

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

API 47 - 095 - 02828 County Tyler District Ellsworth
Quad Porter Falls 7.5' Pad Name Thin Air Field/Pool Name -----
Farm name Clara Suzanne Wallace & Rickie Wallace Well Number Embry 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 4375455m Easting 517846m
Landing Point of Curve Northing 4375449.82m Easting 518509.46m
Bottom Hole Northing 4371084m Easting 520017m

Elevation (ft) 1200' 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 11/3/2022 Date drilling commenced 12/16/2022 Date drilling ceased 2/21/2023
Date completion activities began 4/26/2023 Date completion activities ceased 7/17/2023
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 328' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1660' 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

APPROVED

Reviewed by:

[Signature]
02/09/2024

API 47-095 - 02828 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Embry 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"	125.5'	New	91.59#, J-55	N/A	Y
Surface	17-1/2"	13-3/8"	469'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3664'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" /8-1/2"	5-1/2"	23333'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7312'		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	259 sx	15.6	1.18	306	0'	8 Hrs.
Surface	Class A	387 sx	15.6	1.20	464	0'	8 Hrs.
Coal							
Intermediate 1	Class A	1251 sx	15.6	1.20	1501	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	3717 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.26 (Tail)	4683	-500' into Intermediate Casing	8 Hrs.
Tubing							

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Drillers TD (ft) 23333' MD, 6947' TVD (BHL), 6948' TVD (Deepest Point Drilled) Loggers TD (ft) 23333' MD
Deepest formation penetrated Marcellus Plug back to (ft) N/A

Kick off depth (ft) 6404'

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

02/09/2024

API 47- 095 - 02828 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Embry Unit 2H

PERFORATION RECORD

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

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

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Complete a separate record for each stimulation stage.

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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)
*PLEASE SEE ATTACHED EXHIBIT 2								

Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
	<u>6839' (TOP)</u>	<u>TVD</u>	<u>7483' (TOP)</u> <u>MD</u>
<u>Marcellus</u>			

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

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

OPEN FLOW Gas 12455.33 mcfpd Oil 416.86 bpd NGL --- bpd Water 673.50 bpd GAS MEASURED BY Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
	<u>DEPTH IN FT NAME TVD</u>	<u>DEPTH IN FT TVD</u>	<u>DEPTH IN FT MD</u>	<u>DEPTH IN FT MD</u>	

***PLEASE SEE ATTACHED EXHIBIT 3**

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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 3600 Briarpark Drive City Houston State TX Zip 77042

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

Please insert additional pages as applicable.

Completed by Stefan Gaspar Telephone 303-357-6959
Signature *S Gaspar* Title Permitting Agent Date 10/13/23

