

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

API 47 - 103 - 03586 County Wetzel District Green
Quad Pine Grove Pad Name Furbee Field/Pool Name -----
Farm name Antero Resources Group Well Number Gauss 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 4378582.560m Easting 523125.189m
Landing Point of Curve Northing 4378981.64m Easting 523511.01m
Bottom Hole Northing 4383885.334m Easting 521848.926m

Elevation (ft) 1211' 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 7/10/2023 Date drilling commenced 8/1/2023 Date drilling ceased 11/11/2023
Date completion activities began 1/30/2024 Date completion activities ceased 3/27/2024
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

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Freshwater depth(s) ft 575' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 2284' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 973' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

APPROVED

Reviewed by:

7/19/2024

API 47- 103 - 03586 Farm name Antero Resources Group Well number Gauss 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	28"	20"	125.5'	New	91.59#, J-55	N/A	Y
Surface	17-1/2"	13-3/8"	702'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3495'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" /8-1/2"	5-1/2"	25051'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7202'		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	200 sx	15.6	1.18	236	0'	8 Hrs.
Surface	Class A	689 sx	15.6	1.20	827	0'	8 Hrs.
Coal							
Intermediate 1	Class A	1201 sx	15.6	1.20	1441	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	4322 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.26 (Tail)	5446	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 25,051' MD, 6,984' TVD (BHL), 7,048' TVD (Deepest Point Drilled) Loggers TD (ft) 25,021' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6,530'

