

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

API 47-103-03456 County Wetzel District Green
Quad Pine Grove Pad Name Journeyman Field/Pool Name ----
Farm name Antero Resources Corporation Well Number Ryland Unit 1H
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 4377646m Easting 522025m
Landing Point of Curve Northing 4377962.372m Easting 522211.861m
Bottom Hole Northing 4375189m Easting 523195m

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 4/13/2022
Date completion activities began 5/31/2022 Date completion activities ceased 9/15/2022
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

APPROVED

Reviewed by: [Signature]
03/17/2023

WR-35
Rev. 8/23/13

API 47-103 - 03456 Farm name Antero Resources Corporation Well number Ryland Unit 1H

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#, X60	N/A	Y
Surface	17-1/2"	13-3/8"	386'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2625'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17032'	New	20#, P-110	N/A	Y
Tubing		2-3/8"	7108'		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 ³ /sks)	Volume (ft ³)	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	915 sx	15.8	1.16	1061	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	2579 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.18 (Tail)	3043	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17032' MD, 7005' TVD (BHL), 7005' (Deepest Point Drilled) Loggers TD (ft) 17032' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6230'

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

03/17/2013
 J. M. M.
 2/10/13

API 47-103 - 03456 Farm name Antero Resources Corporation Well number Ryland Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
*PLEASE SEE ATTACHED EXHIBIT 1					

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
*PLEASE SEE ATTACHED EXHIBIT 2								

Please insert additional pages as applicable.

03/17/2023
[Signature]

API 47- 103 - 03456 Farm name Antero Resources Corporation Well number Ryland Unit 1H

PRODUCING FORMATION(S)	DEPTHS		
<u>Marcellus</u>	<u>6862' (TOP)</u>	<u>TVD</u>	<u>7336' (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 1779 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 8536 mcfpd Oil 282 bpd NGL --- bpd Water 1443 bpd GAS MEASURED BY Estimated Orifice Pilot

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

***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 12/29/2022

API 47-103-03456 Farm Name Antero Resources Corporation Well Number Ryland Unit 1H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	05/31/2022	16915.0	16871.0	60	Marcellus
2	06/01/2022	16833.1	16670.5	60	Marcellus
3	06/01/2022	16635.6	16473.0	60	Marcellus
4	06/01/2022	16438.1	16275.5	60	Marcellus
5	06/02/2022	16240.6	16078.0	60	Marcellus
6	06/02/2022	16043.1	15880.5	60	Marcellus
7	06/02/2022	15845.6	15683.0	60	Marcellus
8	06/03/2022	15648.1	15485.5	60	Marcellus
9	06/03/2022	15450.6	15288.0	60	Marcellus
10	06/03/2022	15253.1	15090.5	60	Marcellus
11	06/04/2022	15055.6	14893.0	60	Marcellus
12	06/04/2022	14858.1	14695.5	60	Marcellus
13	06/04/2022	14660.6	14498.0	60	Marcellus
14	06/04/2022	14463.1	14300.5	60	Marcellus
15	06/05/2022	14265.6	14103.0	60	Marcellus
16	06/05/2022	14068.1	13905.5	60	Marcellus
17	06/05/2022	13870.6	13708.0	60	Marcellus
18	06/06/2022	13673.1	13510.5	60	Marcellus
19	06/08/2022	13475.6	13313.0	60	Marcellus
20	06/08/2022	13278.1	13115.5	60	Marcellus
21	06/08/2022	13080.6	12918.0	60	Marcellus
22	06/09/2022	12883.1	12720.5	60	Marcellus
23	06/09/2022	12685.6	12523.0	60	Marcellus
24	06/09/2022	12488.1	12325.5	60	Marcellus
25	06/09/2022	12290.6	12128.0	60	Marcellus
26	06/10/2022	12093.1	11930.5	60	Marcellus
27	06/11/2022	11895.6	11733.0	60	Marcellus
28	06/11/2022	11698.1	11535.5	60	Marcellus
29	06/11/2022	11500.6	11338.0	60	Marcellus
30	06/12/2022	11303.1	11140.5	60	Marcellus
31	06/12/2022	11105.6	10943.0	60	Marcellus
32	06/12/2022	10908.1	10745.5	60	Marcellus
33	06/12/2022	10710.6	10548.0	60	Marcellus
34	06/12/2022	10513.1	10350.5	60	Marcellus
35	06/13/2022	10315.6	10153.0	60	Marcellus
36	06/13/2022	10118.1	9955.5	60	Marcellus
37	06/13/2022	9920.6	9758.0	60	Marcellus
38	06/13/2022	9723.1	9560.5	60	Marcellus
39	06/13/2022	9525.6	9363.0	60	Marcellus
40	06/14/2022	9328.1	9165.5	60	Marcellus
41	06/14/2022	9130.6	8968.0	60	Marcellus
42	06/14/2022	8933.1	8770.5	60	Marcellus
43	06/15/2022	8735.6	8573.0	60	Marcellus
44	06/20/2022	8538.1	8375.5	60	Marcellus
45	06/21/2022	8340.6	8178.0	60	Marcellus
46	06/21/2022	8143.1	7980.5	60	Marcellus
47	06/22/2022	7945.6	7783.0	60	Marcellus
48	06/22/2022	7748.1	7585.5	60	Marcellus
49	06/23/2022	7550.6	7388.0	60	Marcellus

