

RECEIVED  
Office of Oil and Gas  
NOV 12 2021  
WV Department of  
Environmental Protection

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

API 47-095' - 02718 County Tyler District Union/Meade  
Quad Middlebourne/ Ben's Run Pad Name Gorrell Field/Pool Name ----  
Farm name Elizabeth Gorrell Well Number Mills 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 4363186m Easting 500803m  
Landing Point of Curve Northing 4363296.07m Easting 499736.97m  
Bottom Hole Northing 4365994m Easting 498789m

Elevation (ft) 1045' 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 11/19/2020 Date drilling commenced 3/19/2021 Date drilling ceased 4/29/2021  
Date completion activities began 5/30/2021 Date completion activities ceased 7/6/2021  
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 505' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1378' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by:  
DWP  
12/21/21  
**12/31/2021**

API 47-095 - 02718 Farm name Elizabeth Gorrell Well number Mills 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	24"	20"	80'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	630'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2794'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	16962'	New	20#, P-110	N/A	Y
Tubing		2-3/8"	7231'		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	266 sx	15.6	1.18	56	0'	8 Hrs.
Surface	Class A	600 sx	15.8	1.16	124	0'	8 Hrs.
Coal							
Intermediate 1	Class A	980 sx	15.8	1.17	201	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	792 sx (Lead) 2570 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.4 (Lead), 1.32 (Tail)	597	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17012' MD, 6177' TVD (BHL), 6233' (Deepest Point Drilled) Loggers TD (ft) 17012' MD

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

Plug back procedure N/A

Kick off depth (ft) 6460'

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- 095 - 02718 Farm name Elizabeth Gorrell Well number Mills Unit 1H

PERFORATION RECORD

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

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)
<b>*PLEASE SEE ATTACHED EXHIBIT 2</b>								

Please insert additional pages as applicable.

API 47- 095 - 02718 Farm name Elizabeth Gorrell Well number Mills Unit 1H

PRODUCING FORMATION(S)	DEPTHS	
Marcellus	6181' (TOP) TVD	6506' (TOP) MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 2800 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 15547 mcfpd Oil 470 bpd NGL --- bpd Water -17 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 <sub>2</sub> 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 Brandi Hankins Telephone 303-357-7223  
Signature  Title Completions Technician Date 11/10/21

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

12/31/2021

API 47-095-02718 Farm Name Elizabeth Gorrell Well Number Mills Unit 1H

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	5/30/2021	16897	16855	36	Marcellus
2	5/30/2021	16816.30851	16649.8511	36	Marcellus
3	5/31/2021	16614.15957	16447.7021	36	Marcellus
4	5/31/2021	16412.01064	16245.5532	36	Marcellus
5	6/1/2021	16209.8617	16043.4043	36	Marcellus
6	6/1/2021	16007.71277	15841.2553	36	Marcellus
7	6/1/2021	15805.56383	15639.1064	36	Marcellus
8	6/2/2021	15603.41489	15436.9574	36	Marcellus
9	6/2/2021	15401.26596	15234.8085	36	Marcellus
10	6/2/2021	15199.11702	15032.6596	36	Marcellus
11	6/3/2021	14996.96809	14830.5106	36	Marcellus
12	6/3/2021	14794.81915	14628.3617	36	Marcellus
13	6/3/2021	14592.67021	14426.2128	36	Marcellus
14	6/4/2021	14390.52128	14224.0638	36	Marcellus
15	6/4/2021	14188.37234	14021.9149	36	Marcellus
16	6/5/2021	13986.2234	13819.766	36	Marcellus
17	6/5/2021	13784.07447	13617.617	36	Marcellus
18	6/6/2021	13581.92553	13415.4681	36	Marcellus
19	6/6/2021	13379.7766	13213.3191	36	Marcellus
20	6/7/2021	13177.62766	13011.1702	36	Marcellus
21	6/7/2021	12975.47872	12809.0213	36	Marcellus
22	6/7/2021	12773.32979	12606.8723	36	Marcellus
23	6/8/2021	12571.18085	12404.7234	36	Marcellus
24	6/8/2021	12369.03191	12202.5745	36	Marcellus
25	6/8/2021	12166.88298	12000.4255	36	Marcellus
26	6/9/2021	11964.73404	11798.2766	36	Marcellus
27	6/9/2021	11762.58511	11596.1277	36	Marcellus
28	6/9/2021	11560.43617	11393.9787	36	Marcellus
29	6/10/2021	11358.28723	11191.8298	36	Marcellus
30	6/10/2021	11156.1383	10989.6809	36	Marcellus
31	6/10/2021	10953.98936	10787.5319	36	Marcellus
32	6/10/2021	10751.84043	10585.383	36	Marcellus
33	6/11/2021	10549.69149	10383.234	36	Marcellus
34	6/11/2021	10347.54255	10181.0851	36	Marcellus
35	6/12/2021	10145.39362	9978.93617	36	Marcellus
36	6/12/2021	9943.244681	9776.78723	36	Marcellus
37	6/12/2021	9741.095745	9574.6383	36	Marcellus
38	6/12/2021	9538.946809	9372.48936	36	Marcellus
39	6/13/2021	9336.797872	9170.34043	36	Marcellus
40	6/13/2021	9134.648936	8968.19149	36	Marcellus
41	6/13/2021	8932.5	8766.04255	36	Marcellus
42	6/14/2021	8730.351064	8563.89362	36	Marcellus
43	6/14/2021	8528.202128	8361.74468	36	Marcellus
44	6/14/2021	8326.053191	8159.59574	36	Marcellus
45	6/14/2021	8123.904255	7957.44681	36	Marcellus
46	6/15/2021	7921.755319	7755.29787	36	Marcellus
47	6/15/2021	7719.606383	7553.14894	36	Marcellus
48	6/15/2021	7517.457447	7351	36	Marcellus

