

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

API 47 - 103 - 03590 County Wetzel District Green
Quad Pine Grove Pad Name Furbee Field/Pool Name ----
Farm name Antero Resources Group Well Number Viewer 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 4378589.774m Easting 523119.379m
Landing Point of Curve Northing 4379093.13m Easting 522931.96m
Bottom Hole Northing 4383386.972m Easting 521476.234m

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 10/31/2023
Date completion activities began 1/7/2024 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

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

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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"	695'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3448'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" /8-1/2"	5-1/2"	23600'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7027'		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	1172 sx	15.6	1.20	1406	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	4024 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.26 (Tail)	5070	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 23,600' MD, 6,968' TVD (BHL), 7,039' TVD (Deepest Point Drilled) Loggers TD (ft) 23,570' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6,330'

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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PRODUCING FORMATION(S)	DEPTHS	
Marcellus	6,974' (TOP) TVD	7,229' (TOP) MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

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

OPEN FLOW Gas 16,310.29 mcfpd Oil 580.91 bpd NGL --- bpd Water 695.66 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	

***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 US Land
Address 3600 Briarpark Drive City Houston State TX Zip 77042

Stimulating Company Halliburton
Address 3000 N Sam Houston Pkwy E. City Houston State TX Zip 77032

Please insert additional pages as applicable.

Completed by Stefan Gaspar Telephone 303-357-6959
Signature *S Gaspar* Title Permitting Agent Date _____