03/17/2023

API 47-103-03456 Farm Name Antero Resources Corporation Well Number Ryland Unit 1H

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	05/31/2022	25.9	8,289	7,786	4,308	7,400	77,128	N/A
2	06/01/2022	90.7	8,392	6,014	4,461	407,590	479,934	N/A
3	06/01/2022	89.0	8,565	6,952	4,812	399,110	314,167	N/A
4	06/01/2022	88.7	8,540	5,964	4,915	408,269	332,139	N/A
5	06/02/2022	93.3	8,492	5,886	5,066	402,140	314,156	N/A
6	06/02/2022	93.9	8,317	5,928	4,970	401,540	314,116	N/A
7	06/02/2022	94.9	8,327	6,218	4,930	400,455	335,950	N/A
8	06/03/2022	95.1	8,434	6,281	5,248	407,334	331,981	N/A
9	06/03/2022	93.3	8,414	6,030	5,028	393,950	309,047	N/A
10	06/03/2022	92.5	8,592	6,145	5,201	400,341	300,348	N/A
11	06/04/2022	66.8	8,408	6,670	4,786	409,117	438,683	N/A
12	06/04/2022	89.8	8,230	6,358	5,217	396,622	306,694	N/A
13	06/04/2022	89.8	8,200	7,716	4,531	373,369	280,047	N/A
14	06/04/2022	89.4	8,363	6,977	4,506	406,171	320,658	N/A
15	06/05/2022	83.1	8,551	8,310	5,228	392,754	311,158	N/A
16	06/05/2022	85.7	8,466	7,038	4,523	403,222	423,005	N/A
17	06/05/2022	66.7	8,211	6,055	3,928	393,490	427,226	N/A
18	06/06/2022	93.4	8,087	7,981	4,357	385,820	314,814	N/A
19	06/08/2022	90.4	8,730	7,036	5,245	400,028	315,142	N/A
20	06/08/2022	89.5	8,603	6,889	4,994	394,433	306,453	N/A
21	06/08/2022	91.7	8,582	6,802	4,947	377,008	279,478	N/A
22	06/09/2022	83.3	8,468	6,464	4,711	389,429	293,190	N/A
23	06/09/2022	93.8	8,379	6,216	4,986	396,260	294,337	N/A
24	06/09/2022	89.9	8,122	6,934	4,906	405,092	320,635	N/A
25	06/09/2022	95.0	8,140	6,748	4,926	390,001	283,577	N/A
26	06/10/2022	53.4	8,347	6,687	4,915	6,130	286,837	N/A
27	06/11/2022	85.5	8,136	5,668	4,837	387,314	309,142	N/A
28	06/11/2022	91.3	7,946	5,818	5,174	392,151	313,278	N/A
29	06/11/2022	91.0	8,113	5,953	4,721	402,579	320,775	N/A
30	06/12/2022	96.4	7,967	6,139	5,081	403,615	310,316	N/A
31	06/12/2022	97.1	7,838	6,041	5,224	404,846	355,926	N/A
32	06/12/2022	94.4	7,818	6,460	4,292	401,320	296,260	N/A
33	06/12/2022	92.1	8,021	6,391	5,139	397,566	289,625	N/A
34	06/12/2022	96.5	8,034	6,873	5,088	399,220	289,874	N/A
35	06/13/2022	97.0	7,809	6,890	4,907	394,080	290,770	N/A
36	06/13/2022	94.5	7,727	5,119	4,574	396,040	304,850	N/A
37	06/13/2022	94.2	7,531	6,049	4,640	390,140	343,044	N/A
38	06/13/2022	95.6	7,782	5,862	4,892	404,500	286,580	N/A
39	06/13/2022	96.4	7,840	7,225	4,816	409,080	285,145	N/A
40	06/14/2022	97.1	7,511	6,579	4,193	399,400	301,160	N/A
41	06/14/2022	97.0	7,587	7,529	4,654	394,440	279,023	N/A
42	06/14/2022	98.5	7,585	4,505	4,709	391,955	281,293	N/A
43	06/15/2022	97.4	7,603	7,033	4,989	375,970	263,366	N/A
44	06/20/2022	95.0	7,848	7,055	4,839	402,580	296,446	N/A
45	06/21/2022	95.0	7,519	7,278	4,386	396,170	281,282	N/A
46	06/21/2022	92.8	7,446	6,632	4,549	391,820	289,697	N/A
47	06/22/2022	95.5	7,371	7,530	4,467	396,890	279,700	N/A
48	06/22/2022	96.2	7,526	8,339	4,694	402,250	280,205	N/A
49	06/23/2022	97.1	7,148	6,855	4,660	397,476	295,726	N/A
	AVG=	90	8,081	6,610	4,799	18,678,477	15,154,383	TOTAL

