

State of West Virginia  
Department of Environmental Protection - Office of Oil and Gas  
Well Operator's Report of Well Work

API 47-103-03457 County Wetzel District Green  
Quad Pine Grove Pad Name Journeyman Field/Pool Name -----  
Farm name Antero Resources Corporation Well Number Ryland Unit 2H  
Operator (as registered with the OOG) Antero Resources Corporation  
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4377643m Easting 522028m  
Landing Point of Curve Northing 4378032.684m Easting 522478.978m  
Bottom Hole Northing 4375280m Easting 523459m

Elevation (ft) 1154' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine  
Mud Type(s) and Additive(s)  
Air - Foam & 4% KCL  
Mud - Polymer

Date permit issued 10/29/2021 Date drilling commenced 12/10/2021 Date drilling ceased 3/1/2022  
Date completion activities began 6/26/2022 Date completion activities ceased 9/14/2022  
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 1088' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 502' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft 960' Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by: SM  
2/9/23

API 47-103-03457 Farm name Antero Resources Corporation Well number Ryland Unit 2H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	28"	20"	130'	New	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	393'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2688'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17148'	New	20#, P-110	N/A	Y
Tubing		2-3/8"	7268'		4.7#, P-110		
Packer type and depth set		N/A					

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	319 sx	15.6	1.18	376	0'	8 Hrs.
Surface	Class A	330 sx	15.8	1.20	396	0'	8 Hrs.
Coal							
Intermediate 1	Class C	930 sx	15.8	1.16	1079	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	4070 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.18 (Tail)	4803	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17148' MD, 7034' TVD (BHL), 7033' (Deepest Point Drilled) Loggers TD (ft) 17148' MD

Deepest formation penetrated Marcellus Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 6432'

Check all wireline logs run  caliper  density  deviated/directional  induction  
 neutron  resistivity  gamma ray  temperature  sonic

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

Conductor - 0

Surface - 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface

Intermediate - 1 above float joint, 1 above float collar, 1 every 4th joint to surface

Production - 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED N/A

*Handwritten signature and date: JMT/AY 2/19/13*





API 47- 103 - 03457 Farm name Antero Resources Corporation Well number Ryland Unit 2H

PRODUCING FORMATION(S)	DEPTHS		
<u>Marcellus</u>	<u>6889' (TOP)</u>	<u>TVD</u>	<u>7518' (TOP)</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1360 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 7192 mcfpd Oil 237 bpd NGL --- bpd Water 896 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	

**\*PLEASE SEE ATTACHED EXHIBIT 3**


Please insert additional pages as applicable.

Drilling Contractor H & P Drilling  
Address 912 N Eagle Valley Rd City Howard State PA Zip 16841

Logging Company Nine Energy Services  
Address 6500 West Fwy City Fort Worth State TX Zip 76116

Cementing Company Halliburton Energy Services  
Address 3000 W. Sam Houston Pkwy City Houston State TX Zip 76114

Stimulating Company Halliburton  
Address 3000 W. Sam Houston Pkwy City Houston State TX Zip 76114

Please insert additional pages as applicable.

Completed by Carly Marvel Telephone 303-357-7373  
Signature Carly Marvel Title Permitting Agent Date 12-30-2022