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

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EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1/7/2024	23471	23426	36	Marcellus
2	1/7/2024	23387.77778	23223.6667	36	Marcellus
3	1/8/2024	23188.44444	23024.3333	36	Marcellus
4	1/8/2024	22989.11111	22825	36	Marcellus
5	1/8/2024	22789.77778	22625.6667	36	Marcellus
6	1/9/2024	22590.44444	22426.3333	36	Marcellus
7	1/10/2024	22391.11111	22227	36	Marcellus
8	1/10/2024	22191.77778	22027.6667	36	Marcellus
9	1/10/2024	21992.44444	21828.3333	36	Marcellus
10	1/11/2024	21793.11111	21629	36	Marcellus
11	1/11/2024	21593.77778	21429.6667	36	Marcellus
12	1/11/2024	21394.44444	21230.3333	36	Marcellus
13	1/12/2024	21195.11111	21031	36	Marcellus
14	1/12/2024	20995.77778	20831.6667	36	Marcellus
15	1/12/2024	20796.44444	20632.3333	36	Marcellus
16	1/13/2024	20597.11111	20433	36	Marcellus
17	1/13/2024	20397.77778	20233.6667	36	Marcellus
18	1/14/2024	20198.44444	20034.3333	36	Marcellus
19	1/14/2024	19999.11111	19835	36	Marcellus
20	1/14/2024	19799.77778	19635.6667	36	Marcellus
21	1/14/2024	19600.44444	19436.3333	36	Marcellus
22	1/15/2024	19401.11111	19237	36	Marcellus
23	1/15/2024	19201.77778	19037.6667	36	Marcellus
24	1/16/2024	19002.44444	18838.3333	36	Marcellus
25	1/16/2024	18803.11111	18639	36	Marcellus
26	1/16/2024	18603.77778	18439.6667	36	Marcellus
27	1/17/2024	18404.44444	18240.3333	36	Marcellus
28	1/17/2024	18205.11111	18041	36	Marcellus
29	1/17/2024	18005.77778	17841.6667	36	Marcellus
30	1/18/2024	17806.44444	17642.3333	36	Marcellus
31	1/18/2024	17607.11111	17443	36	Marcellus
32	1/18/2024	17407.77778	17243.6667	36	Marcellus
33	1/19/2024	17208.44444	17044.3333	36	Marcellus
34	1/19/2024	17009.11111	16845	36	Marcellus
35	1/20/2024	16809.77778	16645.6667	36	Marcellus
36	1/20/2024	16610.44444	16446.3333	36	Marcellus
37	1/21/2024	16411.11111	16247	36	Marcellus
38	1/21/2024	16211.77778	16047.6667	36	Marcellus
39	1/21/2024	16012.44444	15848.3333	36	Marcellus
40	1/22/2024	15813.11111	15649	36	Marcellus
41	1/22/2024	15613.77778	15449.6667	36	Marcellus
42	1/22/2024	15414.44444	15250.3333	36	Marcellus
43	1/22/2024	15215.11111	15051	36	Marcellus
44	1/23/2024	15015.77778	14851.6667	36	Marcellus
45	1/23/2024	14816.44444	14652.3333	36	Marcellus
46	1/23/2024	14617.11111	14453	36	Marcellus
47	1/23/2024	14417.77778	14253.6667	36	Marcellus
48	1/23/2024	14218.44444	14054.3333	36	Marcellus
49	1/23/2024	14019.11111	13855	36	Marcellus
50	1/24/2024	13819.77778	13655.6667	36	Marcellus
51	1/24/2024	13620.44444	13456.3333	36	Marcellus
52	1/24/2024	13421.11111	13257	36	Marcellus
53	1/24/2024	13221.77778	13057.6667	36	Marcellus
54	1/24/2024	13022.44444	12858.3333	36	Marcellus
55	1/25/2024	12823.11111	12659	36	Marcellus
56	1/25/2024	12623.77778	12459.6667	36	Marcellus
57	1/25/2024	12424.44444	12260.3333	36	Marcellus
58	1/25/2024	12225.11111	12061	36	Marcellus
59	1/25/2024	12025.77778	11861.6667	36	Marcellus
60	1/25/2024	11826.44444	11662.3333	36	Marcellus
61	1/25/2024	11627.11111	11463	36	Marcellus
62	1/26/2024	11427.77778	11263.6667	36	Marcellus
63	1/26/2024	11228.44444	11064.3333	36	Marcellus
64	1/26/2024	11029.11111	10865	36	Marcellus
65	1/26/2024	10829.77778	10665.6667	36	Marcellus
66	1/26/2024	10630.44444	10466.3333	36	Marcellus
67	1/26/2024	10431.11111	10267	36	Marcellus
68	1/27/2024	10231.77778	10067.6667	36	Marcellus
69	1/27/2024	10032.44444	9868.33333	36	Marcellus
70	1/27/2024	9833.11111	9669	36	Marcellus
71	1/27/2024	9633.77778	9469.6667	36	Marcellus
72	1/27/2024	9434.44444	9270.33333	36	Marcellus
73	1/27/2024	9235.11111	9071	36	Marcellus
74	1/28/2024	9035.77778	8871.6667	36	Marcellus
75	1/28/2024	8836.44444	8672.33333	36	Marcellus
76	1/28/2024	8637.11111	8473	36	Marcellus
77	1/28/2024	8437.77778	8273.6667	36	Marcellus
78	1/28/2024	8238.44444	8074.33333	36	Marcellus
79	1/28/2024	8039.11111	7875	36	Marcellus
80	1/29/2024	7839.77778	7675.6667	36	Marcellus
81	1/29/2024	7640.44444	7476.33333	36	Marcellus
82	1/29/2024	7441.11111	7277	36	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	72.67298	9465.52	6341.78	3141.471	165720	5522	N/A
2	1/7/2024	81.53853	10330.28	5241.18	3844.748	414840	8104.19048	N/A
3	1/8/2024	79.91303	10052.88	5627.37	3801.831	413420	7348.19048	N/A
4	1/8/2024	78.55048	10242.88	5472.77	3989.724	415120	7684.52381	N/A
5	1/8/2024	81.62512	10096.27	6220.45	3573.117	418240	7219.64286	N/A
6	1/9/2024	83.3093	10211.97	6690.44	3850.035	415240	7152.02381	N/A
7	1/10/2024	84.16094	10152.35	6991.74	4133.42	411960	7096.28571	N/A
8	1/10/2024	82.99381	10272.36	5961.68	3834.004	410540	6957.92857	N/A
9	1/10/2024	83.41961	10478.41	7090.19	3925.543	410380	7256.83333	N/A
10	1/11/2024	88.53419	10236.42	6724.2	3970.111	411060	6920.59524	N/A
11	1/11/2024	85.4679	10368.09	7086.38	4028.689	411760	7010.42857	N/A
12	1/11/2024	86.13171	10081.31	6427.38	4121.961	407860	7032.09524	N/A
13	1/12/2024	88.26821	10119.38	7112.38	4146.489	410360	7031.78571	N/A
14	1/12/2024	90.83237	10292.86	6082.48	4021.99	410500	6973.61905	N/A
15	1/12/2024	88.37238	10092.88	6344.05	4096.916	413660	7111.40476	N/A
16	1/13/2024	82.49815	9563.248	7508.47	4111.525	416740	7092.59524	N/A