03/17/2023

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	2,109
Big Lime	2,108	2,586	2,109	2,638
Fifty Foot Sandstone	2,586	2,724	2,608	2,778
Gordon	2,724	2,953	2,748	3,015
Fifth Sandstone	2,953	3,001	2,985	3,066
Bayard	3,001	3,944	3,036	4,052
Speechley	3,944	4,074	4,022	4,186
Balltown	4,074	4,556	4,156	4,683
Bradford	4,556	5,107	4,653	5,259
Benson	5,107	5,546	5,229	5,718
Alexander	5,546	6,685	5,688	6,944
Sycamore	6,532	6,655	6,758	6,914
Middlesex	6,655	6,756	6,914	7,078
Burkett	6,756	6,784	7,078	7,132
Tully	6,784	6,862	7,132	7,336
Marcellus	6,862	NA	7,336	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:	5/31/2022
Job End Date:	6/23/2022
State:	West Virginia
County:	Wetzel
API Number:	47-103-03456-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	RYLAND UNIT 1H
Latitude:	39.54813000
Longitude:	-80.74383000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,004
Total Base Water Volume (gal):	16,029,051
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	87.72235	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.19162	

SM

Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			

JK

EXCELERATE LX-16	Halliburton	Friction Reducer					
				Listed Below			
Sand-Premium White-30/50	Halliburton	Proppant					
				Listed Below			
D-AIR 3000L	Halliburton	Defoamer					
				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	12.02622	
			Hydrochloric acid	7647-01-0	30.00000	0.04400	
			Complex Amine Compound	Proprietary	60.00000	0.03690	
			Guar gum	9000-30-0	100.00000	0.03364	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01845	
			Sodium chloride	7647-14-5	10.00000	0.00263	
			Glutaraldehyde	111-30-8	30.00000	0.00242	
			Surfactant	Proprietary	5.00000	0.00176	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00176	
			Ethoxylated alcohol	Proprietary	5.00000	0.00132	
			Amine	Proprietary	5.00000	0.00132	
			Ammonium persulfate	7727-54-0	100.00000	0.00112	
			Ethoxylated alcohols	Proprietary	30.00000	0.00043	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00040	
			Alkoxyated polyhydric alcohol	Proprietary	1.00000	0.00035	
			Organic chloride compound	Proprietary	1.00000	0.00035	

Jm

			Oxylated phenolic resin	Proprietary	30.00000	0.00034	
			Methanol	67-56-1	100.00000	0.00030	
			Alkenes	Proprietary	100.00000	0.00029	
			Polypropylene glycol	25322-69-4	30.00000	0.00009	
			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	30.00000	0.00009	
			Ethanol	64-17-5	1.00000	0.00008	
			Modified thiourea polymer	Proprietary	10.00000	0.00003	
			Diethanolamine	111-42-2	0.10000	0.00003	
			Sodium bisulphite	7681-57-4	0.10000	0.00003	
			Potassium formate	590-29-4	0.10000	0.00003	
			Aldehyde	Proprietary	5.00000	0.00001	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	5.00000	0.00001	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00001	
			Sodium hydroxide	1310-73-2	0.01000	0.00001	
			Formaldehyde	50-00-0	0.01000	0.00000	
			Acrylamide	79-06-1	0.01000	0.00000	
			Sodium glycolate	2836-32-0	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	0.00000	
			Organic salt #2	Proprietary	0.01000	0.00000	
			Organic salt #1	Proprietary	0.01000	0.00000	
			1-Hexadecene	629-73-2	1.00000	0.00000	
			1-Octadecene	112-88-9	1.00000	0.00000	
			1,4-Dioxane	123-91-1	0.01000	0.00000	
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01000	0.00000	
			Ethylene oxide	75-21-8	0.01000	0.00000	

