

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 - 06985 County Doddridge District McLellan  
Quad Center Point Pad Name Crimson Pad Field/Pool Name -----  
Farm name Shawn A. Glaspell Well Number Ramza 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 4359525.058m Easting 527079.640m  
Landing Point of Curve Northing 4359256.44m Easting 526933.46m  
Bottom Hole Northing 4355868.190m Easting 528098.680m

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 8/24/2024  
Date completion activities began 3/10/2025 Date completion activities ceased 5/27/2025  
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:

APPROVED Shawn 03/13/2026

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WR-35  
Rev. 8/23/13

API 47-017 - 06985 Farm name Shawn A. Glaspell Well number Ramza 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"	1060'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	3141'	New	34.89#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	19926'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7234'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	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	1087 sx	15.6	1.18	1283	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) 19926' MD, 7188' TVD (BHL), 7213' (Deepest Point Drilled) Loggers TD (ft) 19926' MD  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6428'

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

APPROVED *Shawn King* 03/13/2026



API 47- 017 - 06985 Farm name Shawn A. Glaspell Well number Ramza Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
	<u>7120' (TOP)</u>	<u>TVD</u>	<u>7480' (TOP)</u> <u>MD</u>
<u>Marcellus</u>			

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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 2981 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 17903 mcfpd Oil 34 bpd NGL --- bpd Water 382 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 <sub>2</sub> 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

