

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

API 47-095-02830 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 Marcellina 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 4375450m Easting 517838m
Landing Point of Curve Northing 4375406.29m Easting 518018.54m
Bottom Hole Northing 4370575m Easting 519690m

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

Date permit issued 11/3/2022 Date drilling commenced 12/16/2022 Date drilling ceased 3/11/2023
Date completion activities began 4/26/2023 Date completion activities ceased 7/9/2023
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

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API 47-095 - 02830 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Marcellina 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"	457'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3488'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	24201'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6948'		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	739 sx	15.6	1.20	887	0'	8 Hrs.
Coal							
Intermediate 1	Class A	1187 sx	15.6	1.20	1424	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							

Drillers TD (ft) 24201' MD, 6943' TVD (BHL), 6943' TVD (Deepest Point Drilled) Loggers TD (ft) 24201' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6100'

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

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

04/12/2024

Handwritten signature and date

API 47- 095 - 02830 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Marcellina Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>			
<u>Marcellus</u>	<u>6835' (TOP)</u>	<u>TVD</u>	<u>7150' (TOP)</u>	<u>MD</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 Oil NGL Water GAS MEASURED BY
 12669.51 mcfpd 434.13 bpd _____ bpd 730.03 bpd Estimated Orifice Pilot

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

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Please insert additional pages as applicable.

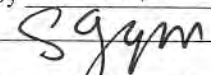
Drilling Contractor H & P Drilling
Address 912 N Eagle Valley Rd City Howard State PA Zip 16841

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  Title Permitting Agent Date 10/13/23

