

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

API 47 - 095 - 02765 County Tyler District Ellsworth  
Quad Porter Falls 7.5' Pad Name Grand Pad Field/Pool Name -----  
Farm name Kenneth Tomblin Et Al. Well Number Toroweap 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 4373136m Easting 516271m  
Landing Point of Curve Northing 4373033.01m Easting 516326.38m  
Bottom Hole Northing 4369804m Easting 517464m

Elevation (ft) 1243.5' 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

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Date permit issued 12/16/2021 Date drilling commenced 2/19/2022 Date drilling ceased 5/7/2022  
Date completion activities began 5/29/2022 Date completion activities ceased 7/12/2022  
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 25' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 2305' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft 431' Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by:

07/21/2023

API 47-095 - 02765 Farm name Kenneth Tomblin Et Al. Well number Toroweap 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	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	381'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2575'	New	36#, K-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	18567'	New	20#, P-100	N/A	Y
Tubing		2-3/8"	6909'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	201 sx	15.6	1.18	237	0'	8 Hrs.
Surface	Class A	385 sx	15.6	1.20	462	0'	8 Hrs.
Coal							
Intermediate 1	Class A	879 sx	15.6	1.19	1046	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	2972 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.26 (Tail)	3745	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 18567' MD, 6887' TVD (BHL), 6697' (Deepest Point Drilled) Loggers TD (ft) 18567' MD  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

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Kick off depth (ft) 6052'

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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

07/21/2023

API 47- 095 - 02765 Farm name Kenneth Tomblin Et Al. Well number Toroweap Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
<b>*PLEASE SEE ATTACHED EXHIBIT 1</b>					

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)	
<b>*PLEASE SEE ATTACHED EXHIBIT 2</b>						RECEIVED Office of Oil & Gas APR 07 2023 WV Department of Environmental Protection			

Please insert additional pages as applicable.

API 47- 095 - 02765 Farm name Kenneth Tomblin Et Al. Well number Torowear Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
Marcellus	6811' (TOP)	TVD	7070' (TOP) MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 2206 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 15442 mcfpd Oil 406 bpd NGL --- bpd Water 521 bpd  
GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
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**\*PLEASE SEE ATTACHED EXHIBIT 3**

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

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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 1080 US-33 City Weston State WV Zip 26452

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

Please insert additional pages as applicable.

Completed by Carly Marvel Telephone 303-357-7373  
Signature *Carly Marvel* Title Permitting Agent Date 3/28/2023