APPRO [Signature] 03/13/2026 25

API 47-017-06985 Farm Name Shawn A. Glaspell Well Number Ramza Unit 1H

**Exhibit 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	3/10/2025	19841	19797	60	Marcellus
2	3/11/2025	19758.49	19592.92	60	Marcellus
3	3/11/2025	19557.40	19391.84	60	Marcellus
4	3/12/2025	19356.32	19190.75	60	Marcellus
5	3/12/2025	19155.24	18989.67	60	Marcellus
6	3/13/2025	18954.16	18788.59	60	Marcellus
7	3/14/2025	18753.08	18587.51	60	Marcellus
8	3/14/2025	18551.99	18386.43	60	Marcellus
9	3/15/2025	18350.91	18185.34	60	Marcellus
10	3/15/2025	18149.83	17984.26	60	Marcellus
11	3/16/2025	17948.75	17783.18	60	Marcellus
12	3/16/2025	17747.67	17582.10	60	Marcellus
13	3/17/2025	17546.58	17381.02	60	Marcellus
14	3/17/2025	17345.50	17179.93	60	Marcellus
15	3/18/2025	17144.42	16978.85	60	Marcellus
16	3/18/2025	16943.34	16777.77	60	Marcellus
17	3/19/2025	16742.26	16576.69	60	Marcellus
18	3/19/2025	16541.17	16375.61	60	Marcellus
19	3/20/2025	16340.09	16174.52	60	Marcellus
20	3/20/2025	16139.01	15973.44	60	Marcellus
21	3/21/2025	15937.93	15772.36	60	Marcellus
22	3/21/2025	15736.85	15571.28	60	Marcellus
23	3/22/2025	15535.77	15370.20	60	Marcellus
24	3/22/2025	15334.68	15169.11	60	Marcellus
25	3/23/2025	15133.60	14968.03	60	Marcellus
26	3/23/2025	14932.52	14766.95	60	Marcellus
27	3/23/2025	14731.44	14565.87	60	Marcellus
28	3/24/2025	14530.36	14364.79	60	Marcellus
29	3/24/2025	14329.27	14163.70	60	Marcellus
30	3/25/2025	14128.19	13962.62	60	Marcellus
31	3/25/2025	13927.11	13761.54	60	Marcellus
32	3/26/2025	13726.03	13560.46	60	Marcellus
33	3/26/2025	13524.95	13359.38	60	Marcellus
34	3/27/2025	13323.86	13158.30	60	Marcellus
35	3/27/2025	13122.78	12957.21	60	Marcellus
36	3/28/2025	12921.70	12756.13	60	Marcellus
37	3/29/2025	12720.62	12555.05	60	Marcellus
38	3/29/2025	12519.54	12353.97	60	Marcellus
39	3/30/2025	12318.45	12152.89	60	Marcellus
40	3/30/2025	12117.37	11951.80	60	Marcellus
41	3/31/2025	11916.29	11750.72	60	Marcellus
42	3/31/2025	11715.21	11549.64	60	Marcellus
43	4/1/2025	11514.13	11348.56	60	Marcellus
44	4/2/2025	11313.04	11147.48	60	Marcellus
45	4/2/2025	11111.96	10946.39	60	Marcellus
46	4/3/2025	10910.88	10745.31	60	Marcellus
47	4/3/2025	10709.80	10544.23	60	Marcellus
48	4/4/2025	10508.72	10343.15	60	Marcellus
49	4/5/2025	10307.63	10142.07	60	Marcellus
50	4/5/2025	10106.55	9940.98	60	Marcellus
51	4/6/2025	9905.47	9739.90	60	Marcellus
52	4/6/2025	9704.39	9538.82	60	Marcellus
53	4/7/2025	9503.31	9337.74	60	Marcellus
54	4/7/2025	9302.22	9136.66	60	Marcellus
55	4/8/2025	9101.14	8935.57	60	Marcellus
56	4/10/2025	8900.06	8734.49	60	Marcellus
57	4/10/2025	8698.98	8533.41	60	Marcellus
58	4/10/2025	8497.90	8332.33	60	Marcellus
59	4/10/2025	8296.81	8131.25	60	Marcellus
60	4/10/2025	8095.73	7930.16	60	Marcellus
61	4/10/2025	7894.65	7729.08	60	Marcellus
62	4/10/2025	7693.57	7528.00	60	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 (bbbls)	Amount of Nitrogen/ other (units)
1	3/10/2025	80.8	10247.0	10426.9	4350.7	168140	4822.8	N/A
2	3/11/2025	93.3	10408.1	7620.8	4664.2	417640	7522.6	N/A
3	3/11/2025	91.2	9698.2	8016.2	4615.0	413160	9516.3	N/A
4	3/12/2025	96.6	9269.9	6547.1	5295.0	417140	7072.1	N/A
5	3/12/2025	98.3	10305.2	7615.2	6012.0	398740	6858.3	N/A
6	3/13/2025	94.2	10254.9	7348.0	5457.2	409640	7039.2	N/A
