

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

API 47-095-02840 County Tyler District Ellsworth
Quad Porter Falls 7.5' Pad Name Ed Yost Field/Pool Name -----
Farm name Edward Yost Estate Well Number Cider Run 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 4377599m Easting 514053m
Landing Point of Curve Northing 4377826.44m Easting 513423.72m
Bottom Hole Northing 4382919m Easting 511684m

Elevation (ft) 1233' 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 12/19/2022 Date drilling commenced 1/23/2023 Date drilling ceased 3/23/2023
Date completion activities began 6/17/2023 Date completion activities ceased 8/25/2023
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 203' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1810' 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]
02/16/2024

API 47- 095 - 02840 Farm name Edward Yost Estate Well number Cider Run Unit 2H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	28"	20"	130'	New	91.59#, J-55	N/A	Y
Surface	17-1/2"	13-3/8"	372'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3540'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" /8-1/2"	5-1/2"	25152'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6955'		4.7#, J-55		
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	178 sx	15.6	1.18	210	0'	8 Hrs.
Surface	Class C	370 sx	15.8	1.17	433	0'	8 Hrs.
Coal							
Intermediate 1	Class C	1233 sx	15.8	1.16	1430	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	4184 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.25 (Tail)	5230	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 25152' MD, 6672' TVD (BHL), 6749' TVD (Deepest Point Drilled) Loggers TD (ft) 25152' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 6311'

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

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Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
 Conductor - 0
 Surface - 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface
 Intermediate - 1 above float joint, 1 above float collar, 1 every 4th joint to surface
 Production - 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

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PERFORATION RECORD

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

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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 (bbbls)	Amount of Nitrogen/other (units)
*PLEASE SEE ATTACHED EXHIBIT 2								

Please insert additional pages as applicable.

02/16/2024

API 47- 095 - 02840 Farm name Edward Yost Estate Well number Cider Run Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6690' (TOP)</u>	<u>TVD</u>	<u>7192' (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 9012.80 mcfpd Oil 433.65 bpd NGL _____ bpd Water 800.88 bpd GAS MEASURED BY Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP DEPTH IN FT NAME TVD</u>	<u>BOTTOM DEPTH IN FT TVD</u>	<u>TOP DEPTH IN FT MD</u>	<u>BOTTOM DEPTH IN FT MD</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
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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 Halliburton
Address 3000 N Sam Houston Pkwy E. City Houston State TX Zip 77032

Stimulating Company Halliburton
Address 3000 N Sam Houston Pkwy E. City Houston State TX Zip 77032

Please insert additional pages as applicable.

Completed by Stefan Gaspar Telephone 303-357-6959
Signature  Title Permitting Agent Date 12/19/2023

