

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

API 47 - 095 - 02785 County Tyler District Lincoln, Ellsworth
Quad Middleboure Pad Name Eldon Field/Pool Name -----
Farm name Eldon J. & Ruth A. Helman Well Number Folger Unit 3H
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 4371558m Easting 503809m
Landing Point of Curve Northing 4372683.983m Easting 504195.087m
Bottom Hole Northing 4376873m Easting 502784m

Elevation (ft) 880' 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 3/21/2022 Date drilling commenced 6/1/2022 Date drilling ceased 7/7/2022
Date completion activities began 10/31/2022 Date completion activities ceased 12/4/2022
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 156' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1676' Void(s) encountered (Y/N) depths No
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:
APPROVED
08/11/2023
Emily Strick

API 47-095 - 02785 Farm name Eldon J. & Ruth A. Helman Well number Folger Unit 3H

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	26"	20"	130'	New	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	354'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3133'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	21962'	New	20#, P-100	N/A	Y
Tubing		2-3/8"	7158'		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	141 sx	15.6	1.18	166	0'	8 Hrs.
Surface	Class A	325 sx	15.8	1.17	380	0'	8 Hrs.
Coal							
Intermediate 1	Class C	1080 sx	15.8	1.16	1253	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	3465 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.25 (Tail)	4331	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 21962' MD, 6038' TVD (BHL), 6143' (Deepest Point Drilled) Loggers TD (ft) 21962' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6656'

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

08/11/2023


API 47-095-02785 Farm name Eldon J. & Ruth A. Helman Well number Folger Unit 3H

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.

API 47- 095 - 02785 Farm name Eldon J. & Ruth A. Helman Well number Folger Unit 3H

PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6068' (TOP)</u> TVD	<u>7413' (TOP)</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1381 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 13598 mcfpd Oil 381 bpd NGL --- bpd Water 1688 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)
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***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 2/27/23

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

08/11/2023 *JM*

API 47-095-02785 Farm Name Eldon J. & Ruth A. Helman Well Number Folger Unit 3H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	10/31/2022	21834.0	21791.0	60	Marcellus
2	10/31/2022	21752.8	21589.1	60	Marcellus
3	11/01/2022	21553.9	21390.1	60	Marcellus
4	11/01/2022	21355.0	21191.2	60	Marcellus
5	11/01/2022	21156.1	20992.3	60	Marcellus
6	11/02/2022	20957.1	20793.3	60	Marcellus
7	11/02/2022	20758.2	20594.4	60	Marcellus
8	11/02/2022	20559.3	20395.5	60	Marcellus
9	11/03/2022	20360.3	20196.6	60	Marcellus
10	11/03/2022	20161.4	19997.6	60	Marcellus
11	11/03/2022	19962.5	19798.7	60	Marcellus
12	11/04/2022	19763.5	19599.8	60	Marcellus
13	11/04/2022	19564.6	19400.8	60	Marcellus
14	11/04/2022	19365.7	19201.9	60	Marcellus
15	11/05/2022	19166.7	19003.0	60	Marcellus
16	11/05/2022	18967.8	18804.0	60	Marcellus
17	11/06/2022	18768.9	18605.1	60	Marcellus
18	11/06/2022	18570.0	18406.2	60	Marcellus
19	11/06/2022	18371.0	18207.2	60	Marcellus
20	11/07/2022	18172.1	18008.3	60	Marcellus
21	11/07/2022	17973.2	17809.4	60	Marcellus
22	11/07/2022	17774.2	17610.5	60	Marcellus
23	11/07/2022	17575.3	17411.5	60	Marcellus
24	11/08/2022	17376.4	17212.6	60	Marcellus
25	11/08/2022	17177.4	17013.7	60	Marcellus
26	11/08/2022	16978.5	16814.7	60	Marcellus
27	11/09/2022	16779.6	16615.8	60	Marcellus
28	11/09/2022	16580.7	16416.9	60	Marcellus
29	11/09/2022	16381.7	16217.9	60	Marcellus
30	11/10/2022	16182.8	16019.0	60	Marcellus
31	11/10/2022	15983.9	15820.1	60	Marcellus
32	11/10/2022	15784.9	15621.2	60	Marcellus
33	11/10/2022	15586.0	15422.2	60	Marcellus
34	11/11/2022	15387.1	15223.3	60	Marcellus
35	11/11/2022	15188.1	15024.4	60	Marcellus
36	11/11/2022	14989.2	14825.4	60	Marcellus
37	11/12/2022	14790.3	14626.5	60	Marcellus
38	11/12/2022	14591.3	14427.6	60	Marcellus
39	11/12/2022	14392.4	14228.6	60	Marcellus
40	11/12/2022	14193.5	14029.7	60	Marcellus
41	11/13/2022	13994.6	13830.8	60	Marcellus
42	11/13/2022	13795.6	13631.8	60	Marcellus
43	11/13/2022	13596.7	13432.9	60	Marcellus
44	11/14/2022	13397.8	13234.0	60	Marcellus
45	11/14/2022	13198.8	13035.1	60	Marcellus
46	11/14/2022	12999.9	12836.1	60	Marcellus
47	11/14/2022	12801.0	12637.2	60	Marcellus
48	11/15/2022	12602.0	12438.3	60	Marcellus
49	11/15/2022	12403.1	12239.3	60	Marcellus
50	11/15/2022	12204.2	12040.4	60	Marcellus
51	11/16/2022	12005.2	11841.5	60	Marcellus
52	11/16/2022	11806.3	11642.5	60	Marcellus
53	11/16/2022	11607.4	11443.6	60	Marcellus
54	11/16/2022	11408.5	11244.7	60	Marcellus
55	11/17/2022	11209.5	11045.7	60	Marcellus
56	11/17/2022	11010.6	10846.8	60	Marcellus
57	11/17/2022	10811.7	10647.9	60	Marcellus
58	11/17/2022	10612.7	10449.0	60	Marcellus
59	11/17/2022	10413.8	10250.0	60	Marcellus
60	11/18/2022	10214.9	10051.1	60	Marcellus
61	11/18/2022	10015.9	9852.2	60	Marcellus
62	11/18/2022	9817.0	9653.2	60	Marcellus
63	11/18/2022	9618.1	9454.3	60	Marcellus
64	11/19/2022	9419.2	9255.4	60	Marcellus
65	11/19/2022	9220.2	9056.4	60	Marcellus
66	11/19/2022	9021.3	8857.5	60	Marcellus
67	11/19/2022	8822.4	8658.6	60	Marcellus
68	11/19/2022	8623.4	8459.7	60	Marcellus
69	11/20/2022	8424.5	8260.7	60	Marcellus
70	11/20/2022	8225.6	8061.8	60	Marcellus
71	11/20/2022	8026.6	7862.9	60	Marcellus
72	11/20/2022	7827.7	7663.9	60	Marcellus
73	11/20/2022	7628.8	7465.0	60	Marcellus