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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EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1/31/2024	24922	24878	30	Marcellus
2	1/31/2024	24838.48084	24672.8851	30	Marcellus
3	1/31/2024	24637.3659	24471.7701	30	Marcellus
4	2/1/2024	24436.25096	24270.6552	30	Marcellus
5	2/1/2024	24235.13602	24069.5402	30	Marcellus
6	2/1/2024	24034.02107	23868.4253	30	Marcellus
7	2/1/2024	23832.90613	23667.3103	30	Marcellus
8	2/2/2024	23631.79119	23466.1954	30	Marcellus
9	2/2/2024	23430.67625	23265.0805	30	Marcellus
10	2/2/2024	23229.5613	23063.9655	30	Marcellus
11	2/2/2024	23028.44636	22862.8506	30	Marcellus
12	2/3/2024	22827.33142	22661.7356	30	Marcellus
13	2/3/2024	22626.21648	22460.6207	30	Marcellus
14	2/3/2024	22425.10153	22259.5057	30	Marcellus
15	2/3/2024	22223.98659	22058.3908	30	Marcellus
16	2/3/2024	22022.87165	21857.2759	30	Marcellus
17	2/4/2024	21821.7567	21656.1609	30	Marcellus
18	2/4/2024	21620.64176	21455.046	30	Marcellus
19	2/4/2024	21419.52682	21253.931	30	Marcellus
20	2/4/2024	21218.41188	21052.8161	30	Marcellus
21	2/5/2024	21017.29693	20851.7011	30	Marcellus
22	2/5/2024	20816.18199	20650.5862	30	Marcellus
23	2/5/2024	20615.06705	20449.4713	30	Marcellus
24	2/5/2024	20413.95211	20248.3563	30	Marcellus
25	2/6/2024	20212.83716	20047.2414	30	Marcellus
26	2/6/2024	20011.72222	19846.1264	30	Marcellus
27	2/6/2024	19810.60728	19645.0115	30	Marcellus
28	2/6/2024	19609.49234	19443.8966	30	Marcellus
29	2/7/2024	19408.37739	19242.7816	30	Marcellus
30	2/7/2024	19207.26245	19041.6667	30	Marcellus
31	2/7/2024	19006.14751	18840.5517	30	Marcellus
32	2/7/2024	18805.03257	18639.4368	30	Marcellus
33	2/7/2024	18603.91762	18438.3218	30	Marcellus
34	2/8/2024	18402.80268	18237.2069	30	Marcellus
35	2/8/2024	18201.68774	18036.092	30	Marcellus
36	2/8/2024	18000.5728	17834.977	30	Marcellus
37	2/8/2024	17799.45785	17633.8621	30	Marcellus
38	2/8/2024	17598.34291	17432.7471	30	Marcellus
39	2/9/2024	17397.22797	17231.6322	30	Marcellus
40	2/9/2024	17196.11303	17030.5172	30	Marcellus
41	2/9/2024	16994.99808	16829.4023	30	Marcellus
42	2/10/2024	16793.88314	16628.2874	30	Marcellus
43	2/10/2024	16592.7682	16427.1724	30	Marcellus
44	2/10/2024	16391.65326	16226.0575	30	Marcellus
45	2/10/2024	16190.53831	16024.9425	30	Marcellus
46	2/10/2024	15989.42337	15823.8276	30	Marcellus
47	2/11/2024	15788.30843	15622.7126	30	Marcellus
48	2/11/2024	15587.19349	15421.5977	30	Marcellus
49	2/11/2024	15386.07854	15220.4828	30	Marcellus
50	2/11/2024	15184.9636	15019.3678	30	Marcellus
51	2/12/2024	14983.84866	14818.2529	30	Marcellus
52	2/12/2024	14782.73372	14617.1379	30	Marcellus
53	2/12/2024	14581.61877	14416.023	30	Marcellus
54	2/12/2024	14380.50383	14214.908	30	Marcellus
55	2/13/2024	14179.38889	14013.7931	30	Marcellus
56	2/13/2024	13978.27395	13812.6782	30	Marcellus
57	2/13/2024	13777.159	13611.5633	30	Marcellus
58	2/13/2024	13576.04406	13410.4483	30	Marcellus
59	2/13/2024	13374.92912	13209.3333	30	Marcellus
60	2/14/2024	13173.81418	13008.2184	30	Marcellus
61	2/14/2024	12972.69923	12807.1034	30	Marcellus
62	2/14/2024	12771.58429	12605.9885	30	Marcellus
63	2/15/2024	12570.46935	12404.8736	30	Marcellus
64	2/15/2024	12369.35441	12203.7586	30	Marcellus
65	2/15/2024	12168.23946	12002.6437	30	Marcellus
66	2/15/2024	11967.12452	11801.5287	30	Marcellus
67	2/15/2024	11766.00958	11600.4138	30	Marcellus
68	2/16/2024	11564.89464	11399.2989	30	Marcellus
69	2/16/2024	11363.77969	11198.1839	30	Marcellus
70	2/16/2024	11162.66475	10997.069	30	Marcellus
71	2/16/2024	10961.54981	10795.954	30	Marcellus
72	2/16/2024	10760.43487	10594.8391	30	Marcellus
73	2/17/2024	10559.31992	10393.7241	30	Marcellus
74	2/17/2024	10358.20498	10192.6092	30	Marcellus
75	2/17/2024	10157.09004	9991.49425	30	Marcellus
76	2/17/2024	9955.975096	9790.37931	30	Marcellus
77	2/17/2024	9754.860153	9589.26437	30	Marcellus
78	2/18/2024	9553.745211	9388.14943	30	Marcellus
79	2/18/2024	9352.630268	9187.03448	30	Marcellus
80	2/18/2024	9151.515326	8985.91954	30	Marcellus
81	2/18/2024	8950.400383	8784.8046	30	Marcellus
82	2/18/2024	8749.285441	8583.68966	30	Marcellus
83	2/19/2024	8548.170498	8382.57471	30	Marcellus
84	2/19/2024	8347.055556	8181.45977	30	Marcellus
85	2/19/2024	8145.940613	7980.34483	30	Marcellus
86	2/19/2024	7944.82567	7779.22989	30	Marcellus
87	2/20/2024	7743.710728	7578.11494	30	Marcellus
88	2/20/2024	7542.595785	7377	30	Marcellus