17	1/13/2024	89.87453	9950.878	6943.6	4048.57	405320	7078.38095	N/A
18	1/14/2024	90.27662	10201.29	7211.4	4168.769	407320	7033.38095	N/A
19	1/14/2024	92.13107	10199.83	6871.15	4122.493	410890	7201.66667	N/A
20	1/14/2024	91.14752	10392.88	6699.69	4208.267	416740	7300.7381	N/A
21	1/14/2024	91.41509	10129.73	6581.86	4349.551	418940	7255.09524	N/A
22	1/15/2024	90.40937	10340.78	7036.95	4136.71	418600	7302.16667	N/A
23	1/15/2024	89.57017	10366.37	6927.76	4473.604	412080	7198.09524	N/A
24	1/16/2024	91.72549	10106.94	6656.44	4141.63	410620	7080.11905	N/A
25	1/16/2024	92.79424	10206.29	6711.36	4396.615	402820	7147.02381	N/A
26	1/16/2024	87.07842	9917.53	6632.08	4191	403800	7077.30952	N/A
27	1/17/2024	85.44158	10142.33	6666.71	4335.22	408560	7195.57143	N/A
28	1/17/2024	91.77446	10024.66	6321.76	4426.38	406800	7141.57143	N/A
29	1/17/2024	94.86254	9927.557	5362.58	4557.279	411740	7170.14286	N/A
30	1/18/2024	96.27832	9930.093	6194.42	4361.375	415400	7153.28571	N/A
31	1/18/2024	95.78535	10195.41	6669.41	4608.596	411380	7219.19048	N/A
32	1/18/2024	94.19294	9891.575	5312.58	4538.272	413600	7204.38095	N/A
33	1/19/2024	95.81772	10033.43	5537.4	4534.905	413580	7136.66667	N/A
34	1/19/2024	95.01942	9689.516	6641.3	4670.542	400360	7049.78571	N/A
35	1/20/2024	93.15252	10228.28	6392.62	4365.653	397840	6913.47619	N/A
36	1/20/2024	95.53088	10071.44	6547.38	4284.643	399540	6781.59524	N/A
37	1/21/2024	94.17371	9763.999	4962.79	4496.708	408040	7078.61905	N/A
38	1/21/2024	92.73562	9877.221	6658.28	4299.881	399960	7030.7381	N/A
39	1/21/2024	94.29807	10017.53	6277.68	4169.906	416120	7020.59524	N/A
40	1/22/2024	97.12988	9316.841	6605.5	4382.692	418080	7098.71429	N/A
41	1/22/2024	96.75395	9440.082	6395.03	4572.269	409800	6907.04762	N/A
42	1/22/2024	95.26741	9778.884	6155.66	4901.899	407220	6811	N/A
43	1/22/2024	95.42419	9715.563	6919.64	4622	415380	6669.14286	N/A
44	1/23/2024	97.33603	9686.793	5976.33	4880	409100	6844.54762	N/A
45	1/23/2024	97.30786	9528.441	6413.9	4835.263	411640	6874.64286	N/A
46	1/23/2024	98.3257	9735.956	6390.78	4190.551	414080	6851.78571	N/A
47	1/23/2024	97.32149	9518.549	6226.31	4581	412940	6784.71429	N/A
48	1/23/2024	95.84168	9777.909	6227.48	4672	409880	6886.95238	N/A
49	1/23/2024	96.77768	9707.279	6328.19	4770	409580	6851.2619	N/A
50	1/24/2024	97.53745	9492.93	5850.65	4912.537	412720	6591.04762	N/A
51	1/24/2024	96.77885	9194.153	6139.26	4042.465	406180	6620.52381	N/A
52	1/24/2024	95.35769	9103.824	6431.42	4100.167	414500	6940.69048	N/A
53	1/24/2024	94.77902	9131.37	6385.42	3890.497	407200	6748.38095	N/A
54	1/24/2024	97.41354	9053.674	6451.62	4448	408380	6718.57143	N/A
55	1/25/2024	97.30813	8874.324	6668.31	4369	409320	6574.95238	N/A
56	1/25/2024	97.22311	8968.633	6577.09	4240	412800	6504.2619	N/A
57	1/25/2024	97.05245	8984.684	6756.2	4631.45	413180	6697	N/A
58	1/25/2024	97.91439	8781.772	6398.84	4057.499	408940	7542.2619	N/A
59	1/25/2024	97.58071	8947.796	6651.9	4037.16	401240	6719.88095	N/A
60	1/25/2024	96.70857	8684.862	6131.36	4322	407920	6665.45238	N/A
61	1/25/2024	96.29937	8982.156	6066.83	3960	409220	6791.2619	N/A
62	1/26/2024	96.10639	9069.426	6416.17	4057	415360	6723.95238	N/A
63	1/26/2024	96.89174	8886.405	6061.94	4173.263	412480	6783.28571	N/A
64	1/26/2024	97.40621	8964.323	6070.95	4058.581	410880	6653.64286	N/A
65	1/26/2024	97.19877	8805.295	5986.09	4068.607	404600	7216.61905	N/A
66	1/26/2024	98.53346	8660.436	6264.89	3983	412980	7248.88095	N/A
67	1/26/2024	97.97437	8441.452	5918.04	4163	414840	7165.09524	N/A
68	1/27/2024	97.3924	8313.695	6249.15	3974	418160	6847.90476	N/A
69	1/27/2024	96.35665	8223.765	5404.99	4141.289	404320	7095.14286	N/A
70	1/27/2024	94.51397	8055.054	5592	4186.29	404600	7139.80952	N/A
71	1/27/2024	96.49907	8000.239	5882.36	4100.186	405100	7187.95238	N/A
72	1/27/2024	97.64367	8421.525	6370.57	4293	405220	7243.21429	N/A
73	1/27/2024	98.0962	8450.766	6179.31	4023	410840	7252.30952	N/A
74	1/28/2024	97.71658	8130.913	6708.06	3970	411920	6792.04762	N/A
75	1/28/2024	95.94918	7963.629	5683.68	4126.701	411400	7239.40476	N/A
76	1/28/2024	95.40918	8079.879	6179.75	4030.723	405820	7222.21429	N/A
77	1/28/2024	95.91874	7944.569	5963.26	4020.355	414500	7490.54762	N/A
78	1/28/2024	96.09564	8069.825	6330.58	4107	401860	7188.57143	N/A
79	1/28/2024	97.44624	7649.568	6046.15	4148	413170	6943.54762	N/A
80	1/29/2024	97.58135	7883.892	6691.45	4093	416720	6758.38095	N/A
81	1/29/2024	97.54651	7868.061	6393.06	4387	405400	6859.19048	N/A
82	1/29/2024	96.62429	7431.023	5497.24	3805.98	407780	6890.92857	N/A
	AVERAGE	93	9,407	6,327	4,217	33,404,700	574,920	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	2,162	2,024	2,172
Big Lime	2,188	2,915	2,172	2,930
Fifty Foot Sandstone	2,915	3,063	2,904	3,079
Gordon	3,063	3,281	3,053	3,297
Fifth Sandstone	3,281	3,340	3,271	3,356
Bayard	3,340	4,130	3,330	4,147
Speechley	4,130	4,377	4,121	4,394
Balltown	4,377	4,827	4,368	4,844
Bradford	4,827	5,240	4,818	5,257
Benson	5,240	5,669	5,231	5,686
Alexander	5,669	6,790	5,660	6,844
Sycamore	6,640	6,764	6,672	6,818
Middlesex	6,764	6,861	6,818	6,952
Burkett	6861	6893	6952	7007
Tully	6893	6974	7007	7229
Marcellus	6974	NA	7229	NA