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

02/09/2024

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	4/26/2023	23213	23169	60	Marcellus
2	4/27/2023	23129.59188	22964.5513	60	Marcellus
3	4/27/2023	22929.14316	22764.1026	60	Marcellus
4	4/27/2023	22728.69444	22563.6538	60	Marcellus
5	4/28/2023	22528.24573	22363.2051	60	Marcellus
6	4/28/2023	22327.79701	22162.7564	60	Marcellus
7	4/28/2023	22127.34829	21962.3077	60	Marcellus
8	4/28/2023	21926.89957	21761.859	60	Marcellus
9	4/29/2023	21726.45085	21561.4103	60	Marcellus
10	4/29/2023	21526.00214	21360.9615	60	Marcellus
11	4/29/2023	21325.55342	21160.5128	60	Marcellus
12	4/29/2023	21125.1047	20960.0641	60	Marcellus
13	4/29/2023	20924.65598	20759.6154	60	Marcellus
14	4/30/2023	20724.20726	20559.1667	60	Marcellus
15	4/30/2023	20523.75855	20358.7179	60	Marcellus
16	4/30/2023	20323.30983	20158.2692	60	Marcellus
17	4/30/2023	20122.86111	19957.8205	60	Marcellus
18	5/1/2023	19922.41239	19757.3718	60	Marcellus
19	5/1/2023	19721.96368	19556.9231	60	Marcellus
20	5/1/2023	19521.51496	19356.4744	60	Marcellus
21	5/2/2023	19321.06624	19156.0256	60	Marcellus
22	5/2/2023	19120.61752	18955.5769	60	Marcellus
23	5/2/2023	18920.1688	18755.1282	60	Marcellus
24	5/2/2023	18719.72009	18554.6795	60	Marcellus
25	5/2/2023	18519.27137	18354.2308	60	Marcellus
26	5/3/2023	18318.82265	18153.7821	60	Marcellus
27	5/3/2023	18118.37393	17953.3333	60	Marcellus
28	5/3/2023	17917.92521	17752.8846	60	Marcellus
29	5/3/2023	17717.4765	17552.4359	60	Marcellus
30	5/3/2023	17517.02778	17351.9872	60	Marcellus
31	5/4/2023	17316.57906	17151.5385	60	Marcellus
32	5/4/2023	17116.13034	16951.0897	60	Marcellus
33	5/4/2023	16915.68162	16750.641	60	Marcellus
34	5/4/2023	16715.23291	16550.1923	60	Marcellus
35	5/4/2023	16514.78419	16349.7436	60	Marcellus
36	5/4/2023	16314.33547	16149.2949	60	Marcellus
37	5/4/2023	16113.88675	15948.8462	60	Marcellus
38	5/5/2023	15913.43803	15748.3974	60	Marcellus
39	5/5/2023	15712.98932	15547.9487	60	Marcellus
40	5/5/2023	15512.5406	15347.5	60	Marcellus
41	5/5/2023	15312.09188	15147.0513	60	Marcellus
42	5/5/2023	15111.64316	14946.6026	60	Marcellus
43	5/5/2023	14911.19444	14746.1538	60	Marcellus
44	5/6/2023	14710.74573	14545.7051	60	Marcellus
45	5/6/2023	14510.29701	14345.2564	60	Marcellus
46	5/6/2023	14309.84829	14144.8077	60	Marcellus
47	5/6/2023	14109.39957	13944.359	60	Marcellus
48	5/6/2023	13908.95085	13743.9103	60	Marcellus
49	5/6/2023	13708.50214	13543.4615	60	Marcellus
50	5/7/2023	13508.05342	13343.0128	60	Marcellus
51	5/7/2023	13307.6047	13142.5641	60	Marcellus
52	5/7/2023	13107.15598	12942.1154	60	Marcellus
53	5/7/2023	12906.70726	12741.6667	60	Marcellus
54	5/7/2023	12706.25855	12541.2179	60	Marcellus
55	5/7/2023	12505.80983	12340.7692	60	Marcellus
56	5/8/2023	12305.36111	12140.3205	60	Marcellus
57	5/8/2023	12104.91239	11939.8718	60	Marcellus
58	5/8/2023	11904.46368	11739.4231	60	Marcellus
59	5/8/2023	11704.01496	11538.9744	60	Marcellus
60	5/8/2023	11503.56624	11338.5256	60	Marcellus
61	5/8/2023	11303.11752	11138.0769	60	Marcellus
62	5/9/2023	11102.6688	10937.6282	60	Marcellus
63	5/9/2023	10902.22009	10737.1795	60	Marcellus
64	5/9/2023	10701.77137	10536.7308	60	Marcellus
65	5/9/2023	10501.32265	10336.2821	60	Marcellus
66	5/9/2023	10300.87393	10135.8333	60	Marcellus
67	5/9/2023	10100.42521	9935.38462	60	Marcellus
68	5/10/2023	9899.976496	9734.9359	60	Marcellus