08/11/2023

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	10/31/2022	82.7	9474.8	7479.2	3619.4	392343	213523	N/A
2	10/31/2022	81.4	8449.6	5373.8	4051.4	797776	397096	N/A
3	11/01/2022	87.6	8626.0	4324.0	3118.2	717370	312301	N/A
4	11/01/2022	91.1	9271.2	5256.1	3506.7	695636	298606	N/A
5	11/01/2022	94.3	9300.5	4496.0	3252.9	697646	299889	N/A
6	11/02/2022	97.7	9422.9	4940.7	3752.2	734360	321986	N/A
7	11/02/2022	93.3	9043.0	4244.0	3525.0	691171	296737	N/A
8	11/02/2022	93.4	9484.7	4451.9	3550.7	721880	310099	N/A
9	11/03/2022	93.8	9245.7	5113.2	3564.9	695591	293647	N/A
10	11/03/2022	90.9	9702.8	4633.4	3861.1	686661	289297	N/A
11	11/03/2022	95.8	9574.0	4876.1	4554.3	687519	287453	N/A
12	11/04/2022	92.1	9464.9	4987.6	3792.1	685632	285164	N/A
13	11/04/2022	92.4	9539.0	5090.0	4279.0	681422	284503	N/A
14	11/04/2022	93.1	9321.4	5006.0	3341.7	686102	286158	N/A
15	11/05/2022	95.3	9398.9	4668.6	3449.8	718041	301060	N/A
16	11/05/2022	94.5	8919.1	4370.0	4571.3	723173	328644	N/A
17	11/06/2022	43.9	6678.0	5091.0	4687.0	477940	267201	N/A
18	11/06/2022	93.1	9112.0	4394.0	3234.0	677708	282032	N/A
19	11/06/2022	91.6	9183.9	5066.0	3549.7	686223	291641	N/A
20	11/07/2022	96.2	8924.3	5537.7	3150.4	685933	287220	N/A
21	11/07/2022	98.0	8887.2	4706.2	3276.2	686725	290054	N/A
22	11/07/2022	95.2	9117.8	6090.4	3538.5	698549	294687	N/A
23	11/07/2022	96.1	8603.1	5664.2	3634.1	710952	296762	N/A
24	11/08/2022	94.8	8586.0	5801.0	3510.0	712180	297418	N/A
25	11/08/2022	94.4	8592.0	4561.0	3871.0	755895	361221	N/A
26	11/08/2022	94.3	9411.0	4452.9	3719.6	697350	275890	N/A
27	11/09/2022	95.9	8811.7	5164.6	4553.0	720099	307175	N/A
28	11/09/2022	96.3	8511.5	4270.3	4837.1	676428	284626	N/A
29	11/09/2022	97.7	8704.0	5096.0	4582.0	671412	275093	N/A
30	11/10/2022	97.0	8634.0	5628.0	3950.0	687062	280461	N/A
31	11/10/2022	96.6	9438.1	3946.2	3635.1	710382	297800	N/A
32	11/10/2022	97.2	9271.8	5233.1	4026.3	699078	291284	N/A
33	11/10/2022	97.7	9090.3	4688.0	3529.3	680667	281821	N/A
34	11/11/2022	96.7	9256.5	4284.9	3302.3	696199	287260	N/A
35	11/11/2022	97.4	8980.0	5169.0	3662.0	703875	294127	N/A
36	11/11/2022	95.9	9415.3	5154.7	3166.2	693786	287876	N/A
37	11/12/2022	89.6	8559.9	4921.0	3251.0	700464	289257	N/A
