WR-35
Rev. 8/23/13

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

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WV Department of
Environmental Protection

API 47 - 095 - 02720 County ~~Wetzel~~ Tyler District Ellsworth/Magnolia

Quad Porter Falls/ Paden City Pad Name Elk Fork Field/Pool Name -----

Farm name Patricia Ann Heintzman Well Number Cheat 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 4376855m	Easting 511134m
Landing Point of Curve	Northing 4377104.06m	Easting 511263.45m
Bottom Hole	Northing 4381500m	Easting 509776m

Elevation (ft) 1126' 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 12/16/2020 Date drilling commenced 1/10/2021 Date drilling ceased 2/19/2021

Date completion activities began 3/30/2021 Date completion activities ceased 5/26/2021

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 408' Open mine(s) (Y/N) depths No

Salt water depth(s) ft 1703' Void(s) encountered (Y/N) depths No

Coal depth(s) ft 58' Cavern(s) encountered (Y/N) depths No

Is coal being mined in area (Y/N) No

Reviewed by:
DCN
12/21/21
12/31/2021

API 47- 095 - 02720 Farm name Patricia Ann Heintzman Well number Cheat 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	24"	20"	80'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	339'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2550'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	19787'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6727'		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	266 sx	15.6	1.18	56	0'	8 Hrs.
Surface	Class A	429 sx	15.6	1.19	92	0'	8 Hrs.
Coal							
Intermediate 1	Class A	884 sx	15.6	1.19	187	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	792 sx (Lead) 3519 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.4 (Lead), 1.26 (Tail)	792	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 22341' MD, 6469' TVD (BHL), 6541' (Deepest Point Drilled) Loggers TD (ft) 22341' MD

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

Plug back procedure N/A

Kick off depth (ft) 5898'

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

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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.

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PRODUCING FORMATION(S)	DEPTHS	
Marcellus	6479' (TOP) TVD	6808' (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 8921 mcfpd Oil 486 bpd NGL --- bpd Water 1837 bpd GAS MEASURED BY ☐ Estimated ■ Orifice ☐ Pilot

LITHOLOGY/ FORMATION NAME	TOP DEPTH IN FT 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_2S, 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 Schlumberger Oilfield Services
Address 300 Schlumberger Dr City Sugarland State TX Zip 77478

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 [signature] Title Completions Technician Date 10/27/2021