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

Handwritten signatures and date stamp:
04/12/2024

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	4/26/2023	24076	24032	60	Marcellus
2	4/27/2023	23992.60516	23827.631	60	Marcellus
3	4/28/2023	23792.23611	23627.2619	60	Marcellus
4	4/28/2023	23591.86706	23426.8929	60	Marcellus
5	4/29/2023	23391.49802	23226.5238	60	Marcellus
6	4/30/2023	23191.12897	23026.1548	60	Marcellus
7	4/30/2023	22990.75992	22825.7857	60	Marcellus
8	5/1/2023	22790.39087	22625.4167	60	Marcellus
9	5/1/2023	22590.02183	22425.0476	60	Marcellus
10	5/1/2023	22389.65278	22224.6786	60	Marcellus
11	5/2/2023	22189.28373	22024.3095	60	Marcellus
12	5/2/2023	21988.91468	21823.9405	60	Marcellus
13	5/3/2023	21788.54563	21623.5714	60	Marcellus
14	5/3/2023	21588.17659	21423.2024	60	Marcellus
15	5/4/2023	21387.80754	21222.8333	60	Marcellus
16	5/4/2023	21187.43849	21022.4643	60	Marcellus
17	5/5/2023	20987.06944	20822.0952	60	Marcellus
18	5/5/2023	20786.7004	20621.7262	60	Marcellus
19	5/6/2023	20586.33135	20421.3571	60	Marcellus
20	5/6/2023	20385.9623	20220.9881	60	Marcellus
21	5/7/2023	20185.59325	20020.619	60	Marcellus
22	5/7/2023	19985.22421	19820.25	60	Marcellus
23	5/8/2023	19784.85516	19619.881	60	Marcellus
24	5/8/2023	19584.48611	19419.5119	60	Marcellus
25	5/8/2023	19384.11706	19219.1429	60	Marcellus
26	5/9/2023	19183.74802	19018.7738	60	Marcellus
27	5/9/2023	18983.37897	18818.4048	60	Marcellus
28	5/10/2023	18783.00992	18618.0357	60	Marcellus
29	5/10/2023	18582.64087	18417.6667	60	Marcellus
30	5/11/2023	18382.27183	18217.2976	60	Marcellus
31	5/11/2023	18181.90278	18016.9286	60	Marcellus
32	5/12/2023	17981.53373	17816.5595	60	Marcellus
33	5/12/2023	17781.16468	17616.1905	60	Marcellus
34	5/12/2023	17580.79563	17415.8214	60	Marcellus
35	5/12/2023	17380.42659	17215.4524	60	Marcellus
36	5/13/2023	17180.05754	17015.0833	60	Marcellus
37	5/13/2023	16979.68849	16814.7143	60	Marcellus
38	5/13/2023	16779.31944	16614.3452	60	Marcellus
39	5/13/2023	16578.9504	16413.9762	60	Marcellus
40	5/13/2023	16378.58135	16213.6071	60	Marcellus
41	5/14/2023	16178.2123	16013.2381	60	Marcellus
42	5/14/2023	15977.84325	15812.869	60	Marcellus
43	5/14/2023	15777.47421	15612.5	60	Marcellus
44	5/14/2023	15577.10516	15412.131	60	Marcellus
45	5/15/2023	15376.73611	15211.7619	60	Marcellus
46	5/15/2023	15176.36706	15011.3929	60	Marcellus
47	5/15/2023	14975.99802	14811.0238	60	Marcellus
48	5/15/2023	14775.62897	14610.6548	60	Marcellus
49	5/16/2023	14575.25992	14410.2857	60	Marcellus
50	5/16/2023	14374.89087	14209.9167	60	Marcellus
51	5/16/2023	14174.52183	14009.5476	60	Marcellus
52	5/16/2023	13974.15278	13809.1786	60	Marcellus
53	5/16/2023	13773.78373	13608.8095	60	Marcellus
54	5/17/2023	13573.41468	13408.4405	60	Marcellus
55	5/17/2023	13373.04563	13208.0714	60	Marcellus
56	5/17/2023	13172.67659	13007.7024	60	Marcellus
57	5/17/2023	12972.30754	12807.3333	60	Marcellus
58	5/18/2023	12771.93849	12606.9643	60	Marcellus
59	5/18/2023	12571.56944	12406.5952	60	Marcellus
60	5/18/2023	12371.2004	12206.2262	60	Marcellus
61	5/18/2023	12170.83135	12005.8571	60	Marcellus
62	5/18/2023	11970.4623	11805.4881	60	Marcellus
63	5/19/2023	11770.09325	11605.119	60	Marcellus
64	5/21/2023	11569.72421	11404.75	60	Marcellus
65	5/21/2023	11369.35516	11204.381	60	Marcellus
66	5/21/2023	11168.98611	11004.0119	60	Marcellus
67	5/21/2023	10968.61706	10803.6429	60	Marcellus
68	5/21/2023	10768.24802	10603.2738	60	Marcellus
69	5/22/2023	10567.87897	10402.9048	60	Marcellus
70	5/22/2023	10367.50992	10202.5357	60	Marcellus
71	5/22/2023	10167.14087	10002.1667	60	Marcellus
72	5/22/2023	9966.771825	9801.79762	60	Marcellus
73	5/22/2023	9766.402778	9601.42857	60	Marcellus
74	5/23/2023	9566.03373	9401.05952	60	Marcellus
75	5/23/2023	9365.664683	9200.69048	60	Marcellus
76	5/23/2023	9165.295635	9000.32143	60	Marcellus
77	5/23/2023	8964.926587	8799.95238	60	Marcellus
78	5/24/2023	8764.55754	8599.58333	60	Marcellus
79	5/24/2023	8564.188492	8399.21429	60	Marcellus
80	5/24/2023	8363.819444	8198.84524	60	Marcellus
81	5/24/2023	8163.450397	7998.47619	60	Marcellus
82	5/25/2023	7963.081349	7798.10714	60	Marcellus
83	5/25/2023	7762.712302	7597.7381	60	Marcellus
84	5/25/2023	7562.343254	7397.36905	60	Marcellus
85	5/25/2023	7361.974206	7197	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	67.81	9640	8384	3132	166090	5348.2857	N/A
2	4/27/2023	86.82	10545	6094	4108	401510	8390.4683	N/A
3	4/28/2023	84.00544	10064.23	6159.09	3436.744	409390	7298.4202	N/A
4	4/28/2023	91.20829	10539.51	6074.7	3773.672	394460	7016.2471	N/A
5	4/29/2023	92.1241	10497.11	6443.63	3965.935	399500	7095.2517	N/A
6	4/30/2023	94.46423	10441.59	5924.27	3859.123	404600	7558.8236	N/A
7	4/30/2023	95.80981	10388.2	3871.6	3949.261	407900	7197.2705	N/A
8	5/1/2023	92.65728	10265.84	5760.65	3925.721	394430	7130.7207	N/A
