

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

API 47-017-06917 County Doddridge District West Union
Quad West Union Pad Name Gaspar Field/Pool Name -----
Farm name Antero Midstream, LLC Well Number Mule 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 4351718m Easting 520455m
Landing Point of Curve Northing 4351140.24m Easting 519904.25m
Bottom Hole Northing 4348587m Easting 520726m

Elevation (ft) 1189' 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 1/18/2022 Date drilling commenced 3/5/2022 Date drilling ceased 6/24/2022
Date completion activities began 9/11/2022 Date completion activities ceased 10/23/2022
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 140, 200, 171' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1345' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 814' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

APPROVED

Reviewed by:
IMR 02/13/2023
03/17/2023

API 47-017 - 06917 Farm name Antero Midstream, LLC Well number Mule 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	20"	16"	130'	New	62.64#, X-60	N/A	Y
Surface	13-1/2"	10-3/4"	355'	New	40.5#, J-55	N/A	Y
Coal							
Intermediate 1	9-7/8"	7-5/8"	2718'	New	26.4#, L-80	N/A	Y
Intermediate 2							
Intermediate 3							
Production	6-3/4"	5"	16371'	New	18#, P-110	N/A	Y
Tubing		2-3/8"	7366.3'		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	96 sx	15.6	1.18	22	0'	8 Hrs.
Surface	Class A	681 sx	15.8	1.16	790	0'	8 Hrs.
Coal							
Intermediate 1	Class A	646 sx	15.8	1.16	749	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	812 sx (Lead)	13 (Lead), 12.5(Tail)	1.75 (Lead)	1421	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 16371' MD, 6836' TVD (BHL), 6897' (Deepest Point Drilled) Loggers TD (ft) 16371' MD

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

Plug back procedure N/A

Kick off depth (ft) 6527'

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

API 47- 017 - 06917 Farm name Antero Midstream, LLC Well number Mule Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6822' (TOP)</u>	<u>TVD</u>	<u>7530' (TOP) MD</u>
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2022 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 6794 mcfpd Oil 84 bpd NGL --- bpd Water 1138 bpd GAS MEASURED BY Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>		<u>BOTTOM</u>		<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
	<u>DEPTH IN FT NAME TVD</u>	<u>DEPTH IN FT TVD</u>	<u>DEPTH IN FT MD</u>	<u>DEPTH IN FT MD</u>	

***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 GR Energy Services
Address 2150 Town Square PL #410 City Sugar Land State TX Zip 77479

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 1/9/2023

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

03/17/2023

API 47-017-06917 Farm Name Antero Midstream, LLC Well Number Mule Unit 2H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	09/11/2022	16252.0	16209.0	60	Marcellus
2	09/11/2022	16171.6	16006.4	60	Marcellus
3	09/11/2022	15971.0	15805.8	60	Marcellus
4	09/11/2022	15770.4	15605.3	60	Marcellus
5	09/12/2022	15569.8	15404.7	60	Marcellus
6	09/12/2022	15369.2	15204.1	60	Marcellus
7	09/13/2022	15168.7	15003.5	60	Marcellus
8	09/13/2022	14968.1	14802.9	60	Marcellus
9	09/13/2022	14767.5	14602.3	60	Marcellus
10	09/13/2022	14566.9	14401.8	60	Marcellus
11	09/13/2022	14366.3	14201.2	60	Marcellus
12	09/13/2022	14165.8	14000.6	60	Marcellus
13	09/14/2022	13965.2	13800.0	60	Marcellus
14	09/14/2022	13764.6	13599.4	60	Marcellus
15	09/14/2022	13564.0	13398.9	60	Marcellus
16	09/14/2022	13363.4	13198.3	60	Marcellus
17	09/14/2022	13162.8	12997.7	60	Marcellus
18	09/15/2022	12962.3	12797.1	60	Marcellus
19	09/15/2022	12761.7	12596.5	60	Marcellus
20	09/15/2022	12561.1	12396.0	60	Marcellus
21	09/15/2022	12360.5	12195.4	60	Marcellus
22	09/15/2022	12159.9	11994.8	60	Marcellus
23	09/15/2022	11959.4	11794.2	60	Marcellus
24	09/15/2022	11758.8	11593.6	60	Marcellus
25	09/16/2022	11558.2	11393.0	60	Marcellus
26	09/16/2022	11357.6	11192.5	60	Marcellus
27	09/16/2022	11157.0	10991.9	60	Marcellus
28	09/16/2022	10956.5	10791.3	60	Marcellus
29	09/16/2022	10755.9	10590.7	60	Marcellus
30	09/16/2022	10555.3	10390.1	60	Marcellus
31	09/16/2022	10354.7	10189.6	60	Marcellus
32	09/16/2022	10154.1	9989.0	60	Marcellus
33	09/17/2022	9953.5	9788.4	60	Marcellus
34	09/17/2022	9753.0	9587.8	60	Marcellus
35	09/17/2022	9552.4	9387.2	60	Marcellus
36	09/18/2022	9351.8	9186.7	60	Marcellus
37	09/19/2022	9151.2	8986.1	60	Marcellus
38	09/19/2022	8950.6	8785.5	60	Marcellus
39	09/19/2022	8750.1	8584.9	60	Marcellus
40	09/19/2022	8549.5	8384.3	60	Marcellus
41	09/19/2022	8348.9	8183.7	60	Marcellus
42	09/20/2022	8148.3	7983.2	60	Marcellus
43	09/20/2022	7947.7	7782.6	60	Marcellus
44	09/20/2022	7747.2	7582.0	60	Marcellus