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

07/21/2023

API 47-095-02765 Farm Name Kenneth Tomblin Et Al Well Number Toroweap Unit 1H					
Exhibit 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	5/29/2022	18446.2	18401.7	60	Marcellus
2	5/29/2022	18362.32887	18196.4732	60	Marcellus
3	5/30/2022	18160.90208	17995.0464	60	Marcellus
4	5/30/2022	17959.4753	17793.6196	60	Marcellus
5	5/30/2022	17758.04851	17592.1929	60	Marcellus
6	5/31/2022	17556.62173	17390.7661	60	Marcellus
7	5/31/2022	17355.19494	17189.3393	60	Marcellus
8	5/31/2022	17153.76815	16987.9125	60	Marcellus
9	5/31/2022	16952.34137	16786.4857	60	Marcellus
10	6/1/2022	16750.91458	16585.0589	60	Marcellus
11	6/1/2022	16549.4878	16383.6321	60	Marcellus
12	6/1/2022	16348.06101	16182.2054	60	Marcellus
13	6/1/2022	16146.63423	15980.7786	60	Marcellus
14	6/2/2022	15945.20744	15779.3518	60	Marcellus
15	6/2/2022	15743.78065	15577.925	60	Marcellus
16	6/2/2022	15542.35387	15376.4982	60	Marcellus
17	6/3/2022	15340.92708	15175.0714	60	Marcellus
18	6/3/2022	15139.5003	14973.6446	60	Marcellus
19	6/3/2022	14938.07351	14772.2179	60	Marcellus
20	6/4/2022	14736.64673	14570.7911	60	Marcellus
21	6/4/2022	14535.21994	14369.3643	60	Marcellus
22	6/4/2022	14333.79315	14167.9375	60	Marcellus
23	6/5/2022	14132.36637	13966.5107	60	Marcellus
24	6/5/2022	13930.93958	13765.0839	60	Marcellus
25	6/5/2022	13729.5128	13563.6571	60	Marcellus
26	6/5/2022	13528.08601	13362.2304	60	Marcellus
27	6/6/2022	13326.65923	13160.8036	60	Marcellus
28	6/6/2022	13125.23244	12959.3768	60	Marcellus
29	6/6/2022	12923.80565	12757.95	60	Marcellus
30	6/6/2022	12722.37887	12556.5232	60	Marcellus
31	6/6/2022	12520.95208	12355.0964	60	Marcellus
32	6/7/2022	12319.5253	12153.6696	60	Marcellus
33	6/7/2022	12118.09851	11952.2429	60	Marcellus
34	6/7/2022	11916.67173	11750.8161	60	Marcellus
35	6/7/2022	11715.24494	11549.3893	60	Marcellus
36	6/8/2022	11513.81815	11347.9625	60	Marcellus
37	6/8/2022	11312.39137	11146.5357	60	Marcellus
38	6/8/2022	11110.96458	10945.1089	60	Marcellus
39	6/9/2022	10909.5378	10743.6821	60	Marcellus
40	6/9/2022	10708.11101	10542.2554	60	Marcellus
41	6/9/2022	10506.68423	10340.8286	60	Marcellus
42	6/9/2022	10305.25744	10139.4018	60	Marcellus
43	6/9/2022	10103.83065	9937.975	60	Marcellus
44	6/10/2022	9902.403869	9736.54821	60	Marcellus
45	6/10/2022	9700.977083	9535.12143	60	Marcellus
46	6/10/2022	9499.550298	9333.69464	60	Marcellus
47	6/10/2022	9298.123512	9132.26786	60	Marcellus
48	6/10/2022	9096.696726	8930.84107	60	Marcellus
49	6/11/2022	8895.26994	8729.41429	60	Marcellus
50	6/11/2022	8693.843155	8527.9875	60	Marcellus
51	6/11/2022	8492.416369	8326.56071	60	Marcellus
52	6/11/2022	8290.989583	8125.13393	60	Marcellus
53	6/11/2022	8089.562798	7923.70714	60	Marcellus
54	6/12/2022	7888.136012	7722.28036	60	Marcellus
55	6/12/2022	7686.709226	7520.85357	60	Marcellus
56	6/12/2022	7485.28244	7319.42679	60	Marcellus
57	6/12/2022	7283.855655	7118	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 (bbls)	Amount of Nitrogen/ other (units)
1	5/29/2022	70.5	7657	6310	3687	170540	276718	N/A
2	5/29/2022	80.1	8262	5697	4444	411540	320395	N/A
3	5/30/2022	82.7	8254	4419	4695	396320	319409	N/A
4	5/30/2022	82.0	7986	5946	4773	399780	320802	N/A
5	5/30/2022	87.2	8028	5253	5215	395639	330313	N/A
6	5/31/2022	88.7	8049	5596	4013	409882	339496	N/A
7	5/31/2022	92.7	8220	4994	4782	416667	341640	N/A
8	5/31/2022	90.9	8319	4552	4822	411269	328604	N/A
9	5/31/2022	92.2	8340	5818	4500	419249	328740	N/A
10	6/1/2022	89.9	8466	5844	4320	418641	315355	N/A
11	6/1/2022	92.4	8267	6420	4391	414210	315904	N/A
12	6/1/2022	93.6	8165	4317	4211	417944	322253	N/A
13	6/1/2022	90.0	8379	5127	4529	412934	325341	N/A
14	6/2/2022	92.6	8496	6049	4579	406857	300686	N/A
15	6/2/2022	89.3	8030	5579	4562	410248	330159	N/A
16	6/2/2022	92.4	8234	5197	5033	422747	315682	N/A
17	6/3/2022	91.5	8308	5833	4371	409749	299769	N/A
18	6/3/2022	94.6	8410	5723	4375	412588	312997	N/A
19	6/3/2022	90.4	7945	4845	4359	398718	315370	N/A
20	6/4/2022	93.7	8094	6068	4460	410846	302714	N/A
21	6/4/2022	92.6	8203	5617	4323	408091	298901	N/A
22	6/4/2022	94.0	8385	6162	4122	414382	293089	N/A
23	6/5/2022	93.0	8392	5950	4137	417513	297008	N/A
24	6/5/2022	96.3	8103	5629	4533	419169	307118	N/A
25	6/5/2022	93.9	8305	8063	3566	407496	294283	N/A
26	6/5/2022	89.5	8405	8239	3409	401789	291257	N/A
27	6/6/2022	96.1	8284	5605	4139	419034	302151	N/A
28	6/6/2022	92.8	7919	5615	4417	407407	319225	N/A
29	6/6/2022	94.6	8016	5558	3872	403392	293269	N/A
30	6/6/2022	93.0	8007	5845	4286	416766	305879	N/A
31	6/6/2022	97.6	8206	5616	4255	396392	295099	N/A
32	6/7/2022	96.9	8164	5963	4107	395437	298570	N/A
33	6/7/2022	87.5	7632	6184	4145	401068	390822	N/A
34	6/7/2022	93.1	8092	6303	3627	409133	288720	N/A
35	6/7/2022	93.1	8145	6035	3989	379947	291895	N/A
36	6/8/2022	87.5	7434	5817	4136	404887	342315	N/A
37	6/8/2022	94.7	8092	6541	3736	409420	311507	N/A
38	6/8/2022	95.3	8054	6795	3936	404449	303705	N/A
39	6/9/2022	96.3	7983	6323	4076	405038	315528	N/A
40	6/9/2022	95.2	8059	7920	4289	406203	311606	N/A
41	6/9/2022	97.5	7751	7738	4294	404295	316778	N/A
42	6/9/2022	95.4	7749	6178	4245	405874	317094	N/A
43	6/9/2022	96.3	7940	6462	4153	398219	311680	N/A
44	6/10/2022	98.2	7694	6052	4507	409298	307401	N/A
45	6/10/2022	97.6	7686	5781	4041	416178	303299	N/A
46	6/10/2022	97.3	7610	6128	4343	402732	299856	N/A
47	6/10/2022	97.3	7311	4823	3919	398128	296545	N/A
48	6/10/2022	98.8	7446	5870	4247	399500	297497	N/A
49	6/11/2022	99.8	7447	6723	4292	407229	302938	N/A
50	6/11/2022	98.7	7416	6512	4259	406479	299707	N/A
51	6/11/2022	93.4	7098	5949	4238	418242	327798	N/A
52	6/11/2022	97.4	7220	6721	4606	400476	297807	N/A
53	6/11/2022	98.3	7109	5462	4393	413686	317968	N/A
54	6/12/2022	97.7	7067	6238	4503	406350	301419	N/A
55	6/12/2022	98.5	7024	6622	4326	426774	309528	N/A
56	6/12/2022	97.3	7098	6374	4138	400425	280101	N/A
57	6/12/2022	98.2	7042	6509	4147	404396	294297	N/A
	<b>AVERAGE</b>	<b>93</b>	<b>7,921</b>	<b>5,991</b>	<b>4,278</b>	<b>23,011,662</b>	<b>17,696,007</b>	<b>TOTAL</b>