7	3/14/2025	97.6	10206.2	7401.3	4711.0	394540	6937.1	N/A
8	3/14/2025	93.9	9575.9	6801.0	4465.0	396930	8191.6	N/A
9	3/15/2025	98.3	10354.9	7231.2	4888.0	414960	7090.5	N/A
10	3/15/2025	96.5	9963.9	6702.4	5149.0	407160	7164.7	N/A
11	3/16/2025	98.4	10021.1	7534.0	4635.8	414760	7244.7	N/A
12	3/16/2025	97.4	10197.6	7336.8	4922.0	396710	7195.9	N/A
13	3/17/2025	97.7	10059.1	7374.8	4613.6	414220	7083.4	N/A
14	3/17/2025	97.2	10058.8	6998.3	5891.0	397480	7062.6	N/A
15	3/18/2025	96.7	9951.0	6769.0	4374.0	403840	7159.9	N/A
16	3/18/2025	96.1	9534.7	7110.9	4888.0	397710	6896.8	N/A
17	3/19/2025	97.5	9726.5	7738.8	4218.0	409520	7017.0	N/A
18	3/19/2025	97.9	9638.7	7008.5	4413.0	399090	6903.4	N/A
19	3/20/2025	98.3	9744.0	6784.3	4711.0	397190	6897.7	N/A
20	3/20/2025	97.3	9450.9	6439.3	4243.3	398500	6955.2	N/A
21	3/21/2025	97.0	9316.8	6813.4	4644.0	413100	6967.5	N/A
22	3/21/2025	98.2	9371.5	6846.6	4531.0	394130	6895.2	N/A
23	3/22/2025	97.7	9278.9	6457.6	4615.0	412440	6985.7	N/A
24	3/22/2025	98.9	9506.7	6699.8	5239.7	416540	7083.7	N/A
25	3/23/2025	97.4	9314.1	6928.6	4754.0	399520	7726.7	N/A
26	3/23/2025	98.9	9295.8	6309.0	4976.0	394720	6813.1	N/A
27	3/23/2025	97.9	9360.6	6766.6	4451.0	396330	6747.6	N/A
28	3/24/2025	98.6	9005.3	6198.2	4770.0	411540	7045.3	N/A
29	3/24/2025	98.1	9157.8	6489.0	4874.0	397840	6771.5	N/A
30	3/25/2025	100.1	9088.5	6478.3	5974.0	408500	7028.9	N/A
31	3/25/2025	97.2	9111.8	6629.9	5130.0	394680	6953.3	N/A
32	3/26/2025	97.5	9158.6	6523.0	6539.7	415240	7133.4	N/A
33	3/26/2025	99.1	9080.3	6780.6	4977.3	411180	6996.3	N/A
34	3/27/2025	95.8	8683.2	6977.7	5011.5	419420	8679.4	N/A
35	3/27/2025	75.1	7855.3	7207.8	3671.0	398350	7790.1	N/A
36	3/28/2025	99.1	9064.9	6860.1	4018.0	413720	7002.9	N/A
37	3/29/2025	96.9	9060.9	7066.4	4215.0	417380	7673.4	N/A
38	3/29/2025	95.6	9088.4	6473.3	3972.0	393270	6708.6	N/A
39	3/30/2025	97.7	8849.1	6618.7	4071.0	412720	7109.8	N/A
40	3/30/2025	99.2	8757.4	6962.5	4303.0	412400	6923.3	N/A
41	3/31/2025	99.4	8599.7	6735.7	3745.0	402060	6898.6	N/A
42	3/31/2025	99.0	8593.4	7020.0	3315.2	412820	6921.1	N/A
43	4/1/2025	98.7	8705.6	7079.2	4561.0	407000	6985.4	N/A
44	4/2/2025	97.2	8555.9	6547.5	4512.0	412480	6961.6	N/A
45	4/2/2025	98.0	8461.4	6649.8	6828.0	412480	6871.5	N/A
46	4/3/2025	97.3	8453.7	7152.1	4181.0	411000	6977.3	N/A
47	4/3/2025	100.3	8580.0	6497.9	4961.3	412460	6937.8	N/A
48	4/4/2025	99.2	8457.2	6978.6	4217.0	412740	6972.5	N/A
49	4/5/2025	96.8	8199.0	6651.4	4749.0	397850	6795.4	N/A
50	4/5/2025	99.0	8425.5	6809.6	4382.0	412020	6868.3	N/A
51	4/6/2025	98.4	8333.2	6664.4	4122.0	414500	6970.0	N/A
52	4/6/2025	99.9	8157.3	6912.4	4365.0	417080	6885.8	N/A
53	4/7/2025	98.4	7725.7	5123.7	4963.0	420740	6902.5	N/A
54	4/7/2025	97.7	8043.8	7051.9	4251.0	413900	6889.6	N/A
55	4/8/2025	99.8	8183.2	6775.4	5277.0	414440	6779.2	N/A
56	4/10/2025	95.9	8087.8	7126.4	3483.9	420280	6906.8	N/A
57	4/10/2025	95.7	7751.2	5600.2	3791.0	413260	6700.8	N/A
58	4/10/2025	97.1	7945.5	6459.3	4064.8	411420	6667.9	N/A
59	4/10/2025	98.0	7786.3	5865.6	4281.9	415360	6615.1	N/A
60	4/10/2025	89.2	8482.3	6280.6	3793.5	404620	8257.0	N/A
61	4/10/2025	97.0	7669.2	6191.1	5248.5	406980	6678.1	N/A
62	4/10/2025	97.8	7462.1	6434.6	4232.3	408580	6692.5	N/A
<b>AVERAGE</b>		<b>97</b>	<b>9,044</b>	<b>6,863</b>	<b>4,655</b>	<b>25,054,160</b>	<b>437,802</b>	<b>TOTAL</b>