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08/16/2024 

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	01/07/2024
Job End Date:	01/29/2024
State:	West Virginia
County:	Wetzel
API Number:	47-103-03590-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	VIEWER UNIT 2H
Latitude:	39.5566
Longitude:	-80.7308
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7039
Total Base Water Volume (gal)*:	25288107
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					
MC B-8614A	MultiChem	Biocide					
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
Produced Water (Density 10.0)	Operator	Base Fluid					
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
WG-36 GELLING AGENT	Halliburton	Gelling Agent					

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

08/16/2024

			Water	7732-18-5	100.00000	88.18226	None
			Crystalline silica, quartz	14808-60-7	100.00000	11.64858	None
			Water	7732-18-5	100.00000	0.14600	None
			Hydrochloric acid	7647-01-0	30.00000	0.03320	None
			Complex amine compound	Proprietary	60.00000	0.02836	None
			Hydrotreated distillate	Proprietary	30.00000	0.01418	None
			Guar gum	9000-30-0	100.00000	0.00396	None
			Ammonium chloride	12125-02-9	5.00000	0.00236	None
			Ethoxylated alcohol	Proprietary	5.00000	0.00236	None
			Fatty nitrogen derived amides	Proprietary	5.00000	0.00236	None
			Glutaraldehyde	111-30-8	30.00000	0.00210	None
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00047	None
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00047	None
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00035	None
			Methanol	67-56-1	100.00000	0.00021	None
			Ammonium persulfate	7727-54-0	100.00000	0.00009	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	0.00003	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.

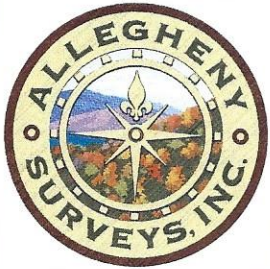
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Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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



6,409' 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. Viewer Unit 2H Top Hole coordinates are
 N: 387,215.10' Latitude: 39°33'23.77"
 E: 1,652,903.03' Longitude: 80°43'51.83"
 Bottom Hole coordinates are
 N: 403,047.03' Latitude: 39°35'59.53"
 E: 1,647,773.38' Longitude: 80°45'00.13"
UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,378,589.774m N: 4,383,386.972m
 E: 523,119.379m E: 521,476.234m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

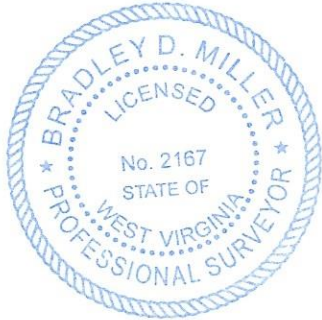
Viewer Unit 2H As-Drilled POE Coordinates
 West Virginia Coordinate System of 1927, North Zone
 N: 387,482.63'
 E: 1,652,725.36'
 Latitude: 39°33'26.39"
 Longitude: 80°43'54.15"
UTM Zone 17, NAD 1983
 N: 4,378,670.374m
 E: 523,063.892m

Bearing	Dist.
L1 S 67°58' W	1,891.7'
L2 N 89°00' W	1,972.3'
L3 N 83°27' E	1,620.0'
L4 N 88°24' E	1,643.3'

BTM Hole
 7.5' Spot

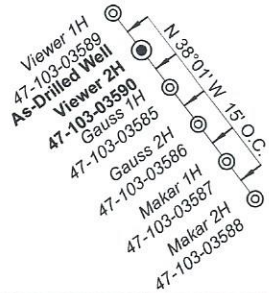
I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Bradley D. Miller
 Bradley D. Miller, P.S. 2167



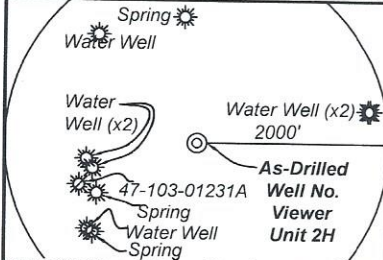
SEAL

Wellhead Layout (NTS)



Legend

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



Note: 6 water wells and 3 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.