12/31/2021

## 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	5/30/2021	69.73	8258	9515	4146	170021	309642	N/A
2	5/30/2021	95.12	8516	4990	3986.85	405517	307494	N/A
3	5/31/2021	98.47	8160	4936	3967.08	405546	302588	N/A
4	5/31/2021	97.99	8534	5613	3753	406940	303233	N/A
5	6/1/2021	99.56	8116	5246	3964	405450	307362	N/A
6	6/1/2021	99.06	8379	4069	3519	405802	301735	N/A
7	6/1/2021	93.25	8634	5776	3224	403060	287187	N/A
8	6/2/2021	99.13	8283	5151	3608	405884	290464	N/A
9	6/2/2021	98.85	8481	6637	3314	405731	283736	N/A
10	6/2/2021	98.61	8485	4477	3468	403000	285103	N/A
11	6/3/2021	91.55	8261	5722	3465	405698	287889	N/A
12	6/3/2021	96.14	8540	6703	3409	400460	284777	N/A
13	6/3/2021	92.72	8456	5649	3199	405775	288035	N/A
14	6/4/2021	98.04	8450	6212	3379	405584	286343	N/A
15	6/4/2021	97.73	8345	5410	3699	405656	289350	N/A
16	6/5/2021	99.46	8280	5846	3535.32	405552	283200	N/A
17	6/5/2021	98.59	8406	5866	3751	407240	284161	N/A
18	6/6/2021	97.19	8217	5690	3406	405476	286295	N/A
19	6/6/2021	99.3	8216	5664	3601	402400	283933	N/A
20	6/7/2021	99	8186	5642	3443	405094	282862	N/A
21	6/7/2021	99.56	7847	5640	3314	405380	288572	N/A
22	6/7/2021	99.16	7906	4346	3196	418300	293016	N/A
23	6/8/2021	99.31	7712	6107	3594.59	405340	286579	N/A
24	6/8/2021	99.66	7480	4503	3163	405740	282704	N/A
25	6/8/2021	97.16	7803	5257	3309	405528	292731	N/A
26	6/9/2021	98.84	7625	6879	3283	405402	289732	N/A
27	6/9/2021	98.75	8187	6364	3453	405628	285402	N/A
28	6/9/2021	99.66	8056	5886	3315	402380	285011	N/A
29	6/10/2021	98.27	7891	6064	3434	405382	286749	N/A
30	6/10/2021	99.91	7755	6045	3245	405047	282884	N/A
31	6/10/2021	98.91	7924	5998	3470	406560	287357	N/A
32	6/10/2021	99.49	7541	5418	3437	405434	286964	N/A
33	6/11/2021	99.13	7584	5625	3610	405841	288205	N/A
34	6/11/2021	100.71	7834	5860	3798.04	406066	282981	N/A
35	6/12/2021	96.99	7456	5709	3371	402980	286471	N/A
36	6/12/2021	98.5	7417	5948	3378	405525	288812	N/A
37	6/12/2021	100.11	7698	5618	3512	404640	284925	N/A
38	6/12/2021	98.7	7484	5788	3669	405803	285066	N/A
39	6/13/2021	98.31	7298	5547	3556	405601	284600	N/A
40	6/13/2021	99.99	7598	5763	3704	401580	280942	N/A
41	6/13/2021	97.75	7469	5688	3302	407520	285892	N/A
42	6/14/2021	99.33	7313	5599	3620	405046	285597	N/A
43	6/14/2021	100.76	7368	5898	3276	405705	288105	N/A
44	6/14/2021	100.45	7824	6002	3540	405939	280205	N/A
45	6/14/2021	99.86	7548	6012	3689	405610	281447	N/A
46	6/15/2021	98.2	7331	6305	3553	405609	281618	N/A
47	6/15/2021	99.07	7099	6487	3367	405445	278333	N/A
48	6/15/2021	99.2	7041	6293	3256	405854	276775	N/A
	AVG=	98	7,923	5,780	3,505	19,226,771	13,823,064	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
Silty Sandstone	70	300	70	300
Sandy Siltstone	300	380	300	380
Sandstone	380	540	380	540
Sandy Siltstone	540	580	540	580
Silty Sandstone	580	630	580	630
Silty Shale	630	720	630	720
Shale	720	1,280	720	1,280
Sandstone	1,280	1,660	1,280	1,660
Sandy Siltstone	1,660	1,780	1,660	1,780
Silty Sandstone, tr Shale	1,780	1,820	1,780	1,820
Sandstone	1,820	1,870	1,820	1,870
Sandy siltstone	1,870	1,880	1,870	1,880
Sandstone	1,880	1,934	1,880	N/A
Big Lime	1,964	2,798	1,934	2,798
Fifty Foot Sandstone	2,798	2,798	2,768	2,897
Gordon	2,798	3,232	2,867	3,237
Fifth Sandstone	3,232	3,323	3,207	3,332
Bayard	3,323	3,894	3,302	3,949
Speechley	3,894	4,164	3,919	4,235
Balltown	4,164	4,472	4,205	4,567
Bradford	4,472	4,472	4,537	4,567
Benson	4,472	5,203	4,537	5,315
Alexander	5,203	6,108	5,285	6,317
Sycamore	5,984	6,078	6,145	6,287
Middlesex	6,078	6,159	6,287	6,446
Burkett	6,159	6,177	6,446	6,495
Tully	6,177	6,181	6,495	6,506
Marcellus	6,181	NA	6,506	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:	5/30/2021
Job End Date:	6/15/2021
State:	West Virginia
County:	Tyler
API Number:	47-095-02718-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	MILLS UNIT 1H
Latitude:	39.41813000
Longitude:	-80.99083300
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,232
Total Base Water Volume (gal):	14,488,164
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 Mixture	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	86.35301	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.10906	



Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
FLUID Enviro-Syn HCR-7000-WL	Fluid Energy Group	Acid Replacement					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
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	13.48192
			Complex Amine Compound	Proprietary	60.00000	0.02574
			Hydrochloric acid	7647-01-0	30.00000	0.02254
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01287
			Proprietary	Proprietary	20.00000	0.00675
			Guar gum	9000-30-0	100.00000	0.00492
			Proprietary	Proprietary	10.00000	0.00338
			Glutaraldehyde	111-30-8	30.00000	0.00245
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00214
			Surfactant	Proprietary	5.00000	0.00214
			Ethoxylated alcohols	Proprietary	5.00000	0.00044
			Organic chloride compound	Proprietary	1.00000	0.00043
			Alkoxylated polyhydric alcohol	Proprietary	1.00000	0.00043
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00041
			Methanol	67-56-1	100.00000	0.00014
			Ethanol	64-17-5	1.00000	0.00008
			Ammonium persulfate	7727-54-0	100.00000	0.00004
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00004
			Modified thiourea polymer	Proprietary	30.00000	0.00004
			Oxylated phenolic resin	Proprietary	30.00000	0.00001
			Hexadecene	629-73-2	5.00000	0.00001
			Propargyl alcohol	107-19-7	5.00000	0.00001
			Sodium glycolate	2836-32-0	0.01000	0.00000
			Organic salt #2	Proprietary	0.01000	0.00000

			Formaldehyde	50-00-0	0.01000	0.00000	
			Acrylamide	79-06-1	0.01000	0.00000	
			Organic salt #1	Proprietary	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	0.00000	
			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			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)