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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
Silty Sandstone	74	164	74	164
Shaley Siltstone	164	194	164	194
Shaley Sandstone	194	314	194	314
Shaley Siltstone	314	734	314	734
Sandy Siltstone	734	674	734	674
Shaley Siltstone, Tr Limestone	674	1,314	674	1,314
Shaley Sandstone	1,314	1,554	1,314	1,554
Sandstone, Tr Shale	1,554	1,664	1,554	1,664
Silty Shale	1,664	1,734	1,664	1,734
Shaley Siltstone	1,734	1,784	1,734	1,784
Sandy Shale	1,784	1,974	1,784	1,974
Shale, Tr Limestone	1,974	2,084	1,974	2,084
Shaley Limestone	2,084	2,059	2,084	2,059
Big Lime	2,085	2,873	2,059	2,874
Fifty Foot Sandstone	2,873	2,982	2,848	2,983
Gordon	2,982	3,226	2,957	3,226
Fifth Sandstone	3,226	3,406	3,200	3,407
Bayard	3,406	4,154	3,381	4,160
Speechley	4,154	4,378	4,134	4,386
Balltown	4,378	4,715	4,360	4,727
Bradford	4,715	5,146	4,701	5,165
Benson	5,146	5,430	5,139	5,451
Alexander	5,430	6,658	5,425	6,736
Sycamore	6,521	6,632	6,570	6,710
Middlesex	6,632	6,726	6,710	6,860
Burkett	6,726	6,756	6,860	6,921
Tully	6,756	6,811	6,921	7,070
Marcellus	6,811	NA	7,070	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.

