

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

API 47 - 095 - 02757 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 Maroon 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 4375383m Easting 517798m
Landing Point of Curve Northing 4375528.47m Easting 517582.61m
Bottom Hole Northing 4380170m Easting 515991m

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 9/20/2021 Date drilling commenced 11/12/2021 Date drilling ceased 2/5/2022
Date completion activities began 3/27/2022 Date completion activities ceased 7/2/2022
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 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

Reviewed by:

APPROVED

08/18/2023

Shane M. [Signature]
5/24/23

API 47-095 - 02757 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Maroon 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	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	476'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2615'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	23523'	New	20#, P-110	N/A	Y
Tubing		2-3/8"	6909'		4.7#, P-110		
Packer type and depth set		N/A					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	279 sx	15.6	1.18	329	0'	8 Hrs.
Surface	Class A	515 sx	15.6	1.20	618	0'	8 Hrs.
Coal							
Intermediate 1	Class A	903 sx	15.6	1.19	1075	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	3806 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.26 (Tail)	4796	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 23523' MD, 6813' TVD (BHL), 6876' (Deepest Point Drilled) Loggers TD (ft) 23523' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5789'

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

API 47- 095 - 02757

Farm name Clara Suzanne Wallace & Rickie Wallace

Well number Maroon 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.

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)
*PLEASE SEE ATTACHED EXHIBIT 2								

Please insert additional pages as applicable.

08/18/2023 *JM*

API 47- 095 - 02757 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Maroon Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6821' (TOP)</u>	<u>TVD</u>	<u>7068' (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 1359 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 14184 mcfpd Oil 573 bpd NGL --- bpd Water 1221 bpd GAS MEASURED BY Estimated Orifice Pilot

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

***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 Schlumberger US Land
Address 1080 US-33 City Weston State WV Zip 26452

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

Please insert additional pages as applicable.

Completed by Carly Marvel Telephone 303-357-7373
Signature Carly Marvel Title Permitting Agent Date 3/23/2023