38	11/12/2022	95.2	9092.2	5044.2	3431.2	693920	290720	N/A
39	11/12/2022	96.5	9250.5	5110.0	3574.2	699657	295907	N/A
40	11/12/2022	97.4	9103.0	5454.6	3304.8	677936	278416	N/A
41	11/13/2022	95.9	8824.5	4784.2	3560.9	695639	285459	N/A
42	11/13/2022	96.3	8779.4	4477.6	3359.4	684961	289192	N/A
43	11/13/2022	97.2	8976.2	5731.1	3294.8	702805	290619	N/A
44	11/14/2022	93.3	9102.1	5056.7	3472.5	666169	276343	N/A
45	11/14/2022	97.2	8510.7	4626.4	4686.1	699397	293142	N/A
46	11/14/2022	97.3	8514.0	3872.0	3347.0	696524	287995	N/A
47	11/14/2022	96.8	8335.4	5240.3	3268.7	694797	285543	N/A
48	11/15/2022	95.2	9009.4	5355.2	4372.6	658847	288354	N/A
49	11/15/2022	92.2	7988.0	4921.0	3334.0	702946	292407	N/A
50	11/15/2022	97.6	8169.0	4922.0	3405.0	699007	292704	N/A
51	11/16/2022	95.6	8420.1	5446.9	3424.2	691543	290157	N/A
52	11/16/2022	97.0	8164.0	5668.0	3309.0	707810	302264	N/A
53	11/16/2022	97.1	8057.0	2990.0	3671.0	691606	293427	N/A
54	11/16/2022	96.9	8216.8	5489.2	3637.7	695189	282909	N/A
55	11/17/2022	97.1	8199.8	6029.7	3967.1	671870	273203	N/A
56	11/17/2022	94.9	7639.0	5256.0	3527.0	707682	293177	N/A
57	11/17/2022	95.8	7939.0	6458.0	3546.0	721168	307944	N/A
58	11/17/2022	96.8	7896.3	4160.7	3477.5	699440	293739	N/A
59	11/17/2022	97.3	8137.1	4943.5	3831.2	705991	290861	N/A
60	11/18/2022	96.1	8016.0	5210.0	3198.0	678974	278174	N/A
61	11/18/2022	96.2	8103.0	2463.0	3932.0	702144	291074	N/A
62	11/18/2022	97.0	8034.2	3694.7	3836.1	705054	292264	N/A
63	11/18/2022	98.1	8090.8	5007.4	3953.5	667032	270722	N/A
64	11/19/2022	96.9	8010.5	4072.9	3808.2	667614	271644	N/A
65	11/19/2022	96.5	7805.0	3749.0	3837.0	703443	283793	N/A
66	11/19/2022	93.2	7635.0	3297.0	3569.0	711392	294494	N/A
67	11/19/2022	96.1	7442.4	3633.6	3831.5	702224	289514	N/A
68	11/19/2022	96.8	7472.6	4906.8	3678.8	671422	274792	N/A
69	11/20/2022	96.8	6722.6	4904.6	3908.6	673029	274219	N/A
70	11/20/2022	95.6	6837.0	4909.0	3831.0	668146	272026	N/A
71	11/20/2022	95.8	6898.0	3883.0	3941.0	678716	278756	N/A
72	11/20/2022	96.6	6594.0	2443.0	4020.0	680255	279035	N/A
73	11/20/2022	96.8	6740.0	4845.0	3302.0	695127	287047	N/A
	AVERAGE	94	8558	4826	3697	50,310,706	21,239,105	TOTAL