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API 47-017-06917 Farm Name Antero Midstream, LLC Well Number Mule Unit 2H

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	09/11/2022	68.1	8401	5348	4899	175,800	202,368	N/A
2	09/11/2022	73.7	8531	5279	4885	399,560	299,440	N/A
3	09/11/2022	73.1	8522	7984	5095	403,950	303,107	N/A
4	09/11/2022	73.4	8512	6570	4701	397,660	288,751	N/A
5	09/12/2022	73.2	8513	5929	4521	397,700	300,614	N/A
6	09/12/2022	65.8	8655	6158	5282	404,860	296,510	N/A
7	09/13/2022	72.4	8476	7205	4312	393,830	306,717	N/A
8	09/13/2022	76.4	8605	5912	5005	402,310	278,207	N/A
9	09/13/2022	72.2	8528	5029	4650	412,600	279,310	N/A
10	09/13/2022	70.5	8641	6102	4633	415,360	286,344	N/A
11	09/13/2022	72.8	8527	5996	4737	416,250	295,670	N/A
12	09/13/2022	73.6	8530	5719	4353	412,390	292,042	N/A
13	09/14/2022	75.6	8477	5656	3984	395,890	288,247	N/A
14	09/14/2022	78.2	8612	4451	4198	396,380	291,283	N/A
15	09/14/2022	67.7	8547	6159	4833	401,390	282,690	N/A
16	09/14/2022	79.2	8613	5663	5217	400,540	289,580	N/A
17	09/14/2022	75.6	8462	5855	4162	409,620	319,453	N/A
18	09/15/2022	79.1	8473	5931	3880	400,600	299,975	N/A
19	09/15/2022	77.6	8279	4765	4542	395,960	320,513	N/A
20	09/15/2022	69.9	8427	6057	4321	409,520	324,162	N/A
21	09/15/2022	77.7	8507	5876	4900	399,660	304,920	N/A
22	09/15/2022	80.7	8434	5845	4640	410,920	298,619	N/A
23	09/15/2022	80.5	8441	4589	4570	397,160	307,075	N/A
24	09/15/2022	81.7	8366	5831	4569	395,070	306,271	N/A
25	09/16/2022	81.8	8387	5803	4315	399,900	306,943	N/A
26	09/16/2022	83.0	8253	5792	4521	403,570	301,278	N/A
27	09/16/2022	83.4	8434	5865	4613	403,340	293,351	N/A
28	09/16/2022	87.3	8469	6209	4852	405,150	294,289	N/A
29	09/16/2022	88.9	8487	5955	4668	394,570	292,079	N/A
30	09/16/2022	86.0	8558	6319	4861	400,690	297,642	N/A
31	09/16/2022	84.7	8440	5950	4758	398,580	288,463	N/A
32	09/16/2022	88.8	8246	6300	4874	398,080	286,791	N/A
33	09/17/2022	93.6	8487	5749	4828	401,100	289,304	N/A
34	09/17/2022	90.6	8335	6333	4856	406,500	291,816	N/A
35	09/17/2022	92.3	8423	5535	4840	405,660	286,695	N/A
36	09/18/2022	89.1	8425	6170	4279	405,100	296,457	N/A
37	09/19/2022	91.2	8465	6276	4533	399,520	288,896	N/A
38	09/19/2022	85.1	8487	5232	4597	397,020	292,203	N/A
39	09/19/2022	87.2	8621	6825	4534	405,980	304,784	N/A
40	09/19/2022	92.1	8378	5296	5071	406,140	288,757	N/A
41	09/19/2022	94.2	8220	6845	4422	406,200	283,943	N/A
42	09/20/2022	95.6	8197	6846	3981	403,540	282,944	N/A
43	09/20/2022	94.4	8074	6110	4466	410,580	291,943	N/A
44	09/20/2022	96.0	8115	6174	3991	404,770	285,408	N/A
	AVG=	81	8,445	5,943	4,608	17,500,970	12,905,854	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
Shaley Siltstone	120	210	120	210
Shale	210	390	210	390
Silty Shale	390	480	390	480
Shale	480	810	480	810
Silty Shale	810	840	810	840
Shaley Sandstone	840	960	840	960
Shaley Sandstone	960	1,050	960	1,050
Shale	1,050	1,110	1,050	1,110
Sandy Shale	1,110	1,230	1,110	1,230
Shaley Sandstone	1,230	1,290	1,230	1,290
Sandstone, Tr Shale, Tr Silt	1,290	1,710	1,290	1,710
Shaley Sandstone, Occ Coal	1,710	1,890	1,710	1,890
Sandy Shale, Tr Coal, Tr Limestone	1,890	2,133	1,890	2,227
Big Lime	2,163	2,786	2,227	2,929
Fifty Foot Sandstone	2,786	2,858	2,899	3,006
Gordon	2,858	3,143	2,976	3,325
Fifth Sandstone	3,143	3,326	3,295	3,528
Bayard	3,326	4,004	3,498	4,263
Speechley	4,004	4,284	4,233	4,567
Balltown	4,284	4,701	4,537	5,024
Bradford	4,701	5,158	4,994	5,519
Benson	5,158	5,418	5,489	5,804
Alexander	5,418	6,645	5,774	7,184
Sycamore	6,415	6,615	6,899	7,154
Middlesex	6,615	6,745	7,154	7,358
Burkett	6,745	6,773	7,358	7,413
Tully	6,773	6,822	7,413	7,530
Marcellus	6,822	NA	7,530	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:	9/11/2022
Job End Date:	9/20/2022
State:	West Virginia
County:	Doddridge
API Number:	47-017-06917-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	MULE UNIT 2H
Latitude:	39.31454000
Longitude:	-80.76289000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,897
Total Base Water Volume (gal):	13,273,972
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	86.36218	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.20152	

