

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

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MAY 10 2023

API 47 - 103 - 03493 County Wetzel District Green
Quad Pine Grove Pad Name Furbee Field/Pool Name -----
Farm name James A. Sell Well Number Eckleberry Unit 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4378664.979m Easting 523083.867m
Landing Point of Curve Northing 4378654.86m Easting 524157.69m
Bottom Hole Northing 4373989.468m Easting 525780.495m

Elevation (ft) 1211' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
Air - Foam & 4% KCL
Mud - Polymer

Date permit issued 4/28/2022 Date drilling commenced 8/15/2022 Date drilling ceased 11/16/2022
Date completion activities began 1/8/2023 Date completion activities ceased 2/8/2023
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

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

Reviewed by: [Signature]
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API 47-103 - 03493 Farm name James A. Sell Well number Eckleberry Unit 2H

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"	680'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3810'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	25334'	New	23#, P-110-ICY	N/A	Y
Tubing		2-3/8"	7941'		4.7#, P-110		
Packer type and depth set		N/A					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	209 sx	15.6	1.18	247	0'	8 Hrs.
Surface	Class A	780 sx	15.8	1.17	913	0'	8 Hrs.
Coal							
Intermediate 1	Class C	1490 sx	15.8	1.16	1728	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	4105 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.25 (Tail)	5131	-500' Into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 25334' MD, 7149' TVD (BHL), 7149' (Deepest Point Drilled) Loggers TD (ft) 25334' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 7175'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Conductor - 0
 Surface - 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface
 Intermediate - 1 above float joint, 1 above float collar, 1 every 4th joint to surface
 Production - 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED N/A

