

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

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OCT 29 2025

WV Department of
Environmental Protection

API 47 - 017 - 06984 County Doddridge District McLellan
Quad Center Point Pad Name Crimson Pad Field/Pool Name ----
Farm name Shawn A. Glaspell Well Number Ralph 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 4359507.942m Easting 527064.508m
Landing Point of Curve Northing 4359133.84m Easting 526289.42m
Bottom Hole Northing 4364449.118m Easting 524493.248m

Elevation (ft) 1222' 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 6/10/2024 Date drilling commenced 7/1/2024 Date drilling ceased 9/21/2024
Date completion activities began 3/10/2025 Date completion activities ceased 5/28/2025
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 303', 953' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 2123' Void(s) encountered (Y/N) depths No
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:

Shawn A. Glaspell
APPROVED 03/13/2025

API 47- 017 - 06984 Farm name Shawn A. Glaspell Well number Ralph 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	28"	20"	125.5'	New	91.59#, J-55	N/A	Y
Surface	17-1/2"	13-3/8"	1063'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	3362'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	26824'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7933'		4.7#, J-55		
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	158 sx	15.6	1.18	186	0'	8 Hrs.
Surface	Class A	880 sx	15.6	1.19	1047	0'	8 Hrs.
Coal							
Intermediate 1	Class H	1009 sx	15.6	1.18	1191	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	5515 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.26 (Tail)	6949	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 26824' MD, 7171' TVD (BHL), 7218' (Deepest Point Drilled) Loggers TD (ft) 26824' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 6801'

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Check all wireline logs run caliper density deviated/directional induction Environmental Protection
 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

APPROVED *Shawn A. Glaspell* 03/13/2026-25

API 47- 017 - 06984 Farm name Shawn A. Glaspell Well number Ralph Unit 1H

PRODUCING FORMATION(S)	DEPTHS	
Marcellus	7099' (TOP) TVD	8165' (TOP) MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

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Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3090 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 16901 mcfpd Oil 41 bpd NGL --- bpd Water 397 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	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 Dowell Schlumberger
Address 600 Industrial Dr City Beckley State WV Zip 25801

Stimulating Company Halliburton
Address 3000 W. Sam Houston Pkwy City Houston State TX Zip 76114

Please insert additional pages as applicable.

Completed by Carly Wren Telephone 303-357-7373
Signature [Signature] Title Permitting Agent Date 10/27/2025