9	5/1/2023	95.8245	10575.86	5654.63	3909.087	404930	7121.6795	N/A
10	5/1/2023	94.51224	10308.41	6033.7	3477.06	401960	7265.9021	N/A
11	5/2/2023	93.28817	10240.05	6067.53	3482.011	397220	7074.191	N/A
12	5/2/2023	93.34	10066	6114	3633	393890	7119.5674	N/A
13	5/3/2023	93.44117	10010.54	6217.15	3672.92	407280	7130.4726	N/A
14	5/3/2023	96.87	10289	4634	3519	414060	7284.569	N/A
15	5/4/2023	93.76198	10228.33	6083.83	3525.832	411400	7367.1762	N/A
16	5/4/2023	96.01	10340	5022	3770	396910	7273.434	N/A
17	5/5/2023	96.12292	10209.19	5703.43	4277.792	394010	7134.2431	N/A
18	5/5/2023	92.34	10291	7096	4058	418820	7428.4614	N/A
19	5/6/2023	93.74	10078	5860	3939	396180	7156.6890	N/A
20	5/6/2023	95.65	10033	6087	3663	396400	7136.3674	N/A
21	5/7/2023	95.73	10143	6691	3721	401710	7252.3931	N/A
22	5/7/2023	95.14	9944	3228	3833	408830	7234.9907	N/A
23	5/8/2023	94.94267	9942.433	6556.44	3814.004	402730	7073.1898	N/A
24	5/8/2023	95.74	10009	6052	3760	416700	7288.1833	N/A
25	5/8/2023	95.33319	9973.597	5811.26	3673.547	414700	7268.9348	N/A
26	5/9/2023	92.6	9514	5617	3594	418090	7388.6762	N/A
27	5/9/2023	97.78114	10058.98	5540.23	3583.568	415722	7093.7452	N/A
28	5/10/2023	97.54	10168	3955	3658	412800	7339.4864	N/A
29	5/10/2023	97.27	10046	6269	3456	413660	7245.8955	N/A
30	5/11/2023	96.66	9710	6074	3338	402120	7000.4757	N/A
31	5/11/2023	97.53254	10034.73	4425	3447.305	403960	6963.5688	N/A
32	5/12/2023	97.42586	9993.779	5668.77	3346.008	400010	6899.96	N/A
33	5/12/2023	96.63	9845	6055	3321	409400	7128.7957	N/A
34	5/12/2023	95.33	9803	6277	3242	412190	7176.9638	N/A
35	5/12/2023	96.86	10023	5730	3410	414270	7081.6945	N/A
36	5/13/2023	98.09116	9989.995	6591.16	3309.613	397910	6971.7693	N/A
37	5/13/2023	97.56	9729	5970	3103	413700	7158.8319	N/A
38	5/13/2023	97.82	9773	5697	3220	416610	7210.6431	N/A
39	5/13/2023	98.20878	9949.308	5807.01	3226.334	413200	7394.55	N/A
40	5/13/2023	96.82	9872	5383	3449	397800	6825.5581	N/A
41	5/14/2023	98.25528	9709.781	5312.03	3556.989	396170	6886.3745	N/A
42	5/14/2023	96.28	9455	8672	3379	417480	7235.4067	N/A
43	5/14/2023	97.44	9422	4211	3956	400340	6917.9707	N/A
44	5/14/2023	97.21065	9389.285	3785.69	3349.637	413020	6961.7002	N/A
45	5/15/2023	97.14	9528	6019	3437	395580	6796.875	N/A
46	5/15/2023	93.01	9093	6090	3266	413910	7133.3726	N/A
47	5/15/2023	98.52	9348	6231	3263	416340	7117.1605	N/A
48	5/15/2023	97.74	9019	6081	3352	398600	6834.8883	N/A
49	5/16/2023	98.3	9098	5573	3395	397160	6800.6779	N/A
50	5/16/2023	98.24705	9186.828	5439.62	3360.503	410430	6983.6671	N/A
51	5/16/2023	96.01897	9097.759	6245.37	3537.569	413020	6821.7331	N/A
52	5/16/2023	97.11405	8767.108	6632.97	3313.945	419810	7176.9805	N/A
53	5/16/2023	97.93	9054	5678	3523	415490	6982.9883	N/A
54	5/17/2023	97.49	9042	5930	3746	406440	6880.3962	N/A
55	5/17/2023	96.97775	9043.459	5864.44	3528.181	415200	7263.2705	N/A
56	5/17/2023	96.87615	9081.462	6277.89	3423.041	412390	7084.8031	N/A
57	5/17/2023	97.3189	8626.28	5445.65	3481.94	399080	6740.1871	N/A
58	5/18/2023	98.26	9067	5816	3695	411850	6919.5295	N/A
59	5/18/2023	98.34	8894	5113	3583	412790	7083.0198	N/A
60	5/18/2023	96.28349	8785.248	5643.47	3513.14	400150	6920.8088	N/A
61	5/18/2023	95.85717	8959.193	6298.73	3599.356	416560	7038.0314	N/A
62	5/18/2023	98.09	9008	5561	3795	411160	6856.4783	N/A
63	5/19/2023	98.27	9071	4174	3734	407560	6841.7421	N/A
64	5/21/2023	91.22	8362	5610	3871	399900	6712.8421	N/A
65	5/21/2023	93.34326	8683.613	6404.13	3715.7	395810	6738.2438	N/A
66	5/21/2023	95.31486	8503.574	6352.35	3785.189	415550	7218.9088	N/A
67	5/21/2023	97.27959	8659.872	6339.76	3722.636	397680	6888.7417	N/A
68	5/21/2023	95.85	8297	6360	3876	411240	7437.9238	N/A
69	5/22/2023	96.544	8317.723	6118.4	3801.743	410530	6869.7717	N/A
70	5/22/2023	95.09258	8062.823	6068.43	3629.904	411730	6820.2193	N/A
71	5/22/2023	93.66408	8280.827	6212.06	3709.3	397040	6743.0643	N/A
72	5/22/2023	89.17135	8262.602	5875.51	3807.694	396210	6622.1188	N/A
73	5/22/2023	93.97	7824	5611	3615	394400	6710.1721	N/A
74	5/23/2023	97.15296	8138.887	6045.81	3632.474	413030	6922.059	N/A
75	5/23/2023	95.66289	7997.542	5725.11	3605.576	417280	7160.6036	N/A
76	5/23/2023	96.23426	7781.311	5596.97	3417.955	411870	6993.8219	N/A
77	5/23/2023	98.31	8052	5517	3385	413480	6923.7367	N/A
78	5/24/2023	98	8025	3863	3219	414330	7024.0945	N/A
79	5/24/2023	90.15674	7329.256	6205.9	3421.034	412150	7004.4062	N/A
80	5/24/2023	96.90496	7905.452	5756.03	3468.982	408412	7063.1145	N/A
81	5/24/2023	96.99	7662	5584	3558	411060	6954.8771	N/A
82	5/25/2023	96.48	7590	5446	3406	405960	6818.0636	N/A
83	5/25/2023	97.72984	7526.643	5443.92	3606.61	412683	6851.96	N/A
84	5/25/2023	97.61038	7483.498	5488.14	3821.873	415190	6882.9779	N/A
85	5/25/2023	97.4665	7634.397	5706.3	3632.537	413790	6921.5469	N/A
AVERAGE		95.4	9,291	5,790	3,589	34,376,907	599,088	0