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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	1/7/2024	66.76994	10109.17	8176.23	4034.711	180500	7568.07143	N/A
2	1/7/2024	79.74392	9980.585	5810.32	4025.674	395420	6579.04762	N/A
3	1/8/2024	79.69596	10047.24	7310.19	3694.161	421540	7440.90476	N/A
4	1/8/2024	68.04169	9840.814	7054.39	3938.042	419900	10307.7619	N/A
5	1/9/2024	82.81292	10215.19	7018.54	3456.331	418680	7466.95238	N/A
6	1/9/2024	84.48725	10485.25	7007.28	4063.382	418980	7135.54762	N/A
7	1/10/2024	84.13939	10224.87	6726.01	4191.113	418600	7289	N/A
8	1/10/2024	85.8838	10404.03	6650.87	3987.887	418320	7240.95238	N/A
9	1/10/2024	76.58133	10173.55	7139.61	3792.836	420040	7393.5	N/A
10	1/11/2024	71.92102	10110.48	7056.72	4003.82	416040	7513.69048	N/A
11	1/11/2024	89.16518	10320.72	6958.42	4127.906	419640	7151.33333	N/A
12	1/11/2024	90.47858	10282.73	6753.86	3985	415900	7266.92857	N/A
13	1/12/2024	89.44879	10150.87	6598.41	4209.013	417520	7133.14286	N/A
14	1/12/2024	91.69157	10224.79	6963.77	4105.675	421080	7099.7381	N/A
15	1/13/2024	90.04839	10218.33	6677.56	4284.32	417520	7050.09524	N/A
16	1/13/2024	92.78459	10363.4	6531.58	4409.396	414260	7127.2381	N/A
17	1/13/2024	90.20049	9976.433	6626.94	4230	424300	7208.5	N/A
18	1/14/2024	88.89005	10038.08	6744.91	4235.206	420540	7339.40476	N/A
19	1/14/2024	92.88595	10098.47	6910.49	4528.047	411840	7011.21429	N/A
20	1/14/2024	82.58532	9687.464	6884.88	4391.714	421760	8033.02381	N/A
21	1/15/2024	92.73592	10020.45	7088.71	4366.681	416360	7302.95238	N/A
22	1/15/2024	90.98003	10093.67	6703.8	4328.283	423180	7363.2381	N/A
23	1/15/2024	94.18254	10435.54	6689.99	4444	415120	7217.40476	N/A
24	1/16/2024	93.38564	10369.13	6608.7	4616	411520	7180.69048	N/A
25	1/16/2024	93.85621	10269.94	6735.83	4674.556	418520	7241.04762	N/A
26	1/17/2024	94.02678	10282.29	7020.22	4673	413760	7030.11905	N/A
27	1/17/2024	95.39197	10189.93	7044.82	4491	413860	6990.54762	N/A
28	1/17/2024	94.77593	10036.32	6981.49	4369.157	403450	6915.30952	N/A
29	1/18/2024	93.44686	10346.24	7273.22	4588	406430	6903.16667	N/A
30	1/18/2024	94.08114	10041.35	7148.1	4529	420920	7166.54762	N/A
31	1/18/2024	96.71227	10072.91	6985.51	4632	419420	6949.52381	N/A
32	1/19/2024	96.64102	10046.17	6432.89	4548	419380	6855.78571	N/A
33	1/19/2024	94.1608	10339.41	6895.81	4416	397890	6745.04762	N/A
34	1/19/2024	96.45346	10069.72	6395.15	4391	404430	6858.04762	N/A
35	1/20/2024	96.7432	10084.34	7005.6	4274	414600	6996.7381	N/A
36	1/20/2024	95.69917	10070.84	5992.07	4184	421000	6960.42857	N/A
37	1/21/2024	94.84461	10062.73	6948.13	4366	417500	7134.78571	N/A
38	1/21/2024	94.58062	10002.57	7270.77	4267	411360	7128.47619	N/A
39	1/21/2024	96.26401	9901.384	7218.97	4455	416180	7125.47619	N/A
40	1/22/2024	94.00064	9690.274	7177.07	4473	415880	6969	N/A
41	1/22/2024	97.25538	9737.836	7137.28	4618	415920	6836.92857	N/A
42	1/22/2024	94.75462	9600	6058.34	4292.888	393420	6728.7381	N/A
43	1/23/2024	96.15326	10088.86	7202.38	4235	410040	7021.30952	N/A
44	1/23/2024	96.26685	10018.87	7322.76	4304	419220	6679.95238	N/A
45	1/23/2024	96.98212	9880.659	7238.96	4422	410760	6952.09524	N/A
46	1/23/2024	95.3175	9763.531	6811.79	4352.526	410520	6912.83333	N/A
47	1/23/2024	96.44364	9844.92	6655.46	4238.224	416740	7139.54762	N/A
48	1/23/2024	96.50464	9908.011	7101.69	4169	414760	6837.40476	N/A
49	1/24/2024	96.36105	9886.928	7243.71	4195.089	415860	6752.02381	N/A
50	1/24/2024	96.11217	10063.99	7187.83	4155.556	413980	6984.54762	N/A
51	1/24/2024	96.82295	9971.547	6907.39	4162.392	411580	6969	N/A
52	1/24/2024	96.5747	9557.425	6625.8	4066	416980	6938.66667	N/A
53	1/24/2024	97.23191	9584.018	6461.05	4428	418220	6824.30952	N/A