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.

FILE NO: 27-34-G-18
 DRAWING NO: Viewer 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

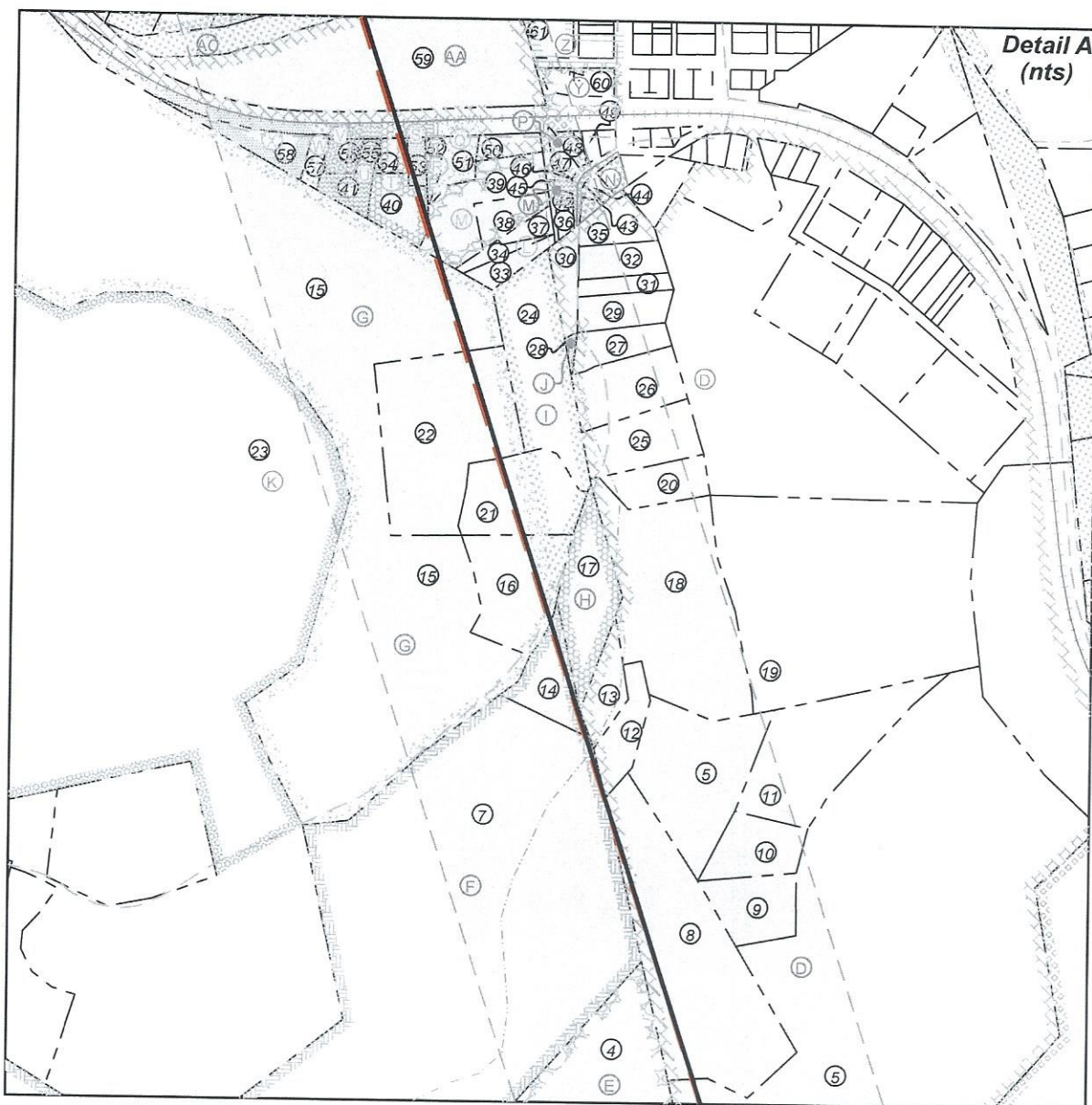
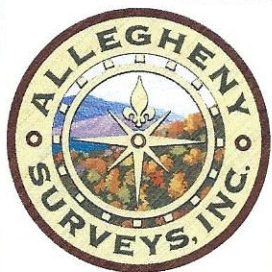
DATE: June 20 20 24
 OPERATOR'S WELL NO. Viewer Unit 2H
API WELL NO
 47 - 103 - 03590
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Drilled 1,211' 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: 23,600' 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

08/16/2024



FILE NO: 27-34-G-18
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Submeter
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WVDOT, Harrisville, WV


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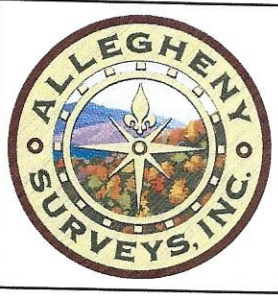
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 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 6,968' TVD
23,600' MD

