

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

API 47-095-02780 County Tyler District Lincoln  
Quad Paden City Pad Name Nalley Field/Pool Name -----  
Farm name Robert D. & Virginia A. Nalley Well Number Wable 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 4377212m Easting 503898m  
Landing Point of Curve Northing 4376960.140m Easting 503055.168m  
Bottom Hole Northing 4372648m Easting 504537m

Elevation (ft) 972' 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 1/21/2022 Date drilling commenced 3/11/2022 Date drilling ceased 6/13/2022  
Date completion activities began 7/11/2022 Date completion activities ceased 8/30/2022  
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 264' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1376' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft No Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by: SMiley  
2/19/23

API 47-095 - 02780 Farm name Robert D. & Virginia A. Nalley Well number Wable 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"	130'	New	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	382'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2790'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"/8-3/4"	5-1/2"	22020'	New	23#, P-110cy	N/A	Y
Tubing		2-3/8"	6884'		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	190 sx	15.6	1.18	224	0'	8 Hrs.
Surface	Class A	330 sx	15.8	1.20	396	0'	8 Hrs.
Coal							
Intermediate 1	Class C	1107 sx	15.8	1.16	1284	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	3710 sx (Tail)	8.33 (Lead), 15.2(Tail)	1.18 (Tail)	4378	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 22020' MD, 6269' TVD (BHL), 6269' (Deepest Point Drilled) Loggers TD (ft) 22020' MD

Deepest formation penetrated Marcellus Plug back to (ft) N/A

Plug back procedure N/A

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Kick off depth (ft) 6042'

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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

*Smiley*  
*2/19/23*

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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>								

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*Smoley*  
*2/9/23*

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6049' (TOP)</u>	<u>TVD</u>	<u>7015' (TOP) MD</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST    Build up    Drawdown    Open Flow      OIL TEST    Flow    Pump

SHUT-IN PRESSURE   Surface 1450   psi   Bottom Hole ---   psi   DURATION OF TEST   ---   hrs

OPEN FLOW      Gas              Oil              NGL              Water              GAS MEASURED BY

16,398   mcfpd   460   bpd   ---   bpd   1,970   bpd    Estimated    Orifice    Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP DEPTH IN FT NAME TVD</u>	<u>BOTTOM DEPTH IN FT TVD</u>	<u>TOP DEPTH IN FT MD</u>	<u>BOTTOM DEPTH IN FT MD</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H<sub>2</sub>S, ETC)</u>
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**\*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 Halliburton Energy Services  
 Address 3000 W. Sam Houston Pkwy      City Houston      State TX      Zip 76114

