inc.
E	Tribune Resources Minerals, LLC
F	Jeffrey T. Hayes
G	Tribune Resources Minerals, LLC
H	Thomas Cunningham, et ux
I	Shiben Estates Inc.
J	Shiben Estates Inc.
K	Louisa J. Fluharty
L	Paul J. Shiben, et al
M	Rachel Wright, et al
N	Antero Minerals, LLC
O	Shiben Estates Inc.

ID	TM-Par	Owner	Bk/Pg	Acres
1	14-19	Dallison Lumber Company	357/267	51.50
2	13-40	Kenneth E. & Vicky A. VanDyne	357/204	42.33
3	13-83	Emma Virginia Miller	133/455	58.00
4	14-34	Dearld T. Mason	292/646	41.00
5	14-42	Karen King, et al	WB96/811	2.87
6	14-41	Amy J. Byard	389/385	1.00
7	14-60	Amy J. Byard	389/385	21.25
8	14-58.1	George Washington Cain, Jr.	428/922	0.75
9	14-59	Garnet Gas Corporation	406/398	0.15
10	14-58	George Washington Cain, Jr.	428/922	0.23
11	14-59.1	Paula N. Quinn	386/474	0.27
12	14-61	Paula Nell Quinn	368/98	0.21
13	14-52	Michael T. & Mildred L. Quinn	483/885	0.75
14	14-53	David Jack & Tonya Michelle Stout	370/158	0.75
15	14-54	David Jack & Tonya Michelle Stout	370/158	0.48
16	14-55	James Allen & Andrea N. Sell	333/134	0.50
17	14-56	James Allen & Andrea N. Sell	333/134	0.73
18	14-57	James Allen & Andrea N. Sell	333/134	0.31
19	17-6	Phillip Dennison	442/24	1.71
20	17-9	Norma King	418/712	1.00
21	17-8	Anthony & Antonia Hupp	432/30	0.70
22	17-5	Coastal Forest Resources	444/105	90.00
23	17-10	Coastal Forest Resources	444/105	90.00
24	17-21	Pauline E. Hayes	420/626	83.30
25	17-20	Heartland Forest Land Fund VII LP	431/936	123.50
26	17-32	Pauline E. Hayes	420/626	79.25
27	17-40	Heartland Forest Land Fund VII LP	431/936	120.00
28	18-4	Barbara D. Cunningham	291/112	212.80
29	17-41	Heartland Forest Land Fund VII, LP	431/936	0.94
30	17-51	Linda K. Ice & Harry G. Whitcerman Jr.	WB66/545	156.00
31	20-46	Sara Ruth Cool & Peggy Ann Dawson Supplemental Needs Trust	471/207	107.1
32	20-48	Charles R. Kuhn & William J. Shrum	411/688	30.00
33	21-4	Michael & Janet Miller	282/45	23.06
34	20-15	Coastal Forest Resources Co.	444/105	198.00
35	21-7.1	Robert D. & Gloria Fluharty	296/83	1.33
36	21-7.3	Roger D. & Janet Fluharty	296/89	1.53
37	21-7.6	Roger & Janet Fluharty	436/803	1.83
38	21-7.7	Robert & Gloria Fluharty	436/808	5.44
39	21-7.9	Charles Fluharty	439/535	1.97
40	21-9	Kyle R. & Lauren Fluharty	439/308	45.90
41	21-15	Douglas & Debra Williams	385/159	57.06
42	21-3	State of WV	207/239	5228.5
43	21-17	Coastal Forest Resources	444/105	47.00
44	21-16.2	Ascent Resources Marcellus	448/247	14.56
45	21-16	Christopher & Kimberly Campbell	405/756	6.71
46	21-21	Sanford Joe Haught	423/709	83.00

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STATE COUNTY PERMIT

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ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.
Denver, CO 80202 Bridgeport, WV 26330

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

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>A: Jenkins Miller Lease</u>			
Jenkins Miller	Hope Natural Gas Company	1/8	0107/0056
Hope Natural Gas Company	Consolidated Gas Supply Corporation	Assignment	0233/0387
Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	066A/0069
Consolidated Gas Transmission Corporation	Eastern States Oil & Gas Inc.	Assignment	076A/0232
Eastern States Oil & Gas Inc.	Blazer Energy Corp.	Merger	0012/0253
Blazer Energy Corp.	Eastern States Oil & Gas Inc.	Name Change	0012/0259
Eastern States Oil & Gas Inc.	Equitable Production – Eastern States Inc.	Name Change	WVSOS
Equitable Production – Eastern States Inc.	Appalachian Natural Gas Trust	Assignment	079A/0244
Appalachian Natural Gas Trust	EQT Production Company	Merger	0096/0505
EQT Production Company	Antero Resources Corporation	Assignment	230A/0801
<u>N: Antero Minerals, LLC Lease</u>			
Antero Minerals, LLC	Antero Resources Corporation	1/8+	250A/0847
<u>A: Jenkins Miller Lease</u>			
Jenkins Miller	Hope Natural Gas Company	1/8	0107/0056
Hope Natural Gas Company	Consolidated Gas Supply Corporation	Assignment	0233/0387
Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	066A/0069
Consolidated Gas Transmission Corporation	Eastern States Oil & Gas Inc.	Assignment	076A/0232
Eastern States Oil & Gas Inc.	Blazer Energy Corp.	Merger	0012/0253
Blazer Energy Corp.	Eastern States Oil & Gas Inc.	Name Change	0012/0259
Eastern States Oil & Gas Inc.	Equitable Production – Eastern States Inc.	Name Change	WVSOS
Equitable Production – Eastern States Inc.	Appalachian Natural Gas Trust	Assignment	079A/0244
Appalachian Natural Gas Trust	EQT Production Company	Merger	0096/0505
EQT Production Company	Antero Resources Corporation	Assignment	230A/0801
<u>B: WVDNR Lease</u>			
WVDNR	Antero Resources Corporation	1/8+	323A/541
<u>C: Coastal Forest Resources Co Lease</u>			
Coastal Forest Resources Co	Antero Resources Corporation	1/8+	273A/764
<u>D: CSX Transportation Inc Lease</u>			
CSX Transportation Inc	Antero Resources Corporation	1/8+	275A/895
<u>C: Coastal Forest Resources Co Lease</u>			
Coastal Forest Resources Co	Antero Resources Corporation	1/8+	273A/764
<u>E: Tribune Resources Minerals LLC Lease</u>			
Tribune Resources Minerals LLC	Antero Resources Corporation	1/8+	248A/634
<u>F: Jeffrey T. Hayes Lease</u>			
Jefferey T. Hayes	Antero Resources Corporation	1/8+	327A/836
<u>G: Tribune Resources Minerals LLC Lease</u>			
Tribune Resources Minerals LLC	Antero Resources Corporation	1/8+	218A/794