MC B-8614A	MultiChem	Biocide					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				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	13.39576	
			Hydrochloric acid	7647-01-0	30.00000	0.04660	
			Complex Amine Compound	Proprietary	60.00000	0.03770	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01885	
			Guar gum	9000-30-0	100.00000	0.01473	
			Sobitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00314	
			Surfactant	Proprietary	5.00000	0.00314	
			Glutaraldehyde	111-30-8	30.00000	0.00255	
			Ethoxylated alcohols	Proprietary	5.00000	0.00064	
			Organic chloride compound	Proprietary	1.00000	0.00063	
			Alkoxylated polyhydric alcohol	Proprietary	1.00000	0.00063	
			Ammonium persulfate	7727-54-0	100.00000	0.00043	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00042	
			Methanol	67-56-1	100.00000	0.00029	
			Oxylated phenolic resin	Proprietary	30.00000	0.00013	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00009	
			Modified thiourea polymer	Proprietary	30.00000	0.00009	
			Ethanol	64-17-5	1.00000	0.00008	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			Nitrated acetate salt	Proprietary	0.01000	0.00001	
			Organic salt #2	Proprietary	0.01000	0.00001	
			Sodium glycolate	2836-32-0	0.01000	0.00001	
			Acrylamide	79-06-1	0.01000	0.00001	
			Organic salt #1	Proprietary	0.01000	0.00001	

			Sodium hydroxide	1310-73-2	0.01000	0.00001	
			Formaldehyde	50-00-0	0.01000	0.00001	
			C.I. pigment Orange 5	3468-63-1	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)