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 12/20/2022

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

*[Handwritten Signature]*  
*2/19/23*

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	07/12/2022	21892.6	21851.4	60	Marcellus
2	07/12/2022	21812.9	21648.5	60	Marcellus
3	07/12/2022	21613.2	21448.7	60	Marcellus
4	07/13/2022	21413.4	21249.0	60	Marcellus
5	07/13/2022	21213.7	21049.2	60	Marcellus
6	07/13/2022	21013.9	20849.5	60	Marcellus
7	07/13/2022	20814.2	20649.7	60	Marcellus
8	07/14/2022	20614.4	20450.0	60	Marcellus
9	07/14/2022	20414.7	20250.2	60	Marcellus
10	07/16/2022	20214.9	20050.5	60	Marcellus
11	07/16/2022	20015.2	19850.7	60	Marcellus
12	07/17/2022	19815.4	19651.0	60	Marcellus
13	07/18/2022	19615.7	19451.2	60	Marcellus
14	07/18/2022	19416.0	19251.5	60	Marcellus
15	07/19/2022	19216.2	19051.8	60	Marcellus
16	07/19/2022	19016.5	18852.0	60	Marcellus
17	07/19/2022	18816.7	18652.3	60	Marcellus
18	07/20/2022	18617.0	18452.5	60	Marcellus
19	07/20/2022	18417.2	18252.8	60	Marcellus
20	07/21/2022	18217.5	18053.0	60	Marcellus
21	07/21/2022	18017.7	17853.3	60	Marcellus
22	07/22/2022	17818.0	17653.5	60	Marcellus
23	07/22/2022	17618.2	17453.8	60	Marcellus
24	07/23/2022	17418.5	17254.0	60	Marcellus
25	07/23/2022	17218.8	17054.3	60	Marcellus
26	07/24/2022	17019.0	16854.6	60	Marcellus
27	07/24/2022	16819.3	16654.8	60	Marcellus
28	07/25/2022	16619.5	16455.1	60	Marcellus
29	07/25/2022	16419.8	16255.3	60	Marcellus
30	07/25/2022	16220.0	16055.6	60	Marcellus
31	07/26/2022	16020.3	15855.8	60	Marcellus
32	07/26/2022	15820.5	15656.1	60	Marcellus
33	07/26/2022	15620.8	15456.3	60	Marcellus
34	07/26/2022	15421.0	15256.6	60	Marcellus
35	07/27/2022	15221.3	15056.8	60	Marcellus
36	07/27/2022	15021.5	14857.1	60	Marcellus
37	07/27/2022	14821.8	14657.3	60	Marcellus
38	07/27/2022	14622.1	14457.6	60	Marcellus
39	07/27/2022	14422.3	14257.9	60	Marcellus
40	07/28/2022	14222.6	14058.1	60	Marcellus
41	07/28/2022	14022.8	13858.4	60	Marcellus
42	07/28/2022	13823.1	13658.6	60	Marcellus
43	07/28/2022	13623.3	13458.9	60	Marcellus
44	07/28/2022	13423.6	13259.1	60	Marcellus
45	07/29/2022	13223.8	13059.4	60	Marcellus
46	07/29/2022	13024.1	12859.6	60	Marcellus
47	07/29/2022	12824.3	12659.9	60	Marcellus
48	07/29/2022	12624.6	12460.1	60	Marcellus
49	07/29/2022	12424.8	12260.4	60	Marcellus
50	07/30/2022	12225.1	12060.6	60	Marcellus
51	07/30/2022	12025.4	11860.9	60	Marcellus
52	07/30/2022	11825.6	11661.2	60	Marcellus
53	07/30/2022	11625.9	11461.4	60	Marcellus
54	07/30/2022	11426.1	11261.7	60	Marcellus
55	07/31/2022	11226.4	11061.9	60	Marcellus
56	07/31/2022	11026.6	10862.2	60	Marcellus
57	07/31/2022	10826.9	10662.4	60	Marcellus
58	07/31/2022	10627.1	10462.7	60	Marcellus
59	08/01/2022	10427.4	10262.9	60	Marcellus
60	08/01/2022	10227.6	10063.2	60	Marcellus
61	08/01/2022	10027.9	9863.4	60	Marcellus
62	08/02/2022	9828.2	9663.7	60	Marcellus
63	08/02/2022	9628.4	9464.0	60	Marcellus
64	08/02/2022	9428.7	9264.2	60	Marcellus
65	08/02/2022	9228.9	9064.5	60	Marcellus
66	08/03/2022	9029.2	8864.7	60	Marcellus
67	08/03/2022	8829.4	8665.0	60	Marcellus
68	08/03/2022	8629.7	8465.2	60	Marcellus
69	08/03/2022	8429.9	8265.5	60	Marcellus
70	08/03/2022	8230.2	8065.7	60	Marcellus
71	08/04/2022	8030.4	7866.0	60	Marcellus
72	08/04/2022	7830.7	7666.2	60	Marcellus
73	08/04/2022	7630.9	7466.5	60	Marcellus
74	08/04/2022	7431.2	7266.7	60	Marcellus
75	08/04/2022	7231.5	7067.0	60	Marcellus