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	145	220	145	220
Silty Sandstone	220	270	220	270
Silty Shale	270	420	270	420
Shale	370	470	370	470
Silty Sandstone	420	470	420	470
Silty Shale	470	670	470	670
Silty Sandstone	670	770	670	770
Shaly Siltstone	770	870	770	870
Shaly Sandstone w/ tr coal	870	1,070	870	1,070
Sandstone	1,070	1,220	1,070	1,220
Shaly Siltstone w/ tr coal	1,220	1,270	1,220	1,270
Shaly Sandstone and siltstone	1,270	1,320	1,270	1,320
Shaly Sandstone w/ tr coal	1,320	1,420	1,320	1,420
Silty Sandstone w/ coal	1,420	1,470	1,420	1,470
Sandy Shale	1,470	1,759	1,470	1,906
Big Lime	1,789	2,182	1,906	2,443
Fifty Foot Sandstone	2,182	2,590	2,413	2,947
Gordon	2,590	2,728	2,917	3,115
Fifth Sandstone	2,728	2,912	3,085	3,340
Bayard	2,912	3,735	3,310	4,353
Speechley	3,735	3,983	4,323	4,658
Balltown	3,983	4,434	4,628	5,226
Bradford	4,434	4,775	5,196	5,639
Benson	4,775	4,981	5,609	5,888
Alexander	4,981	5,993	5,858	7,198
Sycamore	5,864	5,963	6,995	7,168
Middlesex	5,963	6,044	7,168	7,344
Burkett	6,044	6,068	7,344	7,413
Marcellus	6,068	NA	7,413	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.

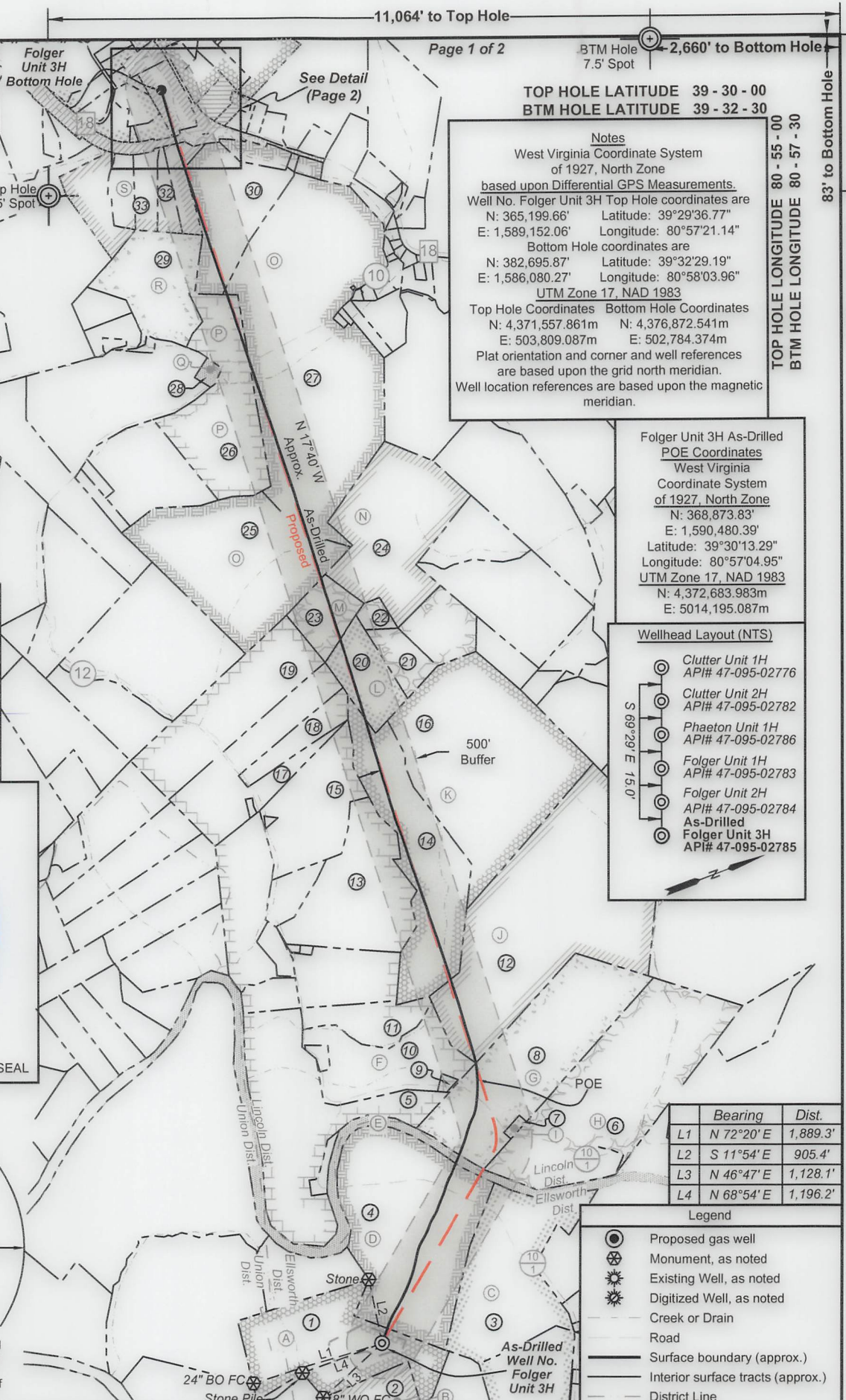
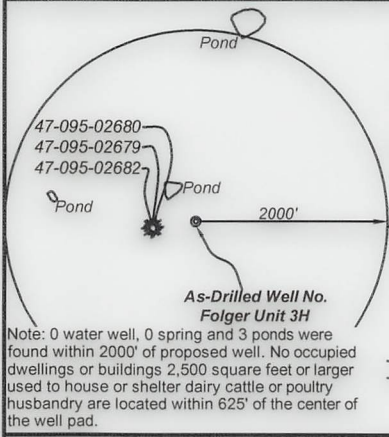
Antero Resources
Well No. Folger 3H
As-Drilled
 Antero Resources Corporation