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Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1/8/2023	25206.9	25163.9	60	Marcellus
2	1/8/2023	25125.16488	24959.4893	60	Marcellus
3	1/9/2023	24923.95417	24758.2786	60	Marcellus
4	1/9/2023	24722.74345	24557.0679	60	Marcellus
5	1/9/2023	24521.53274	24355.8571	60	Marcellus
6	1/10/2023	24320.32202	24154.6464	60	Marcellus
7	1/10/2023	24119.11131	23953.4357	60	Marcellus
8	1/10/2023	23917.9006	23752.225	60	Marcellus
9	1/10/2023	23716.68988	23551.0143	60	Marcellus
10	1/11/2023	23515.47917	23349.8036	60	Marcellus
11	1/11/2023	23314.26845	23148.5929	60	Marcellus
12	1/11/2023	23113.05774	22947.3821	60	Marcellus
13	1/12/2023	22911.84702	22746.1714	60	Marcellus
14	1/12/2023	22710.63631	22544.9607	60	Marcellus
15	1/12/2023	22509.4256	22343.75	60	Marcellus
16	1/13/2023	22308.21488	22142.5393	60	Marcellus
17	1/13/2023	22107.00417	21941.3286	60	Marcellus
18	1/13/2023	21905.79345	21740.1179	60	Marcellus
19	1/13/2023	21704.58274	21538.9071	60	Marcellus
20	1/14/2023	21503.37202	21337.6964	60	Marcellus
21	1/14/2023	21302.16131	21136.4857	60	Marcellus
22	1/14/2023	21100.9506	20935.275	60	Marcellus
23	1/15/2023	20899.73988	20734.0643	60	Marcellus
24	1/15/2023	20698.52917	20532.8536	60	Marcellus
25	1/15/2023	20497.31845	20331.6429	60	Marcellus
26	1/15/2023	20296.10774	20130.4321	60	Marcellus
27	1/16/2023	20094.89702	19929.2214	60	Marcellus
28	1/16/2023	19893.68631	19728.0107	60	Marcellus
29	1/16/2023	19692.4756	19526.8	60	Marcellus
30	1/17/2023	19491.26488	19325.5893	60	Marcellus
31	1/17/2023	19290.05417	19124.3786	60	Marcellus
32	1/17/2023	19088.84345	18923.1679	60	Marcellus
33	1/17/2023	18887.63274	18721.9571	60	Marcellus
34	1/17/2023	18686.42202	18520.7464	60	Marcellus
35	1/18/2023	18485.21131	18319.5357	60	Marcellus
36	1/18/2023	18284.0006	18118.325	60	Marcellus
37	1/18/2023	18082.78988	17917.1143	60	Marcellus
38	1/19/2023	17881.57917	17715.9036	60	Marcellus
39	1/19/2023	17680.36845	17514.6929	60	Marcellus
40	1/19/2023	17479.15774	17313.4821	60	Marcellus
41	1/19/2023	17277.94702	17112.2714	60	Marcellus
42	1/20/2023	17076.73631	16911.0607	60	Marcellus
43	1/20/2023	16875.5256	16709.85	60	Marcellus
44	1/20/2023	16674.31488	16508.6393	60	Marcellus
45	1/20/2023	16473.10417	16307.4286	60	Marcellus
46	1/21/2023	16271.89345	16106.2179	60	Marcellus
47	1/21/2023	16070.68274	15905.0071	60	Marcellus
48	1/21/2023	15869.47202	15703.7964	60	Marcellus
49	1/21/2023	15668.26131	15502.5857	60	Marcellus
50	1/22/2023	15467.0506	15301.375	60	Marcellus
51	1/22/2023	15265.83988	15100.1643	60	Marcellus
52	1/22/2023	15064.62917	14898.9536	60	Marcellus
53	1/22/2023	14863.41845	14697.7429	60	Marcellus
54	1/22/2023	14662.20774	14496.5321	60	Marcellus
55	1/23/2023	14460.99702	14295.3214	60	Marcellus
56	1/23/2023	14259.78631	14094.1107	60	Marcellus
57	1/24/2023	14058.5756	13892.9	60	Marcellus
58	1/24/2023	13857.36488	13691.6893	60	Marcellus
59	1/24/2023	13656.15417	13490.4786	60	Marcellus
60	1/24/2023	13454.94345	13289.2679	60	Marcellus
61	1/25/2023	13253.73274	13088.0571	60	Marcellus
62	1/25/2023	13052.52202	12886.8464	60	Marcellus
63	1/25/2023	12851.31131	12685.6357	60	Marcellus
64	1/25/2023	12650.1006	12484.425	60	Marcellus
65	1/26/2023	12448.88988	12283.2143	60	Marcellus
66	1/26/2023	12247.67917	12082.0036	60	Marcellus
67	1/26/2023	12046.46845	11880.7929	60	Marcellus
68	1/26/2023	11845.25774	11679.5821	60	Marcellus
69	1/26/2023	11644.04702	11478.3714	60	Marcellus
70	1/26/2023	11442.83631	11277.1607	60	Marcellus
71	1/26/2023	11241.6256	11075.95	60	Marcellus
72	1/27/2023	11040.41488	10874.7393	60	Marcellus
73	1/27/2023	10839.20417	10673.5286	60	Marcellus
74	1/27/2023	10637.99345	10472.3179	60	Marcellus
75	1/27/2023	10436.78274	10271.1071	60	Marcellus
76	1/27/2023	10235.57202	10069.8964	60	Marcellus
77	1/27/2023	10034.36131	9868.68571	60	Marcellus
78	1/27/2023	9833.150595	9667.475	60	Marcellus
79	1/28/2023	9631.939881	9466.26429	60	Marcellus
80	1/28/2023	9430.729167	9265.05357	60	Marcellus
81	1/28/2023	9229.518452	9063.84286	60	Marcellus
82	1/28/2023	9028.307738	8862.63214	60	Marcellus
83	1/28/2023	8827.097024	8661.42143	60	Marcellus
84	1/28/2023	8625.88631	8460.21071	60	Marcellus
85	1/29/2023	8424.675595	8259	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	1/8/2023	76.1	9795	6219	4691	177320	226631	N/A
2	1/8/2023	81.6	10236	5891	4501	410420	351964	N/A