JM

			Nitrotriacetic acid, trisodium salt monohydrate	5064-31-3	0.01000	0.00000	
			Hydroquinone monomethyl ether	150-76-5	0.01000	0.00000	
			Acetaldehyde	75-07-0	0.01000	0.00000	

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

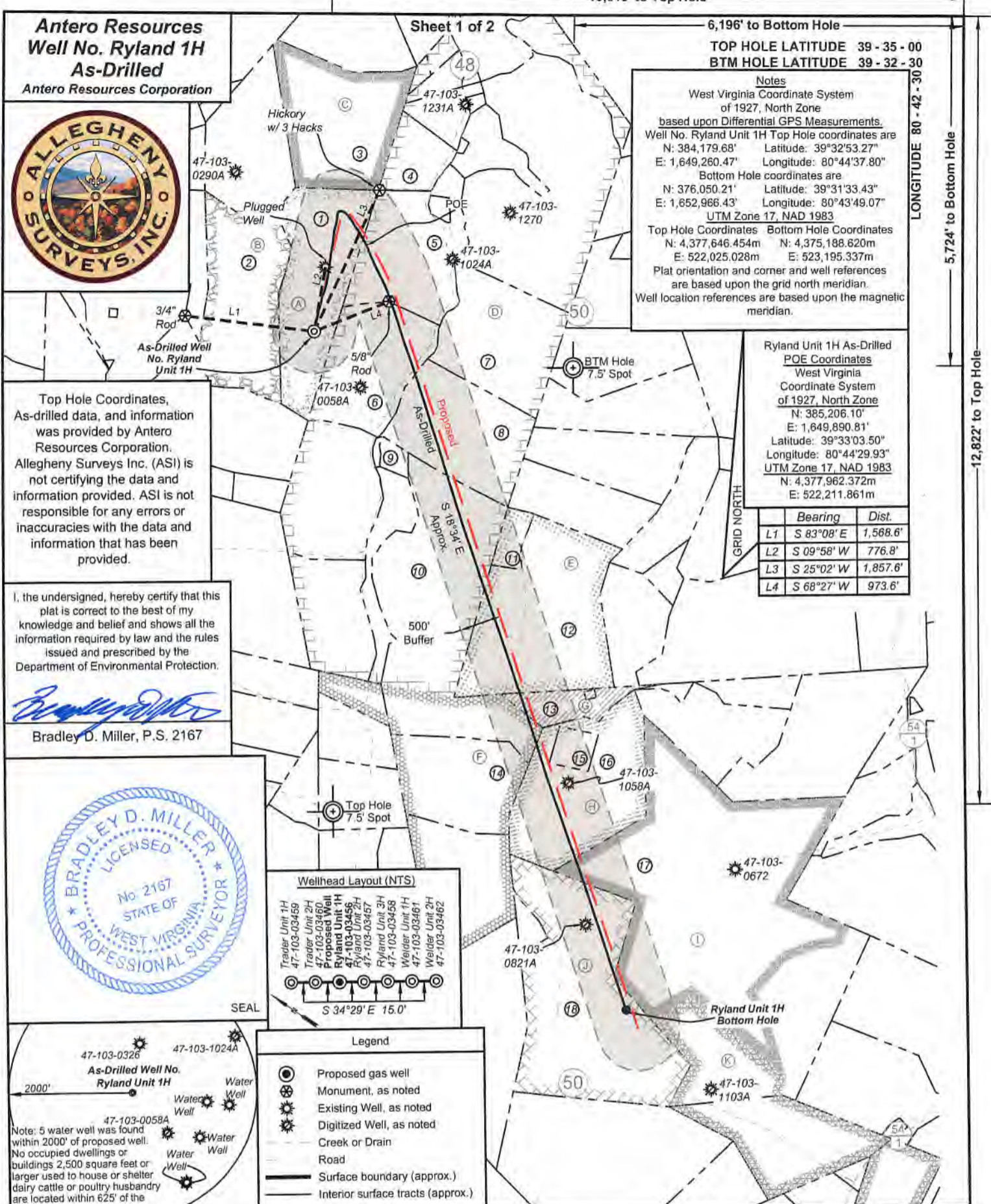
** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** 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)

Sm



Antero Resources
Well No. Ryland 1H
As-Drilled
 Antero Resources Corporation

ALLEGHENY SURVEYS, INC.