69	5/10/2023	9699.527778	9534.48718	60	Marcellus
70	5/10/2023	9499.07906	9334.03846	60	Marcellus
71	5/10/2023	9298.630342	9133.58974	60	Marcellus
72	5/10/2023	9098.181624	8933.14103	60	Marcellus
73	5/10/2023	8897.732906	8732.69231	60	Marcellus
74	5/10/2023	8697.284188	8532.24359	60	Marcellus
75	5/11/2023	8496.83547	8331.79487	60	Marcellus
76	5/11/2023	8296.386752	8131.34615	60	Marcellus
77	5/11/2023	8095.938034	7930.89744	60	Marcellus
78	5/11/2023	7895.489316	7730.44872	60	Marcellus
79	5/11/2023	7695.040598	7530	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	4/26/2023	70.06	9513	7390	3607	170850	5022	N/A
2	4/27/2023	82.81711	10263.58	6181.25	3783.371	414320	7478.5531	N/A
3	4/27/2023	86.20844	10439.93	3735.41	3907.987	407220	7558.4833	N/A
4	4/27/2023	85.84322	10560.87	6475.43	3643.388	414100	7433.4776	N/A
5	4/28/2023	83.60698	9936.787	5988.11	3365.485	399600	7057.8021	N/A
6	4/28/2023	89.74	10392	5622	3992	413950	7227.9593	N/A
7	4/28/2023	87.51082	10470.07	6431.67	3815.971	406250	7180.2162	N/A
8	4/28/2023	88.03601	10018.98	6325.38	4019.462	413320	7333.2271	N/A
9	4/29/2023	92.91061	10370.71	6269.5	3953.118	395850	7158.1062	N/A
10	4/29/2023	96.85368	10480.84	5445.82	4059.946	407610	7157.2469	N/A
11	4/29/2023	94.99302	10131.59	5072.7	3914.333	410750	7294.4688	N/A
12	4/29/2023	95.32434	10500.18	6368.73	3981.342	415130	7283.1707	N/A
13	4/29/2023	94.21181	10082.45	5657.52	4124.269	405720	7246.7169	N/A
14	4/30/2023	95.31497	10050.65	5464.6	3909.251	401650	7166.0998	N/A
15	4/30/2023	97.24	10292	5819	3793	413970	7139.2724	N/A
16	4/30/2023	97.14664	10023.22	5409.07	3761.526	395060	6900.8243	N/A
17	4/30/2023	95.34976	10015.83	6350.16	4029.072	393620	7126.7255	N/A
18	5/1/2023	96.32297	9984.088	6192.64	4076.315	403320	7840.4617	N/A
19	5/1/2023	96.71394	10078.25	5798.19	4053.268	397930	7081.6724	N/A
20	5/1/2023	97.44494	10382.2	5518.97	3993.155	396840	6927.9331	N/A
21	5/2/2023	95.27413	9987.54	5898.17	3803.301	395280	7154.7107	N/A
22	5/2/2023	98.09	10002	5288	4026	394750	6983.2469	N/A
23	5/2/2023	97.52	10062	6378	3918	410610	7421.3436	N/A
24	5/2/2023	98.07622	10038.58	5858.11	3684.181	397640	7028.2745	N/A
25	5/2/2023	95.49668	9659.785	5994.31	4155.903	396370	7034.4124	N/A
26	5/3/2023	91.1716	9645.031	6256.56	3904.793	401610	7099.5543	N/A
27	5/3/2023	95.90351	9547.596	5753.43	3788.141	410880	7148.7836	N/A
28	5/3/2023	96.98	9731	4211	3661	409410	7254.8448	N/A
29	5/3/2023	97.51	9918	5888	3894	400720	7185.0776	N/A
30	5/3/2023	97.6544	9797.141	3731.26	3978.157	411860	7143.1626	N/A
31	5/4/2023	95.11495	9557.892	5701.06	3728.637	394840	6982.7295	N/A
32	5/4/2023	95.03813	9511.505	5961.61	3803.446	402159	7130.904	N/A
33	5/4/2023	92.6	9287	5401	3744	401100	7844.2355	N/A
34	5/4/2023	95.92394	9846.727	5580.93	3632.807	416560	7304.815	N/A
35	5/4/2023	96.35	9648	5934	3409	413180	7324.1771	N/A
36	5/4/2023	95.73522	9524.485	5863.02	3501.828	415560	7339.5943	N/A
37	5/4/2023	95.52111	9450.7	5608.43	3669.002	412240	7240.5926	N/A
38	5/5/2023	97.1427	9261.341	5688.44	3754.499	397130	7217.9631	N/A
39	5/5/2023	96.58	9066	5932	3966	414300	7290.0383	N/A
40	5/5/2023	97.23	9053	3934	3658	399800	7038.2421	N/A
41	5/5/2023	97.48	9031	4078	3694	413240	7206.6079	N/A
42	5/5/2023	95.27855	8994.209	5568.23	3682.346	415660	7263.904	N/A
43	5/5/2023	96.83876	9203.757	5732.62	3721.09	413350	7332.4695	N/A
