

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

API 47 - 095 - 02753 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 Axtel Unit 1H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4375395m Easting 517806m
Landing Point of Curve Northing 4375709.04m Easting 518387.71m
Bottom Hole Northing 4380417m Easting 516775m

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 3/11/2022
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

APPROVED

Reviewed by:

Handwritten Signature
08/18/2023
5/24/23

API 47-095 - 02753 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Axtel Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	28"	20"	125.5'	New	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	479'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2737'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	24045'	New	20#, P-100	N/A	Y
Tubing		2-3/8"	7289'		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	925 sx	15.6	1.19	1101	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) 24045' MD, 6821' TVD (BHL), 6884' (Deepest Point Drilled) Loggers TD (ft) 24045' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5896'

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

08/18/2023 

API 47- 095 - 02753 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Axtel Unit 1H

PRODUCING FORMATION(S)	DEPTHS		
Marcellus	6832' (TOP)	TVD	7480' (TOP) MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1500 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 14194 mcfpd Oil 620 bpd NGL --- bpd Water 1362 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 3/2/2023

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

08/18/2023 

API 47-095-02753 Farm Name Clara Suzanne Wallace & Rickie Wallace Well Number Axtel Unit 1H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	03/27/2022	23922.3	23875.9	60	Marcellus
2	03/28/2022	23836.8	23670.6	60	Marcellus
3	03/28/2022	23635.0	23468.8	60	Marcellus
4	03/29/2022	23433.2	23267.0	60	Marcellus
5	03/29/2022	23231.4	23065.2	60	Marcellus
6	03/30/2022	23029.6	22863.4	60	Marcellus
7	03/31/2022	22827.8	22661.6	60	Marcellus
8	04/01/2022	22626.0	22459.8	60	Marcellus
9	04/02/2022	22424.2	22258.0	60	Marcellus
10	04/02/2022	22222.4	22056.2	60	Marcellus
11	04/03/2022	22020.6	21854.4	60	Marcellus
12	04/03/2022	21818.8	21652.7	60	Marcellus
13	04/03/2022	21617.0	21450.9	60	Marcellus
14	04/04/2022	21415.2	21249.1	60	Marcellus
15	04/04/2022	21213.4	21047.3	60	Marcellus
16	04/04/2022	21011.6	20845.5	60	Marcellus
17	04/05/2022	20809.8	20643.7	60	Marcellus
18	04/05/2022	20608.0	20441.9	60	Marcellus
19	04/05/2022	20406.3	20240.1	60	Marcellus
20	04/07/2022	20204.5	20038.3	60	Marcellus