54	1/24/2024	96.05211	9447.748	6555.98	4419	402240	6779.11905	N/A
55	1/25/2024	96.06817	9840.338	6284.55	4140.51	413860	7011.33333	N/A
56	1/25/2024	96.75784	9563.225	6377.99	4062	416880	6931.04762	N/A
57	1/25/2024	96.88862	9553.117	6502.99	4282	415580	6920.2619	N/A
58	1/25/2024	97.40472	9054.533	6327.83	4187.37	417480	6870.02381	N/A
59	1/25/2024	94.83366	9310.02	6580.5	4117.476	413840	6827.30952	N/A
60	1/25/2024	96.89606	9502.525	6601.23	4149	421360	6990.57143	N/A
61	1/26/2024	97.52294	9008.493	6475.68	4164	416300	6884.61905	N/A
62	1/26/2024	97.31328	9013.118	6938.18	4304	415240	6826.2381	N/A
63	1/26/2024	95.66016	9035.001	6498.22	4268.994	414720	6851.80952	N/A
64	1/26/2024	96.35897	9112.558	7125.39	4167.279	414640	6831.69048	N/A
65	1/26/2024	97.13124	9038.266	6637.03	4193	413640	6833.28571	N/A
66	1/26/2024	97.95195	8966.769	7589.9	4137	420160	6870.83333	N/A
67	1/26/2024	98.66365	8960.672	7379.36	4102.109	415860	6783.61905	N/A
68	1/27/2024	97.02407	8986.796	7142.19	4051.305	413980	6874.19048	N/A
69	1/27/2024	97.01363	9049.766	7073.29	4028	417060	7141.2619	N/A
70	1/27/2024	97.72581	8931.535	7041.95	3888	417620	6914.64286	N/A
71	1/27/2024	97.53644	8863.089	7062.05	4138	419860	6837	N/A
72	1/27/2024	96.74316	8695.901	7008.55	3750.571	419440	6731.45238	N/A
73	1/28/2024	95.70574	8821.722	6884.93	3902.858	394082	6649.71429	N/A
74	1/28/2024	97.72165	8764.969	6994.87	4167	410460	6783.02381	N/A
75	1/28/2024	98.34174	8514.961	6829.15	3902	412700	6712.69048	N/A
76	1/28/2024	98.17551	8306.998	6614.77	4284	417480	7003.45238	N/A
77	1/28/2024	96.96525	8472.881	6014.18	4019.711	419760	6968.40476	N/A
78	1/28/2024	97.8816	8918.688	6997.72	3997.985	414140	6874.69048	N/A
79	1/28/2024	98.09462	8725.83	6661.95	4115	414560	7018.7619	N/A
80	1/29/2024	97.88296	8510.534	6657.23	4038	418220	7019.52381	N/A
81	1/29/2024	97.31439	8414.218	7523.34	4027	417960	6953.69048	N/A
82	1/30/2024	98.42922	8244.304	6252.05	3951.572	416480	6928.61905	N/A
83	1/31/2024	96.95093	8372.371	6615.13	4164.049	421880	7037.66667	N/A
84	2/1/2024	97.75257	8220.967	6007.83	4235	423140	6994	N/A
85	2/2/2024	97.92751	8011.525	6081.98	4211	412240	6937.54762	N/A
86	2/3/2024	96.08739	8107.495	6003.96	4428	413880	7562.80952	N/A
87	2/4/2024	96.28899	7931.412	6474.52	4451.712	371426	6478.21429	N/A
88	2/5/2024	98.91273	8052.909	6805.96	4295.956	376280	6874	N/A
	AVERAGE	93	9,564	6,816	4,218	36,215,588	620,475	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Sandy Siltstone, LS	104	324	104	324
Shaley Siltstone, tr LS	324	374	324	374
Sandy Shale	374	624	374	624
Siltstone, Occ SS, tr Shale, tr Coal	474	824	474	824
Sandy Siltstone, tr LS, tr Shale	624	824	624	824
Silty Sandstone, tr LS	824	924	824	924
Sandy Siltstone, tr LS, tr Shale	924	1,024	924	1,024
Silty Sandstone, tr Shale	1,024	1,124	1,024	1,124
Silty Sandstone, tr Shale, tr LS	1,124	1,224	1,124	1,224
Shaley Sandstone, occ Siltstone	1,224	1,424	1,224	1,424
Silty Sandstone, tr shale	1,424	1,524	1,424	1,524
Sandy Siltstone, tr Coal	1,524	1,674	1,524	1,674
Silty Sandstone, tr Coal, tr Shale	1,674	1,874	1,674	1,874
Sandy Shale, tr Coal	1,874	2,024	1,874	2,024
Silty Sandstone, rr Coal	2,024	2,130	2,024	2,153
Big Lime	2,156	2,907	2,153	2,963
Fifty Foot Sandstone	2,907	3,029	2,937	3,090
Gordon	3,029	3,251	3,064	3,317
Fifth Sandstone	3,251	3,311	3,291	3,379
Bayard	3,311	4,098	3,353	4,196
Speechley	4,098	4,365	4,170	4,473
Balltown	4,365	4,810	4,447	4,931
Bradford	4,810	5,187	4,905	5,322
Benson	5,187	5,625	5,296	5,775
Alexander	5,625	6,805	5,749	7,026
Sycamore	6,650	6,779	6,849	7,000
Middlesex	6,779	6,877	7,000	7,123
Burkett	6877	6906	7123	7165
Tully	6906	6989	7165	7329
Marcellus	6989	NA	7329	NA