44	5/6/2023	95.92105	9420.36	5741.46	3662.128	395020	7015.3586	N/A
45	5/6/2023	94.2553	9497.321	4543.21	3441.762	411830	7317.9738	N/A
46	5/6/2023	96.58	9111	4013	3594	397600	7026.4657	N/A
47	5/6/2023	96.3	9034	5886	3536	399380	6979.0538	N/A
48	5/6/2023	95.05257	8807.281	4600.96	3480.275	394330	6966.4012	N/A
49	5/6/2023	96.19474	8920.969	4228.55	3843.975	398230	7193.1733	N/A
50	5/7/2023	96.4107	8779.698	6441.56	3878.963	399510	6847.3438	N/A
51	5/7/2023	93.67	8621	5677	3830	412110	7140.276	N/A
52	5/7/2023	96.07	8697	6055	3588	416920	7129.5783	N/A
53	5/7/2023	96.1	8709	5639	3954	418717	7400.4207	N/A
54	5/7/2023	97.01756	8738.143	4375.05	3855.172	411280	7162.5521	N/A
55	5/7/2023	96.84	8527	4630	3859	397710	7033.2781	N/A
56	5/8/2023	95.69138	8456.419	5744.1	3854.801	395240	6884.8389	N/A
57	5/8/2023	95.96554	8151.061	4552.75	4156.452	399090	7133.4367	N/A
58	5/8/2023	97.07	8545	5877	3716	413270	7388.6148	N/A
59	5/8/2023	97.14	8203	6204	3709	418590	7187.3586	N/A
60	5/8/2023	95.39	8214	5908	3629	419230	7220.4188	N/A
61	5/8/2023	96.1072	8101.035	4987.53	3913.195	396350	6884.2271	N/A
62	5/9/2023	95.3743	7937.96	6066.28	4185.939	395150	6875.8336	N/A
63	5/9/2023	94.94057	8081.623	4895.08	3900.725	414440	7177.5679	N/A
64	5/9/2023	97.43	8191	4133	3677	419896	7204.5305	N/A
65	5/9/2023	96.18	8423	6513	3803	416450	7084.571	N/A
66	5/9/2023	95.89	7783	6058	3823	410256	6988.0471	N/A
67	5/9/2023	97.93841	7936.826	5063.3	3609.962	398100	7348.2674	N/A
68	5/10/2023	98.01685	8167.462	6950.16	3885.23	397550	6820.9793	N/A
69	5/10/2023	98.16	7954	5774	3835	396570	6844.6186	N/A
70	5/10/2023	97.17	7783	3888	3652	415000	7174.0271	N/A
71	5/10/2023	97.46	8006	6541	3541	416280	7193.5186	N/A
72	5/10/2023	98.41	7866	6253	3581	417890	7156.9076	N/A
73	5/10/2023	97.67442	7846.232	3913.1	3536.709	408510	6849.2119	N/A
74	5/10/2023	98.2	8102	6443	3651	412000	6900.2283	N/A
75	5/11/2023	97.43	7868	5859	3640	395960	6602.1055	N/A
76	5/11/2023	96.71	7730	5487	3611	413670	7113.6957	N/A
77	5/11/2023	97.7	7790	4300	3848	413940	6995.9512	N/A
78	5/11/2023	98.71	7858	5849	3581	418560	7011.8483	N/A
79	5/11/2023	98.5446	7418.952	6150.81	3849.154	416500	6939.0079	N/A
	AVERAGE	95.1	9,153	5,557	3,788	31,886,438	562,776	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
Shaly Siltstone, tr LS	91	275	91	275
Sandy Siltstone, Coal	275	335	275	335
Silty Sandstone	335	425	335	425
Shaly Siltstone, occ LS	425	635	425	635
Sandy Siltstone, occ LS	635	965	635	965
Shaly Siltstone, occ SS	965	1,025	965	1,025
Shaly Siltstone	1,025	1,435	1,025	1,435
Sandy Siltstone, occ Shale	1,435	1,525	1,435	1,525
Silty Sandstone, tr coal	1,525	1,615	1,525	1,615
Silty Sandstone, coal, tr shale	1,615	1,735	1,615	1,735
Silty Sandstone, occ shale	1,735	1,885	1,735	1,885
Shaly Sandstone, coal, occ slst	1,885	2,125	1,885	2,125
Silty Sandstone, coal, occ Shale	2,125	2,176	2,125	2,176
Big Lime	2,201	3,048	2,176	3,048
Fifty Foot Sandstone	3,048	3,114	3,023	3,114
Gordon	3,114	3,384	3,089	3,384
Fifth Sandstone	3,384	3,659	3,359	3,659
Bayard	3,659	4,388	3,634	4,388
Speechley	4,388	4,714	4,363	4,714
Balltown	4,714	5,204	4,689	5,204
Bradford	5,204	5,474	5,179	5,474
Benson	5,474	5,728	5,449	5,728
Alexander	5,728	6,665	5,703	7,123
Sycamore	6,531	6,640	6,965	7,098
Middlesex	6,640	6,743	7,098	7,251
Burkett	6,743	6,776	7,251	7,311
Tully	6,776	6,839	7,311	7,483
Marcellus	6,839	NA	7,483	NA