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

08/18/2023 *JM*

API 47-095-02757 Farm Name Clara Suzanne Wallace & Rickie Wallace Well Number Maroon Unit 2H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	03/27/2022	23406.5	23364.0	60	Marcellus
2	03/27/2022	23325.1	23159.9	60	Marcellus
3	03/28/2022	23124.5	22959.4	60	Marcellus
4	03/28/2022	22923.9	22758.8	60	Marcellus
5	03/29/2022	22723.4	22558.3	60	Marcellus
6	03/30/2022	22522.8	22357.7	60	Marcellus
7	03/30/2022	22322.3	22157.1	60	Marcellus
8	03/31/2022	22121.7	21956.6	60	Marcellus
9	04/01/2022	21921.1	21756.0	60	Marcellus
10	04/02/2022	21720.6	21555.4	60	Marcellus
11	04/02/2022	21520.0	21354.9	60	Marcellus
12	04/03/2022	21319.5	21154.3	60	Marcellus
13	04/03/2022	21118.9	20953.8	60	Marcellus
14	04/04/2022	20918.3	20753.2	60	Marcellus
15	04/04/2022	20717.8	20552.6	60	Marcellus
16	04/04/2022	20517.2	20352.1	60	Marcellus
17	04/05/2022	20316.6	20151.5	60	Marcellus
18	04/05/2022	20116.1	19951.0	60	Marcellus
19	04/05/2022	19915.5	19750.4	60	Marcellus
20	04/06/2022	19715.0	19549.8	60	Marcellus
21	04/07/2022	19514.4	19349.3	60	Marcellus
22	04/07/2022	19313.8	19148.7	60	Marcellus
23	04/08/2022	19113.3	18948.1	60	Marcellus
24	04/08/2022	18912.7	18747.6	60	Marcellus
25	04/09/2022	18712.2	18547.0	60	Marcellus
26	04/09/2022	18511.6	18346.5	60	Marcellus
27	04/09/2022	18311.0	18145.9	60	Marcellus
28	04/10/2022	18110.5	17945.3	60	Marcellus
29	04/10/2022	17909.9	17744.8	60	Marcellus
30	04/10/2022	17709.3	17544.2	60	Marcellus
31	04/11/2022	17508.8	17343.6	60	Marcellus
32	04/11/2022	17308.2	17143.1	60	Marcellus
33	04/11/2022	17107.7	16942.5	60	Marcellus
34	04/11/2022	16907.1	16742.0	60	Marcellus
35	04/12/2022	16706.5	16541.4	60	Marcellus
36	04/12/2022	16506.0	16340.8	60	Marcellus
37	04/12/2022	16305.4	16140.3	60	Marcellus
38	04/13/2022	16104.9	15939.7	60	Marcellus
39	04/13/2022	15904.3	15739.2	60	Marcellus
40	04/14/2022	15703.7	15538.6	60	Marcellus
41	04/14/2022	15503.2	15338.0	60	Marcellus
42	04/14/2022	15302.6	15137.5	60	Marcellus
43	04/14/2022	15102.0	14936.9	60	Marcellus
44	04/15/2022	14901.5	14736.3	60	Marcellus
45	04/26/2022	14700.9	14535.8	60	Marcellus
46	04/26/2022	14500.4	14335.2	60	Marcellus
47	05/02/2022	14299.8	14134.7	60	Marcellus
48	05/03/2022	14099.2	13934.1	60	Marcellus
49	05/04/2022	13898.7	13733.5	60	Marcellus
50	05/04/2022	13698.1	13533.0	60	Marcellus
51	05/05/2022	13497.5	13332.4	60	Marcellus
52	05/06/2022	13297.0	13131.9	60	Marcellus
53	05/07/2022	13096.4	12931.3	60	Marcellus
54	05/08/2022	12895.9	12730.7	60	Marcellus
55	05/09/2022	12695.3	12530.2	60	Marcellus
56	05/09/2022	12494.7	12329.6	60	Marcellus
57	05/09/2022	12294.2	12129.0	60	Marcellus
58	05/10/2022	12093.6	11928.5	60	Marcellus
59	05/11/2022	11893.1	11727.9	60	Marcellus
60	05/12/2022	11692.5	11527.4	60	Marcellus
61	05/12/2022	11491.9	11326.8	60	Marcellus
62	05/13/2022	11291.4	11126.2	60	Marcellus
63	05/13/2022	11090.8	10925.7	60	Marcellus
64	05/14/2022	10890.2	10725.1	60	Marcellus
65	05/15/2022	10689.7	10524.5	60	Marcellus
66	05/15/2022	10489.1	10324.0	60	Marcellus
67	05/16/2022	10288.6	10123.4	60	Marcellus
68	05/17/2022	10088.0	9922.9	60	Marcellus
69	05/17/2022	9887.4	9722.3	60	Marcellus
70	05/18/2022	9686.9	9521.7	60	Marcellus
71	05/18/2022	9486.3	9321.2	60	Marcellus
72	05/19/2022	9285.8	9120.6	60	Marcellus
73	05/19/2022	9085.2	8920.1	60	Marcellus
74	05/20/2022	8884.6	8719.5	60	Marcellus
75	05/21/2022	8684.1	8518.9	60	Marcellus
76	05/21/2022	8483.5	8318.4	60	Marcellus
77	05/22/2022	8282.9	8117.8	60	Marcellus
78	05/22/2022	8082.4	7917.2	60	Marcellus
79	05/23/2022	7881.8	7716.7	60	Marcellus
80	05/23/2022	7681.3	7516.1	60	Marcellus
81	05/23/2022	7480.7	7315.6	60	Marcellus
82	05/24/2022	7280.1	7115.0	60	Marcellus

08/18/2023 *JM*

API 47-095-02757 Farm Name Clara Suzanne Wallace & Rickie Wallace Well Number Maroon Unit 2H