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

12/31/2021

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Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	3/30/2021	22221.7	22177	36	Marcellus
2	3/30/2021	22138.20833	21972.25	36	Marcellus
3	3/31/2021	21936.65833	21770.7	36	Marcellus
4	3/31/2021	21735.10833	21569.15	36	Marcellus
5	4/1/2021	21533.55833	21367.6	36	Marcellus
6	4/22/2021	21332.00833	21166.05	36	Marcellus
7	4/22/2021	21130.45833	20964.5	36	Marcellus
8	4/22/2021	20928.90833	20762.95	36	Marcellus
9	4/22/2021	20727.35833	20561.4	36	Marcellus
10	4/23/2021	20525.80833	20359.85	36	Marcellus
11	4/23/2021	20324.25833	20158.3	36	Marcellus
12	4/23/2021	20122.70833	19956.75	36	Marcellus
13	4/24/2021	19921.15833	19755.2	36	Marcellus
14	4/24/2021	19719.60833	19553.65	36	Marcellus
15	4/24/2021	19518.05833	19352.1	36	Marcellus
16	4/25/2021	19316.50833	19150.55	36	Marcellus
17	4/25/2021	19114.95833	18949	36	Marcellus
18	4/25/2021	18913.40833	18747.45	36	Marcellus
19	4/26/2021	18711.85833	18545.9	36	Marcellus
20	4/26/2021	18510.30833	18344.35	36	Marcellus
21	4/26/2021	18308.75833	18142.8	36	Marcellus
22	4/26/2021	18107.20833	17941.25	36	Marcellus
23	4/27/2021	17905.65833	17739.7	36	Marcellus
24	4/27/2021	17704.10833	17538.15	36	Marcellus
25	4/27/2021	17502.55833	17336.6	36	Marcellus
26	4/28/2021	17301.00833	17135.05	36	Marcellus
27	4/28/2021	17099.45833	16933.5	36	Marcellus
28	4/28/2021	16897.90833	16731.95	36	Marcellus
29	4/28/2021	16696.35833	16530.4	36	Marcellus
30	4/29/2021	16494.80833	16328.85	36	Marcellus
31	4/29/2021	16293.25833	16127.3	36	Marcellus
32	4/29/2021	16091.70833	15925.75	36	Marcellus
33	4/29/2021	15890.15833	15724.2	36	Marcellus
34	4/30/2021	15688.60833	15522.65	36	Marcellus
35	4/30/2021	15487.05833	15321.1	36	Marcellus
36	4/30/2021	15285.50833	15119.55	36	Marcellus
37	4/30/2021	15083.95833	14918	36	Marcellus
38	5/1/2021	14882.40833	14716.45	36	Marcellus
39	5/1/2021	14680.85833	14514.9	36	Marcellus
40	5/1/2021	14479.30833	14313.35	36	Marcellus
41	5/2/2021	14277.75833	14111.8	36	Marcellus
42	5/2/2021	14076.20833	13910.25	36	Marcellus
43	5/2/2021	13874.65833	13708.7	36	Marcellus
44	5/2/2021	13673.10833	13507.15	36	Marcellus
45	5/3/2021	13471.55833	13305.6	36	Marcellus
46	5/3/2021	13270.00833	13104.05	36	Marcellus
47	5/3/2021	13068.45833	12902.5	36	Marcellus
48	5/3/2021	12866.90833	12700.95	36	Marcellus
49	5/4/2021	12665.35833	12499.4	36	Marcellus
50	5/4/2021	12463.80833	12297.85	36	Marcellus
51	5/4/2021	12262.25833	12096.3	36	Marcellus
52	5/5/2021	12060.70833	11894.75	36	Marcellus
53	5/5/2021	11859.15833	11693.2	36	Marcellus
54	5/5/2021	11657.60833	11491.65	36	Marcellus
55	5/5/2021	11456.05833	11290.1	36	Marcellus
56	5/6/2021	11254.50833	11088.55	36	Marcellus
57	5/6/2021	11052.95833	10887	36	Marcellus
58	5/6/2021	10851.40833	10685.45	36	Marcellus
59	5/7/2021	10649.85833	10483.9	36	Marcellus
60	5/7/2021	10448.30833	10282.35	36	Marcellus
61	5/7/2021	10246.75833	10080.8	36	Marcellus
62	5/8/2021	10045.20833	9879.25	36	Marcellus
63	5/8/2021	9843.658333	9677.7	36	Marcellus
64	5/8/2021	9642.108333	9476.15	36	Marcellus
65	5/8/2021	9440.558333	9274.6	36	Marcellus
66	5/9/2021	9239.008333	9073.05	36	Marcellus
67	5/9/2021	9037.458333	8871.5	36	Marcellus
68	5/10/2021	8835.908333	8669.95	36	Marcellus
69	5/10/2021	8634.358333	8468.4	36	Marcellus
70	5/10/2021	8432.808333	8266.85	36	Marcellus
71	5/10/2021	8231.258333	8065.3	36	Marcellus
72	5/10/2021	8029.708333	7863.75	36	Marcellus
73	5/11/2021	7828.158333	7662.2	36	Marcellus
74	5/11/2021	7626.608333	7460.65	36	Marcellus
75	5/11/2021	7425.058333	7259.1	36	Marcellus
76	5/11/2021	7223.508333	7057.55	36	Marcellus
77	5/11/2021	7021.958333	6856	36	Marcellus