9,182' to Top Hole

4,019' to Bottom Hole

LATITUDE 39 - 27 - 30

TOP LONGITUDE 80 - 57 - 30  
BTM LONGITUDE 81 - 00 - 00

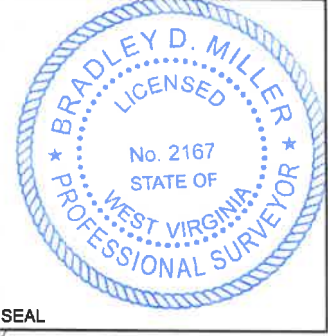
5,595' to Bottom Hole

14,645' to Top Hole

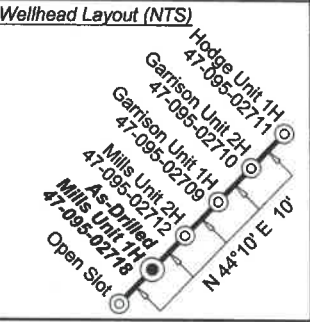
Antero Resources Corporation  
Well No. Mills Unit 1H  
As-Drilled  
Page 1 of 2

Mills Unit  
1H  
Bottom  
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.

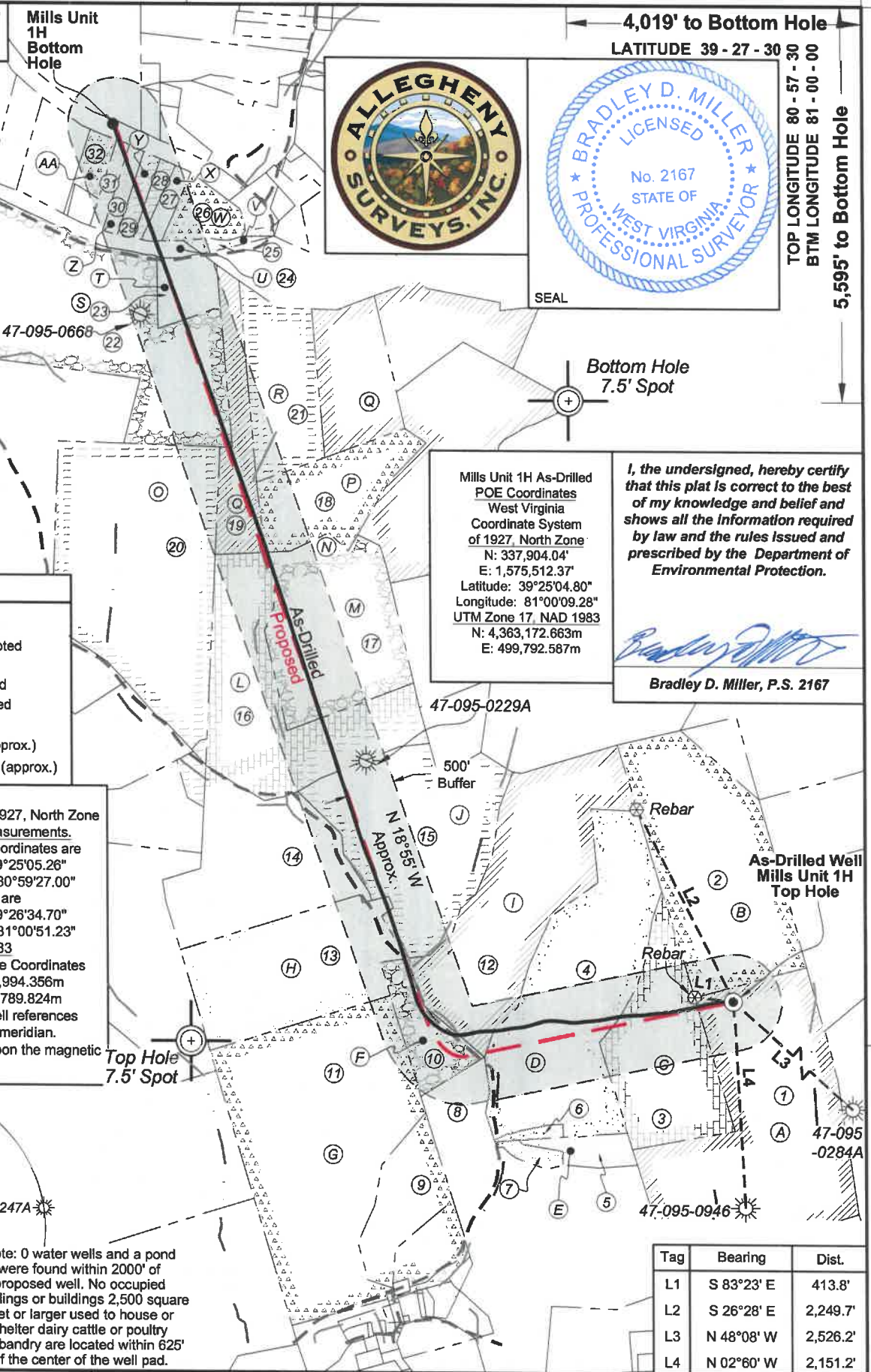
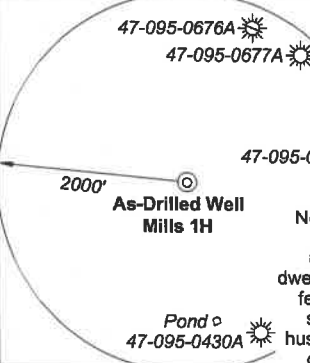