08/16/2024

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

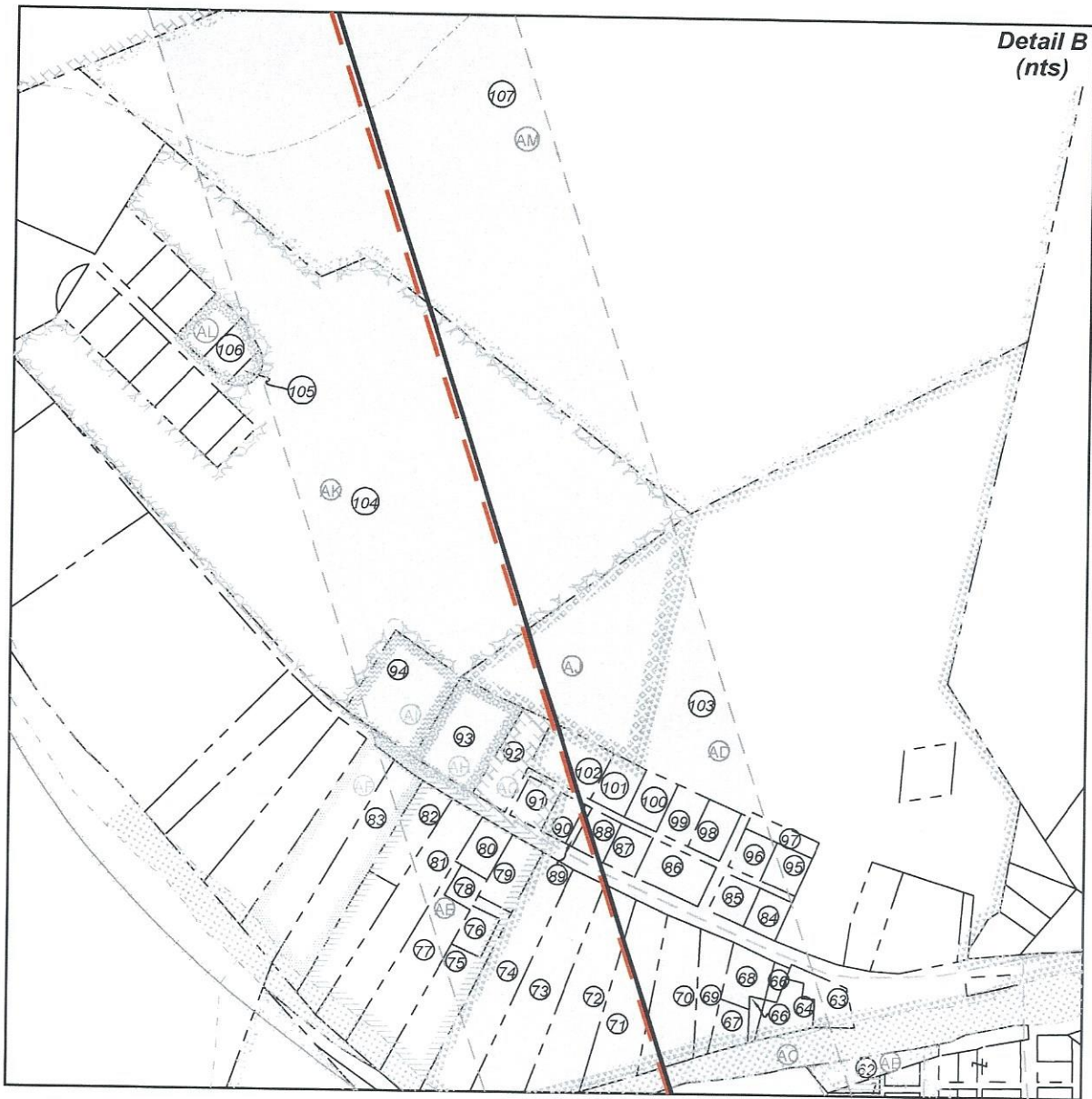
Antero Resources
Well No. Viewer 2H
As-Drilled
 Antero Resources Corporation



Leases	
A	James Allen Sell
B	William R. Stalnaker
C	Marilyn Halley Seeley
D	Antero Minerals, LLC
E	George Neason Myers, et ux
F	Antero Minerals, LLC
G	Dean H. Bucher
H	Dean H. Bucher
I	Dean H. Bucher
J	Dean H. Bucher
K	Dean H. Bucher
L	Faith Fellowship Ministries
M	David P. Lancaster, et ux
N	Robert P. Willoughby
O	Pearl Lynn Larimore
P	John S. Starkey
Q	Belinda A. Henderson
R	Thomas R. Yost Sr., et ux

Leases	
S	Thomas R. Yost Sr., et ux
T	Stanley J. Ashcraft, Jr.
U	Brenda Ellen Glasscock
V	Patrick B. Glasscock, et ux
W	Brenda Ellen Glascock
X	Kenneth Calvin Willard
Y	William E. Duke, et ux
Z	Daniel S. Brown, et ux
AA	Ruby Lynn Price
AB	Thomas S. Haught, et ux
AC	WVDNR
AD	Shiben Estates Inc.
AE	Nola Jean Parks
AF	Howard D. Bucher, et ux
AG	Thelma Jean Tennant
AH	Kimberly K. McCale
AI	Bryan J. Lemasters, et ux
AJ	Daniel W. Henderson, et ux