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Office of Oil and Gas
JUL 01 2024
WV Department of
Environmental Protection

07/19/2024

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	01/30/2024
Job End Date:	02/20/2024
State:	West Virginia
County:	Wetzel
API Number:	47-103-03586-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	GAUSS UNIT 2H
Latitude:	39.5566
Longitude:	-80.7308
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7048
Total Base Water Volume (gal)*:	27492952
Total Base Non Water Volume:	0



Water Source	Percent
Produced Water	100.00%

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
FDP-S1464-22	Halliburton	Friction Reducer					
HAI-501	Halliburton	Acid Corrosion Inhibitor					
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					RECEIVED Office of Oil and Gas
MC B-8614A	MultiChem	Biocide					JUL 01 2024
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					WV Department of Environmental Protection
Produced Water (Density 10.0)	Operator	Base Fluid					
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
WG-36 GELLING AGENT	Halliburton	Gelling Agent					

Items above are Trade Names. Items below are the individual ingredients.

07/19/2024

			Water	7732-18-5	100.00000	88.20176	None
			Crystalline silica, quartz	14808-60-7	100.00000	11.61855	None
			Water	7732-18-5	100.00000	0.15285	None
			Hydrochloric acid	7647-01-0	30.00000	0.03459	None
			Complex amine compound	Proprietary	60.00000	0.03073	None
			Hydrotreated distillate	Proprietary	30.00000	0.01537	None
			Guar gum	9000-30-0	100.00000	0.00601	None
			Ammonium chloride	12125-02-9	5.00000	0.00256	None
			Ethoxylated alcohol	Proprietary	5.00000	0.00256	None
			Fatty nitrogen derived amides	Proprietary	5.00000	0.00256	None
			Glutaraldehyde	111-30-8	30.00000	0.00204	None
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00051	None
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00051	None
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00034	None
			Methanol	67-56-1	100.00000	0.00022	None
			Ammonium persulfate	7727-54-0	100.00000	0.00013	None
			Ethanol	64-17-5	1.00000	0.00007	None
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00006	None
			Modified thiourea polymer	Proprietary	30.00000	0.00006	None
			Oxylated phenolic resin	Proprietary	30.00000	0.00004	None
			Propargyl alcohol	107-19-7	5.00000	0.00001	None
			Hexadecene	629-73-2	5.00000	0.00001	None
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	None
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000	None

* 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%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

07/19/2024

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. Gauss 2H
As-Drilled
 Antero Resources Corporation

Page 1 of 3

Gauss Unit 2H
 Bottom Hole

10,522' to Bottom Hole

6,390' to Top Hole

TOP HOLE LATITUDE 39 - 35 - 00
 BTM HOLE LATITUDE 39 - 37 - 30



Notes
 West Virginia Coordinate System
 of 1927, North Zone
 based upon Differential GPS Measurements.
 Well No. Gauss Unit 2H Top Hole coordinates are
 N: 387,191.11' Latitude: 39°33'23.53"
 E: 1,652,921.70' Longitude: 80°43'51.59"
 Bottom Hole coordinates are
 N: 404,661.93' Latitude: 39°36'15.66"
 E: 1,649,023.57' Longitude: 80°44'44.45"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,378,582.560m N: 4,383,885.334m
 E: 523,125.189m E: 521,848.926m
 Plat orientation and corner and well references
 are based upon the grid north meridian.
 Well location references are based upon the magnetic
 meridian.

Gauss Unit 2H As-Drilled
 POE Coordinates
 West Virginia
 Coordinate System
 of 1927, North Zone
 N: 387,809.59'
 E: 1,654,357.77'
 Latitude: 39°33'29.84"
 Longitude: 80°43'33.36"
 UTM Zone 17, NAD 1983
 N: 4,378,778.300m
 E: 523,559.568m

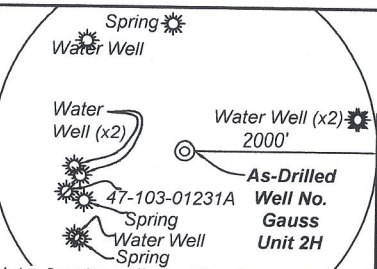
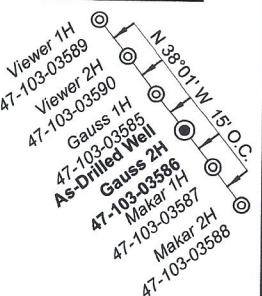
	Bearing	Dist.
L1	S 67°04' W	1,883.7'
L2	N 89°41' W	1,953.4'
L3	N 84°21' E	1,636.0'
L4	N 89°15' E	1,661.4'

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

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.