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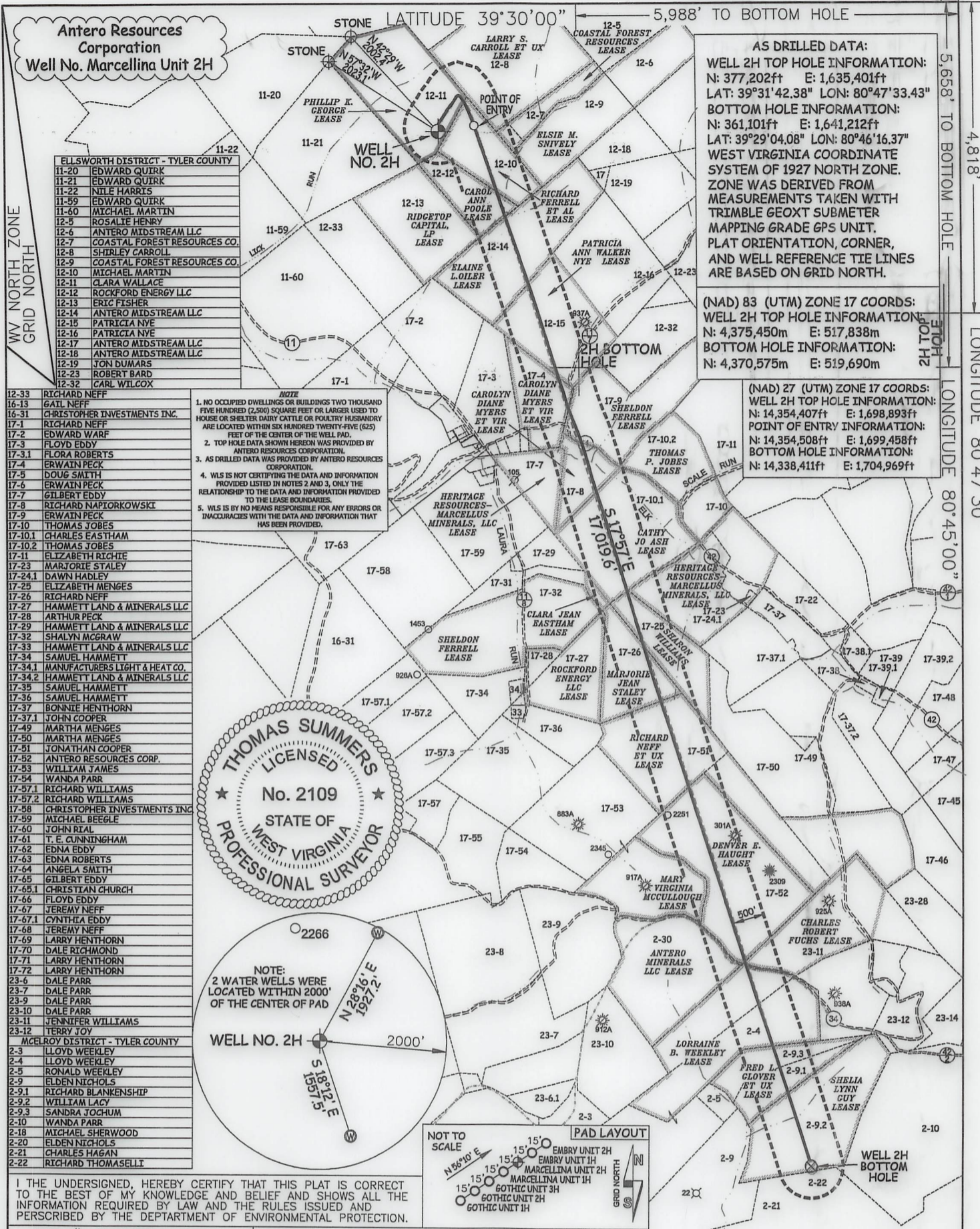
EXHIBIT 3