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API 47-095-02720 Farm Name Patricia Ann Heintzman Well Number Cheat 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	3/30/2021	63.61	9593	7961	3209.16	160340	200675	N/A
2	3/30/2021	82.18	9600.35	5908.68	3720.68	404340	313259	N/A
3	3/31/2021	84.55	9747	5129	3554.64	404260	311240	N/A
4	3/31/2021	82.42	9752	5604	3639.06	410920	312408	N/A
5	4/1/2021	84.44	9733.38	5178.8	3509.65	407700	312429	N/A
6	4/22/2021	88.58	9708	5550	4136	412560	306997	N/A
7	4/22/2021	90.76	9945	5105	3217	411100	295540	N/A
8	4/22/2021	89.49	9967	6014	3983	407640	289354	N/A
9	4/22/2021	89.27	10006	5783	3921	409460	288984	N/A
10	4/23/2021	91.24	9969.36	5580.52	3701.88	408320	291363	N/A
11	4/23/2021	89.59	9986.9	5665.35	3883.66	403920	292717	N/A
12	4/23/2021	92.03	9905	5642	4176	401940	289747	N/A
13	4/24/2021	90.11	9850	5880	4178	414860	293454	N/A
14	4/24/2021	90.14	9931	5600	4350	419940	296565	N/A
15	4/24/2021	93.9	9901	5468	4304	407980	292293	N/A
16	4/25/2021	91.93	9545	5437	4076	410860	289312	N/A
17	4/25/2021	90.4	9860	5881	4273	411700	293134	N/A
18	4/25/2021	87.7	9427.55	5568.49	4046.94	411640	347510	N/A
19	4/26/2021	90.88	9580	5591	4173	410820	289220	N/A
20	4/26/2021	91.33	9616	5297	4283	407560	292073	N/A
21	4/26/2021	92.3	9765	5449	4069	410440	292441	N/A
22	4/26/2021	91.66	9578	5504	4406	404400	286399	N/A
23	4/27/2021	94.02	9823	5502	4325	410500	292561	N/A
24	4/27/2021	93.39	9848	5623	4269	411920	295187	N/A
25	4/27/2021	91.19	9194	5611	4518	406040	289437	N/A
26	4/28/2021	93.82	9455	5758	4023	406040	286572	N/A
27	4/28/2021	93.61	9665	5879	4158	406930	293420	N/A
28	4/28/2021	94.32	9584	5261	4251	408780	294289	N/A
29	4/28/2021	92.7	8999	5548	4237	398160	288808	N/A
30	4/29/2021	94.3	9412	5568	4234	408600	289379	N/A
31	4/29/2021	93.52	9186.97	5753.68	4100.26	410440	288413	N/A
32	4/29/2021	92.66	8848	5687	4357	415400	290953	N/A
33	4/29/2021	93.95	8949	5396	4442	408100	286437	N/A
34	4/30/2021	93.79	8825	5530	4183	405970	287110	N/A
35	4/30/2021	92.33	8747	5880	4159	411920	289815	N/A
36	4/30/2021	93.09	8813	5388	4264	404980	286631	N/A
37	4/30/2021	94.95	8915	5647	3875	413820	286660	N/A
38	5/1/2021	93.92	8894	5951	4051	408580	290516	N/A
39	5/1/2021	92.79	8854.91	5717.86	3853.85	405480	287349	N/A
40	5/1/2021	94.59	8997	5865	4188	407420	286539	N/A
41	5/2/2021	94.93	8944	5830	4054	409220	283556	N/A
42	5/2/2021	91.85	8846	6054	4192	407160	289863	N/A
43	5/2/2021	94.25	8761	5785	3900	404420	288041	N/A
44	5/2/2021	93.09	8883	5758	4201	412400	302521	N/A
45	5/3/2021	95.16	8709	5852	4429	412080	286716	N/A
46	5/3/2021	94.07	8705	5810	4466	411040	288914	N/A
47	5/3/2021	94.02	8714	5511	4334	401360	301423	N/A
48	5/3/2021	93.03	8675	6021	4150	406540	296509	N/A
49	5/4/2021	95.3	8908	6108	4092	396740	297014	N/A
50	5/4/2021	94.9	8741	5697	4224	409120	293439	N/A
51	5/4/2021	95.65	8695	5391	4140	412640	301262	N/A
52	5/5/2021	82.16	8875	6248	3793	403040	366003	N/A
53	5/5/2021	94.18	8379.19	5644.07	3980.89	411080	300034	N/A
54	5/5/2021	94.39	8564	5337	4117.81	406860	301106	N/A
55	5/5/2021	95.71	8290	5807	3773	405460	301509	N/A
56	5/6/2021	95.24	8320	6081	3530	398420	297947	N/A
57	5/6/2021	93.85	8475	5864	3166	403220	300140	N/A
58	5/6/2021	96.14	8374	5892	3676	409260	299186	N/A
59	5/7/2021	93.87	8009	5771	4179	409840	300059	N/A
60	5/7/2021	94.25	8158	5528	3742	403900	300222	N/A
61	5/7/2021	96.29	8146	5976	4138	405280	298315	N/A
62	5/8/2021	95.68	7834	5524	4413	408440	298756	N/A
63	5/8/2021	95.92	7880	5562	4000	404340	299473	N/A
64	5/8/2021	94.99	8290	6164	3533	409240	300456	N/A
65	5/8/2021	96.24	8515	5953	3653	403380	294281	N/A
66	5/9/2021	93.69	7704	5836	3712	410420	301750	N/A
67	5/9/2021	95.41	8054	5756	3661	405080	299638	N/A
68	5/10/2021	96.39	7943	5851	3647	414420	300543	N/A
69	5/10/2021	94.46	7926	5507	3945	406160	300295	N/A
70	5/10/2021	92.98	7709.07	6078.74	3733.78	409260	298024	N/A
71	5/10/2021	94.78	7518	5553	4003	402880	297986	N/A
72	5/10/2021	95.01	7753	5908	3705	403440	296516	N/A
73	5/11/2021	95.62	7561	6055	3695	413040	295575	N/A
74	5/11/2021	94.66	7581	6502	3536	402430	294753	N/A
75	5/11/2021	96.92	7555	6484	3635	407900	297404	N/A
76	5/11/2021	94.84	7149	5532	3712	403400	295592	N/A
77	5/11/2021	96.92	7123	5321	3832	407420	299029	N/A
	AVG=	92	8,886	5,739	3,987	31,152,110	22,751,040	TOTAL