Wellhead Layout (NTS)



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

FILE NO: 121-34-G-18
 DRAWING NO: Gauss Unit 2H As-Drilled Plat
 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: June 20 20 24
 OPERATOR'S WELL NO. Gauss Unit 2H
 API WELL NO
 47 - 103 - 03586
 STATE COUNTY PERMIT

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

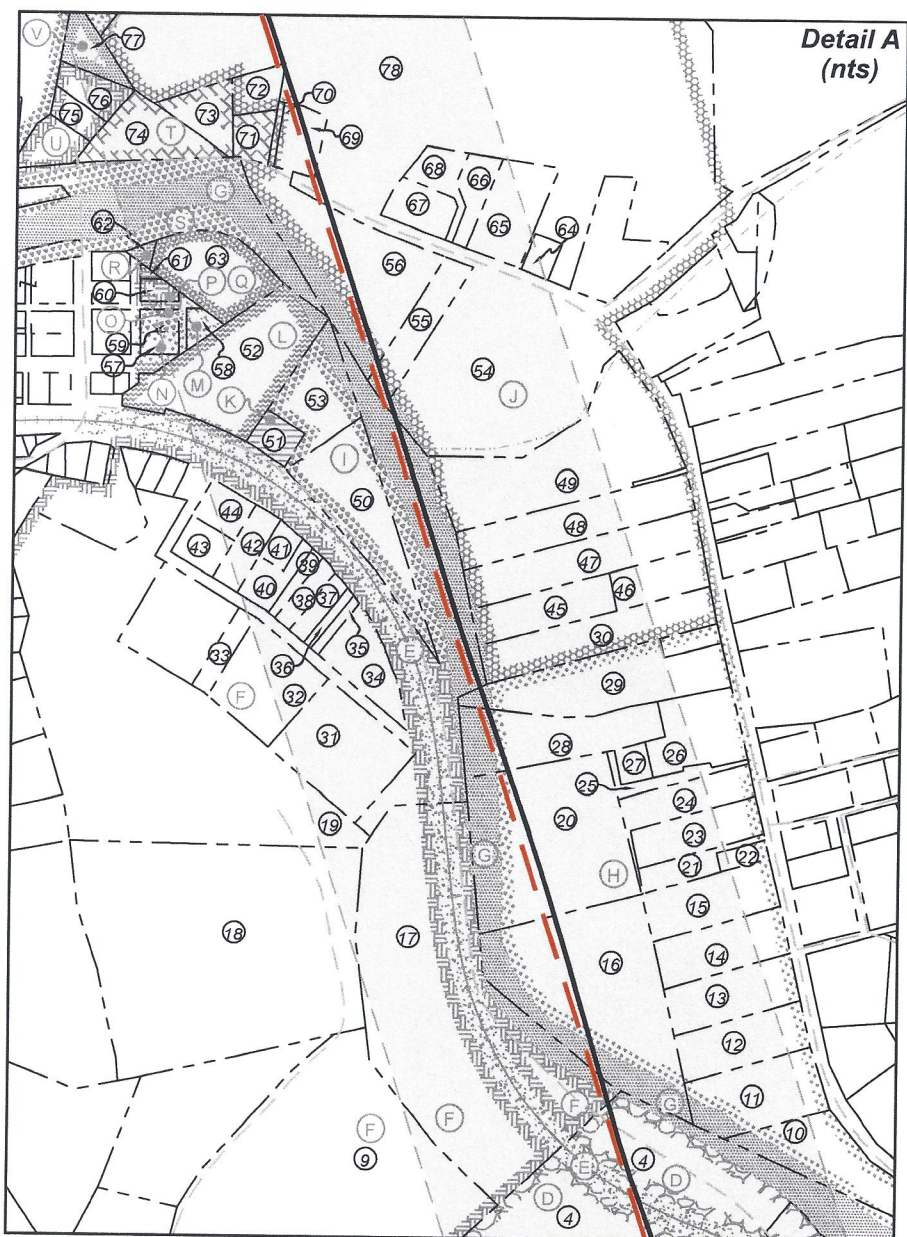
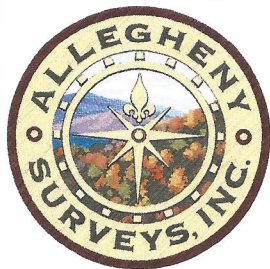
LOCATION: ELEVATION: As-Drilled 1211' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove
 DISTRICT: Green COUNTY: Wetzel
 SURFACE OWNER: Antero Resources Corp. ACREAGE: 58.1
 ROYALTY OWNER: James Allen Sell LEASE NO: ACREAGE: 58.1