3	1/9/2023	86.1	10648	6051	4596	417320	342214	N/A
4	1/9/2023	81.0	10197	5458	4407	405900	330661	N/A
5	1/9/2023	80.2	10128	5497	4402	416480	342235	N/A
6	1/10/2023	79.6	10199	5633	4736	410790	310352	N/A
7	1/10/2023	83.5	10574	5694	4046	405430	288598	N/A
8	1/10/2023	82.8	10523	5138	4316	414730	289187	N/A
9	1/10/2023	83.7	10379	5029	4490	415410	292582	N/A
10	1/11/2023	83.4	10326	5373	4909	407310	301836	N/A
11	1/11/2023	84.8	10043	6076	4128	410080	284998	N/A
12	1/11/2023	81.8	10007	5182	4242	415080	296149	N/A
13	1/12/2023	80.8	10056	5743	4300	413080	299204	N/A
14	1/12/2023	81.6	10029	6291	4330	408920	290993	N/A
15	1/12/2023	82.2	10054	6184	4216	395300	289763	N/A
16	1/13/2023	80.9	10075	6008	4342	396100	283993	N/A
17	1/13/2023	85.3	10046	5059	4781	407410	300896	N/A
18	1/13/2023	91.5	10545	4958	4499	415810	304322	N/A
19	1/13/2023	93.1	10438	4494	4405	408110	353178	N/A
20	1/14/2023	90.9	10467	5871	4073	412270	297619	N/A
21	1/14/2023	94.5	10513	5944	4443	400120	280612	N/A
22	1/14/2023	93.6	10563	5036	4432	399520	285439	N/A
23	1/15/2023	93.3	10482	5686	4640	415760	295111	N/A
24	1/15/2023	91.5	10061	4166	4614	411330	288776	N/A
25	1/15/2023	90.9	10026	5520	4438	415770	297364	N/A
26	1/15/2023	94.6	10095	5828	4430	412370	303588	N/A
27	1/16/2023	91.6	10045	4445	4379	397800	283697	N/A
28	1/16/2023	94.6	10020	5927	4487	416050	292688	N/A
29	1/16/2023	96.1	10025	4789	4541	414810	289000	N/A
30	1/17/2023	95.9	10090	4721	4458	401250	276419	N/A
31	1/17/2023	94.6	10034	4751	4303	417600	295203	N/A
32	1/17/2023	95.3	9980	5669	4638	412860	281161	N/A
33	1/17/2023	93.6	10035	4684	4761	417210	287435	N/A
34	1/17/2023	93.7	9923	4656	4591	417740	292257	N/A
35	1/18/2023	94.7	10027	4873	4339	413390	289813	N/A
36	1/18/2023	96.8	10018	8509	4925	416380	288169	N/A
37	1/18/2023	93.2	9937	4860	4479	418220	280702	N/A
38	1/19/2023	97.3	9960	5883	4890	419130	281371	N/A
39	1/19/2023	93.3	9874	4161	4221	410650	283680	N/A
40	1/19/2023	97.5	10029	5840	0	397980	287095	N/A
41	1/19/2023	94.8	9861	5284	4353	405500	297188	N/A
42	1/20/2023	93.9	9035	5680	4750	405160	292155	N/A
43	1/20/2023	95.6	9063	6054	4226	418520	302869	N/A
44	1/20/2023	95.1	9670	5479	4315	396790	283315	N/A
45	1/20/2023	97.5	9468	5874	4153	415840	293598	N/A
46	1/21/2023	96.7	9577	5751	4402	415150	304482	N/A
47	1/21/2023	97.7	9545	5865	4579	405580	289861	N/A
48	1/21/2023	96.0	9438	5563.27	4520.523	422090	292090	N/A
49	1/21/2023	96.7	9559	5603	4616	401440	293073	N/A
50	1/22/2023	97.7	9485	5399	4426	414900	297975	N/A
51	1/22/2023	98.2	9428	5642	4377	414120	297470	N/A
52	1/22/2023	96.7	9488	5769	4282	415430	293911	N/A
53	1/22/2023	89.3	9118	5618	4155	417140	352843	N/A
54	1/22/2023	97.5	9338	5715	4488	409660	296694	N/A
55	1/23/2023	98.0	9524	5576.74	4235.231	413560	299070	N/A
56	1/23/2023	97.7	9411	5478	4522	416130	290583	N/A
57	1/24/2023	97.6	9417	5314	4410	413790	291026	N/A
58	1/24/2023	96.7	8981	5337	4159	411170	282959	N/A
59	1/24/2023	98.0	8969	5150	4014	416950	302204	N/A
60	1/24/2023	97.8	9054	5408	4217	414320	300182	N/A
61	1/25/2023	97.9	9045	4533	4665	413800	300159	N/A
62	1/25/2023	96.5	9014	5063	4364	412030	288242	N/A
63	1/25/2023	97.0	8972	6431	4411	414530	292125	N/A
64	1/25/2023	97.9	8962	5284	4417	404250	283871	N/A
65	1/26/2023	98.6	8984	5574	4527	414470	306045	N/A
66	1/26/2023	97.9	9051	5666	4481	416370	297392	N/A
67	1/26/2023	98.2	9026	4887	4253	397350	284274	N/A
68	1/26/2023	96.3	8981	5394	4418	415740	292183	N/A
69	1/26/2023	97.4	9010	4896	4208	415440	293913	N/A
70	1/26/2023	98.0	8930	4885	4524	414360	297062	N/A
71	1/26/2023	97.7	8743	5082	4183	409350	294940	N/A
72	1/27/2023	98.0	8811	4407	4124	417040	298624	N/A
73	1/27/2023	97.6	8802	5532	3736	412526	295956	N/A
74	1/27/2023	97.8	8901	5275	3833	403570	296792	N/A
75	1/27/2023	97.9	8568	5033	3823	413620	296731	N/A
76	1/27/2023	97.1	8320	4752	4057	408230	295789	N/A
77	1/27/2023	98.1	8687	5243	3998	405710	294091	N/A
78	1/27/2023	97.9	8497	4993	4015	404150	277785	N/A
79	1/28/2023	97.4	8528	4844	3980	404880	278150	N/A
80	1/28/2023	98.0	8667	5023	3729	406270	294363	N/A
81	1/28/2023	98.0	8633	4830	3960	410190	290207	N/A
82	1/28/2023	97.9	8218	3664	3990	415100	289370	N/A
83	1/28/2023	94.4	7933	5138	3840	399180	270314	N/A
84	1/28/2023	99.0	8094	3795	3737	408450	282118	N/A
85	1/29/2023	98.5	7854	5477	3510	414530	302765	N/A
	AVERAGE	93	9,542	5,352	4,287	34,683,586	25,083,764	0