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	2,099	2,125	2,102
Big Lime	2,124	2,898	2,102	2,901
Fifty Foot Sandstone	2,898	2,961	2,876	2,964
Gordon	2,961	3,213	2,939	3,216
Fifth Sandstone	3,213	3,486	3,191	3,489
Bayard	3,486	4,145	3,464	4,158
Speechley	4,145	4,451	4,133	4,476
Balltown	4,451	4,917	4,451	4,955
Bradford	4,917	5,164	4,930	5,211
Benson	5,164	5,398	5,186	5,452
Alexander	5,398	6,670	5,427	6,802
Sycamore	6,529	6,645	6,631	6,777
Middlesex	6,645	6,742	6,777	6,926
Burkett	6,742	6,772	6,926	6,985
Tully	6,772	6,835	6,985	7,150
Marcellus	6,835	NA	7,150	NA

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LATITUDE 39°32'30" 269'

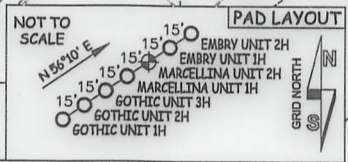
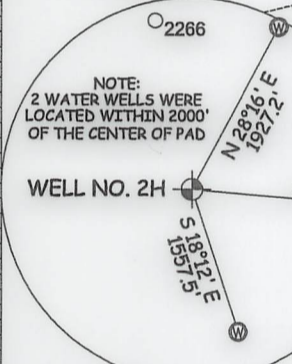
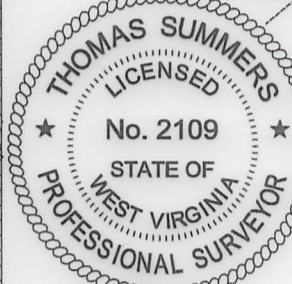


AS DRILLED DATA:
 WELL 2H TOP HOLE INFORMATION:
 N: 377,202ft E: 1,635,401ft
 LAT: 39°31'42.38" LON: 80°47'33.43"
 BOTTOM HOLE INFORMATION:
 N: 361,101ft E: 1,641,212ft
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 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
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NOTE:
 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.