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	03/27/2022	63.1	9381	8504	2557	176740	235614	N/A
2	03/27/2022	76.5	9400	3387	4073	394780	350773	N/A
3	03/28/2022	76.9	9454	8272	4304	396320	341181	N/A
4	03/28/2022	83.6	9924	6049	4417	405845	390628	N/A
5	03/29/2022	79.8	9485	5863	4343	403775	328045	N/A
6	03/30/2022	86.7	10203	5234	3946	401585	354401	N/A
7	03/30/2022	75.0	8949	8102	3341	393835	377040	N/A
8	03/31/2022	77.2	9302	5723	3171	407585	426730	N/A
9	04/01/2022	77.9	9231	5652	3557.95	402760	310544	N/A
10	04/02/2022	78.1	8882	5692	3649	404985	316590	N/A
11	04/02/2022	76.8	9005	6186	3098	402514	320374	N/A
12	04/03/2022	77.0	9184	6018	3132	403176	306191	N/A
13	04/03/2022	72.7	8862	7230	3144	401440	317332	N/A
14	04/04/2022	80.0	9343	5244	3294	404980	303737	N/A
15	04/04/2022	73.1	8693	7398	3491	399372	315238	N/A
16	04/04/2022	79.6	8991	4845	4049	399700	303395	N/A
17	04/05/2022	78.8	8977	4597	3589	407430	300885	N/A
18	04/05/2022	79.8	9064	5203	3439	405425	305856	N/A
19	04/05/2022	76.7	8789	5151	3456	403465	296967	N/A
20	04/06/2022	79.1	8931	4990	3219	402014	296061	N/A
21	04/07/2022	78.8	8863	5452	3918	406650	296637	N/A
22	04/07/2022	79.3	8859	5197	3711	408090	305211	N/A
23	04/08/2022	81.1	8812	5020	3565	395510	295952	N/A
24	04/08/2022	82.1	9056	4721	3336	398735	293941	N/A
25	04/09/2022	77.8	8599	5060	3663	405826	307302	N/A
26	04/09/2022	79.4	8824	5128	3888	400025	288905	N/A
27	04/09/2022	78.7	8838	4702	3466	407140	298606	N/A
28	04/10/2022	79.5	8714	5036	3328	405116	305286	N/A
29	04/10/2022	80.3	8769	5234	3662	397455	290046	N/A
30	04/10/2022	82.0	8964	5499	4080	396500	294639	N/A
31	04/11/2022	78.8	8635	4678	3891	403976	296696	N/A
32	04/11/2022	80.6	8915	4181	3865	402990	296506	N/A
33	04/11/2022	79.4	8747	5170	3596	409090	301591	N/A
34	04/11/2022	78.8	8558	5262	3759	402164	295060	N/A
35	04/12/2022	77.4	8594	5332	3784	407970	294091	N/A
36	04/12/2022	81.2	8476	3817	3395	406300	296115	N/A
37	04/12/2022	79.8	8413	4778	3307	400132	303659	N/A
38	04/13/2022	77.8	8082	7269	3496	403640	292351	N/A
39	04/13/2022	81.8	8423	4689	3467	402915	293490	N/A
40	04/14/2022	78.1	8009	7627	3431	406760	294424	N/A
41	04/14/2022	80.1	8531	5002	4177	398605	287132	N/A