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API 47-095-02780 Farm Name Robert D. & Virginia A. Nalley Well Number Wable 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 (units)
1	07/12/2022	80.7	10,209	9,499	4,162	178,460	219,630	N/A
2	07/12/2022	94.0	10,072	5,088	4,152	392,830	321,061	N/A
3	07/12/2022	96.4	9,900	6,308	3,289	407,691	323,377	N/A
4	07/13/2022	92.6	9,444	9,047	4,719	410,417	412,909	N/A
5	07/13/2022	95.8	9,811	4,800	3,495	413,266	320,020	N/A
6	07/13/2022	95.5	9,802	4,857	3,699	406,702	306,170	N/A
7	07/13/2022	94.7	9,942	4,821	3,349	394,631	313,929	N/A
8	07/14/2022	94.5	9,901	4,964	3,485	415,722	323,478	N/A
9	07/14/2022	96.0	9,708	6,495	3,347	415,388	324,641	N/A
10	07/16/2022	94.2	9,870	4,917	3,170	430,775	297,105	N/A
11	07/16/2022	93.5	9,347	4,936	3,689	400,950	292,885	N/A
12	07/17/2022	86.2	9,283	5,246	4,655	405,438	379,139	N/A
13	07/18/2022	95.9	9,496	4,761	3,427	398,890	290,729	N/A
14	07/18/2022	93.5	9,308	7,962	3,264	415,075	284,315	N/A
15	07/19/2022	96.1	9,612	5,553	3,551	335,385	291,620	N/A
16	07/19/2022	96.2	9,485	7,513	3,526	400,882	292,735	N/A
17	07/19/2022	96.8	9,776	5,959	3,616	410,152	297,927	N/A
18	07/20/2022	96.7	9,591	8,426	3,930	411,506	300,667	N/A
19	07/20/2022	96.4	9,674	5,762	3,681	408,704	300,723	N/A
20	07/21/2022	97.7	9,779	6,283	3,459	410,515	299,541	N/A
21	07/21/2022	96.9	9,378	5,980	3,494	413,143	302,833	N/A
22	07/22/2022	98.6	9,554	5,830	3,519	402,685	300,227	N/A
23	07/22/2022	97.5	9,361	5,724	3,551	391,899	292,001	N/A
24	07/23/2022	98.2	9,371	5,806	3,462	398,709	299,796	N/A
25	07/23/2022	88.0	8,561	5,866	3,440	398,232	364,980	N/A
26	07/24/2022	97.4	9,158	6,124	3,429	398,803	297,764	N/A
27	07/24/2022	94.7	9,085	5,996	3,604	398,650	298,870	N/A
28	07/25/2022	98.3	8,909	5,987	3,554	406,025	297,252	N/A
29	07/25/2022	96.1	8,866	6,186	3,434	395,995	290,003	N/A
30	07/25/2022	96.7	9,134	5,968	3,389	396,958	292,820	N/A
31	07/26/2022	88.1	8,321	5,827	3,084	410,448	311,348	N/A
32	07/26/2022	97.3	8,782	5,550	3,499	409,419	290,831	N/A
33	07/26/2022	95.9	8,804	5,930	3,633	399,089	289,663	N/A
34	07/26/2022	98.5	9,449	6,106	3,891	407,876	301,159	N/A
35	07/27/2022	97.9	8,887	6,094	3,464	395,914	302,834	N/A
36	07/27/2022	95.4	8,904	6,631	3,358	405,317	294,774	N/A
37	07/27/2022	98.1	8,836	5,617	3,484	409,129	306,905	N/A
38	07/27/2022	97.1	8,775	6,492	3,629	410,087	305,260	N/A
39	07/27/2022	98.6	8,727	5,479	3,715	405,060	304,737	N/A
40	07/28/2022	91.2	8,402	5,656	3,633	395,464	317,004	N/A
41	07/28/2022	98.0	8,606	6,187	4,010	403,871	315,048	N/A
42	07/28/2022	97.3	8,471	6,247	3,657	397,790	305,715	N/A
43	07/28/2022	97.7	8,730	7,050	3,632	404,523	309,127	N/A
44	07/28/2022	98.2	8,553	5,137	4,419	407,139	300,824	N/A
45	07/29/2022	98.4	8,212	5,524	3,500	395,570	296,764	N/A
46	07/29/2022	97.7	8,487	6,365	3,440	401,049	302,759	N/A
47	07/29/2022	98.2	8,333	7,066	3,511	409,064	298,926	N/A
48	07/29/2022	97.6	8,481	5,606	4,329	401,866	291,117	N/A
49	07/29/2022	98.0	8,317	5,167	3,367	403,914	304,285	N/A
50	07/30/2022	98.6	8,288	6,197	3,905	401,230	300,372	N/A