ELLSWORTH DISTRICT - TYLER COUNTY

11-20	EDWARD QUIRK
11-21	EDWARD QUIRK
11-22	NILE HARRIS
11-59	EDWARD QUIRK
11-60	MICHAEL MARTIN
12-5	ROSALIE HENRY
12-6	ANTERO MIDSTREAM LLC
12-7	COASTAL FOREST RESOURCES CO.
12-8	SHIRLEY CARROLL
12-9	COASTAL FOREST RESOURCES CO.
12-10	MICHAEL MARTIN
12-11	CLARA WALLACE
12-12	ROCKFORD ENERGY LLC
12-13	ERIC FISHER
12-14	ANTERO MIDSTREAM LLC
12-15	PATRICIA NYE
12-16	PATRICIA NYE
12-17	ANTERO MIDSTREAM LLC
12-18	ANTERO MIDSTREAM LLC
12-19	TOM DUMARS
12-23	ROBERT BARD
12-32	CARL WILCOX

MCELROY DISTRICT - TYLER COUNTY

2-3	LLOYD WEEKLEY
2-4	LLOYD WEEKLEY
2-5	RONALD WEEKLEY
2-9	ELDEN NICHOLS
2-9.1	RICHARD BLANKENSHIP
2-9.2	WILLIAM LACY
2-9.3	SANDRA JOCHUM
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JOB # 20-011WA	LEGEND	STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
DRAWING # MARCELLINA2HAD	----- Surface Owner Boundary Lines +/- - - - - Interior Surface Tracts +/- ○ - - - - Proposed Well Path ○ - - - - As Drilled Well Path	
SCALE 1" = 2000'	THOMAS SUMMERS P.S. 2109	WILLOW LAND SURVEYING PLLC 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415
MINIMUM DEGREE OF ACCURACY SUBMETER	DATE 10/02/23	
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS	OPERATOR'S WELL# MARCELLINA UNIT #2H	STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS		
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___	47 - 095 - 02830	COUNTY NAME TYLER
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X	STATE COUNTY PERMIT	
LOCATION: ELEVATION 1,200' - AS BUILT	WATERSHED OUTLET MIDDLE ISLAND CREEK	04/12/2024
QUADRANGLE PORTER FALLS 7.5' (TH) - SHIRLEY 7.5' (BH)	DISTRICT ELLSWORTH COUNTY TYLER	
SURFACE OWNER CLARA SUZANNE WALLACE & RICKIE WALLACE	ACREAGE 60 ACRES +/-	PERMIT
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 ___	PERMIT
(SPECIFY) AS DRILLED	PLUG & ABANDON ___ CLEAN OUT & REPLUG ___	
TARGET FORMATION MARCELLUS	ESTIMATED DEPTH 6,943' TVD 24,201' MD	PERMIT
WELL OPERATOR ANTERO RESOURCES CORP.	DESIGNATED AGENT KEVIN ELLIS	
ADDRESS 1615 WYNKOOP ST.	ADDRESS 535 WHITE OAKS BLVD	PERMIT
FORM WW-6	DENVER, CO 80202	
	BRIDGEPORT, WV 26330	

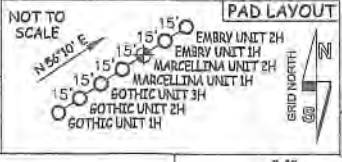
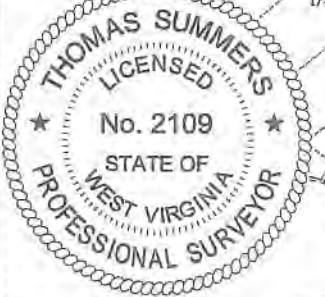
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Antero Resources Corporation
Well No. Marcellina Unit 2H