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: 25,051' MD 6,984' 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

07/19/2024



FILE NO: 121-34-G-18
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WVDOT, Harrisville, WV

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

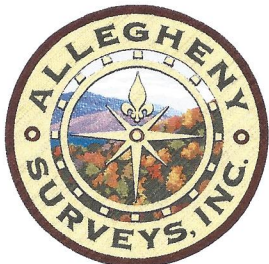
DATE: June 20 20 24
OPERATOR'S WELL NO. Gauss Unit 2H
API WELL NO
47 - 103 - 03586
STATE COUNTY PERMIT

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ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.
Denver, CO 80202 Bridgeport, WV 26330

07/19/2024



Leases	
A	James Allen Sell
B	William R. Stalnaker
C	Tribune Resources Minerals, LLC
D	Marilyn Halley Seeley
E	CSX Transportation, Inc.
F	Antero Minerals, LLC
G	WVDNR
H	Antero Minerals, LLC
I	Antero Minerals, LLC
J	Antero Minerals, LLC
K	Trinity UMC
L	Timothy Lynn & Michael A. McDiffitt
M	Donald L. & Cshawn L. Smith
N	Darla J. Brinker
O	Donald L., II & Cshawn L. Smith
P	Daniel Melott
Q	Kevin Cunningham, et ux
R	Kevin Cunningham, et ux

Leases	
S	Shiben Estates, Inc.
T	Ronald M. Jackson, et ux
U	Brent A. Whipkey
V	Phillip W. Wiley
W	Chesapeake Appalachia, LLC
X	Chesapeake Appalachia, LLC
Y	Mary E. Snider
Z	BRC Minerals, LP & BRC Appalachian Minerals I, LLC
AA	Shiben Estates, Inc.
AB	Valerie Preat
AC	Nancy B. Hatfield, et al
AD	Ryann Wade, Sr., et al
AE	Nancy B. Hatfield, et al
AF	Cylde B. Snider
AG	Donzel A. Hornbeck
AH	Elizabeth P. Omer

ID	TM-Par	Owner	Bk/Pg	Acres
1	17-12	Antero Resources Corp.	483/888	58.10
2	17-1	Antero Resources Corp	483/888	15.35
3	17-60	Ross Bucher	411/765	79.00
4	13-71	Charles R. & Kay L. Blair	387/577	63.11
5	17-2	Clarence & Carol Lancaster	287/357	0.50
6	17-3	Bradford Highley	386/607	17.00
7	17-3.1	Bradford D. Highley	386/607	1.00
8	13-71.1	Clarence L. & Carol J. Lancaster	387/266	19.19
9	13-70	Doris Ruth Haught, et al	AP112/912	33.78
10	30-23.1	Michael A. McDiffitt	447/102	2.06
11	30-23	Charles R. & Kay Blair	312/585	1.20
12	30-23.2	Charles R. & Kay L. Blair	305/372	1.00
13	30-21	Robert Dennis Lawson	326/512	1.00
14	30-20	Esther R. Coen	433/68	1.00
15	30-19	Zachary C. Propst	431/280	1.00
16	30-22	James E. & Shawn L. Coen	342/489	3.00
17	13-47	Charles J. Stillwagoner III	460/921	8.00
18	29-69.1	Donald L. II & Cshawn L. Smith	350/465	8.80
19	29-69	Leroy E. & Virginia R. Derby	278/70	10.20
20	30-13	Kathy L. Wright	WB75/465	4.74
21	30-18	Laura A. Hicks	439/363	0.37
22	30-17	Laura A. Hicks	439/363	0.15
23	30-16	Thomas R. & Paula C. Loy	393/683	0.77
24	30-15	Reva E. Shanholtzer	WB44/164	0.73
25	30-14.1	Reva E. Shanholtzer	WB44/164	0.25
26	30-13	Kathy L. Wright	W75/4605	4.74
27	30-14	Kathy L. Wright	428/931	0.18
28	30-13.1	Joshua R. Wright	370/13	1.53
29	30-12	Kenneth R. & Charlene Ice	319/352	1.97
30	30-10	Eric & Estella Hayes	409/390	1.25
31	29-96	Brenda Ellen Glasscock	472/33	1.65
32	29-95	Brian Keith Haught	420/216	1.26
33	29-94	Brian Keith Haught	420/216	0.27
34	29-89	Brenda Ellen Glasscock	472/33	0.61
35	29-88	Brian Keith Haught	420/216	0.10
36	29-87	Russell Craig Bates	429/422	0.10
37	29-86	Russell Craig Bates	429/422	0.21
38	29-79	James Stacey Anderson	402/596	0.22
39	29-78	James Stacey Anderson	402/596	0.13
40	29-77	Roland Lee & Jo Ann Pittman	333/528	0.32
41	29-76	Roland Lee & Jo Ann Pittman	333/528	0.18
42	29-75	Janet Lea Higginbotham	WB 8/638	0.38
43	29-80	John M. & Robin Lynn Pittman	295/446	0.30
44	29-73	John M. & Robin Lynn Pittman	295/446	0.33
45	30-9	Jerry D. & Joyce Martin	339/379	0.85
46	30-9.1	Jerry D. & Joyce Martin	339/379	0.57