42	04/14/2022	80.1	8580	5234	4499	398955	302403	N/A
43	04/14/2022	79.0	8818	8994	3965	408946	312532	N/A
44	04/15/2022	78.8	8325	8204	3300	397435	289780	N/A
45	04/16/2022	75.6	7842	6693	3365	402020	292936	N/A
46	04/16/2022	78.5	8022	5300	3546	405900	312106	N/A
47	05/02/2022	78.3	7785	5065	3671	399680	300522	N/A
48	05/03/2022	76.4	7536	5441	3972	404160	389433	N/A
49	05/04/2022	79.3	7766	5441	3787	398495	300642	N/A
50	05/04/2022	79.7	7781	5277	4213	397190	300434	N/A
51	05/05/2022	79.2	7831	5234	3959	406865	302288	N/A
52	05/06/2022	80.4	8095	7474	3556	405575	300326	N/A
53	05/07/2022	78.9	8040	6408	4037	390300	444447	N/A
54	05/08/2022	80.4	7621	4235	3474.3	406405	341059	N/A
55	05/09/2022	79.9	7446	6015	3581	411075	307717	N/A
56	05/09/2022	79.6	7452	5060	4125	408655	299499	N/A
57	05/09/2022	80.0	7483	6245	3790	407690	300294	N/A
58	05/10/2022	78.5	7398	4105	3829	395360	304322	N/A
59	05/11/2022	77.2	7306	4138	4013	398840	359581	N/A
60	05/12/2022	79.1	7584	6448	4311	404375	351861	N/A
61	05/12/2022	75.2	7003	4846	4039	409020	462635	N/A
62	05/13/2022	79.4	7103	4265	4556	401329	297354	N/A
63	05/13/2022	79.1	7010	4358	4571	397960	296045	N/A
64	05/14/2022	79.9	7024	3658	4651	408095	300473	N/A
65	05/15/2022	79.1	7223	6023	4681	399535	387955	N/A
66	05/15/2022	79.5	7029	4248	4402	412555	302438	N/A
67	05/16/2022	79.5	6987	5171	4358	402815	304246	N/A
68	05/17/2022	79.2	7107	6438	4546	407014	324492	N/A
69	05/17/2022	79.9	7170	6864	3856	407825	297559	N/A
70	05/18/2022	79.9	7090	5647	3922	400135	289694	N/A
71	05/18/2022	77.5	6940	3917	3992	399450	297183	N/A
72	05/19/2022	79.8	6830	4405	4446	400285	286612	N/A
73	05/19/2022	77.7	6925	6170	4595	399445	311374	N/A
74	05/20/2022	73.4	6427	3589	4730	406090	283741	N/A
75	05/21/2022	78.8	6782	4364	4093	400290	287682	N/A
76	05/21/2022	75.4	6927	6051	4878	405685	322897	N/A
77	05/22/2022	79.9	7062	4525	4742	397935	278792	N/A
78	05/22/2022	77.8	7003	6842	4175	399080	284632	N/A
79	05/23/2022	77.6	7269	4712	4476	401740	296340	N/A
80	05/23/2022	76.6	7053	5245	5203	407465	285025	N/A
81	05/23/2022	77.7	6976	5979	4738	400020	277231	N/A
82	05/24/2022	80.3	6985	5597	4478	407070	282204	N/A
AVERAGE		79	8,151	5,514	3,892	32,802,074	25,594,008	TOTAL