21	04/07/2022	20002.7	19836.5	60	Marcellus
22	04/07/2022	19800.9	19634.7	60	Marcellus
23	04/08/2022	19599.1	19432.9	60	Marcellus
24	04/09/2022	19397.3	19231.1	60	Marcellus
25	04/09/2022	19195.5	19029.3	60	Marcellus
26	04/09/2022	18993.7	18827.5	60	Marcellus
27	04/10/2022	18791.9	18625.7	60	Marcellus
28	04/10/2022	18590.1	18423.9	60	Marcellus
29	04/10/2022	18388.3	18222.1	60	Marcellus
30	04/10/2022	18186.5	18020.3	60	Marcellus
31	04/11/2022	17984.7	17818.5	60	Marcellus
32	04/11/2022	17782.9	17616.8	60	Marcellus
33	04/12/2022	17581.1	17415.0	60	Marcellus
34	04/12/2022	17379.3	17213.2	60	Marcellus
35	04/12/2022	17177.5	17011.4	60	Marcellus
36	04/13/2022	16975.7	16809.6	60	Marcellus
37	04/13/2022	16773.9	16607.8	60	Marcellus
38	04/13/2022	16572.1	16406.0	60	Marcellus
39	04/14/2022	16370.4	16204.2	60	Marcellus
40	04/14/2022	16168.6	16002.4	60	Marcellus
41	04/14/2022	15966.8	15800.6	60	Marcellus
42	04/15/2022	15765.0	15598.8	60	Marcellus
43	04/15/2022	15563.2	15397.0	60	Marcellus
44	04/26/2022	15361.4	15195.2	60	Marcellus
45	04/26/2022	15159.6	14993.4	60	Marcellus
46	04/27/2022	14957.8	14791.6	60	Marcellus
47	04/27/2022	14756.0	14589.8	60	Marcellus
48	04/27/2022	14554.2	14388.0	60	Marcellus
49	04/29/2022	14352.4	14186.2	60	Marcellus
50	04/29/2022	14150.6	13984.4	60	Marcellus
51	04/29/2022	13948.8	13782.6	60	Marcellus
52	04/29/2022	13747.0	13580.9	60	Marcellus
53	04/30/2022	13545.2	13379.1	60	Marcellus
54	04/30/2022	13343.4	13177.3	60	Marcellus
55	05/05/2022	13141.6	12975.5	60	Marcellus
56	05/06/2022	12939.8	12773.7	60	Marcellus
57	05/08/2022	12738.0	12571.9	60	Marcellus
58	05/10/2022	12536.2	12370.1	60	Marcellus
59	05/11/2022	12334.4	12168.3	60	Marcellus
60	05/12/2022	12132.7	11966.5	60	Marcellus
61	05/12/2022	11930.9	11764.7	60	Marcellus
62	05/13/2022	11729.1	11562.9	60	Marcellus
63	05/13/2022	11527.3	11361.1	60	Marcellus
64	05/14/2022	11325.5	11159.3	60	Marcellus
65	05/15/2022	11123.7	10957.5	60	Marcellus
66	05/15/2022	10921.9	10755.7	60	Marcellus
67	05/16/2022	10720.1	10553.9	60	Marcellus
68	05/17/2022	10518.3	10352.1	60	Marcellus
69	05/17/2022	10316.5	10150.3	60	Marcellus
70	05/18/2022	10114.7	9948.5	60	Marcellus
71	05/18/2022	9912.9	9746.7	60	Marcellus
72	05/19/2022	9711.1	9545.0	60	Marcellus
73	05/19/2022	9509.3	9343.2	60	Marcellus
74	05/20/2022	9307.5	9141.4	60	Marcellus
75	05/21/2022	9105.7	8939.6	60	Marcellus
76	05/21/2022	8903.9	8737.8	60	Marcellus
77	05/22/2022	8702.1	8536.0	60	Marcellus
78	05/23/2022	8500.3	8334.2	60	Marcellus
79	05/23/2022	8298.5	8132.4	60	Marcellus
80	05/23/2022	8096.8	7930.6	60	Marcellus
81	05/24/2022	7895.0	7728.8	60	Marcellus
82	05/24/2022	7693.2	7527.0	60	Marcellus