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

APPROVED [Signature] 03/13/2026 3-25

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	3/10/2025	26739	26695	60	Marcellus
2	3/10/2025	26656.52	26491.14	60	Marcellus
3	3/11/2025	26455.66	26290.28	60	Marcellus
4	3/12/2025	26254.81	26089.42	60	Marcellus
5	3/12/2025	26053.95	25888.57	60	Marcellus
6	3/13/2025	25853.09	25687.71	60	Marcellus
7	3/13/2025	25652.23	25486.85	60	Marcellus
8	3/14/2025	25451.37	25285.99	60	Marcellus
9	3/14/2025	25250.51	25085.13	60	Marcellus
10	3/15/2025	25049.65	24884.27	60	Marcellus
11	3/15/2025	24848.80	24683.41	60	Marcellus
12	3/16/2025	24647.94	24482.55	60	Marcellus
13	3/16/2025	24447.08	24281.70	60	Marcellus
14	3/17/2025	24246.22	24080.84	60	Marcellus
15	3/18/2025	24045.36	23879.98	60	Marcellus
16	3/18/2025	23844.50	23679.12	60	Marcellus
17	3/19/2025	23643.64	23478.26	60	Marcellus
18	3/19/2025	23442.78	23277.40	60	Marcellus
19	3/20/2025	23241.93	23076.54	60	Marcellus
20	3/20/2025	23041.07	22875.68	60	Marcellus
21	3/21/2025	22840.21	22674.83	60	Marcellus
22	3/21/2025	22639.35	22473.97	60	Marcellus
23	3/22/2025	22438.49	22273.11	60	Marcellus
24	3/22/2025	22237.63	22072.25	60	Marcellus
25	3/23/2025	22036.77	21871.39	60	Marcellus
26	3/23/2025	21835.91	21670.53	60	Marcellus
27	3/24/2025	21635.06	21469.67	60	Marcellus
28	3/24/2025	21434.20	21268.82	60	Marcellus
29	3/25/2025	21233.34	21067.96	60	Marcellus
30	3/25/2025	21032.48	20867.10	60	Marcellus
31	3/26/2025	20831.62	20666.24	60	Marcellus
32	3/26/2025	20630.76	20465.38	60	Marcellus
33	3/26/2025	20429.90	20264.52	60	Marcellus
34	3/27/2025	20229.05	20063.66	60	Marcellus
35	3/28/2025	20028.19	19862.80	60	Marcellus
36	3/28/2025	19827.33	19661.95	60	Marcellus
37	3/29/2025	19626.47	19461.09	60	Marcellus
38	3/29/2025	19425.61	19260.23	60	Marcellus
39	3/30/2025	19224.75	19059.37	60	Marcellus
40	3/31/2025	19023.89	18858.51	60	Marcellus
41	3/31/2025	18823.03	18657.65	60	Marcellus
42	4/1/2025	18622.18	18456.79	60	Marcellus
43	4/1/2025	18421.32	18255.93	60	Marcellus
44	4/2/2025	18220.46	18055.08	60	Marcellus
45	4/3/2025	18019.60	17854.22	60	Marcellus
46	4/3/2025	17818.74	17653.36	60	Marcellus
47	4/4/2025	17617.88	17452.50	60	Marcellus
48	4/4/2025	17417.02	17251.64	60	Marcellus
49	4/5/2025	17216.16	17050.78	60	Marcellus
50	4/5/2025	17015.31	16849.92	60	Marcellus
51	4/6/2025	16814.45	16649.07	60	Marcellus
52	4/7/2025	16613.59	16448.21	60	Marcellus
53	4/7/2025	16412.73	16247.35	60	Marcellus
54	4/8/2025	16211.87	16046.49	60	Marcellus
55	4/8/2025	16011.01	15845.63	60	Marcellus
56	4/9/2025	15810.15	15644.77	60	Marcellus
57	4/9/2025	15609.30	15443.91	60	Marcellus
58	4/10/2025	15408.44	15243.05	60	Marcellus
59	4/11/2025	15207.58	15042.20	60	Marcellus
60	4/14/2025	15006.72	14841.34	60	Marcellus
61	4/14/2025	14805.86	14640.48	60	Marcellus
62	4/14/2025	14605.00	14439.62	60	Marcellus
63	4/14/2025	14404.14	14238.76	60	Marcellus
64	4/14/2025	14203.28	14037.90	60	Marcellus
65	4/14/2025	14002.43	13837.04	60	Marcellus
66	4/14/2025	13801.57	13636.18	60	Marcellus
67	4/14/2025	13600.71	13435.33	60	Marcellus
68	4/17/2025	13399.85	13234.47	60	Marcellus
69	4/17/2025	13198.99	13033.61	60	Marcellus
70	4/17/2025	12998.13	12832.75	60	Marcellus
71	4/17/2025	12797.27	12631.89	60	Marcellus
72	4/18/2025	12596.41	12431.03	60	Marcellus
73	4/18/2025	12395.56	12230.17	60	Marcellus
74	4/20/2025	12194.70	12029.32	60	Marcellus
75	4/20/2025	11993.84	11828.46	60	Marcellus
76	4/20/2025	11792.98	11627.60	60	Marcellus
77	4/20/2025	11592.12	11426.74	60	Marcellus
78	4/21/2025	11391.26	11225.88	60	Marcellus
79	4/22/2025	11190.40	11025.02	60	Marcellus
80	4/23/2025	10989.55	10824.16	60	Marcellus
81	4/23/2025	10788.69	10623.30	60	Marcellus
82	4/23/2025	10587.83	10422.45	60	Marcellus
83	4/24/2025	10386.97	10221.59	60	Marcellus
84	4/24/2025	10186.11	10020.73	60	Marcellus
85	4/24/2025	9985.25	9819.87	60	Marcellus
86	4/25/2025	9784.39	9619.01	60	Marcellus
87	4/25/2025	9583.53	9418.15	60	Marcellus
88	4/26/2025	9382.68	9217.29	60	Marcellus
89	4/26/2025	9181.82	9016.43	60	Marcellus
90	4/26/2025	8980.96	8815.58	60	Marcellus
91	4/26/2025	8780.10	8614.72	60	Marcellus
92	4/27/2025	8579.24	8413.86	60	Marcellus
93	4/27/2025	8378.38	8213.00	60	Marcellus