Leases	
AK	Michael Paul Melott, et ux
AL	Jack E. Daken, et ux
AM	Chesapeake Appalachia, LLC
AN	Margaret Lancaster, et vir
AO	Mary E. Snider
AP	Shiben Estates Inc.
AQ	Barbara Anne Amos King
AR	Lillian Priscilla Grimm
AS	Valerie Preat
AT	Valerie Preat
AU	James D. Highley, et ux
AV	Nancy B. Hatfield, et al
AW	Maria Delia Estrada
AX	Nancy B. Hatfield, et al
AY	Nancy B. Hatfield, et al
AZ	Fern Nuhring
BA	Nancy B. Hatfield, et al



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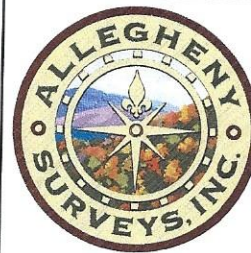
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 Denver, CO 80202 Bridgeport, WV 26330

08/16/2024



ID	TM-Par	Owner	Bk/Pg	Acres
1	17-12	Antero Resources Corp.	483/888	58.10
2	17-60	Ross Bucher	411/765	79.00
3	17-1	Antero Resources Corp	483/888	15.35
4	13-69.1	Donald L. Mason	410/759	14.00
5	13-70	Doris Ruth Haught, et al	AP112/912	33.78
6	13-71	Charles R. & Kay L. Blair	387/577	63.11
7	13-69	Donald L. Mason	410/759	69.61
8	13-70.1	Clark B. & Linda J. Haught	422/525	4.75
9	13-70.2	Cory R. & Mary L. Haught	449/135	1.04
10	13-70.4	Adriene N. Derby	459/95	0.93
11	13-70.3	Tom & Betty C. Haught	303/65	2.59
12	13-59	Douglas A. & Shirley J. Bucher	460/929	0.75
13	13-58	Douglas A. & Shirley J. Bucher	363/292	0.85
14	13-57	Carol S. Bishop	433/306	0.89
15	13-90	Coastal Forest Resources Co.	444/105	36.13
16	13-44	Nicholas Lee Henderson	421/85	1.75
17	13-45	Janet Lee Higginbotham	368/196	1.25
18	13-46.1	Douglas A. & Shirley J. Bucher	300/188	4.42
19	29-69.1	Donald L. II & Cshawn L. Smith	350/465	8.80
20	13-46	Carol Knapp Revocable Trust	437/796	0.70
21	13-84	Nathan L. Anderson	359/611	5.12
22	13-91	Coastal Forest Resources Co.	444/105	3.47
23	13-43	John R. & Johnna S. Harter	437/867	46.25
24	13-45.1	Faith Fellowship Ministries Church	398/491	2.58
25	29-68	Carol Knapp Revocable Trust	437/796	1.30
26	29-67	Carol Knapp Revocable Trust	437/796	1.30
27	29-67.1	Tully S. Vanwinkle	68/379	0.57
28	29-40	Faith Fellowship Ministries	477/796	0.19
29	29-66	Tully S. Vanwinkle	68/379	0.63
30	29-41	Faith Fellowship Ministries	477/796	0.45
31	29-65	Tully S. Vanwinkle	68/379	0.31
32	29-64	Tully S. Vanwinkle	68/379	0.59
33	29-39	Faith Fellowship Ministries	477/796	0.20
34	29-38	Faith Fellowship Ministries	477/796	0.20
35	29-61	Pearl Lynn Larrimore	403/430	0.81
36	29-42	Faith Fellowship Ministries	477/786	0.09
37	29-33	Faith Fellowship Ministries	477/796	0.15
38	29-32	David & Debra Lancaster	261/469	0.47
39	29-31	David & Debra Lancaster	333/167	1.50
40	28-48	Stanley J. Ashcraft, Jr. & Suzanna L. Miller	469/840	0.70
41	28-41	Brenda Ellen Taylor & Patrick Wayne Glasscock	442/539	0.38
42	29-43	Jami Barnes	442/231	0.06
43	29-60	Pearl Lynn Larrimore	403/430	0.03
44	29-59	Pearl Lynn Larrimore	403/430	0.08
45	29-44	Jami Barnes	442/231	0.06
46	29-45	William Leccese	484/153	0.01
47	29-46	William Leccese	484/153	0.19
48	29-47	William Leccese	484/153	0.12
49	29-47.1	Rhonda Thomas	431/798	0.09
50	29-30	Sara Larrimore, et al	AP107/99	0.20
51	28-40	Belinda Ann Gump	404/403	0.50
52	28-39	Thomas R. Yost, Sr., et al	361/125	0.17
53	28-38	Thomas R. & Billie Jo Yost	397/286	0.19
54	28-36	Stanley J. Ashcraft, Jr. & Suzanna L. Miller	469/840	0.25
55	28-37	Brenda Ellen Taylor & Patrick Wayne Glasscock	442/539	0.11
56	28-35	Brenda Ellen Taylor & Patrick Wayne Glasscock	442/758	0.23
57	28-34	Brenda Ellen Taylor & Patrick Wayne Glasscock	442/736	0.17
58	28-42	George Keck	71/258	0.50
59	28-25	Sara Larrimore, et al	AP107/99	4.50
60	28-31	Ricky L. & Amy F. Bassett	481/782	0.36
61	28-27	Daniel S. & Leah M. Brown	411/328	0.38
62	28-26	Thomas S. & Betty C. Haught	415/521	0.99