ID	TM-Par	Owner	Bk/Pg	Acres
47	30-8	Robert J. Yeager	310/433	1.25
48	30-7	Jerry Lee & Karen Beryl Mason	365/533	1.25
49	13-24.1	Jerry Lee & Karen Beryl Mason	235/9	3.10
50	29-37	Trinity United Methodist	294/260	2.25
51	29-36	Trinity United Methodist	---/--	0.23
52	29-34	Timothy Lynn & Michael Allen McDiffitt	399/54	2.32
53	29-35	Benjamin R. & Tammy Y. Highley	423/99	1.00
54	13-24	Howard D. & Clara M. Bucher	367/144	34.02
55	13-24.8	Doris J. Miller	367/84	0.70
56	13-24.4	Doris J. Miller	344/20	2.35
57	29-20	Darla J. Brinker	371/308	0.14
58	29-19	Dillon Leroy Edgell	444/504	0.15
59	29-21	Cathy Brown	399/473	0.14
60	29-17	Daniel Melott	483/851	0.12
61	29-15.1	Daniel Melott	483/851	0.03
62	29-120	Kevin E. & Carol L. Cunningham	432/231	0.06
63	29-18	Kevin E. & Carol L. Cunningham	432/231	1.00
64	13-29	Howard D. & Clara M. Bucher	367/144	0.17
65	13-24.7	Jerry L. & Karen B. Mason	367/79	0.91
66	13-24.6	Jerry L. & Karen B. Mason	367/74	0.35
67	13-24.5	Marilyn K. Daugherty	MS89/328	0.45
68	13-24.9	Nila E. Nice	431/653	0.37
69	29-5	U.S. Postal Service	348/289	0.43
70	29-4	Ronald & Pamela Jackson	383/595	0.06
71	29-3	Ronald & Pamela Jackson	383/595	0.75
72	29-2	Ronald & Pamela Jackson	383/595	0.55
73	29-1.1	Ronald M. & Pamela A. Jackson	320/38	0.56
74	29-1	Ronald M. & Pamela A. Jackson	320/38	1.00
75	29-117	Brent A. Whipkey	411/154	0.18
76	29-118	Brent A. Whipkey	411/154	0.34
77	29-119	Phillip Wiley	368/706	0.42
78	13-24	Howard D. & Clara M. Bucher	367/144	34.02
79	13-21	Daniel W. & Ruth A. Henderson	244/111	30.95
80	13-7	WSD Properties LLC	441/793	162.00
81	13-13	Linda M. Headley	385/209	85.50
82	8-43	Debra Key Fluharty, et al	368/559	35.00
83	8-41	Nancy Hatfield	267/370	60.00
84	8-28	Nancy B. Hatfield	474/481	449.48
85	8-27	Valerie Preat	416/599	16.80
86	8-23	Debra Kay Fluharty, et al	368/561	28.04
87	8-16	Ryann M. Wade, et al	433/830	9.25
88	8-17	Harold L. & Deborah C. Miller	393/500	2.12
89	8-5	Charles J. Jr & Robin D Stillwagoner	367/460	37.87
90	3-36	Donzel A. Hornbeck	459/560	35.00
91	3-35	Richard Hornbeck, et al	483/191	19.50
92	3-27	Ronald E. Wade	433/785	100.00

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DATE: June 20 20 24
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