12/31/2021

API 47-095-02720 Farm Name Patricia Ann Heintzman Well Number Cheat Unit 2H

EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Shaley Siltstone	74	194	74	194
Shaley Sandstone	194	284	194	284
Shaley Siltstone	284	364	284	364
Limestone, Tr Shale	364	494	364	494
Sandstone	494	584	494	584
Limestone, Tr Shale	584	794	584	794
Shaley Sandstone	794	884	794	884
Shale, Tr Sandstone	884	1,134	884	1,134
Sandy Shale, Limestone	1,134	1,244	1,134	1,244
Sandy Shale	1,244	1,484	1,244	1,484
Sandstone, Tr Shale	1,484	1,664	1,484	1,664
Silty Shale, tr SS	1,664	1,754	1,664	1,754
Shale, Tr Sst	1,754	1,924	1,754	1,929
Big Lime	1,950	2,599	1,929	2,605
Fifty Foot Sandstone	2,599	2,688	2,579	2,693
Gordon	2,688	3,042	2,667	3,049
Fifth Sandstone	3,042	3,130	3,023	3,138
Bayard	3,130	3,950	3,112	3,974
Speechley	3,950	4,204	3,948	4,237
Balltown	4,204	4,667	4,211	4,717
Bradford	4,667	5,084	4,691	5,146
Benson	5,084	5,303	5,120	5,370
Alexander	5,303	6,353	5,344	6,507
Sycamore	6,221	6,327	6,339	6,481
Middlesex	6,327	6,415	6,481	6,635
Burkett	6,415	6,432	6,635	6,672
Tully	6,432	6,479	6,672	6,808
Marcellus	6,479	NA	6,808	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.