ID	TM-Par	Owner	Bk/Pg	Acres
63	28-33.1	Robin D. Stillwagoner	467/508	0.45
64	28-33.2	Thomas L. & Emily Marie Gifford	421/20	0.37
65	28-32.1	Benjamin J. Dotson	447/881	0.10
66	28-33	Benjamin J. Dotson	447/881	0.18
67	28-24.1	Joetta Cain	436/186	0.31
68	28-24	Benjamin J. Dotson	447/881	0.34
69	28-23	Cathy D. Brown	431/594	0.55
70	28-22	Justin D. Carter	452/12	1.23
71	28-21	Ronnie Robinson	392/14	1.48
72	28-20	Thelma L. Brideman	MS10/131	1.82
73	28-19	Ricky L. & Cindy S. Wade	420/441	2.07
74	28-18	Ronald S. Anderson	417/63	2.14
75	28-17.2	Darel L. & Joyce A. Ueltschy	424/365	1.33
76	28-17.1	Darel L. & Joyce A. Ueltschy	424/365	0.25
77	28-15	Nathan D. & Jacqueline Johnson	404/399	1.46
78	28-16	Nathan D. & Jacqueline Johnson	404/399	0.20
79	28-17	Sharyn D. Utt	360/348	0.49
80	28-15.1	Christopher David Thomas	365/112	0.35
81	28-14	Benjamin F. & Ruth Kocher	242/14	1.83
82	28-12	Benjamin F. Kocher	202/264	0.67
83	28-11	Howard D. & Clara Mae Bucher	285/483	1.62
84	28-44	David Lewis Anderson	242/483	---
85	28-3	David Anderson, et al	WB57/511	---
86	28-4	Valerie D. Piatt	423/422	---
87	28-5	Alex M. Henderson	471/165	---
88	28-2.1	Michael A. Briggs	454/625	---
89	28-2.8	Michael A. Briggs	454/625	---
90	28-2.2	Toy L. & Thelma Jean Tennant	219/111	---
91	28-6	Toy L. & Thelma Jean Tennant	408/326	---
92	28-2.7	Toy L. & Thelma Jean Tennant	228/265	---
93	28-2.6	Phillip Bassett	440/61	---
94	28-1	Bryan J. & Christina D. Lemasters	315/335	---
95	28-46	David Lewis Anderson	WB57/511	---
96	28-45	David Lewis Anderson	WB57/511	---
97	28-47	David Lewis Anderson	WB57/511	---
98	28-2.5	Robert L. Yoho	452/434	---
99	28-2.4	Robert L. Yoho	452/434	---
100	28-2.3	Michael A. Briggs	454/625	---
101	28-2	Michael A. Briggs	454/625	---
102	28-2.9	Toy L. & Thelma Jean Tennant	253/20	---
103	13-21	Daniel W. & Ruth A. Henderson	244/111	30.95
104	13-19.1	Michael Paul & Tamatha Lynn Melott	379/128	23.95
105	13A-28	Jack E. & Constance D. Dakan	354/503	0.10
106	13A-27	Jack E. & Constance D. Dakan	268/88	0.34
107	13-13	Linda M. Headley	385/209	85.5
108	13-6	Margaret Lancaster	333/440	39.39
109	8-43	Debra Key Fluharty, et al	368/559	35.00
110	8-28	Nancy B. Hatfield	474/481	449.48
111	8-34	Peter S. & Marietta A. Florea	420/915	42.00
112	8-33	Lloyd L. King	319/55	20.35
113	8-31	Valerie Preat	416/599	32.5
114	8-27	Valerie Preat	416/599	16.80
115	8-32	Valerie Preat	416/599	---
116	8-26.1	James D. & Julie M. Highley	360/318	9.79
117	8-48	James D. Highley Jr.	472/167	41.00
118	8-22	John D. & Connie J. Morgan	417/944	40.00
119	8-12	John D. & Connie J. Morgan	417/944	13.60
120	8-13.1	William H. & Charlene M. Gore	370/632	20.27
121	8-11	Andrea Wade	420/853	13.50
122	8-4.1	William H. & Charlene M. Gore	370/632	38.71
123	8-4.2	William H. & Charlene M. Gore	370/632	22.93

FILE NO: 27-34-G-18
 DRAWING NO: Viewer 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: June 20 20 24
 OPERATOR'S WELL NO. Viewer Unit 2H
 API WELL NO
47 — 103 — 03590
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Drilled 1,211' 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: 6,968' TVD
23,600' 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