SEAL



- Legend**
- Proposed gas well
  - Well Reference, as noted
  - Monument, as noted
  - Existing Well, as noted
  - Digitized Well, as noted
  - Existing Road
  - Surface boundary (approx.)
  - Interior surface tracts (approx.)

**Notes:**  
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.  
Well No. Mills Unit 1H Top Hole coordinates are  
N: 337,895.26' Latitude: 39°25'05.26"  
E: 1,578,830.92' Longitude: 80°59'27.00"  
Bottom Hole coordinates are  
N: 347,054.36' Latitude: 39°26'34.70"  
E: 1,572,373.65' Longitude: 81°00'51.23"  
UTM Zone 17, NAD 1983  
Top Hole Coordinates Bottom Hole Coordinates  
N: 4,363,186.894m N: 4,365,994.356m  
E: 500,803.631m E: 498,789.824m  
Plat orientation and corner and well references are based upon the grid north meridian.  
Well location references are based upon the magnetic meridian.



Mills Unit 1H As-Drilled POE Coordinates  
West Virginia Coordinate System of 1927, North Zone  
N: 337,904.04'  
E: 1,575,512.37'  
Latitude: 39°25'04.80"  
Longitude: 81°00'09.28"  
UTM Zone 17, NAD 1983  
N: 4,363,172.663m  
E: 499,792.587m

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

Tag	Bearing	Dist.
L1	S 83°23' E	413.8'
L2	S 26°28' E	2,249.7'
L3	N 48°08' W	2,526.2'
L4	N 02°60' W	2,151.2'

FILE NO: 51-54-M-17  
DRAWING NO: Mills Unit 1H As-Drilled  
SCALE: 1" = 1500'  
MINIMUM DEGREE OF ACCURACY: Submeter  
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: October 4 20 21  
OPERATOR'S WELL NO. Mills Unit 1H  
API WELL NO  
47 - 095 - 02718  
STATE COUNTY PERMIT

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


LOCATION: ELEVATION: 1045' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Top: Middlebourne  
DISTRICT: Union / Meade Bottom: Bens Run 5.43; 16.97; 3.13; 6.24;  
SURFACE OWNER: Elizabeth Gorrell COUNTY: Tyler 234.74; 25.06875; 74.5;  
ROYALTY OWNER: Elizabeth Gorrell, et al; David C. Henderson; Sharon A. Brock (2); Mary C. Robinson Living Trust; Harry E. West, Jr., et ux; Randy M. Myers; Richard W. & Elisa L. Barnhart; Gregory L. & Tammy L. Bever; Janet Sue Baker; ACREAGE: 212.30; 64.23; 19.772; 155;  
PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,177' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,012' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System  
ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road  
Denver CO 80202 Charleston, WV 25313



ID	Lease
A	Elizabeth Gorrell, et al
B	Wilma Jane Benefield
C	Janet Sue Baker
D	Sharon A. Brock
E	Antero Minerals, LLC
F	David C. Henderson
G	Wilma Jane Benefiel
H	Mary C. Robinson Living Trust
I	Sharon A. Brock
J	Harry E. West, Jr. et ux
L	Richard W. & Elisa L. Barnhart
M	Gregory L. & Tammy L. Bever
N	Randy M. Myers
O	J&N Management Enterprises, LLC
P	Fisher Oil Co.
Q	Dale V. Hadley
R	Ernest P. Herbold, Jr., et ux
S	Wells Cattle Farms
T	Ernest P. Herbold, Jr., et ux
U	WVDNR
V	Charles N. Grachanin
W	Waco Oil & Gas Co. Inc.
X	Cheryl A. Dalrymple
Y	Gerald W. Silliman
Z	City of Sistersville
AA	BRC Appalachian Minerals I, LLC