08/18/2023 JM

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	2,088	2,125	2,091
Big Lime	2,113	2,966	2,091	2,970
Fifty Foot Sandstone	2,966	3,104	2,945	3,107
Gordon	3,104	3,402	3,082	3,405
Fifth Sandstone	3,402	3,484	3,380	3,487
Bayard	3,484	4,163	3,462	4,169
Speechley	4,163	4,487	4,144	4,498
Balltown	4,487	4,921	4,473	4,937
Bradford	4,921	5,182	4,912	5,202
Benson	5,182	5,431	5,177	5,454
Alexander	5,431	6,656	5,429	6,738
Sycamore	6,515	6,631	6,570	6,713
Middlesex	6,631	6,727	6,713	6,859
Burkett	6,727	6,758	6,859	6,914
Tully	6,758	6,821	6,914	7,068
Marcellus	6,821	NA	7,068	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.

LATITUDE 39°32'30"

400'

LATITUDE 39°32'30"

6,297' TO BOTTOM HOLE

Antero Resources Corporation Well No. Maroon Unit 2H

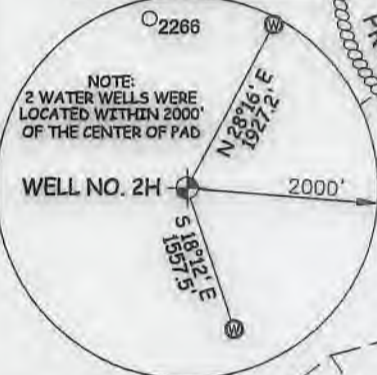
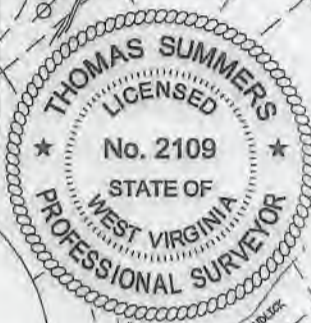
Table listing landowners and leases in Ellsworth District - Tyler County and Green District - Wetzel County.

AS DRILLED DATA: WELL 2H TOP HOLE INFORMATION: N: 376,986ft E: 1,635,266ft... BOTTOM HOLE INFORMATION: N: 392,792ft E: 1,629,597ft... (NAD) 83 (UTM) ZONE 17 COORDS: WELL 2H TOP HOLE INFORMATION: N: 4,375,383m E: 517,798m...

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.

WV NORTH ZONE GRID NORTH

LONGITUDE 80°47'30"



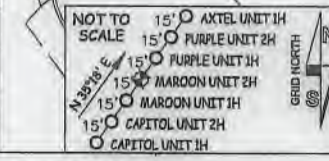
I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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

JOB # 20-012WA DRAWING # MAROON2HAD SCALE 1" = 2000' MINIMUM DEGREE OF ACCURACY SUBMETER PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND table with symbols for Surface Owner Boundary Lines +/-, Interior Surface Tracts +/-, Proposed Well Path, and As Drilled Well Path.



(NAD) 27 (UTM) ZONE 17 COORDS: WELL 2H TOP HOLE INFORMATION: N: 14,354,189ft E: 1,698,762ft... POINT OF ENTRY INFORMATION: N: 14,354,380ft E: 1,698,209ft...

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 095 - 02757 (IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X STATE COUNTY PERMIT LOCATION: ELEVATION 1,200' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER SURFACE OWNER CLARA SUZANNE WALLACE & RICKIE WALLACE ACREAGE 60 ACRES +/- 08/18/2023 OIL & GAS ROYALTY OWNER PHILLIP K. GEORGE; SAMUEL K. STONEKING, JR.; BRC APPALACHIAN MINERALS I LLC; LEASE ACREAGE 60 AC +/-; 76.88 AC +/-; 43 AC +/-; D. RALPH HACKER; D. RALPH THACKER; MURIEL SHERWOOD; WILLIAM D. HOPPE; HAROLD S. YOST ET UX; CHARLES E. GUMP ET UX; 59 AC +/-; 75.97 AC +/-; 163.96 AC +/-; 183.72 AC +/-; 87 AC +/-; 52.08 AC +/-; BRC APPALACHIAN MINERALS I LLC; SHIBEN ESTATES INC.; ROBERT B. MYERS, SR.; ROBERT B. MYERS, SR.; FLUHARTY FAMILY TRUST; DAVID L. SMITH 39 AC +/-; 23.06 AC +/-; 10 AC +/-; 93.5 AC +/-; 6 AC +/-; 30 AC +/- PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,813' TVD 23,523' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

LATITUDE 39°32'30"

400'

LATITUDE 39°32'30"

6,297' TO BOTTOM HOLE

5,036'

LONGITUDE 80°47'30"