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WV Department of
Environmental Protection

02/09/2024

LATITUDE 39°32'30" 244'

4,912' TO BOTTOM HOLE

3,989' TO BOTTOM HOLE

4,801'

LONGITUDE 80°47'30"

LONGITUDE 80°45'00"

Antero Resources Corporation Well No. Embry Unit 2H

AS DRILLED DATA:
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 N: 377,219ft E: 1,635,426ft
 LAT: 39°31'42.55" LON: 80°47'33.11"
 BOTTOM HOLE INFORMATION:
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 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.

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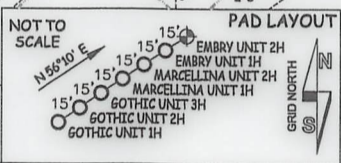
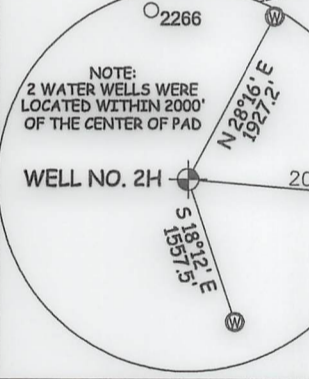
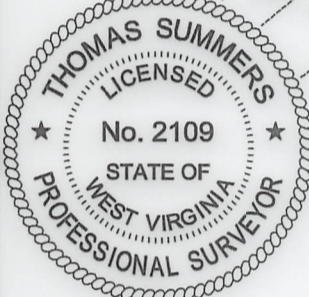
ELLSWORTH DISTRICT - TYLER COUNTY

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12-18	ANTERO MIDSTREAM LLC
12-19	JON DUMARS
12-23	ROBERT BARD
12-32	CARL WILCOX

WV NORTH ZONE GRID NORTH

12-33	RICHARD NEFF
16-13	GAIL NEFF
16-31	CHRISTOPHER INVESTMENTS INC.
17-1	RICHARD NEFF
17-2	EDWARD WARF
17-3	FLOYD EDDY
17-3.1	FLORA ROBERTS
17-4	ERWAIN PECK
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17-7	GILBERT EDDY
17-8	RICHARD NAPIORKOWSKI
17-9	ERWAIN PECK
17-10	THOMAS JOBS
17-10.1	CHARLES EASTHAM
17-10.2	THOMAS JOBS
17-11	ELIZABETH RICHIE
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23-9	DALE PARR
23-10	DALE PARR
23-11	JENNIFER WILLIAMS
23-12	TERRY JOY
MCELROY DISTRICT - TYLER COUNTY	
2-3	LOYD WEEKLEY
2-4	LOYD WEEKLEY
2-5	RONALD WEEKLEY
2-9	ELDEN NICHOLS
2-9.1	RICHARD BLANKENSHIP
2-9.2	WILLIAM LACY
2-9.3	SANDRA JOCHUM
2-10	WANDA PARR
2-18	MICHAEL SHERWOOD
2-20	ELDEN NICHOLS
2-21	CHARLES HAGAN
2-22	RICHARD THOMASELLI