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



FILE NO: 02-54-U-20
 DRAWING NO: Folger Unit 3H As-Drilled
 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: February 22 20 23
 OPERATOR'S WELL NO. Folger Unit 3H
 API WELL NO
 47 - 095 - 02785
 STATE COUNTY PERMIT

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

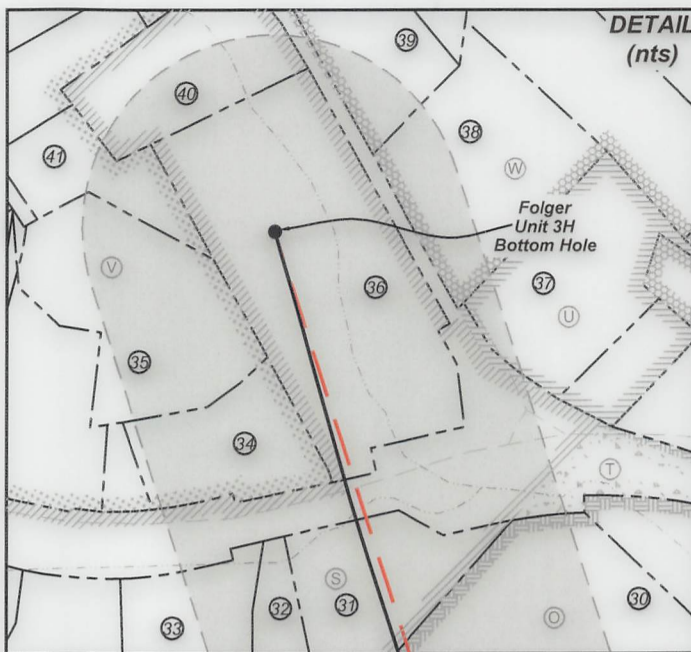
LOCATION: ELEVATION: As-Built 880' WATERSHED: Middle Island Creek QUADRANGLE: Middleboure
 DISTRICT: Lincoln
 SURFACE OWNER: Ruth A. Helman William P. Ingram; Larry A. Wells, et ux; COUNTY: Tyler
 SURFACE OWNER: Ruth A. Helman John W. Starkey, et ux; Gerald C. Clutter, et ux; Timothy B. Ingram; ACREAGE: 61.83
 ROYALTY OWNER: Eldon J. & Ruth A. Helman; Ruth H. Wells; WVDNR; Debra Lynn Warner; LEASE NO: ACREAGE: 56.5; 466.7275;
 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: 21,962' 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