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API 47-012-00884 Form Name: Shown A. Glassell Well Number: Raleigh Unit 1H

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 (lbm)
1	3/10/2025	70.8	10722.1	10308.7	3679.8	167560	5392.6	N/A
2	3/10/2025	84.9	10968.3	6307.0	4581.6	415260	7420.8	N/A
3	3/11/2025	80.0	10443.7	7747.5	4354.4	417280	7407.6	N/A
4	3/12/2025	95.9	10646.3	7461.7	5074.0	397030	7339.8	N/A
5	3/12/2025	94.5	10452.6	7825.4	4844.7	407160	7122.1	N/A
6	3/13/2025	93.4	10685.8	8202.4	5001.0	395190	6863.9	N/A
7	3/13/2025	87.9	10669.6	7391.8	4390.7	412800	7117.0	N/A
8	3/14/2025	90.3	10682.2	8080.5	4611.0	394530	7194.3	N/A
9	3/14/2025	91.4	10813.4	7600.1	5415.0	394090	7296.3	N/A
10	3/15/2025	82.7	10460.5	7876.3	4207.6	394010	7282.7	N/A
11	3/15/2025	89.2	10886.1	6780.7	4151.0	397460	7200.6	N/A
12	3/16/2025	84.0	10549.3	7295.8	4879.0	398550	7162.7	N/A
13	3/16/2025	87.7	10958.6	7644.3	5067.0	412620	7080.5	N/A
14	3/17/2025	85.3	10709.8	7541.5	4365.7	394220	7176.8	N/A
15	3/18/2025	85.4	11009.7	7163.2	4999.0	400230	7021.6	N/A
16	3/18/2025	95.1	10082.5	6521.4	5723.0	393770	7034.1	N/A
17	3/19/2025	96.3	10383.0	7989.7	4911.0	409540	7151.8	N/A
18	3/19/2025	95.7	10166.7	6245.7	5184.0	397080	7035.5	N/A
19	3/20/2025	96.1	10166.8	6922.6	4219.4	413900	7366.6	N/A
20	3/20/2025	96.5	10079.1	6371.2	5211.0	397560	7037.4	N/A
21	3/21/2025	88.5	9565.3	7008.8	4460.7	413000	7296.7	N/A
22	3/21/2025	98.4	10585.1	7404.7	4980.0	398690	6893.5	N/A
23	3/22/2025	98.2	10123.6	6396.4	4873.8	398860	7120.5	N/A
24	3/22/2025	96.8	10393.5	6665.4	4951.0	399540	7049.0	N/A
25	3/23/2025	97.3	10459.6	6901.1	4862.3	411620	7218.9	N/A
26	3/23/2025	77.9	9206.6	7190.0	4659.8	415700	8770.0	N/A
27	3/24/2025	95.8	10377.6	7916.2	4784.0	394020	6881.5	N/A
28	3/24/2025	96.9	10333.0	7505.6	4667.0	417020	7054.8	N/A
29	3/25/2025	98.6	10616.7	7015.3	4788.0	411120	7049.0	N/A
30	3/25/2025	96.6	10587.7	6929.4	4754.0	410580	7097.7	N/A
31	3/26/2025	94.8	10170.3	6315.1	4372.0	398980	7073.4	N/A
32	3/26/2025	97.7	10241.0	6766.7	4224.8	397080	7005.4	N/A
33	3/26/2025	96.6	9969.5	6346.9	4318.8	397740	7112.6	N/A
34	3/27/2025	95.2	10159.6	7310.5	5004.2	416020	8218.5	N/A
35	3/28/2025	97.6	9973.4	7285.7	4655.2	418020	7262.7	N/A
36	3/29/2025	98.0	10057.9	7130.0	4741.0	396940	6943.2	N/A
37	3/29/2025	97.7	10053.0	6890.4	4647.0	415440	7171.2	N/A
38	3/29/2025	94.4	9661.2	7019.0	4133.5	417320	6963.3	N/A
39	3/30/2025	98.7	10058.7	6805.4	4831.0	409880	7202.0	N/A
40	3/31/2025	96.8	9747.7	5897.3	4463.3	397100	6787.3	N/A
41	3/31/2025	98.6	9971.7	6376.3	4701.0	397940	7041.9	N/A
42	4/1/2025	96.9	9933.1	7085.3	4571.0	406020	7224.7	N/A
43	4/1/2025	98.6	10017.2	6798.1	5000.0	400000	6957.3	N/A
44	4/2/2025	98.6	9927.4	6722.9	4512.0	414020	7108.4	N/A
45	4/3/2025	97.8	9942.5	6506.7	4668.0	414800	7091.6	N/A