Submission of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

*SMC  
2/1/13*

API 47-103-03457 Farm Name Antero Resources Corporation Well Number Ryland Unit 2H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	06/26/2022	16988.0	16943.0	60	Marcellus
2	06/26/2022	16904.8	16740.6	60	Marcellus
3	06/27/2022	16705.4	16541.3	60	Marcellus
4	06/27/2022	16506.0	16341.9	60	Marcellus
5	06/27/2022	16306.7	16142.6	60	Marcellus
6	06/27/2022	16107.3	15943.2	60	Marcellus
7	06/28/2022	15908.0	15743.8	60	Marcellus
8	06/28/2022	15708.6	15544.5	60	Marcellus
9	06/28/2022	15509.2	15345.1	60	Marcellus
10	06/28/2022	15309.9	15145.7	60	Marcellus
11	06/29/2022	15110.5	14946.4	60	Marcellus
12	06/29/2022	14911.2	14747.0	60	Marcellus
13	06/29/2022	14711.8	14547.7	60	Marcellus
14	06/29/2022	14512.4	14348.3	60	Marcellus
15	06/30/2022	14313.1	14148.9	60	Marcellus
16	06/30/2022	14113.7	13949.6	60	Marcellus
17	06/30/2022	13914.3	13750.2	60	Marcellus
18	06/30/2022	13715.0	13550.9	60	Marcellus
19	06/30/2022	13515.6	13351.5	60	Marcellus
20	07/01/2022	13316.3	13152.1	60	Marcellus
21	07/01/2022	13116.9	12952.8	60	Marcellus
22	07/01/2022	12917.5	12753.4	60	Marcellus
23	07/01/2022	12718.2	12554.0	60	Marcellus
24	07/02/2022	12518.8	12354.7	60	Marcellus
25	07/02/2022	12319.5	12155.3	60	Marcellus
26	07/02/2022	12120.1	11956.0	60	Marcellus
27	07/02/2022	11920.7	11756.6	60	Marcellus
28	07/03/2022	11721.4	11557.2	60	Marcellus
29	07/03/2022	11522.0	11357.9	60	Marcellus
30	07/03/2022	11322.6	11158.5	60	Marcellus
31	07/03/2022	11123.3	10959.1	60	Marcellus
32	07/03/2022	10923.9	10759.8	60	Marcellus
33	07/04/2022	10724.6	10560.4	60	Marcellus
34	07/04/2022	10525.2	10361.1	60	Marcellus
35	07/04/2022	10325.8	10161.7	60	Marcellus
36	07/04/2022	10126.5	9962.3	60	Marcellus
37	07/04/2022	9927.1	9763.0	60	Marcellus
38	07/05/2022	9727.8	9563.6	60	Marcellus
39	07/05/2022	9528.4	9364.3	60	Marcellus
40	07/05/2022	9329.0	9164.9	60	Marcellus
41	07/05/2022	9129.7	8965.5	60	Marcellus
42	07/09/2022	8930.3	8766.2	60	Marcellus
43	07/09/2022	8730.9	8566.8	60	Marcellus
44	07/10/2022	8531.6	8367.4	60	Marcellus
45	07/10/2022	8332.2	8168.1	60	Marcellus
46	07/10/2022	8132.9	7968.7	60	Marcellus
47	07/10/2022	7933.5	7769.4	60	Marcellus
48	07/11/2022	7734.1	7570.0	60	Marcellus

SM



## EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	06/26/2022	64.7	8,660	8,417	3,442	175,360	250,059	N/A
2	06/26/2022	77.7	8,372	8,616	4,424	394,580	333,695	N/A
3	06/27/2022	78.4	7,836	5,767	4,626	400,819	450,780	N/A
4	06/27/2022	89.4	8,103	5,627	4,802	396,527	286,725	N/A
5	06/27/2022	88.9	8,347	5,723	4,932	403,888	294,390	N/A
6	06/27/2022	90.5	8,526	6,527	3,945	413,927	314,138	N/A
7	06/28/2022	90.3	8,305	8,141	4,475	407,378	313,213	N/A
8	06/28/2022	95.0	8,368	6,513	4,486	394,403	296,366	N/A
9	06/28/2022	96.4	8,367	6,079	5,018	405,052	305,191	N/A
10	06/28/2022	94.1	8,088	7,012	4,940	405,173	295,568	N/A
11	06/29/2022	93.0	7,922	6,655	4,908	410,280	298,056	N/A
12	06/29/2022	93.8	8,640	6,026	4,639	407,718	299,802	N/A
13	06/29/2022	93.6	8,662	6,501	4,506	399,474	285,006	N/A
14	06/29/2022	90.0	8,107	4,686	5,049	407,685	303,836	N/A
15	06/30/2022	88.8	8,129	6,019	4,527	410,721	285,066	N/A
16	06/30/2022	96.4	8,382	5,484	4,416	407,468	342,017	N/A
17	06/30/2022	82.9	8,499	6,457	4,468	399,330	341,534	N/A
18	06/30/2022	96.8	8,343	6,361	4,635	410,256	300,878	N/A
19	06/30/2022	92.2	8,102	6,073	6,930	413,356	300,179	N/A
20	07/01/2022	94.0	8,047	6,094	4,789	412,371	294,291	N/A
21	07/01/2022	94.3	8,408	6,456	4,425	392,945	283,920	N/A
22	07/01/2022	96.9	8,443	6,725	4,601	397,851	287,202	N/A
23	07/01/2022	92.5	8,035	6,206	5,002	398,714	283,030	N/A
24	07/02/2022	89.6	7,708	5,414	4,914	512,320	339,533	N/A
25	07/02/2022	98.0	8,094	5,998	4,663	532,479	295,237	N/A
26	07/02/2022	97.3	8,063	6,168	4,646	541,219	291,062	N/A
27	07/02/2022	86.4	8,072	6,018	4,992	403,767	352,988	N/A
28	07/03/2022	93.3	7,771	5,590	4,484	411,019	288,218	N/A
29	07/03/2022	95.7	7,702	5,517	5,071	412,550	345,219	N/A
30	07/03/2022	76.1	8,617	6,537	4,086	414,210	332,916	N/A
31	07/03/2022	97.9	8,020	5,214	4,611	406,699	293,361	N/A
32	07/03/2022	93.6	7,914	5,837	5,115	456,821	285,612	N/A
33	07/04/2022	92.5	7,581	5,497	4,576	416,428	274,985	N/A
34	07/04/2022	97.3	7,947	6,357	4,308	392,834	282,264	N/A
35	07/04/2022	98.0	7,614	5,717	4,281	481,566	293,792	N/A
36	07/04/2022	96.0	8,119	6,340	4,540	412,937	295,248	N/A
37	07/04/2022	93.2	7,419	5,866	4,922	547,347	282,218	N/A
38	07/05/2022	94.7	7,619	6,008	4,913	548,852	283,336	N/A
39	07/05/2022	94.1	7,459	5,719	5,034	556,114	289,020	N/A
40	07/05/2022	94.0	8,030	6,528	4,254	527,051	295,183	N/A
41	07/05/2022	97.6	7,459	5,878	4,491	544,549	289,465	N/A
42	07/09/2022	95.5	7,174	7,086	4,586	407,822	289,699	N/A
43	07/09/2022	96.0	7,544	6,589	3,983	408,995	287,099	N/A
44	07/10/2022	97.5	7,304	5,947	4,273	406,177	289,749	N/A
45	07/10/2022	97.0	7,206	5,971	3,973	410,097	295,642	N/A
46	07/10/2022	97.1	7,145	6,663	3,915	403,299	284,046	N/A
47	07/10/2022	97.1	7,059	5,822	4,521	392,781	289,482	N/A
48	07/11/2022	96.9	7,037	6,615	4,051	409,934	300,625	N/A
	AVG=	92	7,966	6,230	4,608	20,423,143	14,490,941	TOTAL