08/11/2023

Antero Resources
Well No. Folger 3H
As-Drilled

Antero Resources Corporation

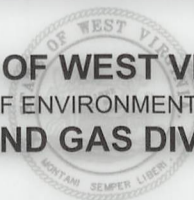


ID	TM/Par	Owner	Bk/Pg	Acres
1	19-1	Eldon J. & Ruth A. Helman	383/761	61.83
2	10-10	Lora K. Thomas	201/359	307.06
3	13-9	Chauncy P. & Ruth M. Archer	190/9	58.38
4	13-10	Eldon J. & Ruth A. Helman	383/761	96.82
5	15-18	B.F. Kile	174/412	70.00
6	15-17	Earl & Donna Smith	191/12	127.39
7	15-16.1	Richard G. Thomas	339/706	1.00
8	15-16	Mary Ann Devine, et al	W36/282	81.67
9	15-15.1	Bruce B. Seckman	348/100	0.99
10	15-15	Jack B. & Bennie H. Kile, Jr.	155/195	39.64
11	15-15.2	Ridgetop Capital, LP	375/206	17.54
12	15-13	B.F., Ben H. & Ida M. Kile	174/412	140.00
13	15-7.1	John Preston Litten	391/769	56.00
14	15-8	Ridgetop Capital, LP	375/206	68.20
15	15-7	Ivan W. & Karen L. Makely	281/498	35.10
16	15-9	Ridgetop Capital, LP	375/206	120.00
17	15-4	Ivan W. & Karen L. Makely	337/639	41.29
18	15-4.1	Ivan W. & Karen L. Makely	404/130	12.00
19	15-2	Stephen E. Surface, et al	365/302	54.00
20	12-58	John W. & Leah D. Starkey	373/699	19.25
21	12-59	Gerald C. & Mary Lou Clutter	286/350	11.00
22	12-57	Gerald C. & Mary Lou Clutter	247/307	3.78
23	12-56	Gerald C. & Mary Lou Clutter	247/307	17.87
24	12-51	Rickie Lee Littleton	281/193	61.23
25	12-50	William P. Ingram	605/159	88.00
26	12-45	Timothy B. Ingram	326/353	56.35
27	12-27	William P. & Jo Anne Ingram	156/175	183.16
28	12-45.1	Timothy B. Ingram	326/353	1.98
29	12-26	Kenneth W. Hammond	393/592	41.25
30	12-9	William P. & Joanne M. Ingram	174/60	43.10
31	12-5	Russell L. Ashcraft	278/214	8.59
32	12-4.3	Judith L. Ashcraft	344/396	5.70
33	12-4.2	Kelley R. Stewart	325/921	8.30
34	12-73	Larry H. & Elizabeth A. Helmick	351/153	2.80
35	8-46.10	Patrick Morris	481/759	5.34
36	8-46	Richard Reeves, II	456/508	10.17
37	8-51	Robert D. & Virginia Nalley	186/336	4.50
38	8-38.1	Dana L. Shields, et al	359/547	5.00
39	8-50	Tonya Rachelle Keller	200/281	2.51
40	8-46.1	Larry A. & Karen B. Wells	217/435	3.61
41	8-46.8	Brian J. & Christine L. Pfohl	323/798	2.01

Leases	
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B	Carol J. Cox
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D	Ruth H. Wells
E	WVDNR
F	Mary Ann Devine
G	Debra Lynn Warner
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Q	Timothy B. Ingram
R	Beverly J. Lamp
S	Larry A. Wells, et ux
T	WVDOT, Division of Highways
U	Robert D. & Virginia A. Nalley
V	Harold L. Marshall, Jr., et ux
W	Robert L. Keller

FILE NO: 02-54-U-20
 DRAWING NO: Folger Unit 3H As-Drilled
 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: February 22 2023
 OPERATOR'S WELL NO. Folger Unit 3H
 API WELL NO
 47 -- 095 -- 02785
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built 880' WATERSHED: Middle Island Creek QUADRANGLE: Middlebourne

DISTRICT: Ellsworth SURFACE OWNER: Eldon J. & Ruth A. Helman; William P. Ingram; Larry A. Wells, et ux; COUNTY: Tyler 08/11/2023

ROYALTY OWNER: Eldon J. & Ruth A. Helman; Ruth H. Wells; WVDNR; Debra Lynn Warner; LEASE NO: ACREAGE: 61.83