46	4/3/2025	88.7	9305.0	7272.8	4169.4	395440	6829.8	N/A
47	4/4/2025	97.9	9856.4	7218.9	4468.6	415520	7203.4	N/A
48	4/4/2025	98.1	10174.0	6431.0	5170.0	419180	7098.7	N/A
49	4/5/2025	99.5	10168.6	6582.6	4618.0	398710	6931.7	N/A
50	4/5/2025	98.4	9834.7	5850.9	3753.0	404010	6781.5	N/A
51	4/6/2025	96.1	9782.2	6337.6	5028.0	411620	8868.3	N/A
52	4/7/2025	98.1	9754.4	7029.3	4370.0	411340	6952.3	N/A
53	4/7/2025	96.2	9584.2	6750.7	4481.0	410500	6970.8	N/A
54	4/8/2025	97.0	9145.0	6972.9	4989.0	395650	6871.9	N/A
55	4/8/2025	98.5	9250.5	6501.4	5117.0	415860	6960.9	N/A
56	4/9/2025	96.8	9362.1	6216.9	4491.7	415040	6994.9	N/A
57	4/9/2025	96.6	9138.4	5643.7	4296.3	412240	6906.3	N/A
58	4/10/2025	96.4	9203.7	5899.9	5393.3	410900	6894.5	N/A
59	4/11/2025	96.7	8920.8	6125.8	5502.9	409540	6425.9	N/A
60	4/14/2025	93.8	9085.7	8096.9	4246.3	402900	6920.6	N/A
61	4/14/2025	96.6	9050.6	6253.9	5676.8	407160	6903.1	N/A
62	4/14/2025	96.6	8701.1	5986.0	5320.7	404880	6919.6	N/A
63	4/14/2025	96.7	8541.0	5949.3	5130.5	406220	6880.2	N/A
64	4/14/2025	96.7	8809.4	6404.4	4918.0	402280	6958.7	N/A
65	4/14/2025	95.7	8634.2	5428.3	5080.1	408680	6917.2	N/A
66	4/14/2025	96.9	8571.7	5623.9	5302.9	407740	6789.2	N/A
67	4/14/2025	96.6	8438.0	6084.1	5007.2	408160	6983.0	N/A
68	4/17/2025	96.5	9101.6	5705.2	4571.1	414280	7587.3	N/A
69	4/17/2025	97.4	9066.2	5862.6	4704.7	417920	6951.7	N/A
70	4/17/2025	97.2	8963.1	5609.8	4414.0	416140	7021.5	N/A
71	4/17/2025	96.2	8936.8	6425.1	5074.4	401240	6809.1	N/A
72	4/18/2025	97.4	8628.7	6711.5	5503.4	420820	7101.0	N/A
73	4/18/2025	96.9	8782.2	6581.6	4648.9	419200	7094.3	N/A
74	4/20/2025	95.3	9074.9	6729.5	3893.6	417240	7002.8	N/A
75	4/20/2025	92.9	8987.2	6155.7	3727.2	425300	7888.1	N/A
76	4/20/2025	96.7	8691.4	7309.5	4270.2	419460	6945.0	N/A
77	4/20/2025	96.6	8673.0	6520.2	4050.6	421020	7078.2	N/A
78	4/21/2025	97.1	8873.8	7881.3	4363.5	402230	6781.4	N/A
79	4/22/2025	97.0	8476.2	7293.9	4642.0	416960	6910.8	N/A
80	4/23/2025	86.0	8366.2	2008.6	3576.7	420280	7303.9	N/A
81	4/23/2025	97.0	8641.1	7729.2	4022.0	423000	7013.6	N/A
82	4/23/2025	91.3	8741.2	7133.8	4939.3	420620	7077.0	N/A
83	4/24/2025	98.1	8369.0	5890.1	4926.0	422620	6922.7	N/A
84	4/24/2025	97.3	8345.1	6990.8	4805.0	422180	7008.0	N/A
85	4/24/2025	96.8	8366.7	6308.2	5455.0	420840	6992.6	N/A
86	4/25/2025	97.6	7884.1	6880.2	4228.8	423000	6963.3	N/A
87	4/25/2025	97.3	7936.5	6042.5	5089.0	416680	6945.1	N/A
88	4/26/2025	97.8	8376.7	6776.1	3715.7	422640	6868.7	N/A
89	4/26/2025	98.1	8178.8	6212.8	4517.0	425100	6967.1	N/A
90	4/26/2025	95.7	8201.4	7278.5	4158.9	416180	7011.2	N/A
91	4/26/2025	96.9	8052.8	7095.0	4952.0	403840	6720.9	N/A
92	4/27/2025	98.2	7731.9	7377.1	4108.3	418400	6930.0	N/A
93	4/27/2025	98.6	7890.5	6647.9	3819.0	414520	6796.6	N/A
AVERAGE		95	9,553	6,790	4,472	37,807,448	684,585	TOTAL