08/18/2023

API 47-095-02753 Farm Name Clara Suzanne Wallace & Rickie Wallace Well Number Axtel Unit 1H

EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	03/27/2022	78.8	9732.0	8134	3589	176480	219599	N/A
2	03/28/2022	73.7	8955.6	6228.2	3920.03	401210	341325	N/A
3	03/28/2022	73.6	9191.9	6291.32	3673.64	398980	329037	N/A
4	03/29/2022	73.5	9080.9	5876	3971.06	403240	421240	N/A
5	03/29/2022	77.2	9569.9	5122.46	3855.91	395775	368168	N/A
6	03/30/2022	71.6	8967.4	5906.07	3550	411100	380488	N/A
7	03/31/2022	76.2	9062.0	5363.94	4192.68	410825	312482	N/A
8	04/01/2022	60.5	8824.0	6729	3943.63	404475	563613	N/A
9	04/02/2022	81.7	9273.0	5763	3163.39	410280	316929	N/A
10	04/02/2022	81.4	9446.0	5077	3908.54	408105	324620	N/A
11	04/03/2022	81.2	9176.0	5869	3481	406960	314989	N/A
12	04/03/2022	76.3	9027.0	8689	3126	407680	320060	N/A
13	04/03/2022	73.2	8945.0	4717	4131	405964	301200	N/A
14	04/04/2022	76.7	8762.0	7270	4156	407501	326645	N/A
15	04/04/2022	75.0	8770.0	8065	3071	403610	324687	N/A
16	04/04/2022	76.7	8808.0	4945	4331	402886	304784	N/A
17	04/05/2022	78.6	8908.0	5228	2873	408100	308779	N/A
18	04/05/2022	81.0	9415.0	4924	3733	403945	303799	N/A
19	04/05/2022	75.6	8972.0	5033	3139	406886	302691	N/A
20	04/07/2022	65.7	8009.0	5342	4378	420650	557961	N/A
21	04/07/2022	78.5	8890.0	5349	3544	404940	320088	N/A
22	04/07/2022	79.5	9160.0	4556	3997	404559	317727	N/A
23	04/08/2022	76.2	8864.0	4669	3880	408580	327180	N/A
24	04/09/2022	76.3	8811.0	5535	3410	403504	300135	N/A
25	04/09/2022	76.8	8790.0	5238	3550	409965	301436	N/A
26	04/09/2022	76.2	8980.0	5338	3573	406210	300191	N/A
27	04/10/2022	69.3	8579.0	4578	3297	407374	314182	N/A
28	04/10/2022	76.9	8896.0	4937	3601	404484	303189	N/A
29	04/10/2022	80.0	8931.0	4839	4479	410060	299726	N/A
30	04/10/2022	78.9	8523.0	5199	3454	403976	298931	N/A
31	04/11/2022	77.9	8561.0	4970	3963	406150	302380	N/A
32	04/11/2022	64.8	9279.0	5066	6417	154680	200471	N/A
33	04/12/2022	64.3	8129.0	6936	3574	401644	352898	N/A
34	04/12/2022	75.6	8797.0	5493	3602	401325	304215	N/A
35	04/12/2022	79.6	8766.0	5552	3683	404730	300667	N/A
36	04/13/2022	78.0	8698.0	6870	3857	404116	297636	N/A
37	04/13/2022	79.6	8653.0	3907	4829	402490	297818	N/A
38	04/13/2022	76.8	8460.0	5270	4855	409050	298262	N/A
39	04/14/2022	77.2	8467.0	8324	4033	408096	302765	N/A
40	04/14/2022	77.6	9192.0	4509	4300	404040	299729	N/A
41	04/14/2022	78.5	8979.0	5147	4068	405950	299225	N/A
42	04/15/2022	77.5	8396.0	7557	3606	410270	298105	N/A