SM

## EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Sandstone	75	210	75	210
Silty Sandstone	210	240	210	240
Shaly sandstone	240	270	240	270
Silty Sandstone	270	420	270	420
Shaly sandstone	420	490	420	490
Silty Sandstone	490	600	490	600
Shale	600	810	600	810
Silty Sandstone	810	1,070	810	1,070
Shale w/coal interbeds	1,070	1,230	1,070	1,230
Sandy shale	1,230	1,320	1,230	1,320
Shale	1,320	1,410	1,320	1,410
Sandy shale	1,410	1,710	1,410	1,710
Shaly sandstone	1,710	2,078	1,710	2,148
Big Lime	2,108	2,584	2,148	2,686
Fifty Foot Sandstone	2,584	2,729	2,656	2,841
Gordon	2,729	2,965	2,811	3,097
Fifth Sandstone	2,965	3,019	3,067	3,156
Bayard	3,019	3,952	3,126	4,151
Speechley	3,952	4,080	4,121	4,287
Balltown	4,080	4,573	4,257	4,812
Bradford	4,573	5,128	4,782	5,405
Benson	5,128	5,567	5,375	5,877
Alexander	5,567	6,711	5,847	7,136
Sycamore	6,554	6,681	6,945	7,106
Middlesex	6,681	6,780	7,106	7,260
Burkett	6,780	6,809	7,260	7,314
Tully	6,809	6,889	7,314	7,518
Marcellus	6,889	NA	7,518	NA

\*Please note Antero determines formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.



## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/26/2022
Job End Date:	7/11/2022
State:	West Virginia
County:	Wetzel
API Number:	47-103-03457-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	RYLAND UNIT 2H
Latitude:	39.54810000
Longitude:	-80.74380000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,030
Total Base Water Volume (gal):	15,289,015
Total Base Non Water Volume:	0



### Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Produced Water	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	86.89699	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.17730	

Sm



D-AIR 3000L	Halliburton	Defoamer					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
EXCELERATE LX-16	Halliburton	Friction Reducer					
				Listed Below			
FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			