12/31/2021

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/30/2021
Job End Date:	5/11/2021
State:	West Virginia
County:	Tyler
API Number:	47-095-02720-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	CHEAT 2H
Latitude:	39.54121900
Longitude:	-80.87059200
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,541
Total Base Water Volume (gal):	23,716,599
Total Base Non Water Volume:	0

FracFocus Chemical Disclosure Registry

GROUNDWATER PROTECTION COUNCIL

Interstate Oil & Gas

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	90.32371	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.17546	

MC B-8614A	MultiChem	Biocide					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
MC B-8614	Halliburton	Biocide					
				Listed Below			

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

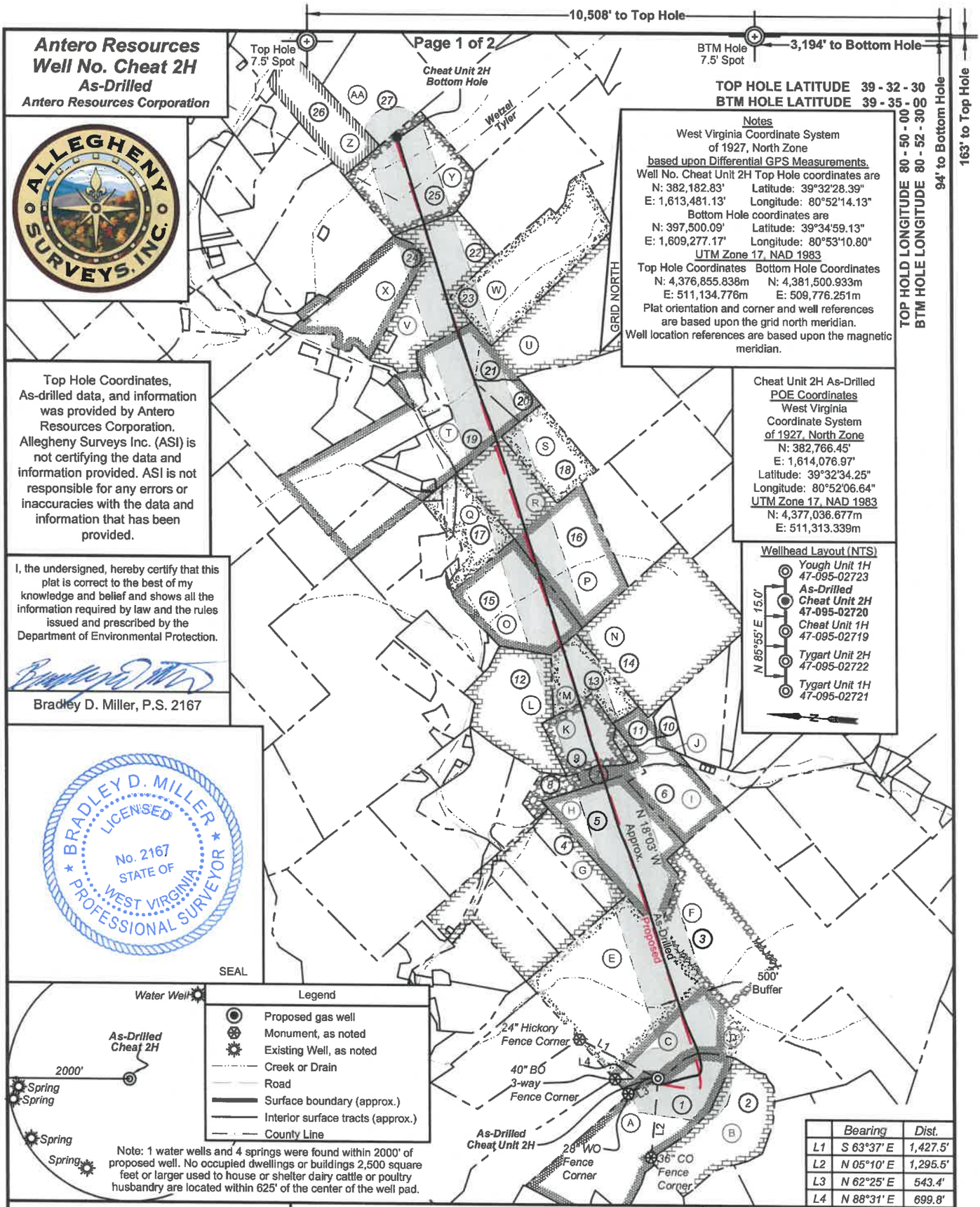
			Crystalline silica, quartz	14808-60-7	100.00000	9.47730	
			Hydrochloric acid	7647-01-0	30.00000	0.04142	
			Complex Amine Compound	Proprietary	60.00000	0.02877	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01438	
			Guar gum	9000-30-0	100.00000	0.00401	
			Glutaraldehyde	111-30-8	30.00000	0.00259	
			Sobitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00240	
			Surfactant	Proprietary	5.00000	0.00240	
			Ethoxylated alcohols	Proprietary	5.00000	0.00049	
			Alkoxylated polyhydric alcohol	Proprietary	1.00000	0.00048	
			Organic chloride compound	Proprietary	1.00000	0.00048	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00040	
			Methanol	67-56-1	100.00000	0.00026	
			Ammonium persulfate	7727-54-0	100.00000	0.00010	
			Ethanol	64-17-5	1.00000	0.00009	
			Modified thiourea polymer	Proprietary	30.00000	0.00008	
			Mixture of dimer and trimer fatty acids of indefinite compostion derived from tall oil	61790-12-3	30.00000	0.00008	
			Oxylated phenolic resin	Proprietary	30.00000	0.00003	
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00003	
			Hexadecene	629-73-2	5.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Organic salt #2	Proprietary	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	0.00000	