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API 47-017-06985 Farm Name Shawn A. Glaspell Well Number Ramza 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		2,134		2,124		2,136	
Big Lime	2,160		2,816		2,136		2,818	
Fifty Foot Sandstone	2,816		2,979		2,792		2,982	
Gordon	2,979		3,202		2,956		3,205	
Fifth Sandstone	3,202		3,254		3,179		3,257	
Bayard	3,254		4,055		3,231		4,070	
Speechley	4,055		4,303		4,044		4,325	
Balltown	4,303		4,834		4,299		4,873	
Bradford	4,834		5,326		4,847		5,382	
Benson	5,326		5,592		5,356		5,659	
Alexander	5,592		6,896		5,633		7,023	
Sycamore	6,724		6,870		6,826		6,997	
Middlesex	6,870		7,012		6,997		7,209	
Burkett	7,012		7,043		7,209		7,268	
Tully	7,043		7,120		7,268		7,480	
Marcellus	7,120		NA		7,480		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. Ramza 1H**  
**As-Drilled**  
**Antero Resources Corporation**

Page 1 of 2



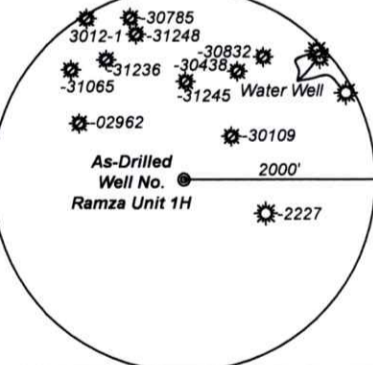
Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheeny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

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



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.



**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.)

2,091' to Bottom Hole  
 TOP HOLE LATITUDE 39 - 25 - 00  
 BTM HOLE LATITUDE 39 - 22 - 30

**Notes**  
 West Virginia Coordinate System of 1927, North Zone  
 based upon Differential GPS Measurements.  
 Well No. Ramza Unit 1H Top Hole coordinates are  
 N: 324,437.63' Latitude: 39°23'04.92"  
 E: 1,664,855.27' Longitude: 80°41'08.66"  
 Bottom Hole coordinates are  
 N: 312,381.79' Latitude: 39°21'06.18"  
 E: 1,667,999.09' Longitude: 80°40'26.62"  
 UTM Zone 17, NAD 1983  
 Top Hole Coordinates Bottom Hole Coordinates  
 N: 4,359,525.058m N: 4,355,868.190m  
 E: 527,079.640m E: 528,098.680m  
 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. Ramza Unit 1H As-Drilled POE Coordinates  
 WV Coordinate System of 1927, North Zone  
 N: 324,209.52'  
 E: 1,664,220.73'  
 Lat: 39°23'02.58"  
 Lon: 80°41'16.70"  
 UTM Zone 17, NAD 1983  
 N: 4,359,452.334m  
 E: 526,887.480m

BTM Hole  
 7.5' Spot

	Bearing	Dist.
L1	S 81°01' E	2,032.6'
L2	S 27°53' W	574.6'
L3	S 78°31' W	828.8'
L4	N 67°47' W	1,018.4'

FILE NO: 266-30-M-22  
 DRAWING NO: Ramza 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 20 25  
 OPERATOR'S WELL NO. Ramza 1H  
 API WELL NO  
 47 - 017 - 06985  
 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 COUNTY: Doddridge  
 SURFACE OWNER: Shawn A. 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: 19,926' MD 7,188' TVD

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	Minda Allen
B	Thomas H. Downs
C	Morris Mountaineer Oil & Gas, LLC
D	Robert O. Hopkins
E	Arthur G. Doak, et al
F	Arthur G. Doak, et ux
G	Shawn Giaspell
H	Jonnie Huy Rominger
I	A. H. Low, et ux
J	CNX Gas Company, LLC
K	Acropolis, Inc.
L	CNX Gas Company, LLC
M	Cliff Wilson & Opal Wilson
N	Brian A. Moreno & Diane P. Blanchette
O	Brenda V. Ney
P	Clyde M. Ford, III
Q	Romona L. Clauson
R	Mary A. Murphy Simons
S	Ollie M. Ford, et al
T	Kathleen E. Davis, et al
U	AMP IV, LP
V	Margaret J. & Martha A. McMillan
W	Roy Hoskinson & Faye Hoskinson