Antero Resources Corporation Well No. Maroon Unit 2H

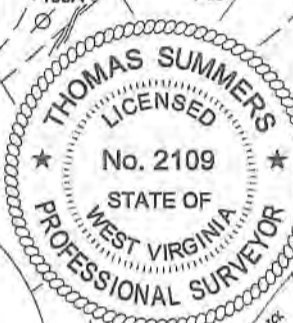
Ellsworth District - Tyler County	
07-07	Lillie Gump
07-08	Lillie Gump
07-09	Harold Yost
07-10	William Hope
07-11	William Hope
07-12	William Hope
07-14	William Hope
07-25	BB Farm Investments LLC
07-26	William Hope
07-27	James Kleeh
11-15	BB Farm Investments LLC
11-16	James Kleeh
11-17	James Kleeh
11-18	Sarah Sine
11-18.1	Sarah Sine
11-19	Eltzie Hall
11-20	Edward Quirk
11-21	Edward Quirk
11-59	Edward Quirk
11-60	Michael Martin
12-01	James Kleeh
12-02	Gary Midcap
12-07	Coastal Forest Resources Co.
12-08	Shirley Carroll
12-09	Coastal Forest Resources Co.
12-10	Michael Martin
12-11	Rickie Wallace
12-12	Rockford Energy LLC
12-13	Eric Fisher
12-33	Richard Neff
Green District - Wetzel County	
11-16	David Smith Et Al
11-18	David Smith Et Al
11-19	David Smith Et Al
11-21	Fluharty Family Trust
11-22	Fluharty Family Trust
11-23	David Smith Et Al
11-24	David Smith Et Al
11-30	Fluharty Family Trust
11-31	Steven Beaty
11-31.1	Brian Stradley
11-32	David Smith Et Al
11-36	Thomas Gaffney
11-37	Sylvia Warrick
11-38	Charles Gump
11-39	Michael Smith
11-40	David Smith Et Al

AS DRILLED DATA:
 WELL 2H TOP HOLE INFORMATION:
 N: 376,986ft E: 1,635,266ft
 LAT: 39°31'40.22" LON: 80°47'35.11"
 BOTTOM HOLE INFORMATION:
 N: 392,792ft E: 1,629,597ft
 LAT: 39°34'15.62" LON: 80°48'50.41"
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
 WELL 2H TOP HOLE INFORMATION:
 N: 4,375,383m E: 517,798m
 BOTTOM HOLE INFORMATION:
 N: 4,380,170m E: 515,991m

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.

WV NORTH ZONE GRID NORTH



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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

JOB # 20-012WA
 DRAWING # MAROON2HAD
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS
 STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

LEGEND
 - - - Surface Owner Boundary Lines +/-
 - - - Interior Surface Tracts +/-
 - - - Proposed Well Path
 - - - As Drilled Well Path
 THOMAS SUMMERS P.S. 2109
 DATE 10/11/22
 OPERATOR'S WELL# MAROON UNIT #2H

NOT TO SCALE
 15' AXTEL UNIT 1H
 15' PURPLE UNIT 2H
 15' PURPLE UNIT 1H
 15' MAROON UNIT 2H
 15' MAROON UNIT 1H
 15' CAPITOL UNIT 2H
 15' CAPITOL UNIT 1H
 (NAD) 27 (UTM) ZONE 17 COORDS:
 WELL 2H TOP HOLE INFORMATION:
 N: 14,354,189ft E: 1,698,762ft
 POINT OF ENTRY INFORMATION:
 N: 14,354,380ft E: 1,698,209ft
 BOTTOM HOLE INFORMATION:
 N: 14,369,893ft E: 1,692,831ft