			Acrylamide	79-06-1	0.01000	0.00000	
			Formaldehyde	50-00-0	0.01000	0.00000	
			Organic salt #1	Proprietary	0.01000	0.00000	
			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			Sodium glycolate	2836-32-0	0.01000	0.00000	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000	
			Phosphoric acid	7664-38-2	0.10000	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. Cheat 2H
As-Drilled
Antero Resources Corporation



Notes
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Well No. Cheat Unit 2H Top Hole coordinates are
N: 382,182.83' Latitude: 39°32'28.39"
E: 1,613,481.13' Longitude: 80°52'14.13"
Bottom Hole coordinates are
N: 397,500.09' Latitude: 39°34'59.13"
E: 1,609,277.17' Longitude: 80°53'10.80"
UTM Zone 17, NAD 1983

Top Hole Coordinates	Bottom Hole Coordinates
N: 4,376,855.838m	N: 4,381,500.933m
E: 511,134.776m	E: 509,776.251m

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 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.

Cheat Unit 2H As-Drilled
POE Coordinates
West Virginia Coordinate System of 1927, North Zone
N: 382,766.45'
E: 1,614,076.97'
Latitude: 39°32'34.25"
Longitude: 80°52'06.64"
UTM Zone 17, NAD 1983
N: 4,377,036.677m
E: 511,313.339m

Wellhead Layout (NTS)
N 85°55' E 15.0'
- Yough Unit 1H 47-095-02723
- **As-Drilled Cheat Unit 2H 47-095-02720**
- Cheat Unit 1H 47-095-02719
- Tygart Unit 2H 47-095-02722
- Tygart Unit 1H 47-095-02721

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

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

SEAL

Legend
- Proposed gas well
- Monument, as noted
- Existing Well, as noted
- Creek or Drain
- Road
- Surface boundary (approx.)
- Interior surface tracts (approx.)
- County Line

Note: 1 water wells and 4 springs were 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.