SM

HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.							
			Crystalline silica, quartz	14808-60-7	100.00000	12.86519	
			Hydrochloric acid	7647-01-0	30.00000	0.04108	
			Guar gum	9000-30-0	100.00000	0.03751	
			Complex Amine Compound	Proprietary	60.00000	0.03227	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01614	
			Sodium chloride	7647-14-5	10.00000	0.00538	
			Amine	Proprietary	5.00000	0.00269	
			Ethoxylated alcohol	Proprietary	5.00000	0.00269	
			Glutaraldehyde	111-30-8	30.00000	0.00242	
			Ammonium persulfate	7727-54-0	100.00000	0.00125	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00040	
			Oxylated phenolic resin	Proprietary	30.00000	0.00037	
			Methanol	67-56-1	100.00000	0.00031	
			Alkenes	Proprietary	100.00000	0.00012	
			Ethanol	64-17-5	1.00000	0.00008	
			Ethoxylated alcohols	Proprietary	30.00000	0.00008	
			Diethanolamine	111-42-2	0.10000	0.00005	
			Sodium bisulphite	7681-57-4	0.10000	0.00005	
			Potassium formate	590-29-4	0.10000	0.00005	
			Polypropylene glycol	25322-69-4	30.00000	0.00004	
			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	30.00000	0.00004	
			Modified thiourea polymer	Proprietary	10.00000	0.00003	



		Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	5.00000	0.00001
		Aldehyde	Proprietary	5.00000	0.00001
		C.I. pigment Orange 5	3468-63-1	1.00000	0.00001
		Ethylene oxide	75-21-8	0.01000	0.00001
		Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01000	0.00001
		Hydroquinone monomethyl ether	150-76-5	0.01000	0.00001
		1,4-Dioxane	123-91-1	0.01000	0.00001
		Acetaldehyde	75-07-0	0.01000	0.00001
		Sodium hydroxide	1310-73-2	0.01000	0.00001
		Nitrotriacetic acid, trisodium salt monohydrate	5064-31-3	0.01000	0.00001
		1-Octadecene	112-88-9	1.00000	0.00000
		1-Hexadecene	629-73-2	1.00000	0.00000

\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

JM



**Antero Resources**  
**Well No. Ryland 2H**  
**As-Drilled**  
 Antero Resources Corporation



Sheet 1 of 2

10,002' to Top Hole

5,331' to Bottom 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. Ryland Unit 2H Top Hole coordinates are  
 N: 384,167.09' Latitude: 39°32'53.15"  
 E: 1,649,289.04' Longitude: 80°44'37.69"  
 Bottom Hole coordinates are  
 N: 376,336.59' Latitude: 39°31'36.38"  
 E: 1,653,835.00' Longitude: 80°43'38.04"  
 UTM Zone 17, NAD 1983  
 Top Hole Coordinates Bottom Hole Coordinates  
 N: 4,377,642.662m N: 4,375,280.291m  
 E: 522,027.703m E: 523,458.505m  
 Plat orientation and corner and well references are based upon the grid north meridian.  
 Well location references are based upon the magnetic meridian.

LONGITUDE 80 - 42 - 30

5,425' to Bottom Hole

12,834' to Top Hole

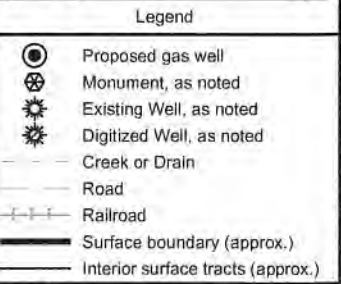
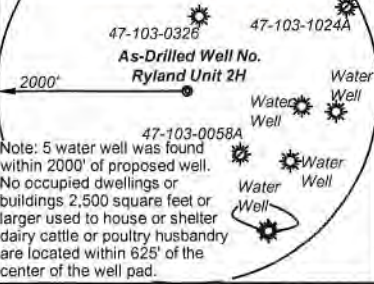
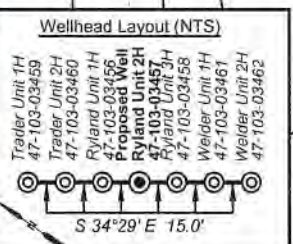
Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

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

Ryland Unit 2H As-Drilled POE Coordinates  
 West Virginia Coordinate System of 1927, North Zone  
 N: 385,422.17'  
 E: 1,650,771.17'  
 Latitude: 39°33'05.76"  
 Longitude: 80°44'18.73"  
 UTM Zone 17, NAD 1983  
 N: 4,378,032.684m  
 E: 522,478.978m