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LATITUDE 39°32'30"

5,428'

LATITUDE 39°30'00" 1,539' TO BOTTOM HOLE

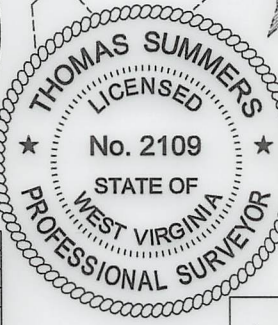
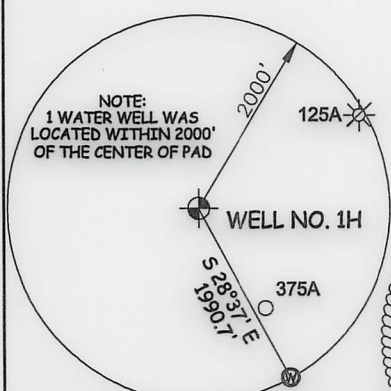
### Antero Resources Corporation Well No. Toroweap 1H

**AS DRILLED DATA:**  
**WELL 1H TOP HOLE INFORMATION:**  
 N: 369,695ft E: 1,630,134ft  
 LAT: 39°30'27.44" LON: 80°48'39.25"  
**BOTTOM HOLE INFORMATION:**  
 N: 358,696ft E: 1,633,865ft  
 LAT: 39°28'39.26" LON: 80°47'49.62"  
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

**(NAD) 83 (UTM) ZONE 17 COORDS:**  
**WELL 1H TOP HOLE INFORMATION:**  
 N: 4,373,136m E: 516,271m  
**BOTTOM HOLE INFORMATION:**  
 N: 4,369,804m E: 517,464m

WV NORTH ZONE GRID NORTH

Ellsworth District - Tyler County	
16-14	James Barnhart
16-15	Harvey Miller Et Al
16-28	Kenneth Tomblin Et Al
16-29	Michael Tomblin
16-30	Christopher Investments Inc.
16-31	Christopher Investments Inc.
16-33	J. A. Weekley Hrs.
16-34	J. A. Weekley Hrs.
16-35	Jay Wright
17-56	J. A. Weekley Hrs.
22-9	Steven Wright
22-10	Leslie Henderson
22-11	Angela DeGuelle
22-13	Christopher Blake
22-14	Susan Delsordo
22-14.1	Sheryl Hayes
22-27	C. W. Weekley Hrs.
22-28	WSD Properties LLC
23-02	Dale Parr
23-03	Jack Hair
23-04	Jack Hair
McElroy District - Tyler County	
2-01	Jack Hair
2-02	Jack Hair
2-15	Leo Wiker
2-28	Jay Bee Oil & Gas Inc.
2-29	Cecil Nichols



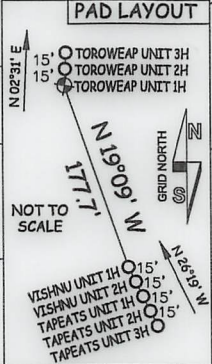
LINE	BEARING	DIST.	LINE	BEARING	DIST.
L1	N 79°23' W	1820.64'	L7	N 17°11' W	1289.39'
L2	N 72°38' W	1737.73'	L8	N 14°44' W	1409.38'
L3	N 69°39' W	1680.54'	L9	N 07°35' W	1774.82'
L4	N 45°05' W	1540.95'	L10	N 03°37' W	1761.12'
L5	N 36°53' W	1627.55'	L11	N 17°55' E	1113.36'
L6	N 30°40' W	1612.05'	L12	N 48°24' E	1322.09'

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC  
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415



JOB # 21-011WA  
 DRAWING # TOROWEAP1HAD  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY SUBMETER  
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS  
 STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

**LEGEND**  
 - - - Surface Owner Boundary Lines +/-  
 - - - Interior Surface Tracts +/-  
 O - Proposed Well Path  
 O - As Drilled Well Path