43	04/15/2022	78.4	8577.0	8212	5228	407069	296966	N/A
44	04/26/2022	78.1	8612.0	8184	4132	399640	357696	N/A
45	04/26/2022	77.8	8191.0	4862	4030	405400	291970	N/A
46	04/27/2022	79.0	8422.0	5186	4088	408860	294172	N/A
47	04/27/2022	81.5	8297.0	5130	3983	401115	290624	N/A
48	04/27/2022	72.9	8552.0	5323	5803.46	264900	268248	N/A
49	04/29/2022	79.4	7865.0	4566	3609	397680	397150	N/A
50	04/29/2022	76.4	8300.0	6814	3710	399646	336344	N/A
51	04/29/2022	77.0	7846.0	5054	4529	404325	315340	N/A
52	04/29/2022	77.7	7734.0	5576	4099	401746	299319	N/A
53	04/30/2022	79.9	7839.0	5720	4036	400540	298709	N/A
54	04/30/2022	76.7	7753.0	6369	4375	404800	300062	N/A
55	05/05/2022	78.7	8209.0	6028	4013	388545	349184	N/A
56	05/06/2022	79.3	8183.0	6046	4250	406505	349558	N/A
57	05/08/2022	79.8	7671.0	6181	4611	401170	312192	N/A
58	05/10/2022	78.7	7971.0	6127.0	3776.0	395360.0	304343.0	N/A
59	05/11/2022	76.6	7897.0	6310.0	4394.0	398840.0	358594.0	N/A
60	05/12/2022	79.3	8050.0	6306.0	4634.0	404375.0	353739.0	N/A
61	05/12/2022	75.2	7351.0	7611.0	4357.0	409020.0	462747.0	N/A
62	05/13/2022	79.5	7539.0	8145.0	4840.0	401329.0	297143.0	N/A
63	05/13/2022	79.1	7469.0	6273.0	4525.0	397960.0	296209.0	N/A
64	05/14/2022	79.9	7327.0	6841.0	4946.0	408095.0	299353.0	N/A
65	05/15/2022	79.1	7522.0	6283.0	4863.0	399535.0	387319.0	N/A
66	05/15/2022	79.5	7500.0	8805.0	4608.0	412555.0	301674.0	N/A
67	05/16/2022	79.6	7341.0	8083.0	4621.0	402815.0	303867.0	N/A
68	05/17/2022	79.2	7251.0	5724.0	5220.0	407014.0	323966.0	N/A
69	05/17/2022	80.0	7513.0	6373.0	4447.0	407825.0	297404.0	N/A
70	05/18/2022	80.0	7295.0	5799.0	4622.0	400135.0	290118.0	N/A
71	05/18/2022	77.5	7148.0	5953.0	4385.0	399450.0	296910.0	N/A
72	05/19/2022	79.8	7294.0	5688.0	4446.0	400285.0	285989.0	N/A
73	05/19/2022	77.9	7555.0	5962.0	3892.0	399445.0	311290.0	N/A
74	05/20/2022	73.8	7146.0	4174.0	4171.0	406090.0	284627.0	N/A
75	05/21/2022	78.5	7686.0	5590.0	3933.0	400290.0	286746.0	N/A
76	05/21/2022	75.3	7301.2	5601.6	4830.6	405685.0	322455.0	N/A
77	05/22/2022	79.9	7321.0	5797.0	3503.0	398365.0	287001.0	N/A
78	05/23/2022	77.7	7398.0	5902.0	4263.0	404105.0	288480.0	N/A
79	05/23/2022	79.7	6978.0	4895.0	3449.0	400714.0	293717.0	N/A
80	05/23/2022	77.3	6921.0	6296.0	4128.0	400790.0	281745.0	N/A
81	05/24/2022	77.3	6995.0	6022.0	4759.0	396505.0	276081.0	N/A
82	05/24/2022	79.7	6939.0	5689.0	3665.0	395235.0	266747.0	N/A
	AVERAGE	77	8,298	5,926	4,092	32,514,603	26,095,850	TOTAL