Antero Resources
Well No. Mule 2H
As-Drilled
 Antero Resources Corporation

Sheet 1 of 2



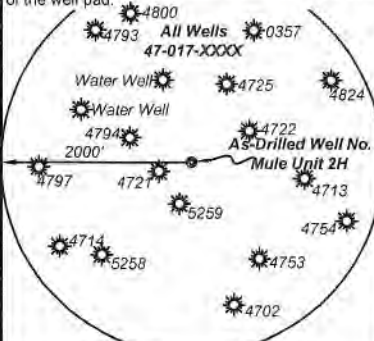
Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

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



Note: 2 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.



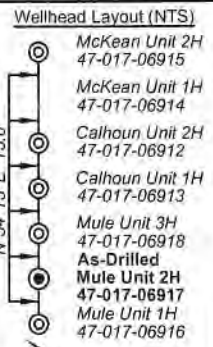
Legend

- 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.)

3,647' to Top Hole
 2,788' to Bottom Hole
 TOP HOLE LATITUDE 39 - 20 - 00
 BTM HOLE LATITUDE 39 - 17 - 30

Notes
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Mule Unit 2H Top Hole coordinates are
 N: 299,182.40' Latitude: 39°18'52.33"
 E: 1,642,690.97' Longitude: 80°45'46.41"
 Bottom Hole coordinates are
 N: 288,892.03' Latitude: 39°17'10.73"
 E: 1,643,407.46' Longitude: 80°45'35.45"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,351,718.159m N: 4,348,586.827m
 E: 520,455.474m E: 520,726.041m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

Mule Unit 2H As-Drilled POE Coordinates
 West Virginia Coordinate System of 1927, North Zone
 N: 297,316.17'
 E: 1,640,850.46'
 Latitude: 39°18'33.63"
 Longitude: 80°46'09.49"
 UTM Zone 17, NAD 1983
 N: 4,351,140.240m
 E: 519,904.246m



Bearing	Dist.
L1 N 89°28' E	1,531.8'
L2 S 63°21' E	643.4'
L3 S 62°04' W	758.9'
L4 N 19°29' W	1,533.6'

FILE NO: 55-30-WU-14
 DRAWING NO: Mule Unit 2H As-Drilled
 SCALE: 1" = 1500'
 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: December 20 2022
 OPERATOR'S WELL NO. Mule Unit 2H
 API WELL NO
 47 - 017 - 06917
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built: 1,189' WATERSHED: Middle Island Creek QUADRANGLE: West Union
 DISTRICT: West Union Antero
 SURFACE OWNER: Midstream, LLC
 ROYALTY OWNER: William A. Farr; James Lincoln Smith; Richard Lowther, et ux; WVDNR
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 16,371' MD

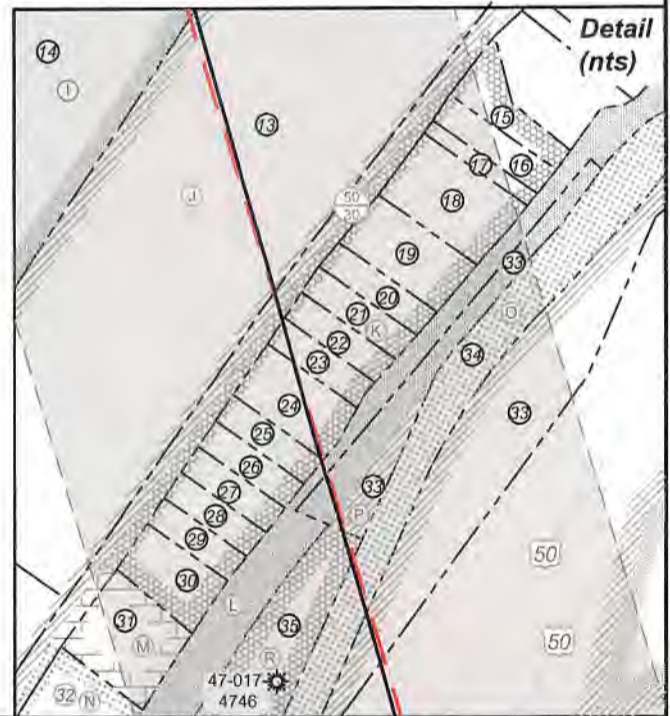
WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Kevin Ellis
 ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oak Blvd.
 Denver, CO 80202 Bridgeport, WV 26330

03/17/2023



Leases	
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B	William Ashburn Heirs
C	James Lincoln Smith
D	Roy E. Smith, et ux
E	Richard Lowther, et ux
F	Michael A. Swisher, et ux
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R	Key Oil Company & Frank L. Butler
S	AMP Fund III, LP
T	Four Leaf Land Company
U	R.S. Maxwell & Clarence E. Sigley Sr.