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Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
H: Thomas Cunningham et ux Lease			
Thomas Cunningham et ux	L.G. Robinson	1/8	48/569
L.G. Robinson	South Penn Oil Company	Assignment	49/659
South Penn Oil Company	Hope Natural Gas Company	Assignment	9A/230
Hope Natural Gas Company	Consolidated Gas Supply Corporation	Assignment	233/387
Consolidated Gas Corporation	Consolidated Gas Transmission Corporation	Assignment	66A/69
Consolidated Gas Transmission Corporation	CNG Transmission Corporation	Name Change	13/151
CNG Transmission Corporation	Eastern States Oil & Gas Inc	Assignment	76A/232
Eastern States Oil & Gas Inc	Equitable Production-Eastern States Inc	Name Change	13/14
Equitable Production- Eastern States Inc	Equitable Production Company	Merge	13/14
Equitable Production Company	EQT Production Company	Name Change	13/14
EQT Production Company	Antero Resources Corporation	Assignment	230A/801
I: Shibden Estates Inc Lease			
Shibden Estates Inc	Antero Resources Corporation	1/8+	197A/825
J: Shibden Estates Inc Lease			
Shibden Estates Inc	Antero Resources Corporation	1/8+	202A/234
K: Louisa J Fluharty Lease			
Louisa J Fluharty	South Penn Oil	1/8	49/44
South Penn Oil Company	Pennzoil Company	Name Change	WV SOS
Pennzoil Company	Pennzoil Products Company	Assignment	319/397
Pennzoil Products Company	Pennzoil Exploration & Production Company	Assignment	363/384
Pennzoil Exploration & Production Company	PennEnergy Exploration & Production Company	Merge	12/177
PennEnergy Exploration & Production Company	Devon Energy Production Company LP	Merge	12/278
Devon Energy Production Company LP	East Resources Inc	Assignment	370/580
East Resources Inc	American Energy-Marcellus LLC	Assignment	153A/238
American Energy-Marcellus LLC	Ascent Resources-Marcellus LLC	Name Change	13/304
Ascent Resources-Marcellus LLC	Tribune Resources LLC	Name Change	13/421
Tribune Resources LLC	Antero Resources Corporation	Partial Assignment	310A/473

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 Office of Oil and Gas
 DEC 21 2023
 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.

*Co-tenancy utilization – Antero is utilizing the Co-tenancy Modernization and Majority Protection Act to proceed with development of certain royalty owners' interests in this tract.

**Pooling/Unitization – Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool certain owners in this tract.

**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:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>L: Paul J. Shibben, et al Lease</u>	Paul J. Shibben, et al Pennzoil Company Pennzoil Products Company Pennzoil Exploration & Production Company PennzEnergy Exploration & Production Company Devon Energy Production Company LP East Resources Inc. American Energy-Marcellus LLC Ascent Resources-Marcellus LLC Tribune Resources LLC	Pennzoil Company Pennzoil Products Company Pennzoil Exploration & Production Company PennzEnergy Exploration & Production Company Devon Energy Production Company LP East Resources Inc. American Energy-Marcellus LLC Ascent Resources-Marcellus LLC Tribune Resources LLC Antero Resources Corporation	1/8 Assignment Assignment Merge Merge Assignment Assignment Name Change Name Change Partial Assignment	067A/0633 0319/0397 0363/0384 0012/0177 0012/0278 0370/0580 153A/0238 0013/0304 0013/0421 310A/0473

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****Pooling/Unitization – Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool certain owners in this tract.**

**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: Senior Vice President of Land



December 18, 2023

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

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

CK# 4026584
CK# 7,500.00

Mr. Brewer:

Antero Resources Corporation (Antero) would like to submit the following permit modifications for approved well on the existing Cedar Pad; Gowland Unit 1H (47-103-03614) expedited.

Attached you will find the following:

- Revised Forms WW-6B
- Revised Forms WW-6A1
- Revised Mylar Plats
- AORs

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 black ink that reads "Mallory Turco".

Mallory Turco
Permitting Manager
Antero Resources Corporation

Enclosures

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Office of Oil and Gas
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01/12/2024