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: 6,038' TVD

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

Antero Resources
Well No. Folger 3H
As-Drilled
 Antero Resources Corporation



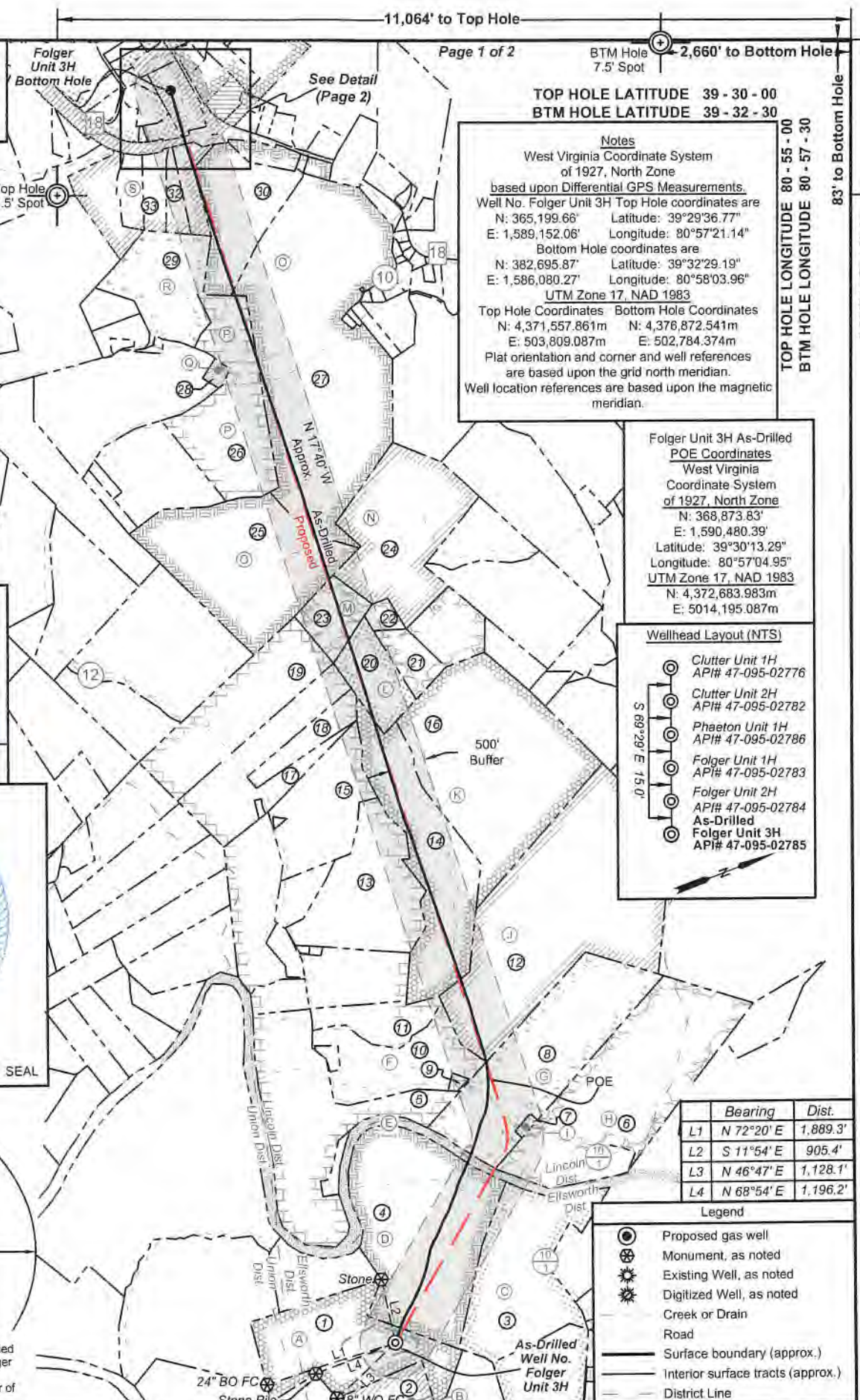
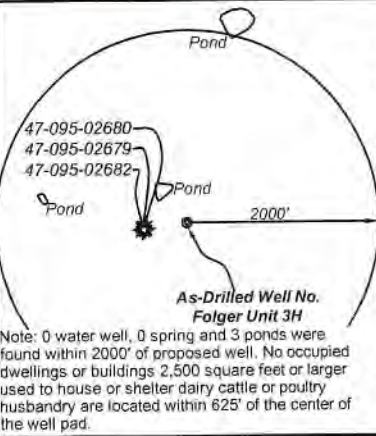
Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

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



SEAL



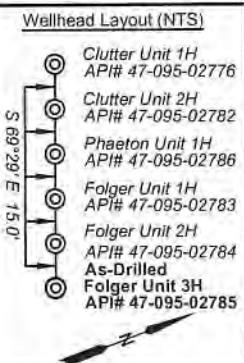
11,064' to Top Hole
 Page 1 of 2
 BTM Hole 7.5' Spot
 2,660' to Bottom Hole

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

Notes
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Folger Unit 3H Top Hole coordinates are
 N: 365,199.66' Latitude: 39°29'36.77"
 E: 1,589,152.06' Longitude: 80°57'21.14"
 Bottom Hole coordinates are
 N: 382,695.87' Latitude: 39°32'29.19"
 E: 1,586,080.27' Longitude: 80°58'03.96"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,371,557.861m N: 4,376,872.541m
 E: 503,809.087m E: 502,784.374m
 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 - 55 - 00
 BTM HOLE LONGITUDE 80 - 57 - 30
 83' to Bottom Hole
 2,350' to Top Hole

Folger Unit 3H As-Drilled POE Coordinates
 West Virginia Coordinate System of 1927, North Zone
 N: 368,873.83'
 E: 1,590,480.39'
 Latitude: 39°30'13.29"
 Longitude: 80°57'04.95"
 UTM Zone 17, NAD 1983
 N: 4,372,683.983m
 E: 5014,195.087m



	Bearing	Dist.
L1	N 72°20' E	1,889.3'
L2	S 11°54' E	905.4'
L3	N 46°47' E	1,128.1'
L4	N 68°54' E	1,196.2'

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.)
- District Line

FILE NO: 02-54-U-20
 DRAWING NO: Folger Unit 3H As-Drilled
 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