03/13/2026

OCT 29 2025

WV Department of
Environmental Protection

API 47-017-06984 Farm Name Shawn A. Gaspell Well Number Ralph Unit 1H

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	1,124	1,224	1,124	1,224
Sandstone, Occ Siltstone	1,224	1,274	1,224	1,274
Silty Sandstone, tr coal	1,274	1,424	1,274	1,424
Silty Sandstone	1,374	1,524	1,374	1,524
Sandstone, Siltstone	1,424	1,524	1,424	1,524
Silty Sandstone, tr coal	1,524	1,574	1,524	1,574
Silty Sandstone	1,574	1,624	1,574	1,624
Silty Sandstone, tr coal	1,624	1,674	1,624	1,674
Sandstone, Siltstone	1,674	1,774	1,674	1,774
Sandstone, Siltstone, tr coal	1,774	1,874	1,774	1,874
Silty Sandstone	1,874	1,974	1,874	1,974
Sandy Siltstone	1,974	2,024	1,974	2,024
Sandy Siltstone	2,024	2,074	2,024	2,074
Siltstone, Occ Sandstone	2,074	2,124	2,074	2,124
Sandy Siltstone, Occ Limestone	2,124	2,128	2,124	2,177
Big Lime	2,154	2,813	2,177	2,962
Fifty Foot Sandstone	2,813	2,968	2,936	3,139
Gordon	2,968	3,202	3,113	3,407
Fifth Sandstone	3,202	3,258	3,381	3,470
Bayard	3,258	4,047	3,444	4,394
Speechley	4,047	4,300	4,368	4,687
Balltown	4,300	4,816	4,661	5,285
Bradford	4,816	5,315	5,259	5,866
Benson	5,315	5,577	5,840	6,173
Alexander	5,577	6,878	6,147	7,689
Sycamore	6,703	6,852	7,466	7,663
Middlesex	6,852	6,995	7,663	7,902
Burkett	6,995	7,025	7,902	7,963
Tully	7,025	7,099	7,963	8,165
Marcellus	7,099	NA	8,165	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.

03/13/2026

Antero Resources
Well No. Ralph 1H
As-Drilled
Antero Resources Corporation



Page
1 of 2

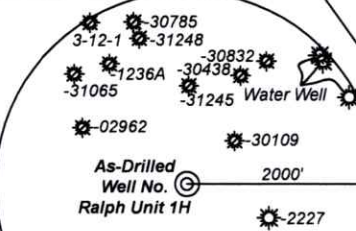
Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