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

BRADLEY D. MILLER
 LICENSED
 No. 2167
 STATE OF WEST VIRGINIA
 PROFESSIONAL SURVEYOR

Sheet 1 of 2

10,010' to Top Hole

6,196' 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 1H Top Hole coordinates are
 N: 384,179.68' Latitude: 39°32'53.27"
 E: 1,649,260.47' Longitude: 80°44'37.80"
 Bottom Hole coordinates are
 N: 376,050.21' Latitude: 39°31'33.43"
 E: 1,652,966.43' Longitude: 80°43'49.07"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,377,646.454m N: 4,375,188.620m
 E: 522,025.028m E: 523,195.337m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

Ryland Unit 1H As-Drilled POE Coordinates
 West Virginia Coordinate System of 1927, North Zone
 N: 385,206.10'
 E: 1,649,890.81'
 Latitude: 39°33'03.50"
 Longitude: 80°44'29.93"
 UTM Zone 17, NAD 1983
 N: 4,377,962.372m
 E: 522,211.861m

	Bearing	Dist.
L1	S 83°08' E	1,568.6'
L2	S 09°58' W	776.8'
L3	S 25°02' W	1,857.6'
L4	S 68°27' W	973.6'

Wellhead Layout (NTS)

Trader Unit 1H 47-103-03459
 Trader Unit 2H 47-103-03460
 Proposed Well 1H 47-103-03456
 Ryland Unit 2H 47-103-03457
 Ryland Unit 3H 47-103-03458
 Welder Unit 1H 47-103-03461
 Welder Unit 2H 47-103-03462

S 34°29' E 15.0'

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.)

As-Drilled Well No. Ryland Unit 1H

Note: 5 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.

FILE NO: 278-34-G-17
 DRAWING NO: Ryland 1H 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 2022
 OPERATOR'S WELL NO. Ryland Unit 1H
 API WELL NO
 47 - 103 - 03456
 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 03/17/2023
 SURFACE OWNER: Corporation Waco Oil & Gas Company, Inc.; ACREAGE: 47.5 47.5; 537.11875;
 ROYALTY OWNER: Pamela Ann Plamer Emch; BRC Appalachian Minerals I, LLC; Carl F. Fellows; Terry Bartrug; 81.5; 35.5; 100; 53;
 William R. Stalnaker; Karen B. Mason; Barbara Barker, et.vir; LEASE NO: ACREAGE: 137.9125; 92.904

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 7,005' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,032' MD

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

LONGITUDE 80 - 42 - 30

5,724' to Bottom Hole

12,822' to Top Hole

51

Antero Resources
Well No. Ryland 1H
As-Drilled
 Antero Resources Corporation



Leases	
A	Pamela Ann Palmer Emch
B	BRC Appalachian Minerals I, LLC
C	David E. Bowyer
D	William R. Stalnaker
E	Karen B. Mason
F	BRC Appalachian Minerals I, LLC
G	Barbara Barker, et vir
H	Carl F. Fellows
I	Waco Oil & Gas Company Inc.
J	Terry Bartrug
K	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	17-22	Perry D. Bucher	411/759	37.65
7	17-23	Michael Steven Blinkman	461/443	40.10
8	17-22.1	Steven & Bertie Blinkman	418/121	41.0
9	17-42.1	Robert & Connie Haught	416/373	2.63
10	17-42.3	Coastal Forest Resources	444/105	88.43
11	17-43.1	Robert & Phylis Cross	443/205	5.00
12	17-43	George David Sell, et al	206/184	124.50
13	20-2	George David Sell	351/473	10.00
14	20-8.1	Josh Wright	W75/551	42.00
15	20-9.1	George David Sell	372/705	5.00
16	20-9	George David Sell	351/473	48.00
17	20-13	Dallison Lumber Inc.	440/243	208.00
18	20-12	Terry Bartrug	361/465	92.90

FILE NO: 278-34-G-17
 DRAWING NO: Ryland 1H 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 1H
 API WELL NO
 47 - 103 - 03456
 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 03/17/2023

SURFACE OWNER: Corporation Waco Oil & Gas Company, Inc.; BRC Appalachian Minerals I, LLC; Carl F. Fellows; Terry Bartrug; ACREAGE: 47.5
 ROYALTY OWNER: Pamela Ann Palmer Emch; William R. Stalnaker; Karen B. Mason; Barbara Barker, et vir; LEASE NO: ACREAGE: 47.5
81.5; 35.5; 100; 53; 137.9125; 92.904

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 7,005' TVD

PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,032' MD

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

Jm