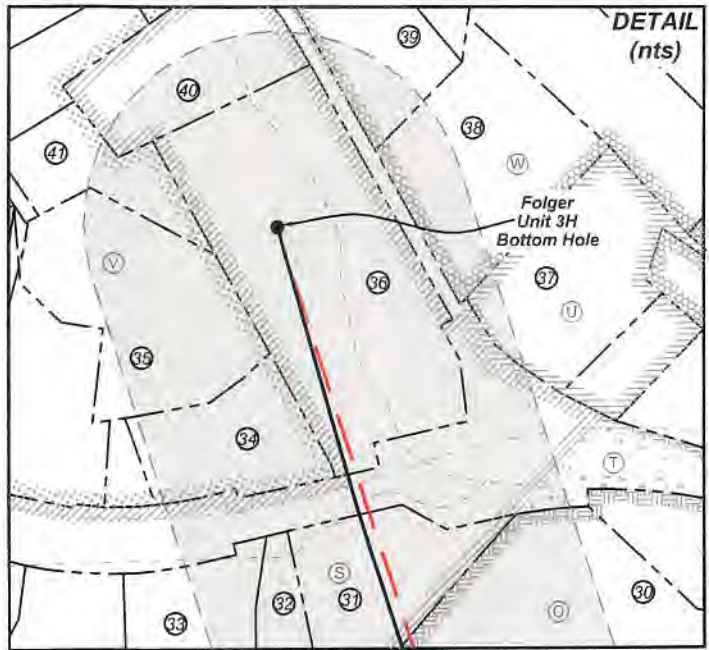
DATE: February 22 2023
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API WELL NO
 47 - 095 - 02785
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built 880' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Middlebourne 177.690;
 DISTRICT: Lincoln Ellsworth COUNTY: Lincoln 177.690; 34.3;
 SURFACE OWNER: Ruth A. Helman Eldon J. & William P. Ingram; Larry A. Wells, et ux; John W. Starkey, et ux; Gerald C. Clutter, et ux; Timothy B. Ingram; Donald H. Lancaster, Jr.; Mary Ann Devine; Ridgetop Capital, LP. COUNTY: 08/11/2023
 ROYALTY OWNER: Eldon J. & Ruth A. Helman; Ruth H. Wells; WVDNR; Debra Lynn Warner; LEASE NO: ACREAGE: 61.83 406.69; 205.862;
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled ACREAGE: 19.25; 49.66;
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 21,962' MD 56.5; 466.7275;

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

Antero Resources
Well No. Folger 3H
As-Drilled
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FILE NO: 02-54-U-20
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Submeter
 PROVEN SOURCE OF ELEVATION:
WVDOT, Harrisville, WV

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

DATE: February 22 2023
 OPERATOR'S WELL NO. Folger Unit 3H
 API WELL NO
47 - 095 - 02785
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Built 880' WATERSHED: Middle Island Creek QUADRANGLE: Middleboure 177.690;
 DISTRICT: Lincoln Ellsworth COUNTY: Taylor 177.690; 34.3;
 SURFACE OWNER: Eldon J. & Ruth A. Helman; William P. Ingram; Larry A. Wells, et ux; ACREAGE: 61.83 406.69; 205.862;
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 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,038' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 21,962' 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

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/31/2022
Job End Date:	11/20/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02785-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	FOLGER UNIT 3H
Latitude:	39.49355000
Longitude:	-80.95587000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,143
Total Base Water Volume (gal):	22,452,796
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	86.60641	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.15119	

Handwritten signature or initials

OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Chemstream StimSTREAM FR 9800	Chemstream, Inc.	Friction Reducer					
				Listed Below			
HYDROCHLORI C ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			

Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				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	13.19262	
			Hydrochloric acid	7647-01-0	30.00000	0.03908	
			Guar gum	9000-30-0	100.00000	0.01700	
			Complex Amine Compound	Proprietary	60.00000	0.01294	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.00647	
			Butene, homopolymer	9003-29-6	25.00000	0.00589	
			Alkanes, C16-20-iso-	Proprietary	25.00000	0.00589	
			Glutaraldehyde	111-30-8	30.00000	0.00239	
			Surfactant	Proprietary	5.00000	0.00108	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00108	
			Ethoxylated alcohols (C12-16)	68213-23-0	3.00000	0.00071	
			Ammonium persulfate	7727-54-0	100.00000	0.00041	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00040	
			Methanol	67-56-1	100.00000	0.00024	
			Ethoxylated alcohols	Proprietary	5.00000	0.00023	
			Alkoxyated polyhydric alcohol	Proprietary	1.00000	0.00022	
			Organic chloride compound	Proprietary	1.00000	0.00022	
			Oxylated phenolic resin	Proprietary	30.00000	0.00012	
			Ethanol	64-17-5	1.00000	0.00008	
			Modified thiourea polymer	Proprietary	30.00000	0.00007	

			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000	
			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			Organic salt #2	Proprietary	0.01000	0.00000	
			Sodium glycolate	2836-32-0	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	0.00000	
			Acrylamide	79-06-1	0.01000	0.00000	
			Organic salt #1	Proprietary	0.01000	0.00000	
			Formaldehyde	50-00-0	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)