*Thomas Summers*  
 THOMAS SUMMERS P.S. 2109  
 DATE 10/11/22  
 OPERATOR'S WELL # TOROWEAP UNIT #1H

**(NAD) 27 (UTM) ZONE 17 COORDS:**  
**WELL 1H TOP HOLE INFORMATION:**  
 N: 14,346,816ft E: 1,693,753ft  
**POINT OF ENTRY INFORMATION:**  
 N: 14,346,702ft E: 1,693,885ft  
**BOTTOM HOLE INFORMATION:**  
 N: 14,335,884ft E: 1,697,666ft

- NOTES**
- NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
  - TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
  - AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
  - WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
  - WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_ API WELL # 47 - 095 - 02765  
 (IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X STATE COUNTY PERMIT  
 LOCATION: ELEVATION AS BUILT - 1,243.5' WATERSHED OUTLET MIDDLE ISLAND CREEK  
 QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER  
 SURFACE OWNER KENNETH TOMBLIN ET AL ACREAGE 290.32 ACRES +/-  
 OIL & GAS ROYALTY OWNER S. A. SMITH AND C. B. MORRIS HEIRS TRUST; BETTY MOREHEAD ET VIR; LEASE ACREAGE 290.32 AC.±; 68.88 AC.±;  
JAY A. WRIGHT ET UX; MORRIS MOUNTAINEER OIL & GAS LLC; CAROL J. KNAPP; 40.81 AC.±; 45.98 AC.±; 77.5 AC.±;  
BERNICE BAKER; JAMES A. WEEKLEY ET AL.; JANIE DENOON TRUST; MICHAEL SHERWOOD 45 AC.±; 58.5 AC.±; 20 AC.±; 32.5 AC.±;

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_  
 PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL \_\_\_  
 (SPECIFY) AS DRILLED PLUG & ABANDON \_\_\_ CLEAN OUT & REPLUG \_\_\_  
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,887' TVD 18,567' MD  
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM  
 ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD  
 FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

8,169' TO BOTTOM HOLE

LONGITUDE 80°47'30"

12,401'

LONGITUDE 80°47'30"

COUNTY TYLER PERMIT

07/21/2023



LATITUDE 39°32'30"

5,428'

LATITUDE 39°30'00" 1,539' TO BOTTOM HOLE

Antero Resources Corporation Well No. Toroweap 1H

AS DRILLED DATA: WELL 1H TOP HOLE INFORMATION: N: 369,695ft E: 1,630,134ft LAT: 39°30'27.44" LON: 80°48'39.25" BOTTOM HOLE INFORMATION: N: 358,696ft E: 1,633,865ft LAT: 39°28'39.26" LON: 80°47'49.62" WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATTION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 4,373,136m E: 516,271m BOTTOM HOLE INFORMATION: N: 4,369,804m E: 517,464m

WV NORTH ZONE GRID NORTH

Table listing landowners and lease information for Ellsworth District - Tyler County and McElroy District - Tyler County.

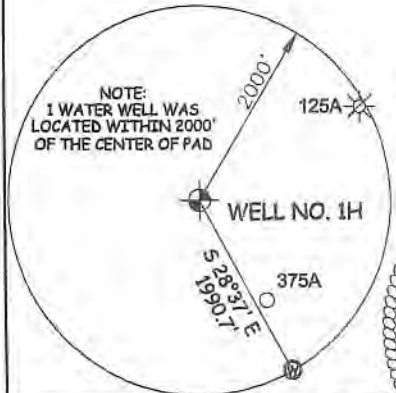
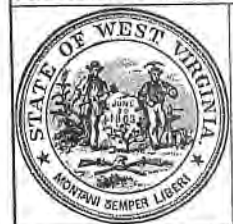


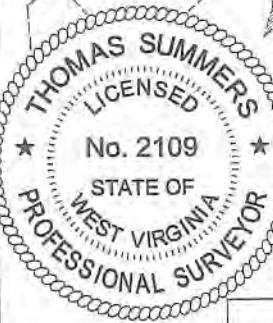
Table with 6 columns: LINE, BEARING, DIST., LINE, BEARING, DIST. listing boundary lines for the well pad.