	Bearing	Dist.
L1	S 82°43' E	1,578.7'
L2	S 09°11' W	787.8'
L3	S 24°37' W	1,865.4'
L4	S 67°34' W	970.4'



FILE NO: 278-34-G-17  
 DRAWING NO: Ryland 2H As-Drilled  
 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: December 6 20 22  
 OPERATOR'S WELL NO. Ryland Unit 2H  
 API WELL NO  
 47 - 103 - 03457  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION: ELEVATION: As-Built 1,154' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove  
 DISTRICT: Green Antero Resources COUNTY: Wetzel  
 SURFACE OWNER: Corporation Waco Oil & Gas Company, Inc.; Barbara Barker, et vir; Carl F. Fellows; ACREAGE: 47.5 137.9125;  
 ROYALTY OWNER: Pamela Ann Plamer Emch; William R. Stalnaker; Debra L. Brown; Karen B. Mason; LEASE NO: ACREAGE: 47.5; 537.11875; 26;  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled ESTIMATED DEPTH: 7,034' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,148' 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





Leases	
A	Pamela Ann Palmer Emch
B	BRC Appalachian Minerals I, LLC
C	David E. Bowyer
D	William R. Stalnaker
E	Ridgetop Capital IV, LP
F	Debra L. Brown
G	Debra L. Brown
H	Karen B. Mason
I	Kevin Goff, et ux
J	Shiben Estates, Inc.
K	Barbara Barker, et vir
L	BRC Appalachian Minerals I, LLC
M	Barbara Barker, et vir
N	Carl F. Fellows
O	Waco Oil & Gas Company Inc.
P	Terry Bartrug
Q	BRC Appalachian Minerals I, LLC

ID	TM/Par	Owner	Bk/Pg	Acres
1	16-26	Antero Resources Corporation	474/713	47.50
2	16-25	Antero Resources Corporation	474/713	39.00
3	16-16	Donald L. Smith II, et ux	451/925	60.75
4	17-15.1	Douglas Alan & Shirley Joann Bucher	442/718	12.41
5	17-58	Pennie Baker	411/735	42.41
6	17-56	Pennie R. & Richard K. Baker	366/273	1.63
7	17-60	Ross Bucher	411/765	79.00
8	17-23	Michael Steven Blinkman	461/443	40.10
9	17-22.1	Steven & Bertie Blinkman	418/121	41.0
10	17-25	Nola Parks & Jonathan Sivert	417/35	25.00
11	17-33	Debra Lynn Brown	332/480	26.00
12	17-44	Debra Lynn Brown	362/474	26.00
13	17-42.3	Coastal Forest Resources	444/105	88.43
14	17-43.1	Robert & Phylis Cross	443/205	5.00
15	17-43	George David Sell, et al	206/184	124.50
16	17-45	George D. Sell, et al	W53/228	20.20
17	17-35	Alfred Raymond Furbee, Sr. & Olive Gay Brown	333/638	60.00
18	20-2	George David Sell	351/473	10.00
19	20-3	Higgins Cemetery	---/---	0.28
20	17-30	Alfred Raymond Furbee, Sr. & Olive Gay Brown	333/638	11.70
21	20-4	Nola J. Parks & Gloria C. Higgins	A100/689	25.50
22	20-9.1	George David Sell	372/705	5.00
23	20-9	George David Sell	351/473	48.00
24	20-13	Dallison Lumber Inc.	440/243	208.00
25	20-12	Terry Bartrug	361/465	92.90

FILE NO: 278-34-G-17  
 DRAWING NO: Ryland 2H As-Drilled  
 SCALE: 1" = 1500'  
 MINIMUM DEGREE OF ACCURACY:  
Submeter  
 PROVEN SOURCE OF ELEVATION:  
CORS, Monroe County, OH



DATE: December 6 2022  
 OPERATOR'S WELL NO. Ryland Unit 2H  
 API WELL NO  
47 - 103 - 03457  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built 1,154' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove

DISTRICT: Green Antero Resources CORPORATION COUNTY: Wetzel

SURFACE OWNER: Corporation Waco Oil & Gas Company, Inc.; Barbara Barker, et vir; Carl F. Fellows; ACREAGE: 47.5 137.9125;  
 ROYALTY OWNER: Pamela Ann Plamer Emch; William R. Stalnaker; Debra L. Brown; Karen B. Mason; LEASE NO: \_\_\_\_\_ ACREAGE: \_\_\_\_\_ 47.5; 537.11875; 26;  
 81.5; 35.5; 53;

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 7.034' TVD

PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,148' 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