51	07/30/2022	95.6	8,342	5,461	4,827	396,214	307,638	N/A
52	07/30/2022	97.2	8,294	5,321	3,405	403,598	284,676	N/A
53	07/30/2022	96.9	8,232	4,891	3,561	408,021	295,985	N/A
54	07/30/2022	98.6	8,209	5,687	3,825	398,453	296,942	N/A
55	07/31/2022	98.3	8,013	6,534	3,875	410,139	297,914	N/A
56	07/31/2022	98.5	8,020	5,219	3,556	401,726	298,395	N/A
57	07/31/2022	96.8	7,976	5,365	3,940	400,116	290,482	N/A
58	07/31/2022	97.8	7,892	5,233	3,309	410,530	297,709	N/A
59	08/01/2022	96.2	7,798	5,125	3,447	413,852	290,378	N/A
60	08/01/2022	95.8	7,566	6,146	3,566	400,091	291,542	N/A
61	08/01/2022	83.4	7,518	5,618	4,813	411,743	354,166	N/A
62	08/02/2022	95.6	7,385	5,461	3,725	407,506	292,551	N/A
63	08/02/2022	95.1	7,462	5,356	3,473	401,631	278,470	N/A
64	08/02/2022	95.9	7,742	5,288	3,483	398,495	284,674	N/A
65	08/02/2022	97.5	7,609	5,553	3,428	395,058	285,690	N/A
66	08/03/2022	96.6	7,288	5,452	4,179	405,617	284,930	N/A
67	08/03/2022	95.6	7,654	5,135	4,122	407,388	307,786	N/A
68	08/03/2022	96.1	7,539	5,703	4,851	394,621	281,859	N/A
69	08/03/2022	96.4	7,425	5,743	4,683	402,577	286,037	N/A
70	08/03/2022	98.2	7,437	5,058	3,809	413,882	295,182	N/A
71	08/04/2022	98.7	7,381	5,477	3,741	408,943	292,347	N/A
72	08/04/2022	98.4	7,249	5,101	4,427	418,418	300,868	N/A
73	08/04/2022	96.3	7,411	6,448	4,218	414,471	281,744	N/A
74	08/04/2022	96.3	7,198	5,463	4,035	391,880	272,452	N/A
75	08/04/2022	93.6	6,709	5,757	4,516	411,065	281,275	N/A
AVG=		96	8,655	5,869	3,740	30,064,332	22,610,291	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
Sandstone	370	420	370	420
Silty Sandstone, Tr Shale	420	470	420	470
Sandy Siltstone, occ Shale	470	670	470	670
Silty Sandstone, tr Shale	670	820	670	820
Sandstone, Tr coal	820	1,020	820	1,020
Sandstone, occ Shale, Tr siltstone	1,020	1,170	1,020	1,170
Shaley Sandstone	1,170	1,270	1,170	1,270
Sandstone, Tr coal	1,270	1,420	1,270	1,420
Silty Sandstone, occ Shale	1,420	1,470	1,420	1,470
Silty Sandstone, tr Shale	1,470	1,520	1,470	1,520
Sandy Siltstone	1,520	1,620	1,520	1,620
Sandstone, occ Siltstone	1,620	1,720	1,620	1,720
Sandy Siltstone; tr drsy pyr	1,720	1,797	1,720	1,874
Big Lime	1,797	2,248	1,874	2,413
Fifty Foot Sandstone	2,248	2,657	2,413	2,890
Gordon	2,657	2,825	2,890	3,089
Fifth Sandstone	2,825	3,111	3,089	3,432
Bayard	3,111	3,793	3,432	4,226
Speechley	3,793	4,084	4,226	4,565
Balltown	4,084	4,518	4,565	5,066
Bradford	4,518	4,809	5,066	5,407
Benson	4,809	5,025	5,407	5,661
Alexander	5,025	5,852	5,661	6,670
Sycamore	5,852	5,945	6,670	6,806
Middlesex	5,945	6,022	6,806	6,951
Burkett	6,022	6,049	6,951	7,015
Marcellus	6,049	NA	7,015	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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## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/11/2022
Job End Date:	8/4/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02780-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Wable 1H
Latitude:	39.54449000
Longitude:	-80.95480000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,268
Total Base Water Volume (gal):	23,907,894
Total Base Non Water Volume:	0