NOTE
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JOB # 20-011WA
 DRAWING # EMBRY2HAD
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 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 +/-
 - - - - - Proposed Well Path
 O - - - - - As Drilled Well Path

THOMAS SUMMERS P.S. 2109
 DATE 10/02/23
 OPERATOR'S WELL# EMBRY UNIT #2H



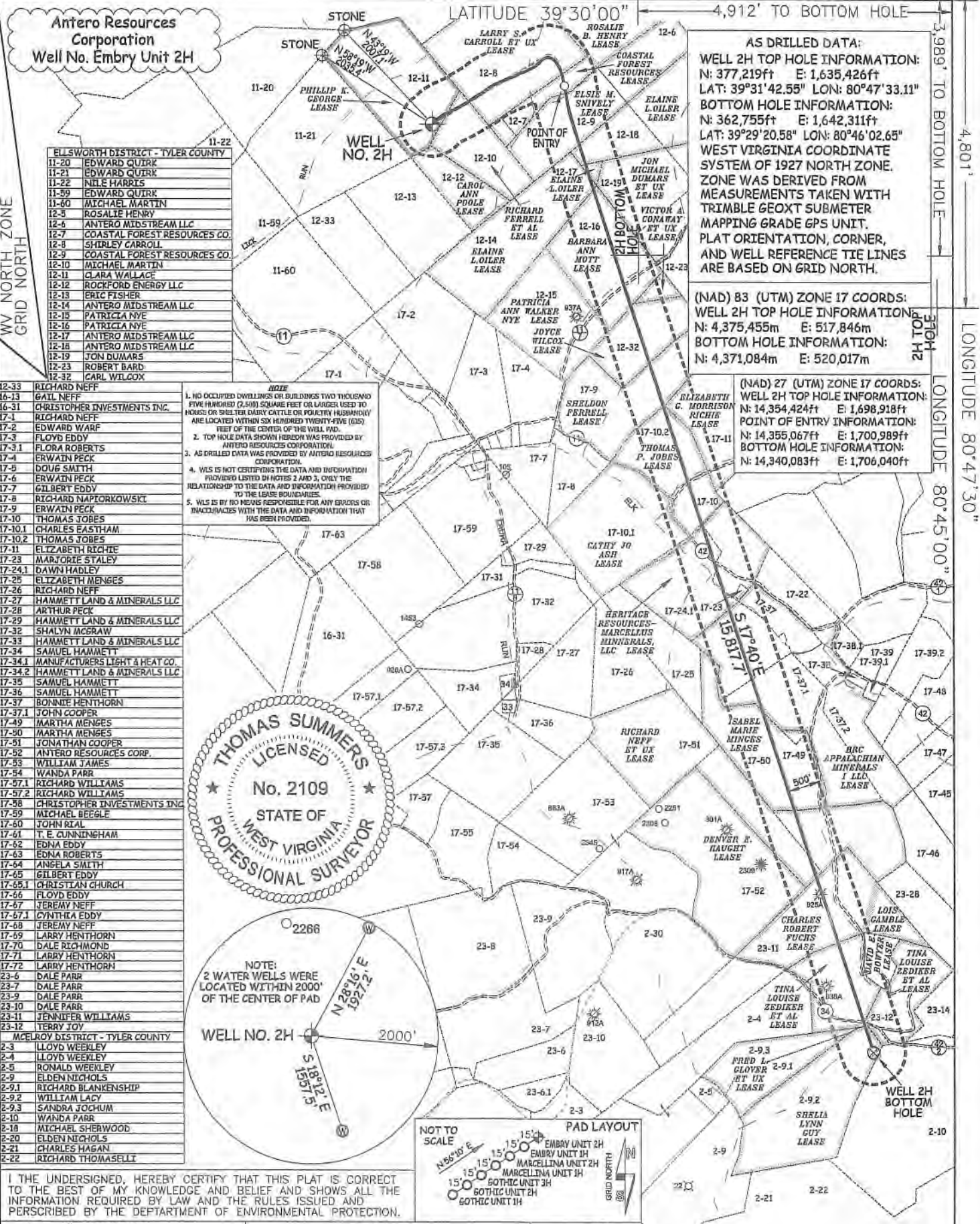
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL 47 095 02828
 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X STATE COUNTY PERMIT
 LOCATION: ELEVATION 1,200' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK COUNTY NAME
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 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 6,947' TVD 23,333' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS
 ADDRESS 1615 WYNKOOP ST. ADDRESS 535 WHITE OAKS BLVD
 FORM WW-6 DENVER, CO 80202 BRIDGEPORT, WV 26330