	Bearing	Dist.
L1	S 63°37' E	1,427.5'
L2	N 05°10' E	1,295.5'
L3	N 62°25' E	543.4'
L4	N 88°31' E	699.8'

FILE NO: 44-54-E-19
DRAWING NO: Cheat Unit 2H 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: August 30 2021
OPERATOR'S WELL NO. Cheat 2H
API WELL NO
47 - 095 - 02720
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built 1,126' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Top Hole:Porter Falls BTM Hole:Paden City
DISTRICT: Ellsworth/Magnolia COUNTY: Top Hole Tyler BTM Hole Wetzel
SURFACE OWNER: Patricia Ann Heintzman; Lowmax R. Kunkel; BRC Appalachian Minerals I, LLC; Penny G. Bond; Antero Minerals, LLC; Judy P. Meyers; James D. VanCamp, et al (3); ACREAGE: 73.25; 93.6985; 52.125; 92.18; 48; 12.55; 24.44; 365.2064; 48.5;
ROYALTY OWNER: Patricia Ann Heintzman; Norma Smith; Dennis R. Heintzman, et ux; Brenda L. Martin; Harold Skinner; LEASE NO: ____ ACREAGE: 151.08; 27; 59.75; 58.6
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: 6,489' TVD 22,341' MD

12/31/2021

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

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

ID	TM/Par	Owner	Bk/Pg	Acres
1	10-2	Patricia Ann Heintzman	W13/384	73.26
2	10-3	Kevin S. & Melinda S. Goff	597/808	53.75
3	6-36	Dennis & Clista Heintzman	297/640	417.60
4	6-35.4	Stephen & Andriea Knowlton	340/412	17.46
5	6-24	Harold Skinner	204/595	62.18
6	6-25.2	Kevin Lee Fletcher	328/723	32.00
7	6-25.1	Kevin Lee Fletcher	328/723	5.76
8	6-16.3	Michael L. Roberts	407/45	14.81
9	6-16.4	Michael L. Roberts	407/45	27.74
10	6-16.5	James M. & Sherry Starkey	344/785	24.44
11	6-25	William L. McClain	253/323	11.87
12	6-15	James D. VanCamp, et al	W38/144	47.50
13	6-16.5	James M. & Sherry Starkey	344/785	24.44
14	6-6	Gary A. & Penny K. Midcap	301/265	100.00
15	6-4	James D. Vancamp, et al	W38/144	46.76
16	6-5	Gary A. & Penny K. Midcap	301/265	75.55
17	3-43	Joel A. Prosser	387/736	23.62
18	3-42	Rosalie B. Henry	362/339	27.00
19	3-40	Rosalie Henry	170/006	46.21
20	3-41	Gary A. & Penny K. Midcap	296/518	7.00
21	3-18	Gary Midcap	322/108	80.33
22	3-12	Lomax R. Kunkel	297/692	57.51
23	3-13	Lomax R. Kunkel	297/692	63.50
24	3-48	Linda Hoover	356/233	45.00
25	16-65	Kenneth W. & Norma A. Headley	355/347	58.60
26	16-56	Verda Hart	W69/785	10.50
27	16-59	Kenneth W. & Norma A. Headley	355/347	47.75

Leases	
A	Patricia Ann Heintzman
B	Nina & Phillip Whitefield
C	Norma Smith
D	BRC Appalachian Minerals I, LLC
E	Dennis R. Heintzman, et ux
F	BRC Appalachian Minerals I, LLC
G	BRC Appalachian Minerals I, LLC
H	Harold Skinner
I	Antero Minerals, LLC
J	Judy P. Meyers
K	Brenda L. Martin
L	James D. VanCamp, et al
M	Judy P. Meyers
N	Gary A. Midcap, et ux
O	James D. VanCamp, et al
P	James D. VanCamp, et al
Q	BRC Appalachian Minerals I, LLC
R	Penny G. Bond
S	Linda Allen
T	James D. VanCamp, et al
U	Gary A. & Penny K. Midcap
V	Lowmax R. Kunkel
W	Lowmax R. Kunkel
X	James D. VanCamp, et ux
Y	BRC Appalachian Minerals, I LLC
Z	David B. Shriver
AA	No Lease

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