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

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



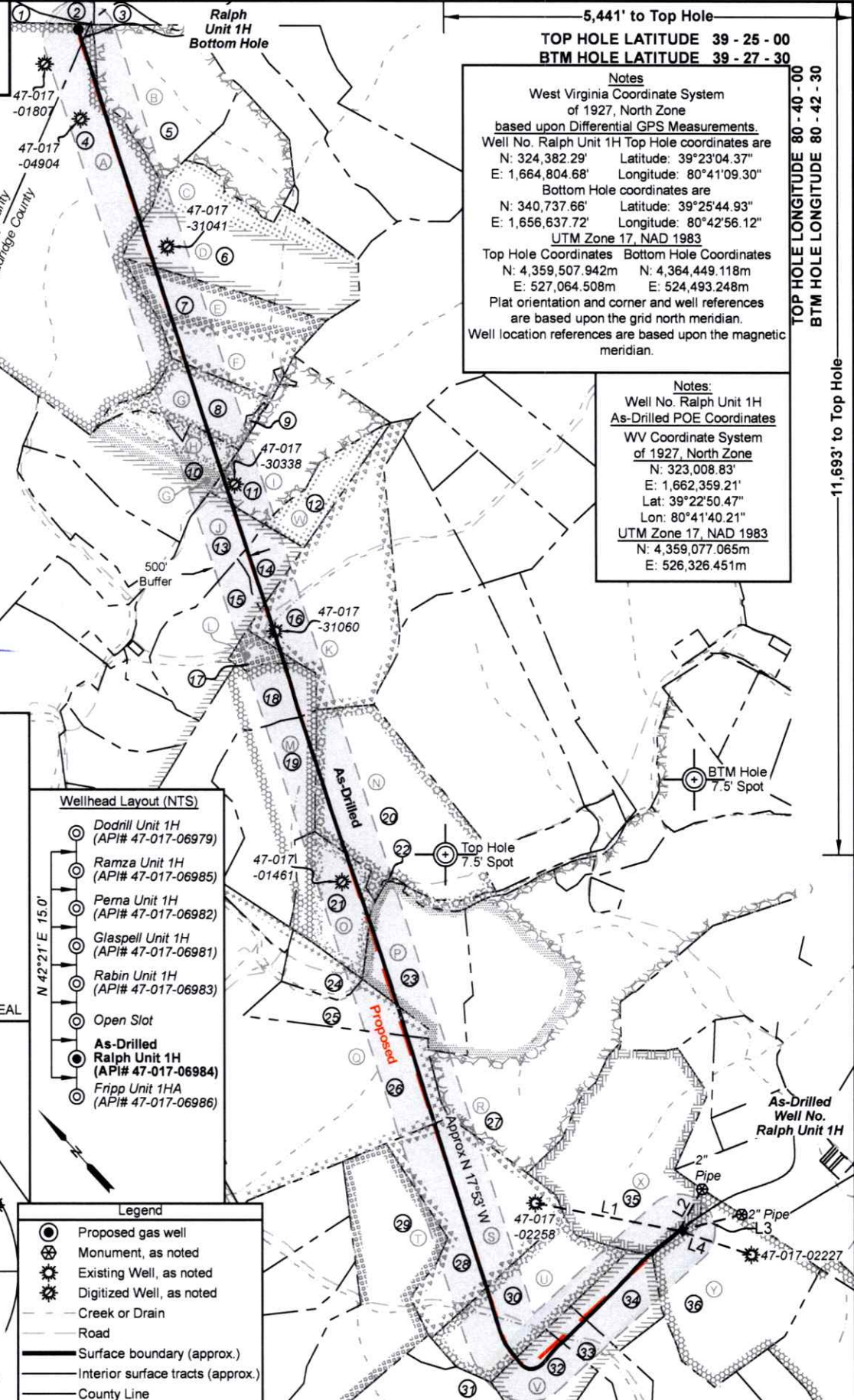
	Bearing	Dist.
L1	S 79°13' E	1,992.2'
L2	S 29°33' W	647.5'
L3	S 75°41' W	890.4'
L4	N 71°38' W	1,046.7'



Note: 3 water wells 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.