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415



JOB # 21-011WA DRAWING # TOROWEAP1HAD SCALE 1" = 2000' MINIMUM DEGREE OF ACCURACY SUBMETER PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND: Surface Owner Boundary Lines +/-, Interior Surface Tracts +/-, Proposed Well Path, As Drilled Well Path. Signature of Thomas Summers, P.S. 2109.

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

DATE 10/11/22 OPERATOR'S WELL# TOROWEAP UNIT #1H

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 14,346,816ft E: 1,693,753ft POINT OF ENTRY INFORMATION: N: 14,346,702ft E: 1,693,885ft BOTTOM HOLE INFORMATION: N: 14,335,884ft E: 1,697,666ft

- NOTES: 1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD. 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ANTERO RESOURCES CORPORATION. 3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION. 4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES. 5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL 47 - 095 - 02765 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X STATE COUNTY PERMIT LOCATION: ELEVATION AS BUILT - 1,243.5' WATERSHED OUTLET MIDDLE ISLAND CREEK QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER SURFACE OWNER KENNETH TOMBLIN ET AL ACREAGE 290.32 ACRES +/- OIL & GAS ROYALTY OWNER S. A. SMITH AND C. B. MORRIS HEIRS TRUST; BETTY MOREHEAD ET VIR; LEASE ACREAGE 290.32 AC.±: 68.88 AC.±; JAY A. WRIGHT ET UX; MORRIS MOUNTAINEER OIL & GAS LLC; CAROL J. KNAPP; 40.81 AC.±: 45.98 AC.±: 77.5 AC.±; BERNICE BAKER; JAMES A. WEEKLEY ET AL; JANIE DENOON TRUST; MICHAEL SHERWOOD 45 AC.±: 58.5 AC.±: 20 AC.±. 07/21/2023

8,169' TO BOTTOM HOLE

12,401'

LONGITUDE 80°47'30"

LONGITUDE 80°47'30"

COUNTY NAME PERMIT

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/29/2022
Job End Date:	6/12/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02765-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Toroweap 1H
Latitude:	39.50762000
Longitude:	-80.81090000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,886
Total Base Water Volume (gal):	18,351,579
Total Base Non Water Volume:	0



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## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Produced Water	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	86.94858	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.16908	

HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			

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D-AIR 3000L	Halliburton	Defoamer					
				Listed Below			
FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			
Sand-Premium White-30/50	Halliburton	Proppant					
				Listed Below			

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

			Crystalline silica, quartz	14808-60-7	100.00000	12.82686	
			Hydrochloric acid	7647-01-0	30.00000	0.03904	
			Guar gum	9000-30-0	100.00000	0.03421	
			Complex Amine Compound	Proprietary	60.00000	0.03062	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01531	
			Surfactant	Proprietary	5.00000	0.00255	
			Sobitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00255	
			Glutaraldehyde	111-30-8	30.00000	0.00250	
			Ammonium persulfate	7727-54-0	100.00000	0.00069	
			Ethoxylated alcohols	Proprietary	30.00000	0.00058	
			Alkoxyated polyhydric alcohol	Proprietary	1.00000	0.00051	
			Organic chloride compound	Proprietary	1.00000	0.00051	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00042	
			Methanol	67-56-1	100.00000	0.00023	
			Oxylated phenolic resin	Proprietary	30.00000	0.00021	
			Ethanol	64-17-5	1.00000	0.00008	

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			Modified thiourea polymer	Proprietary	30.00000	0.00002	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00001	
			Aldehyde	Proprietary	5.00000	0.00001	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00001	
			Formaldehyde	50-00-0	0.01000	0.00001	
			Acrylamide	79-06-1	0.01000	0.00001	
			Sodium glycolate	2836-32-0	0.01000	0.00001	
			Organic salt #2	Proprietary	0.01000	0.00001	
			Organic salt #1	Proprietary	0.01000	0.00001	
			Nitrated acetate salt	Proprietary	0.01000	0.00001	
			Sodium hydroxide	1310-73-2	0.01000	0.00001	
			1-Octadecene	112-88-9	1.00000	0.00000	
			1-Hexadecene	629-73-2	1.00000	0.00000	
			Propargyl alcohol	107-19-7	5.00000		
			Polypropylene glycol	25322-69-4	30.00000		
			Alkenes	Proprietary	100.00000		
			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	30.00000		
			Hexadecene	629-73-2	5.00000		

\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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

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

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