### 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	86.90713	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.16357	

*Handwritten signature or initials in blue ink.*

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OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			
HYDROCHLORI C ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			

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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	12.88622
			Hydrochloric acid	7647-01-0	30.00000	0.03924
			Guar gum	9000-30-0	100.00000	0.02590
			Complex Amine Compound	Proprietary	60.00000	0.02466
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01233
			Glutaraldehyde	111-30-8	30.00000	0.00243
			Surfactant	Proprietary	5.00000	0.00206
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00206
			Ammonium persulfate	7727-54-0	100.00000	0.00056
			Ethoxylated alcohols	Proprietary	30.00000	0.00048
			Organic chloride compound	Proprietary	1.00000	0.00041
			Alkoxylated polyhydric alcohol	Proprietary	1.00000	0.00041
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00041
			Methanol	67-56-1	100.00000	0.00023
			Oxylated phenolic resin	Proprietary	30.00000	0.00017
			Ethanol	64-17-5	1.00000	0.00008
			Modified thiourea polymer	Proprietary	10.00000	0.00002
			Aldehyde	Proprietary	5.00000	0.00001
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	5.00000	0.00001
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00001
			Sodium glycolate	2836-32-0	0.01000	0.00000
			Organic salt #2	Proprietary	0.01000	0.00000
			Acrylamide	79-06-1	0.01000	0.00000
			Organic salt #1	Proprietary	0.01000	0.00000
			Formaldehyde	50-00-0	0.01000	0.00000

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			Nitrated acetate salt	Proprietary	0.01000	0.00000	
			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			1-Hexadecene	629-73-2	1.00000	0.00000	
			1-Octadecene	112-88-9	1.00000	0.00000	

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

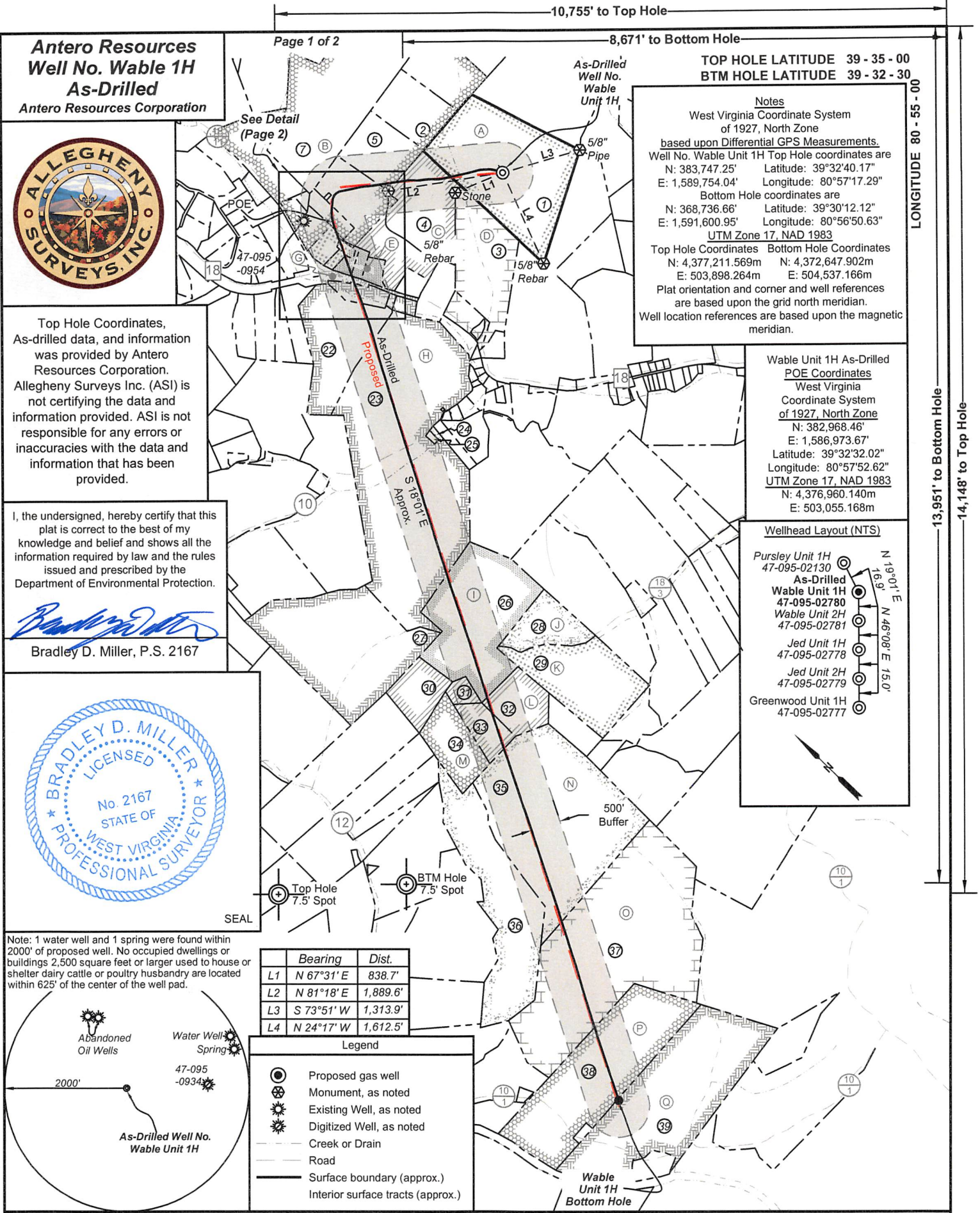
\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