ID	TM-Par	Owner	Bk/Pg	Acres
1	17-3.3	Shawn A. Giaspell	283/601	100.00
2	17-3.2	Shawn A. Giaspell	283/601	135.00
3	17-13	Shawn A. Giaspell	468/444	65.00
4	17-16	Faith L. Fry	238/167	36.84
5	17-18.1	Faith L. & Michael Fry	342/340	19.50
6	17-18	Faith L. Fry	238/167	80.14
7	17-19	Shawn A. Giaspell	372/215	13.82
8	17-20	Shawn A. Giaspell	372/215	12.07
9	17-25	Shawn A. Giaspell	372/215	7.89
10	6-6	Duaine Doak, et al	WB31/416	50.00
11	17-21	Patrick M. MacMillan	379/615	30.69
12	22-1	Donald V. Sandstrom	266/650	34.63
13	22-2	Timothy C. Pitts	W100/240	45.13
14	6-11.1	Danny R. & Joyce A. Groover	301/149	44.94
15	6-11.2	Danny R. & Joyce A. Groover	301/149	0.64
16	6-11	Danny R. & Joyce A. Groover	301/149	47.30
17	22-3.1	George D. Payton & Donald V. Sandstrom	236/354	24.11
18	22-3	Timothy C. Pitts	W100/240	29.89
19	23-8	Steven R. Chipps & Nathaniel Hoskinson	432/200	40.99
20	22-6	Robert F. & Deborah C. Fetty	304/421	1.30
21	6-16	Brian A. Moreno & Diane P. Blanchette	389/382	104.80
22	22-5	Jerry W. Harman	282/436	27.00
23	6-17	Clyde M. Ford III	234/474	65.6
24	6-23	Werner F. Blei	272/340	52.50
25	7-1	Steven M. & Mary Ellen Perna	286/506	132.54
26	7-5	David A. Hoskinson	168/787	10.23
27	10-1	Josephine Donnahoe	WB31/4	23.14

FILE NO: 266-30-M-22  
 DRAWING NO: Ramza 1H As-Drilled  
 SCALE: 1" = 2000'  
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**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
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47 - 017 - 06985  
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 ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.  
Denver, CO 80202 Bridgeport, WV 26330

# Hydraulic Fracturing Fluid Product Component Information Disclosure

RECEIVED  
Office of Oil and Gas  
OCT 29 2025  
WV Department of  
Environmental Protection

Job Start Date:	03/10/2025
Job End Date:	04/10/2025
State:	West Virginia
County:	Doddridge
API Number:	47-017-06985-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	RAMZA UNIT 1H
Latitude:	39.384792
Longitude:	-80.685566
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7213
Total Base Water Volume (gal)*:	18907923
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					

03/13/2026

Sand-Premium White-40/70	Halliburton	Proppant				OCT 29 2025	
WG-36 GELLING AGENT	Halliburton	Gelling Agent				WV Department of Environmental Protection	
Items above are Trade Names. Items below are the individual ingredients.							
			Water	7732-18-5	100.00000	86.74828	None
			Crystalline silica, quartz	14808-60-7	100.00000	13.06215	None
			Water	7732-18-5	100.00000	0.16207	None
			Hydrochloric acid	7647-01-0	30.00000	0.03887	None
			Complex amine compound	Proprietary	60.00000	0.02549	None
			Hydrotreated distillate	Proprietary	100.00000	0.01305	None
			Guar gum	9000-30-0	100.00000	0.00441	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	0.00256	None
			Glutaraldehyde	111-30-8	30.00000	0.00246	None
			Ammonium chloride	12125-02-9	5.00000	0.00234	None
			Fatty nitrogen derived amides	Proprietary	5.00000	0.00212	None
			Ethoxylated alcohol	Proprietary	5.00000	0.00212	None
			Hydrotreated light petroleum distillates	64742-47-8	30.00000	0.00128	None
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00047	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	0.00041	None
			Methanol	67-56-1	100.00000	0.00024	None
			Amides, tall-oil fatty, N,N-bis(hydroxyethyl)	68155-20-4	5.00000	0.00021	None
			Ethoxylated branched C13 alcohol	78330-21-9	5.00000	0.00021	None
			Ammonium persulfate	7727-54-0	100.00000	0.00012	None
			Citric acid	77-92-9	1.00000	0.00008	None
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007	None

			Modified thiourea polymer	Proprietary	30.00000	0.00007	None
			Sobitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00004	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.

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

RECEIVED  
Office of Oil and Gas

OCT 29 2025

WV Department of  
Environmental Protection

03/13/2026