No.	TM / Par	Owner	Bk / Pg	Ac.
1	7 / 15	Elizabeth Gorrell	321 / 360	242.50
2	7 / 5	Coastal Forest Resources Co.	301 / 131	74.30
3	7 / 14	Russell G. Smith & Ruth M. Smith Family Trust	541 / 608	50.00
4	7 / 9	Russell G. Smith & Ruth M. Smith Family Trust	541 / 608	66.85
5	7 / 13	Russell E. & Janice Smith	328 / 867	6.00
6	7 / 9.1	Russell E. & Janice Smith	332 / 234	1.65
7	7 / 13.1	Russell E. & Janice Smith	328 / 867	2.60
8	7 / 19	Darlene Henderson	W47 / 263	122.83
9	7 / 12.2	Gary W. Freeland	336 / 530	19.97
10	7 / 23	David Henderson & Sharley Shortridge	W47 / 263	16.07
11	7 / 12	Wilma Jane (Benefiel) Wagner	W35 / 225	110.30
12	7 / 4	Marcia A. Hill	506 / 479	74.50
13	7 / 8	John Wells	428 / 412	52.39
14	7 / 2	Paul R. Wells & Susie Cunningham	269 / 367	53.85
15	7 / 3	Harry Edward West, Jr. & Noreen Marie West	328 / 530	88.00
16	4 / 20.1	Richard W. Barnhart Jr.	213 / 162	49.74
17	4 / 26	Gregory L. & Tammy L. Bever	620 / 145	53.30
18	4 / 21	Lori C. Kemp & Ernest P. Herbold, et al	343 / 714	27.27
19	4 / 10	Lori C. Kemp & Ernest P. Herbold, et al	343 / 714	84.0
20	4 / 20	Cecil E. Jordan, Jr., et al	337 / 702	103.59
21	4 / 9	Lori C. Kemp & Ernest P. Herbold, et al	343 / 714	35.18
22	4 / 8	Wells Cattle Farm, Inc.	331 / 164	155.00
23	4 / 8.1	Lori C. Kemp & Ernest P. Herbold, et al	343 / 714	6.61
24	15 / 26	Jay L. Summers & Carla Summers	429 / 201	24.18
25	15 / 25	Charles & Marie Grachanin	344 / 722	1.25
26	15 / 24	Cheryl Dalrymple, et al	337 / 108A	8.79
27	15 / 23	Cheryl Dalrymple, et al	337 / 110A	3.13
28	15 / 22	Gerald Silliman, et al	180 / 215	2.86
29	15 / 21	Gerald Silliman, et al	180 / 215	3.38
30	15 / 20	Augusta Lauderman, et al	133 / 455	3.00
31	15 / 18.1	Amy & Howard D. Spurlock, II	380 / 796	2.43
32	15 / 18	Terry L. & Daphne R. Heinzman	356 / 472	15.25

FILE NO: 51-54-M-17	 <b>STATE OF WEST VIRGINIA</b> DEPARTMENT OF ENVIRONMENTAL PROTECTION <b>OIL AND GAS DIVISION</b>	DATE: October 4 20 21
DRAWING NO: Mills Unit 1H As-Drilled		OPERATOR'S WELL NO. Mills Unit 1H
SCALE: 1" = 1500'		API WELL NO
MINIMUM DEGREE OF ACCURACY: Submeter		47 STATE — 095 COUNTY — 02718 PERMIT
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV		

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

LOCATION: ELEVATION: 1045' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Top: Middlebourne Btm: Bens Run 5.43; 16.97; 3.13; 6.24; 234.74; 25.06875; 74.5; 66.03125; 63.95937; 82.732; 155; 49.875; 3.425; 50;

DISTRICT: Union / Meade COUNTY: Tyler

SURFACE OWNER: Elizabeth Gorrell ACREAGE: 242.50 ±

ROYALTY OWNER: Elizabeth Gorrell, et al; David C. Henderson; Sharon A. Brock (2); LEASE NO: ACREAGE: 27.725; 172.68125; 6.61;

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,177' TVD

PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,012' MD

WELL OPERATOR: Antero Resources Corporation	DESIGNATED AGENT: Dianna Stamper - CT Corporation System
ADDRESS: 1615 Wynkoop Street Denver CO 80202	ADDRESS: 5400 D Big Tyler Road Charleston, WV 25313