- Wellhead Layout (NTS)**
- Dodrill Unit 1H (API# 47-017-06979)
 - Ramza Unit 1H (API# 47-017-06985)
 - Perna Unit 1H (API# 47-017-06982)
 - Glaspell Unit 1H (API# 47-017-06981)
 - Rabin Unit 1H (API# 47-017-06983)
 - Open Slot
 - **As-Drilled Ralph Unit 1H (API# 47-017-06984)**
 - Fripp Unit 1HA (API# 47-017-06986)

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



Notes
 West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
 Well No. Ralph Unit 1H Top Hole coordinates are
 N: 324,382.29" Latitude: 39°23'04.37"
 E: 1,664,804.68" Longitude: 80°41'09.30"
 Bottom Hole coordinates are
 N: 340,737.66" Latitude: 39°25'44.93"
 E: 1,656,637.72" Longitude: 80°42'56.12"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,359,507.942m N: 4,364,449.118m
 E: 527,064.508m E: 524,493.248m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

Notes:
 Well No. Ralph Unit 1H As-Drilled POE Coordinates
 WV Coordinate System of 1927, North Zone
 N: 323,008.83"
 E: 1,662,359.21"
 Lat: 39°22'50.47"
 Lon: 80°41'40.21"
 UTM Zone 17, NAD 1983
 N: 4,359,077.065m
 E: 526,326.451m

2,050' to Bottom Hole

5,441' to Top Hole
 TOP HOLE LATITUDE 39 - 25 - 00
 BTM HOLE LATITUDE 39 - 27 - 30

TOP HOLE LONGITUDE 80 - 40 - 00
 BTM HOLE LONGITUDE 80 - 42 - 30

11,693' to Top Hole

10,630' to Bottom Hole

FILE NO: 147-30-M-23
 DRAWING NO: Ralph 1H 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: October 17 2025
 OPERATOR'S WELL NO. Ralph 1H
 API WELL NO
47 - 017 - 06984
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Built: 1,222' WATERSHED: McElroy Creek QUADRANGLE: Center Point
 DISTRICT: McClellan Shawn A. COUNTY: Dodridge
 SURFACE OWNER: Glaspell ACREAGE: 100
 ROYALTY OWNER: Minda Allen LEASE NO: _____ ACREAGE: 100
 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: 7,171' TVD
26,824' MD

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

09/13/2026



Leases	
A	O.W.O. Hardman, et al
B	Robert L. Wolfe
C	Deborah Ann Cox
D	Jefferson Minerals, LLC
E	Ed Broome, Inc.
F	Grace Olive Rudder
G	Mary Ann Swiger
H	Charles O. Dennison Trust
I	N.M. Laughery
J	W.B. Allen, et ux
K	Jay Bee Production Company, et al
L	Jacqueline L. Wichman Trust
M	Mary F. Mutschelknaus
N	Donald R. Reynolds
O	Arley Bartholow
P	Donald R. Reynolds
Q	Rebecca Allen & I.J. Allen
R	Donald R. Reynolds
S	W.S. & Nannie L. Stuart
T	Edison & Virginia L. Underwood
U	Thomas H. Downs
V	Robert O. Hopkins
W	Jacqueline L. Wichman Trust
X	Minda Allen
Y	Morris Mountaineer Oil & Gas, LLC

ID	TM-Par	Owner	Bk/Pg	Acres
1	12-33	Jerry Walters	207/669	50
2	12-29	Larry & Kim Henthorn, et al	214/81	77.84
3	12-28	Garnett M. Ferreebee	WB24/333	107.00
4	17-3	Coastal Forest Resources Co.	199/267	766.00
5	5-1	Robert L. Wolfe	231/560	58.00
6	5-10	Kevin E. & Elizabeth A. Denny	287/49	88.89
7	5-11	Edward F. & Grace O. Rudder	244/30	53.76
8	11-1	Jonathan G. Edwards	277/108	29.58
9	11-1.1	Bernice A. Swiger	273/502	0.91
10	11-4	Craig A. & Connie L. Simmons	248/314	64.00
11	5-11.1	Grace Olive Rudder	WB42/130	60.63
12	11-5.2	James B. & Hazel I. Lemasters	143/118	21.50
13	11-13	Elk Lick Church of God	136/85	41.00
14	11-5.3	James B. & Hazel I. Lemasters	143/118	11.40
15	11-13.1	Elk Lick Church of God	136/85	35.00
16	11-5	James B. & Hazel I. Lemasters	143/118	108.00
17	11-5.1	James B. & Hazel I. Lemasters	143/118	5.58
18	11-21	Mary K. & Paul Baker	92/51	63.98
19	11-23	Sarah L. Mayle	WB48/356	54.67
20	11-24	Barbara M. Swiger	WB59/593	90.83
21	11-31	Sarah L. Mayle	WB48/356	36.94
22	11-33.1	Mary L. Giaspell, et al	WB33/513	0.60
23	11-33	Mary Lea Giaspell	WB33/513	50.00
24	11-23.2	Sarah L. Mayle	WB48/356	9.83
25	17-2	Mary Lea Giaspell	WB33/513	20.00
26	17-5	Chad Johnson, et al	304/417	131.00
27	11-34	Shawn A. Giaspell	271/230	254.51
28	17-9	John M. & Connie S. Underwood Irrevocable Trust	294/401	84.00
29	17-8	Cecelia Underwood Reid	WB96/232	93.00
30	17-13	Shawn A. Giaspell	468/444	65.00
31	17-17	John Tetric	319/311	131.34
32	17-16	Faith L. Fry	238/167	36.84
33	17-18.1	Faith L. & Michael Fry	342/340	19.50
34	17-16	Faith L. Fry	238/167	36.84
35	17-3.3	Shawn A. Giaspell	283/601	100.00
36	17-3.2	Shawn A. Giaspell	283/601	135.00