\*\*\* 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

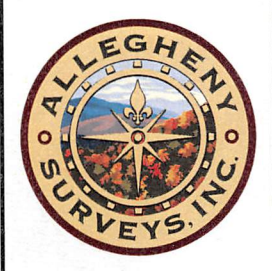
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

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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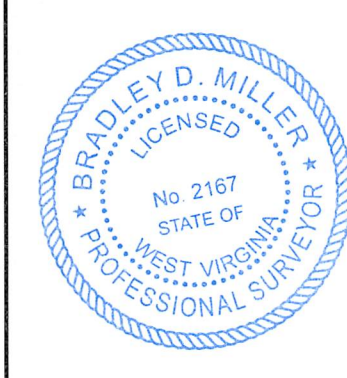
**Antero Resources**  
**Well No. Wable 1H**  
**As-Drilled**  
 Antero Resources Corporation



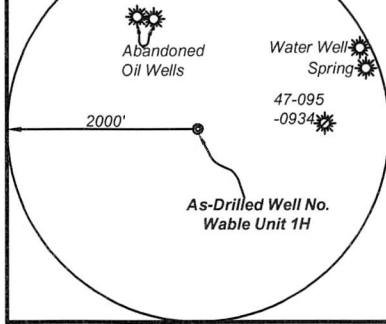
Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

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



Note: 1 water well and 1 spring 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.



	Bearing	Dist.
L1	N 67°31' E	838.7'
L2	N 81°18' E	1,889.6'
L3	S 73°51' W	1,313.9'
L4	N 24°17' W	1,612.5'

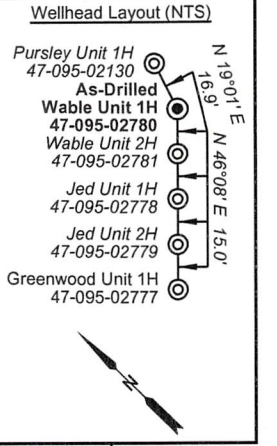
**Legend**

- 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.)

**TOP HOLE LATITUDE 39 - 35 - 00**  
**BTM HOLE LATITUDE 39 - 32 - 30**

**Notes**  
 West Virginia Coordinate System of 1927, North Zone  
 based upon Differential GPS Measurements.  
 Well No. Wable Unit 1H Top Hole coordinates are  
 N: 383,747.25' Latitude: 39°32'40.17"  
 E: 1,589,754.04' Longitude: 80°57'17.29"  
 Bottom Hole coordinates are  
 N: 368,736.66' Latitude: 39°30'12.12"  
 E: 1,591,600.95' Longitude: 80°56'50.63"  
 UTM Zone 17, NAD 1983  
 Top Hole Coordinates Bottom Hole Coordinates  
 N: 4,377,211.569m N: 4,372,647.902m  
 E: 503,898.264m E: 504,537.166m  
 Plat orientation and corner and well references are based upon the grid north meridian.  
 Well location references are based upon the magnetic meridian.