08/18/2023

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	2,087	2,125	2,175
Big Lime	2,112	2,968	2,175	3,116
Fifty Foot Sandstone	2,968	3,110	3,091	3,265
Gordon	3,110	3,401	3,240	3,578
Fifth Sandstone	3,401	3,492	3,553	3,677
Bayard	3,492	4,168	3,652	4,398
Speechley	4,168	4,457	4,373	4,705
Balltown	4,457	4,920	4,680	5,197
Bradford	4,920	5,178	5,172	5,470
Benson	5,178	5,423	5,445	5,729
Alexander	5,423	6,665	5,704	7,127
Sycamore	6,521	6,640	6,939	7,102
Middlesex	6,640	6,738	7,102	7,261
Burkett	6,738	6,769	7,261	7,317
Tully	6,769	6,832	7,317	7,480
Marcellus	6,832	NA	7,480	NA

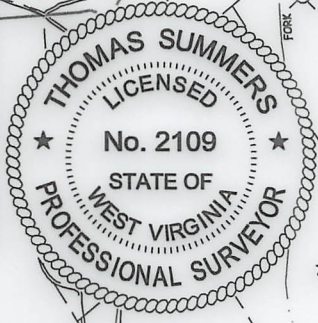
*Please note Antero determines formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.

LATITUDE 39°32'30"

375'

Antero Resources Corporation
Well No. Axtel Unit 1H

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
07-13	William Hope
07-14	William Hope
07-15	John Bennett
07-16	John Bennett
07-23	Harold Yost
07-25	BB Farm Investments LLC
07-26	William Hope
07-27	James Kleeh
11-14	Paul Thomas
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	Elzie Hall
11-20	Edward Quirk
11-21	Edward Quirk
11-22	Nile Harris
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	
11-39	Michael Smith
11-40	David Smith Et Al
15-2	Barbara Clark
15-2.1	Robert Clark
15-3	Robert Clark
15-6	Robert Clark
15-10	Antero Midstream LLC



AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 377,022ft E: 1,635,292ft
LAT: 39°31'40.59" LON: 80°47'34.79"
BOTTOM HOLE INFORMATION:
N: 393,561ft E: 1,632,184ft
LAT: 39°34'23.59" LON: 80°48'17.52"
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 1H TOP HOLE INFORMATION:
N: 4,375,395m E: 517,806m
BOTTOM HOLE INFORMATION:
N: 4,380,417m E: 516,775m

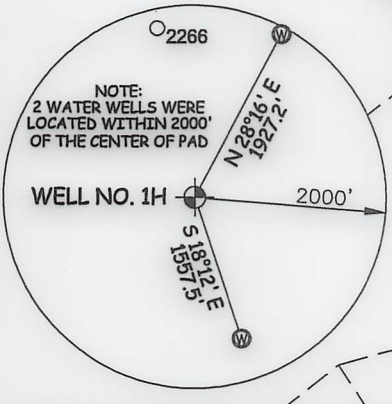
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ANTERO RESOURCES 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

4,999'

LONGITUDE 80°45'00"

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 PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



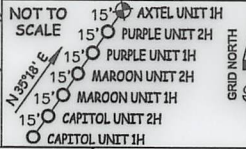
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

JOB # 20-014WA
DRAWING # AXTEL1HAD
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

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

DATE 10/11/22
OPERATOR'S WELL # AXTEL UNIT #1H



(NAD) 27 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 14,354,226ft E: 1,698,787ft
POINT OF ENTRY INFORMATION:
N: 14,355,086ft E: 1,700,815ft
BOTTOM HOLE INFORMATION:
N: 14,370,705ft E: 1,695,404ft

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 095 - 02753
(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 +/-
OIL & GAS ROYALTY OWNER PHILLIP K. GEORGE; RICHARD J. FERRELL ET AL; COASTAL FOREST RESOURCES COMPANY; LEASE ACREAGE 60 AC.±; 27.9 AC.±, 12.15 AC.±, 53.75 AC.±; 70 AC.±; 163.13 AC.±; 112 AC.±; 33 AC.±;
ELSIE M. SNIVELY; LARRY CARROLL ET UX; MACK PERCY GAS WELL INC.; BARBARA K. BAKER ET VIR; PAUL R. KNIGHT ET UX;
WENDI M. MANION; JOHN BENNETT ET UX; ROBERT E. CLARK ET AL; WILLIAM M. CLARK ET AL; JAMES W. YOHO ET UX; JAMES W. YOHO ET UX;
JAMES W. YOHO ET UX; COASTAL FOREST RES. CO; BOUNTY MINERALS; SHIBEN ESTATES, INC.; MC CUNNINGHAM;
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 6,821' TVD 24,045' 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

08/18/2023

COUNTY NAME PERMIT

LATITUDE 39°32'30"

375'

Antero Resources Corporation Well No. Axtel Unit 1H

Table listing landowners and lease numbers for Ellsworth District - Tyler County and Green District - Wetzel County.