FILE NO: 147-30-M-23
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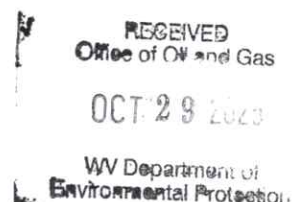
WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Conrad Baston
 ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.
Denver, CO 80202 Bridgeport, WV 26330

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	03/09/2025
Job End Date:	04/27/2025
State:	West Virginia
County:	Doddridge
API Number:	47-017-06984-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	RALPH UNIT 1H
Latitude:	39.384638
Longitude:	-80.685742
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7218
Total Base Water Volume (gal)*:	28957199
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
Excelerate LX-21	Halliburton	Friction Reducer					
FDP-S1470-23	Halliburton	Friction Reducer					
HAI-501	Halliburton	Acid Corrosion Inhibitor					
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
LCA-1	Halliburton	Solvent					
MC B-8123	MultiChem	Biocide					
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
Produced Water (Density 8.8)	Operator	Base Fluid					
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					

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WV Department of
Environmental Protection

Sand-Premium White-40/70	Halliburton	Proppant					
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
Items above are Trade Names. Items below are the individual ingredients.							
			Water	7732-18-5	100.00000	86.90659	None
			Crystalline silica, quartz	14808-60-7	100.00000	12.89412	None
			Water	7732-18-5	100.00000	0.16113	None
			Hydrochloric acid	7647-01-0	30.00000	0.03755	None
			Complex amine compound	Proprietary	60.00000	0.02515	None
			Hydrotreated distillate	Proprietary	100.00000	0.01257	None
			Ethanaminium, N,N,N-trimethyl-2-(1-oxo-2-propen-1-yl)oxy-, chloride (1:1), polymer with 2-propenamide	69418-26-4	60.00000	0.01065	None
			Guar gum	9000-30-0	100.00000	0.00623	None
			Hydrotreated light petroleum distillates	64742-47-8	30.00000	0.00533	None
			Ammonium chloride	12125-02-9	5.00000	0.00298	None
			Glutaraldehyde	111-30-8	30.00000	0.00235	None
			Fatty nitrogen derived amides	Proprietary	5.00000	0.00210	None
			Ethoxylated alcohol	Proprietary	5.00000	0.00210	None
			Amides, tall-oil fatty, N,N-bis(hydroxyethyl)	68155-20-4	5.00000	0.00089	None
			Ethoxylated branched C13 alcohol	78330-21-9	5.00000	0.00089	None
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00060	None
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00042	None
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.00000	0.00039	None
			Methanol	67-56-1	100.00000	0.00024	None
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00018	None
			Ammonium persulfate	7727-54-0	100.00000	0.00016	None
			Citric acid	77-92-9	1.00000	0.00008	None
			Mixture of dimer and trimer fatty acids of	61790-12-3	30.00000	0.00007	None

03/13/2026

			indefinite composition derived from tall oil				
			Modified thiourea polymer	Proprietary	30.00000	0.00007	None
			Oxylated phenolic resin	Proprietary	30.00000	0.00005	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.

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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Office of Oil and Gas

OCT 29 2025

WV Department of
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03/13/2026