**Wable Unit 1H As-Drilled POE Coordinates**  
 West Virginia Coordinate System of 1927, North Zone  
 N: 382,968.46'  
 E: 1,586,973.67'  
 Latitude: 39°32'32.02"  
 Longitude: 80°57'52.62"  
 UTM Zone 17, NAD 1983  
 N: 4,376,960.140m  
 E: 503,055.168m



FILE NO: 270-54-L-13  
 DRAWING NO: Wable Unit 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: December 6 2022  
 OPERATOR'S WELL NO. Wable Unit 1H  
 API WELL NO  
 47 - 095 - 02780  
 STATE COUNTY PERMIT

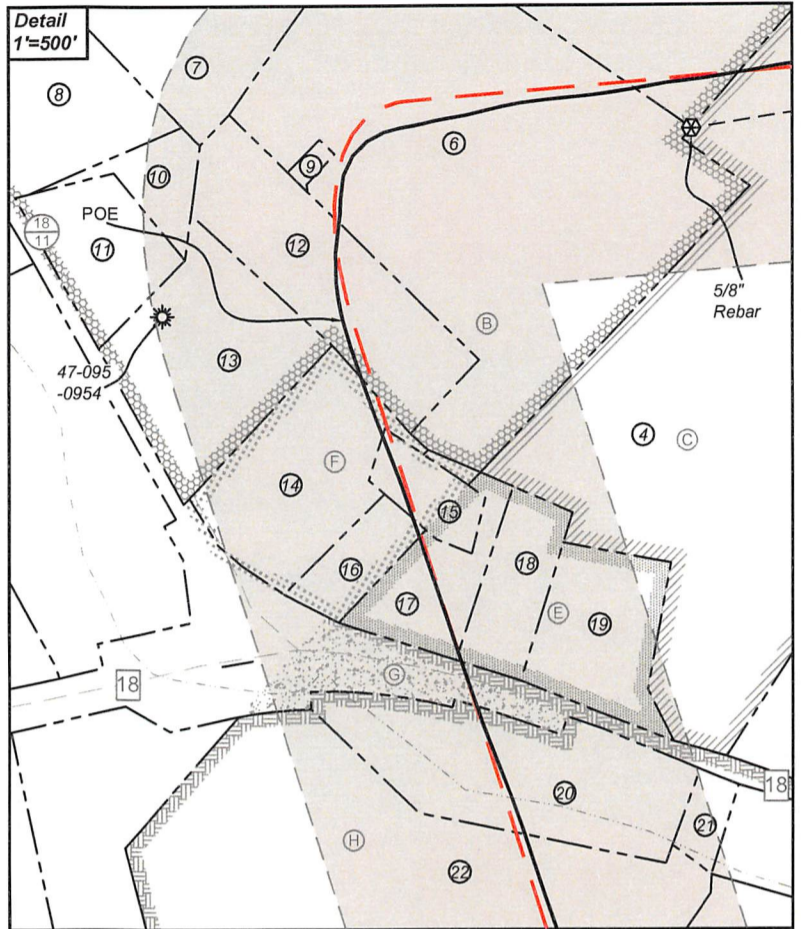
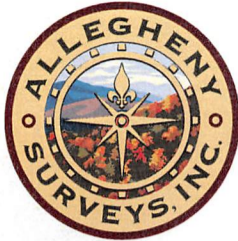
WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: As-Built 971.8' WATERSHED: Middle Island Creek QUADRANGLE: Paden City  
 DISTRICT: Lincoln Robert D. & WVDOT, Division of Highways; COUNTY: Tyler 6.03; 2.02;  
 SURFACE OWNER: Virginia A. Nalley Donald H. Lancaster, Jr.; Donna Smith; Debra Lynn Warner; 80; 48.1; 53.7;  
 Gerald C. Clutter, et ux; Ridgetop Capital, LP; 212.4; 466.7275;  
 ROYALTY OWNER: Robert D. Nalley, et ux (4); Robert L. Keller; William P. Ingram; Larry Folger, et ux; LEASE NO: ACREAGE: 80.00 61.225; 49.66;  
 205.862; 140.0;  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 127.39; 71.93152  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 22,020' MD 6,269' TVD