ID	TM/Par	Owner	Bk/Pg	Acres
1	7-18.1	Antero Midstream, LLC	346/612	45.8
2	7-18	Antero Midstream, LLC	387/708	116.54
3	7-29	Sharon A. Gaspar	W113/242	182.67
4	7-18.2	Brian D. and Patricia Sue Reed	392/472	1.34
5	7-18.3	Bryan & Ronda Ash	216/663	15.00
6	11-87	Amy B. & Howard Spurlock II	244/522	8.94
7	11-87.1	Amy B. & Howard Spurlock II	243/113	5.94
8	11-9	Shelia Jane Lynch Buck, et al	W8/35	56.25
9	11-7.1	Michael A. & Vivian L. Swisher	219/617	3.50
10	11-14	Rhoda Rene Fitzsimmons, et al	272/89	5.12
11	11-93	Rhoda Rene Fitzsimmons, et al	272/89	0.11
12	11-16	Rhoda Rene Fitzsimmons, et al	272/89	19.72
13	11-24	Clarence Ray Bonnell, et al	105/317	15.76
14	11-23	Justin E. & Melissa Ann Holtz	342/354	23.77
15	11-66	Monkey Row Trailer Park LLC	288/26	0.25
16	11-65.1	Monkey Row Trailer Park LLC	288/26	0.40
17	11-65	Monkey Row Trailer Park LLC	288/26	0.15
18	11-64	Monkey Row Trailer Park LLC	288/26	0.96
19	11-63	Monkey Row Trailer Park LLC	288/26	0.73
20	11-62	Monkey Row Trailer Park LLC	288/26	0.35
21	11-61	W. Randall Lynch & Dixie Craig	315/477	0.34
22	11-60	Ralph & Pamela Cutright	376/34	0.33
23	11-59	Ralph & Pamela Cutright	376/34	0.33
24	11-58	Janet M. Esposito, et al	W37/536	0.62
25	11-57	Patrick H. Bonnell	248/582	0.32
26	11-56	Robert O. Bonnell	229/184	0.30
27	11-55	Robert O. Bonnell	229/184	0.30
28	11-54	Mansfield Lee Leeson	282/339	0.29
29	11-53	Shelly G. Bonnell	275/367	0.29
30	11-52	Daniel L. Friend	274/34	0.51
31	11-51	Cheryl Lynn Hall	W89/488	1.00
32	11-50	Earl R. Daugherty	304/415	1.00
33	11-25	J. Charles & George J. Buff III, et al	377/517	6.02
34	11-95	WV Railroad Maintenance Authority	216/166	31.84
35	11-69.1	Franklin L. Butler	255/666	1.00
36	11-68	Earl R. Daugherty	286/205	5.00
37	11-25.1	J. Charles & George J. Buff III, et al	377/517	16.72
38	11-70	Four Leaf Land Co.	270/147	0.24
39	12-63	Karen M. Ireland Family L.P.	235/3	31.50
40	11-80	Karen M. Ireland Family L.P.	235/3	105.35
41	12-71.1	Franklin L. Butler & Key Oil Co.	256/324	81.91



FILE NO: 55-30-WU-14
 DRAWING NO: Mule Unit 2H As-Drilled
 SCALE: 1" = 1500'
 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: December 20 2022
 OPERATOR'S WELL NO. Mule Unit 2H
 API WELL NO
47 - 017 - 06917
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built: 1,189' WATERSHED: Middle Island Creek QUADRANGLE: West Union
 DISTRICT: West Union Antero COUNTY: Doddridge **03/17/2023**
 SURFACE OWNER: Midstream, LLC ACREAGE: 45.8
 ROYALTY OWNER: William A. Farr; James Lincoln Smith; Richard Lowther, et ux; WVDNR LEASE NO: _____ ACREAGE: 137; 7.2; 17; 1.95
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,836' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 16,371' 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

Antero Resources
Well No. Mule 2H
As-Drilled
 Antero Resources Corporation

Sheet 1 of 2

3,647' to Top Hole

2,788' to Bottom Hole

TOP HOLE LATITUDE 39 - 20 - 00
 BTM HOLE LATITUDE 39 - 17 - 30

LONGITUDE 80 - 45 - 00
 1,950' to Bottom Hole
 6,846' to Top Hole



Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheeny 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.