WV NORTH ZONE
GRID NORTH

ELLSWORTH DISTRICT - TYLER COUNTY	
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12-32	CARL WILCOX

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12-33	RICHARD NEFF
16-13	GAIL NEFF
16-31	CHRISTOPHER INVESTMENTS INC.
17-1	RICHARD NEFF
17-2	EDWARD WARE
17-3	FLOYD EDDY
17-3.1	FLORA ROBERTS
17-4	ERWAIN PECK
17-5	DOUG SMITH
17-6	ERWAIN PECK
17-7	GILBERT EDDY
17-8	RICHARD NAPIORKOWSKI
17-9	ERWAIN PECK
17-10	THOMAS JOBES
17-10.1	CHARLES EASTHAM
17-10.2	THOMAS JOBES
17-11	ELIZABETH RICHIE
17-23	MARJORIE STALEY
17-24.1	DAWN HADLEY
17-25	ELIZABETH MENGES
17-26	RICHARD NEFF
17-27	HAMMETT LAND & MINERALS LLC
17-28	ARTHUR PECK
17-29	HAMMETT LAND & MINERALS LLC
17-32	SHALYN MCGRAW
17-33	HAMMETT LAND & MINERALS LLC
17-34	SAMUEL HAMMETT
17-34.1	MANUFACTURERS LIGHT & HEAT CO.
17-34.2	HAMMETT LAND & MINERALS LLC
17-35	SAMUEL HAMMETT
17-36	SAMUEL HAMMETT
17-37	BONNIE HENTHORN
17-37.1	JOHN COOPER
17-49	MARtha MENGES
17-50	MARtha MENGES
17-51	JONATHAN COOPER
17-52	ANTERO RESOURCES CORP.
17-53	WILLIAM JAMES
17-54	WANDA PARR
17-57.1	RICHARD WILLIAMS
17-57.2	RICHARD WILLIAMS
17-58	CHRISTOPHER INVESTMENTS INC.
17-59	MICHAEL BEEGLE
17-60	JOHN REAY
17-61	T. E. CUNNINGHAM
17-62	EDNA EDDY
17-63	EDNA ROBERTS
17-64	ANGELA SMITH
17-65	GILBERT EDDY
17-65.1	CHRISTIAN CHURCH
17-66	FLOYD EDDY
17-67	JEREMY NEFF
17-67.1	CYNTHIA EDDY
17-68	JEREMY NEFF
17-69	LARRY HENTHORN
17-70	DALE RICHMOND
17-71	LARRY HENTHORN
17-72	LARRY HENTHORN
23-6	DALE PARR
23-7	DALE PARR
23-9	DALE PARR
23-10	DALE PARR
23-11	JENNIFER WILLIAMS
23-12	TERRY TOY
MCLEROY DISTRICT - TYLER COUNTY	
2-3	LLOYD WEEKLEY
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DRAWING # MARCELLINAZHAD
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

THOMAS SUMMERS P.S. 2109
DATE 10/02/23
OPERATOR'S WELL# MARCELLINA 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 LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 095 - 02830
(IF "GAS") PRODUCTION STORAGE ___ DEEP ___ SHALLOW STATE COUNTY PERMIT
LOCATION: ELEVATION 1,200' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
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ADDRESS 1615 WYNKOOP ST. ADDRESS 535 WHITE OAKS BLVD
FORM WW-6 DENVER, CO 80202 BRIDGEPORT, WV 26330

COUNTY NAME

PERMIT

04/12/2024

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/26/2023
Job End Date:	5/25/2023
State:	West Virginia
County:	Tyler
API Number:	47-095-02830-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	MARCELLINA UNIT 2H
Latitude:	39.52843000
Longitude:	-80.79261000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,906
Total Base Water Volume (gal):	26,396,654
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	86.32823	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.16709	

AS

FDP-S1464-22	Halliburton	Friction Reducer					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	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	13.48047	
			Hydrochloric acid	7647-01-0	30.00000	0.03868	
			Complex amine compound	Proprietary	60.00000	0.02970	

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			Hydrotreated distillate	Proprietary	30.00000	0.01485	
			Guar gum	9000-30-0	100.00000	0.00409	
			Glutaraldehyde	111-30-8	30.00000	0.00253	
			Ammonium chloride	12125-02-9	5.00000	0.00248	
			Fatty nitrogen derived amides	Proprietary	5.00000	0.00248	
			Ethoxylated alcohol	Proprietary	5.00000	0.00248	
			Sobitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00050	
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00050	
			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	
			Hexadecene	629-73-2	5.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Ethoxylated alcohols	Proprietary	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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