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 095 - 02757
 (IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X STATE COUNTY PERMIT
 LOCATION: ELEVATION 1,200' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER
 SURFACE OWNER CLARA SUZANNE WALLACE & RICKIE WALLACE ACREAGE 60 ACRES +/- 08/18/2023
 OIL & GAS ROYALTY OWNER PHILLIP K. GEORGE; SAMUEL K. STONEKING, JR.; BRC APPALACHIAN MINERALS I LLC; LEASE ACREAGE 60 AC +/-; 76.88 AC +/-; 43 AC +/-;
 D RALPH HACKER; D. RALPH HACKER; MURIEL SHERWOOD; WILLIAM D. HOPE; HAROLD S. YOST ET UX; CHARLES E. GUMP ET UX; 59 AC +/-; 75.97 AC +/-; 163.96 AC +/-; 183.72 AC +/-; 87 AC +/-; 52.08 AC +/-;
 BRC APPALACHIAN MINERALS I LLC.; SHIBEN ESTATES INC.; ROBERT B. MYERS, SR.; ROBERT B. MYERS, SR.; FLUHARTY FAMILY TRUST; DAVID L. SMITH 39 AC +/-; 23.06 AC +/-; 10 AC +/-; 93.5 AC +/-; 6 AC +/-; 30 AC +/-
 PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
 PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED
 TARGET FORMATION MARCELLUS PLUG & ABANDON CLEAN OUT & REPLUG
 WELL OPERATOR ANTERO RESOURCES CORP. ESTIMATED DEPTH 6,813' TVD 23,523' MD
 ADDRESS 1615 WYNKOOP ST. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
 ADDRESS 5400 D BIG TYLER ROAD
 DENVER, CO 80202 CHARLESTON, WV 25313

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/26/2022
Job End Date:	5/24/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02757-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	MAROON UNIT 2H
Latitude:	39.52784000
Longitude:	-80.79309000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,876
Total Base Water Volume (gal):	26,795,758
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	87.22101	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.16820	

Handwritten signature/initials

D-AIR 3000L	Halliburton	Defoamer					
				Listed Below			
Sand-Premium White-30/50	Halliburton	Proppant					
				Listed Below			
WG-35 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			

OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
MC DF-7250	MultiChem	Defoamer					
				Listed Below			
HYDROCHLORI C ACID, 22 BAUME	Halliburton	Solvent					
				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	12.56145	
			Hydrochloric acid	7647-01-0	30.00000	0.03958	
			Guar gum	9000-30-0	100.00000	0.02982	
			Complex Amine Compound	Proprietary	60.00000	0.02800	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01400	
			Glutaraldehyde	111-30-8	30.00000	0.00248	
			Sorbitan, mono-9- octadecenoate, (Z)	1338-43-8	5.00000	0.00233	
			Surfactant	Proprietary	5.00000	0.00233	
			Ammonium persulfate	7727-54-0	100.00000	0.00065	

			Ethoxylated alcohols	Proprietary	30.00000	0.00053	
			Alkoxyated polyhydric alcohol	Proprietary	1.00000	0.00047	
			Organic chloride compound	Proprietary	1.00000	0.00047	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00041	
			Methanol	67-56-1	100.00000	0.00025	
			Oxylated phenolic resin	Proprietary	30.00000	0.00019	
			Ethanol	64-17-5	1.00000	0.00008	
			Modified thiourea polymer	Proprietary	30.00000	0.00003	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00002	
			Didecyldimethylammonium chloride	68910-32-7	60.00000	0.00002	
			Aldehyde	Proprietary	5.00000	0.00001	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00001	
			Formaldehyde	50-00-0	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	0.00000	
			Sodium glycolate	2836-32-0	0.01000	0.00000	
			Organic salt #1	Proprietary	0.01000	0.00000	
			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			Acrylamide	79-06-1	0.01000	0.00000	
			Organic salt #2	Proprietary	0.01000	0.00000	
			Alkenes	Proprietary	100.00000	0.00000	
			1-Hexadecene	629-73-2	1.00000	0.00000	
			1-Octadecene	112-88-9	1.00000	0.00000	
			Hexadecene	629-73-2	5.00000	0.00000	
			Propargyl alcohol	107-19-7	5.00000	0.00000	
			Polypropylene glycol	25322-69-4	30.00000	0.00000	

			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	30.00000	0.00000	
			Sulfuric acid	7664-93-9	1.00000	0.00000	
			Alkylbenzene Derivatives	Proprietary	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)