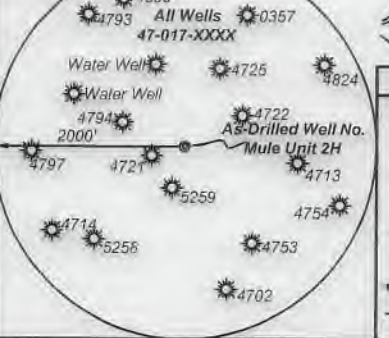
I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Bradley D. Miller, P.S. 2167



SEAL

Note: 2 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.

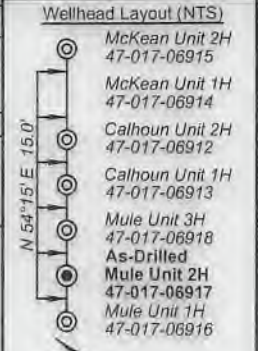


Legend

- 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.)

Notes
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Mule Unit 2H Top Hole coordinates are
 N: 299,182.40' Latitude: 39°18'52.33"
 E: 1,642,690.97' Longitude: 80°45'46.41"
 Bottom Hole coordinates are
 N: 288,892.03' Latitude: 39°17'10.73"
 E: 1,643,407.46' Longitude: 80°45'35.45"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,351,718.159m N: 4,348,586.827m
 E: 520,455.474m E: 520,726.041m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

Mule Unit 2H As-Drilled POE Coordinates
 West Virginia Coordinate System of 1927, North Zone
 N: 297,316.17'
 E: 1,640,850.46'
 Latitude: 39°18'33.63"
 Longitude: 80°46'09.49"
 UTM Zone 17, NAD 1983
 N: 4,351,140.240m
 E: 519,904.246m



	Bearing	Dist.
L1	N 89°28' E	1,531.8'
L2	S 63°21' E	643.4'
L3	S 62°04' W	758.9'
L4	N 19°29' W	1,533.6'

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

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 API WELL NO
 47 - 017 - 06917
 STATE COUNTY PERMIT

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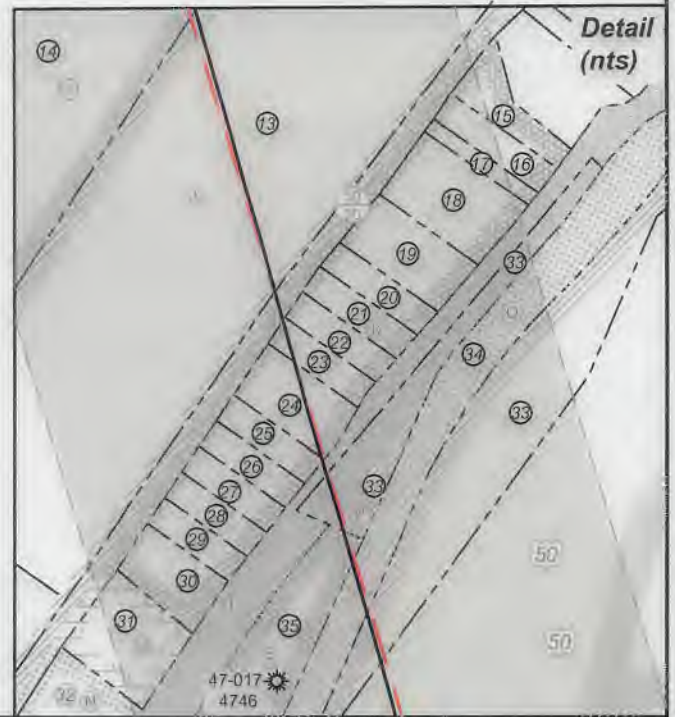
Antero Resources
Well No. Mule 2H
As-Drilled
 Antero Resources Corporation

Sheet 2 of 2



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