AS DRILLED DATA: WELL 1H TOP HOLE INFORMATION: N: 377,022ft E: 1,635,292ft... BOTTOM HOLE INFORMATION: N: 393,561ft E: 1,632,184ft... AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

NOTE: 1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER... 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ANTERO RESOURCES CORPORATION.



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 # 20-014WA DRAWING # AXTEL1HAD 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

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

DATE 10/11/22 OPERATOR'S WELL # AXTEL UNIT #1H

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL 47 - 095 - 02753 (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 +/- OIL & GAS ROYALTY OWNER PHILLIP K. GEORGE; RICHARD J. FERRELL ET AL; COASTAL FOREST RESOURCES COMPANY; LEASE ACREAGE 60 AC +/- 27.9 AC +/- 12.10 AC +/- ELSIE M. SNIVELY; LARRY CARROLL ET UX; MACK PERCY GAS WELL INC.; BARBARA K. BAKER ET VIR; PAUL R. KNIGHT ET UX; 53.75 AC +/- 70 AC +/- 163.13 AC +/- 112 AC +/- 33 AC +/- WENDI M. MANION; JOHN BENNETT ET UX; ROBERT E. CLARK ET AL; WILLIAM M. CLARK ET AL; JAMES W. YOHO ET UX; JAMES W. YOHO ET UX; 28.46 AC +/- 103.05 AC +/- 53.25 AC +/- 85.5 AC +/- 50 AC +/- 119.69 AC +/- JAMES W. YOHO ET UX; COASTAL FOREST RES. CO; BOUNTY MINERALS; SHIBEN ESTATES, INC.; MC CUNNINGHAM; 50 AC +/- 5.88 AC +/- 33.95 AC +/- 13 AC +/- 106 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 6,821' TVD 24,045' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

08/18/2023

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/27/2022
Job End Date:	5/23/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02753-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	AXTEL UNIT 1H
Latitude:	39.52794000
Longitude:	-80.79300000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,883
Total Base Water Volume (gal):	27,411,421
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	87.56381	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.16449	

HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
D-AIR 3000L	Halliburton	Defoamer					
				Listed Below			
WG-35 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
Sand-Premium White-30/50	Halliburton	Proppant					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					

				Listed Below			
MC DF-7250	MultiChem	Defoamer					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
Sand-Premium White-30/70	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	12.21954	
			Hydrochloric acid	7647-01-0	30.00000	0.03798	
			Guar gum	9000-30-0	100.00000	0.03153	
			Complex Amine Compound	Proprietary	60.00000	0.02967	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01483	
			Surfactant	Proprietary	5.00000	0.00247	
			Sorbitan, mono-9- octadecenoate, (Z)	1338-43-8	5.00000	0.00247	
			Glutaraldehyde	111-30-8	30.00000	0.00247	
			Ammonium persulfate	7727-54-0	100.00000	0.00067	
			Ethoxylated alcohols	Proprietary	30.00000	0.00055	
			Alkoxylated polyhydric alcohol	Proprietary	1.00000	0.00049	

			Organic chloride compound	Proprietary	1.00000	0.00049	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00041	
			Methanol	67-56-1	100.00000	0.00024	
			Oxylated phenolic resin	Proprietary	30.00000	0.00020	
			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	0.00001	
			Aldehyde	Proprietary	5.00000	0.00001	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00001	
			Organic salt #2	Proprietary	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	0.00000	
			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			Acrylamide	79-06-1	0.01000	0.00000	
			Sodium glycolate	2836-32-0	0.01000	0.00000	
			Organic salt #1	Proprietary	0.01000	0.00000	
			Formaldehyde	50-00-0	0.01000	0.00000	
			Alkenes	Proprietary	100.00000	0.00000	
			Hexadecene	629-73-2	5.00000	0.00000	
			Propargyl alcohol	107-19-7	5.00000	0.00000	
			1-Hexadecene	629-73-2	1.00000	0.00000	
			1-Octadecene	112-88-9	1.00000	0.00000	
			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	30.00000	0.00000	
			Polypropylene glycol	25322-69-4	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)