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

**Antero Resources**  
**Well No. Wable 1H**  
**As-Drilled**

Antero Resources Corporation



ID	TM/Par	Owner	Bk/Pg	Acres
1	8-54	Robert D. & Virginia A. Nalley	198/41	80.00
2	8-38.3	Joann & Howard L. Schubach Jr.	467/383	21.17
3	12-13	Robert D. & Virginia A. Nalley	183/452	38.75
4	8-53	Robert D. & Virginia A. Nalley	200/53	48.10
5	8-38.5	Donald D. & Alice J. Haught	300/583	21.17
6	8-38.6	Joann & Howard L. Schubach Jr.	467/383	21.17
7	8-38	Joann & Howard L. Schubach Jr.	451/645	98.77
8	8-47	Victoria L. Keller	223/15	21.05
9	8-38.7	Tyler County Shrine Club Holding Corp.	OR 53/41	0.15
10	8-49	Tonya Rachele Keller	211/476	1.08
11	8-50	Tonya Rachele Keller	200/281	2.51
12	8-38.2	Tyler County Shrine Club Holding Corp.	263/77	5.03
13	8-38.1	Dana L. Shields & Mary Clare	359/547	5.00
14	8-51	Robert D. & Virginia Nalley	186/336	4.50
15	8-51.1	Matthew Scott Ash	597/317	1.10
16	8-52	Robert D. Nalley	163/422	1.53
17	12-6	Robert D. Nalley	164/175	1.96
18	12-7	Robert D & Virginia Nalley	285/385	2.04
19	12-8	Robert D. & Virginia Nalley	305/151	3.80
20	12-9.1	WV DOT, Division of Highways	332/271	6.00
21	12-10	Joseph E. Miller	373/702	0.88
22	12-9	William P. & Joanne M. Ingram	174/60	43.10
23	12-27	William P. & Joanne Ingram	156/175	183.16
24	12-36	William A. & Tracy Fletcher	227/51	0.46
25	12-27.1	William & Tracy Fletcher	379/501	0.50
26	12-51	Rickie Lee Littleton	281/193	61.23
27	12-50	William P. Ingram	605/159	88.00
28	12-61	Melinda A. King	568/757	17.00
29	12-62	Leslie Ray Tennant, et al	282/305	50.00
30	12-56	Gerald C. & Mary Lou Clutter	247/307	17.87
31	12-57	Gerald C. & Mary Lou Clutter	247/307	3.78
32	12-60	Gerald C. & Mary Lou Clutter	286/350	17.50
33	12-59	Gerald C. & Mary Lou Clutter	286/350	11.00
34	12-58	John W. & Leah D. Starkey	373/699	19.25
35	15-9	Ridgetop Capital, LP	375/206	120.00
36	15-8	Ridgetop Capital, LP	375/206	68.20
37	15-13	B. F., Ben H. & Ida M. Kile	174/412	140.00
38	15-16	Mary Ann Devine, et al	W36/282	81.67
39	15-17	Earl & Donna Smith	191/12	127.39

Leases	
A	Robert D. Nalley, et ux
B	Robert L. Keller
C	Robert D. Nalley, et ux
D	Robert D. Nalley, et ux
E	Robert D. Nalley, et ux
F	Robert D. Nalley, et ux
G	WV DOT, Division of Highways
H	William P. Ingram
I	Larry Folger, et ux
J	BRC Appalachian Minerals I, LLC
K	BRC Appalachian Minerals I, LLC
L	Gerald C. Clutter, et ux
M	John W. Starkey, et ux
N	Ridgetop Capital LP
O	Donald H. Lancaster, Jr.
P	Debra Lynn Warner
Q	Donna Smith

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