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Sandy Siltstone, LS	100	320	100	320
Shaley Siltstone, tr LS	320	370	320	370
Sandy Shale	370	620	370	620
Siltstone, Occ SS, tr Shale, tr Coal	470	820	470	820
Sandy Siltstone, tr LS, tr Shale	620	820	620	820
Silty Sandstone, tr LS	820	920	820	920
Sandy Siltstone, tr LS, tr Shale	920	1,020	920	1,020
Silty Sandstone, tr Shale	1,020	1,120	1,020	1,120
Silty Sandstone, tr Shale, tr LS	1,120	1,220	1,120	1,220
Shaley Sandstone, occ Siltstone	1,220	1,420	1,220	1,420
Silty Sandstone, tr shale	1,420	1,520	1,420	1,520
Sandy Siltstone, tr Coal	1,520	1,670	1,520	1,670
Silty Sandstone, tr Coal, tr Shale	1,670	1,870	1,670	1,870
Sandy Shale, tr Coal	1,870	2,020	1,870	2,020
Silty Sandstone, rr Coal	2,020	2,105	2,020	2,236
Big Lime	2,135	2,969	2,236	3,240
Fifty Foot Sandstone	2,969	3,019	3,210	3,298
Gordon	3,019	3,240	3,268	3,552
Fifth Sandstone	3,240	3,585	3,522	3,946
Bayard	3,585	3,993	3,916	4,433
Speechley	3,993	4,148	4,403	4,616
Balltown	4,148	4,641	4,586	5,190
Bradford	4,641	5,199	5,160	5,844
Benson	5,199	5,637	5,814	6,354
Alexander	5,637	6,833	6,324	7,767
Sycamore	6,672	6,803	7,560	7,737
Middlesex	6,803	6,901	7,737	7,897
Burkett	6,901	6,932	7,897	7,957
Tully	6,932	7,015	7,957	8,207
Marcellus	7,015	NA	8,207	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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Antero Resources
Well No. Eckleberry 2H
As-Drilled
 Antero Resources Corporation