02/09/2024

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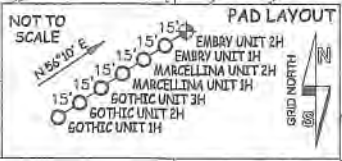
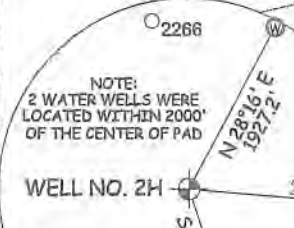
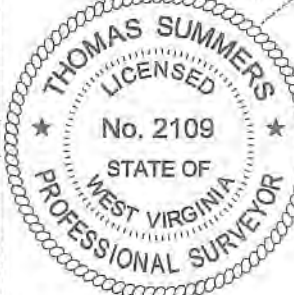


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LEGEND
 - - - - - Surface Owner Boundary Lines +/-
 - - - - - Interior Surface Tracts +/-
 ○ Proposed Well Path
 ○ As Drilled Well Path

THOMAS SUMMERS P.S. 2109
 DATE 10/02/23
 OPERATOR'S WELL# EMBRY UNIT #2H



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

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 SURFACE OWNER CLARA SUZANNE WALLACE & RICKIE WALLACE ACREAGE 60 ACRES +/-
 OIL & GAS ROYALTY OWNER PHILLIP K. GEORGE LEASE ACREAGE 60 ACRES +/-

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
 PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL ___
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 ADDRESS 1615 WYNNKOOP ST. ADDRESS 535 WHITE OAKS BLVD
 FORM WW-6 DENVER, CO 80202 BRIDGEPORT, WV 26330

02/09/2024

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/26/2023
Job End Date:	5/11/2023
State:	West Virginia
County:	Tyler
API Number:	47-095-02828-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	EMBRY UNIT 2H
Latitude:	39.52848000
Longitude:	-80.79253000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	12,128
Total Base Water Volume (gal):	24,895,197
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	86.51946	Density = 8.34
Ingredients	Listed Above	Listed Above	Water	7732-18-5	100.00000	0.16755	

Handwritten signature or initials

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HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
FDP-S1464-22	Halliburton	Friction Reducer					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				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	13.28735	
			Hydrochloric acid	7647-01-0	30.00000	0.03824	
			Complex amine compound	Proprietary	60.00000	0.03166	

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			Hydrotreated distillate	Proprietary	30.00000	0.01583	
			Guar gum	9000-30-0	100.00000	0.00420	
			Ammonium chloride	12125-02-9	5.00000	0.00264	
			Fatty nitrogen derived amides	Proprietary	5.00000	0.00264	
			Ethoxylated alcohol	Proprietary	5.00000	0.00264	
			Glutaraldehyde	111-30-8	30.00000	0.00253	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00053	
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00053	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00042	
			Methanol	67-56-1	100.00000	0.00024	
			Ammonium persulfate	7727-54-0	100.00000	0.00009	
			Ethanol	64-17-5	1.00000	0.00008	
			Modified thiourea polymer	Proprietary	30.00000	0.00007	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007	
			Oxylated phenolic resin	Proprietary	30.00000	0.00003	
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			C.I. 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(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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