As-Drilled Well No. Eckleberry Unit 2H

Conc. Mans.

L4

L3

L2

L1

Rebar

1/2"

Ed

D

C

B

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ID	TM-Par	Owner	Bk/Pg	Acres
1	17-12	James Allen Sell	370/148	58.10
2	17-60	Ross Bucher	411/765	79.00
3	17-1	James Allen Sell	370/148	15.35
4	13-71	Charles R. & Kay L. Blair	387/577	63.11
5	17-71.1	Clarence L. & Carol J. Lancaster	387/266	19.19
6	17-3.1	Bradford D. Highley	386/607	1.00
7	17-2	Clarence & Carol Lancaster	287/357	0.50
8	17-3	Bradford Highley	386/607	17.00
9	17-4	James Straight	223/193	10.80
10	13-73	James Straight, et al	W57/427	14.60
11	13-74	Linda D. Straight	W67/427	0.29
12	13-65.4	Raye Anne Lloyd	445/660	2.99
13	13-65	Raye Anne Lloyd	445/660	18.01
14	13-78	Sebastian, Jr. & Marcella Harrison	281/94	25.37
15	17-5	Coastal Forest Resources	444/105	90.00
16	17-20	Heartland Forest Land Fund VII LP	431/936	123.50
17	17-19	Donna Bassett	299/614	19.10
18	17-29	Leslie & Georgia Bassett	319/394	66.00
19	17-31	Heartland Forest Land Fund VII,LP	431/936	120.33
20	17-40	Heartland Forest Land Fund VII,LP	431/936	120.00
21	17-49	Heartland Forest Land Fund VII, LP	431/936	20.90
22	17-50	EIP III, West Virginia LLC	463/193	69.00
23	20-14	Robert Bassett	371/32	126.74
24	20-46	Sara Ruth Cool & Peggy Ann Dawson Supplemental Needs Trust	471/207	107.10
25	20-14.4	Matthew D. Bassett, et al	421/365	97.18
26	20-14.2	Coastal Forest Resources Co.	444/105	37.40
27	20-14.1	Coastal Forest Resources Co.	444/105	49.25
28	20-15	Coastal Forest Resources Co.	444/105	198.00
29	20-21	Coastal Forest Resources Co.	444/105	29.00
30	20-37	Coastal Forest Resources Co.	444/105	246.84
31	20-37.1	Douglas & Debra Williams	472/115	6.26
32	21-15	Douglas & Debra Williams	385/159	57.06
33	20-49	Douglas & Debra Williams	472/115	2.00
34	23-1	Israel Miller Estate	417/744	100.00

Leases	
A	James Allen Sell
B	William R. Stalnaker
C	Marilyn Halley Seeley
D	Tribune Resources Minerals, LLC
E	Linda Darlene Straight
F	Marcella K. Harrison
G	Tribune Resources Minerals, LLC
H	Shiben Estates, Inc.
I	AMP Fund II, LP
J	Thomas Cunningham, et ux
K	Tribune Resources Minerals, LLC
L	Robert G. Bassett, et ux
M	Tribune Resources Minerals, LLC
N	Shiben Estates, Inc.
O	Josephine Brast, et al
P	Shiben Estates, Inc.
Q	Israel Miller, et ux

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WV Department of
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FILE NO: 120-34-G-18
 DRAWING NO: Eckleberry Unit 2H As-Drilled
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY:
 Submeter
 PROVEN SOURCE OF ELEVATION:
 WVDOT, Harrisville, WV

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: May 5 2023
 OPERATOR'S WELL NO. Eckleberry Unit 2H
 API WELL NO
 47 - 103 - 03493
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Drilled 1,211' WATERSHED: Fishing Creek QUADRANGLE: Pine Grove
 DISTRICT: Green James COUNTY: Wayne 264.75; 100;
 SURFACE OWNER: A. Sell Robert G. Bassett, et ux; Josephine Brast, et al; Israel Miller, et ux; 25.6; 75; 500; 123.5;
 ROYALTY OWNER: James Allen Sell; Marilyn Halley Seeley; Linda Darlene Straight; Marcella K. Harrison; LEASE NO: ACREAGE: 58.1 109.83125; 140.3333;
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 7.149' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,334' MD

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

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/8/2023
Job End Date:	1/29/2023
State:	West Virginia
County:	Wetzel
API Number:	47-103-03493-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Eckleberry Unit 2H
Latitude:	39.55728000
Longitude:	-80.73148000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,149
Total Base Water Volume (gal):	26,481,758
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	86.46670	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.13655	

AS

LCA-1	Halliburton	Solvent					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
Chemstream StimSTREAM FR 2800	Chemstream, Inc.	Friction Reducer					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				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	13.32316
			Hydrochloric acid	7647-01-0	30.00000	0.03833
			Distillates, (petroleum), hydrotreated light	64742-47-8	25.00000	0.01764
			Alcohols, C11-14-iso, C-13-rich, ethoxylated	78330-21-9	5.00000	0.00353
			Glutaraldehyde	111-30-8	30.00000	0.00263
			Guar gum	9000-30-0	100.00000	0.00251
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00044
			Methanol	67-56-1	100.00000	0.00024
			Hydrotreated distillate	Proprietary	100.00000	0.00022
			Ethanol	64-17-5	1.00000	0.00009
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007
			Modified thiourea polymer	Proprietary	30.00000	0.00007
			Ammonium persulfate	7727-54-0	100.00000	0.00007
			Oxylated phenolic resin	Proprietary	30.00000	0.00002
			Hexadecene	629-73-2	5.00000	0.00001
			Propargyl alcohol	107-19-7	5.00000	0.00001
			Ethoxylated alcohols	Proprietary	5.00000	0.00001
			Color pigment Orange 5	3468-63-1	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(b) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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