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

02/16/2024

API 47-095-02840 Farm Name Edward Yost Estate Well Number Cider Run Unit 2H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	6/17/2023	25023	24979	60	Marcellus
2	6/17/2023	24940.41667	24774.5	60	Marcellus
3	6/18/2023	24738.91667	24573	60	Marcellus
4	6/18/2023	24537.41667	24371.5	60	Marcellus
5	6/19/2023	24335.91667	24170	60	Marcellus
6	6/19/2023	24134.41667	23968.5	60	Marcellus
7	6/19/2023	23932.91667	23767	60	Marcellus
8	6/20/2023	23731.41667	23565.5	60	Marcellus
9	6/20/2023	23529.91667	23364	60	Marcellus
10	6/20/2023	23328.41667	23162.5	60	Marcellus
11	6/21/2023	23126.91667	22961	60	Marcellus
12	6/21/2023	22925.41667	22759.5	60	Marcellus
13	6/21/2023	22723.91667	22558	60	Marcellus
14	6/22/2023	22522.41667	22356.5	60	Marcellus
15	6/22/2023	22320.91667	22155	60	Marcellus
16	6/22/2023	22119.41667	21953.5	60	Marcellus
17	6/23/2023	21917.91667	21752	60	Marcellus
18	6/23/2023	21716.41667	21550.5	60	Marcellus
19	6/23/2023	21514.91667	21349	60	Marcellus
20	6/24/2023	21313.41667	21147.5	60	Marcellus
21	6/24/2023	21111.91667	20946	60	Marcellus
22	6/24/2023	20910.41667	20744.5	60	Marcellus
23	6/25/2023	20708.91667	20543	60	Marcellus
24	6/25/2023	20507.41667	20341.5	60	Marcellus
25	6/25/2023	20305.91667	20140	60	Marcellus
26	6/26/2023	20104.41667	19938.5	60	Marcellus
27	6/26/2023	19902.91667	19737	60	Marcellus
28	6/26/2023	19701.41667	19535.5	60	Marcellus
29	6/27/2023	19499.91667	19334	60	Marcellus
30	6/27/2023	19298.41667	19132.5	60	Marcellus
31	6/27/2023	19096.91667	18931	60	Marcellus
32	6/28/2023	18895.41667	18729.5	60	Marcellus
33	6/28/2023	18693.91667	18528	60	Marcellus
34	6/28/2023	18492.41667	18326.5	60	Marcellus
35	6/28/2023	18290.91667	18125	60	Marcellus
36	6/29/2023	18089.41667	17923.5	60	Marcellus
37	6/29/2023	17887.91667	17722	60	Marcellus
38	6/29/2023	17686.41667	17520.5	60	Marcellus
39	6/30/2023	17484.91667	17319	60	Marcellus
40	6/30/2023	17283.41667	17117.5	60	Marcellus
41	6/30/2023	17081.91667	16916	60	Marcellus
42	7/1/2023	16880.41667	16714.5	60	Marcellus
43	7/1/2023	16678.91667	16513	60	Marcellus
44	7/1/2023	16477.41667	16311.5	60	Marcellus
45	7/2/2023	16275.91667	16110	60	Marcellus
46	7/2/2023	16074.41667	15908.5	60	Marcellus
47	7/2/2023	15872.91667	15707	60	Marcellus
48	7/2/2023	15671.41667	15505.5	60	Marcellus
49	7/3/2023	15469.91667	15304	60	Marcellus
50	7/3/2023	15268.41667	15102.5	60	Marcellus
51	7/3/2023	15066.91667	14901	60	Marcellus
52	7/3/2023	14865.41667	14699.5	60	Marcellus
53	7/3/2023	14663.91667	14498	60	Marcellus
54	7/3/2023	14462.41667	14296.5	60	Marcellus
55	7/4/2023	14260.91667	14095	60	Marcellus
56	7/4/2023	14059.41667	13893.5	60	Marcellus
57	7/4/2023	13857.91667	13692	60	Marcellus
58	7/4/2023	13656.41667	13490.5	60	Marcellus
59	7/4/2023	13454.91667	13289	60	Marcellus
60	7/4/2023	13253.41667	13087.5	60	Marcellus
61	7/4/2023	13051.91667	12886	60	Marcellus
62	7/5/2023	12850.41667	12684.5	60	Marcellus
63	7/5/2023	12648.91667	12483	60	Marcellus
64	7/5/2023	12447.41667	12281.5	60	Marcellus
65	7/5/2023	12245.91667	12080	60	Marcellus
66	7/5/2023	12044.41667	11878.5	60	Marcellus
67	7/5/2023	11842.91667	11677	60	Marcellus
68	7/6/2023	11641.41667	11475.5	60	Marcellus
69	7/6/2023	11439.91667	11274	60	Marcellus
70	7/6/2023	11238.41667	11072.5	60	Marcellus
71	7/6/2023	11036.91667	10871	60	Marcellus
72	7/6/2023	10835.41667	10669.5	60	Marcellus
73	7/7/2023	10633.91667	10468	60	Marcellus
74	7/7/2023	10432.41667	10266.5	60	Marcellus
75	7/7/2023	10230.91667	10065	60	Marcellus
76	7/7/2023	10029.41667	9863.5	60	Marcellus
77	7/7/2023	9827.91667	9662	60	Marcellus
78	7/7/2023	9626.41667	9460.5	60	Marcellus
79	7/7/2023	9424.91667	9259	60	Marcellus
80	7/8/2023	9223.41667	9057.5	60	Marcellus
81	7/8/2023	9021.91667	8856	60	Marcellus
82	7/8/2023	8820.41667	8654.5	60	Marcellus
83	7/8/2023	8618.91667	8453	60	Marcellus
84	7/8/2023	8417.41667	8251.5	60	Marcellus
85	7/8/2023	8215.91667	8050	60	Marcellus
86	7/8/2023	8014.41667	7848.5	60	Marcellus
87	7/9/2023	7812.91667	7647	60	Marcellus
88	7/9/2023	7611.41667	7445.5	60	Marcellus
89	7/9/2023	7409.91667	7244	60	Marcellus

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EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	avg Treatment Pressure (PSI)	Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	6/17/2023	80.96	9607	7195	3700	171308	5228.1836	N/A
2	6/17/2023	83.22	9289	5016	4129	405840	7745.3005	N/A
3	6/18/2023	85.4754	9955.015	3898.67	3774.715	404140	7325.0117	N/A
4	6/18/2023	84.89	9763	5030	3955	396840	6982.9426	N/A
5	6/19/2023	90.19	10296	5155	3916	401560	7178.2407	N/A
6	6/19/2023	88.17	10000	5078	3958	399740	7253.5195	N/A
7	6/19/2023	87.25283	9754.255	5119.08	3810.938	400280	6967.4886	N/A
8	6/20/2023	87.73306	9711.204	5081.83	3918.873	404420	7271.6374	N/A
9	6/20/2023	87.39	9928	5079	4026	399680	7140.2652	N/A
10	6/20/2023	91.01	10171	5146	3961	411800	6897.6869	N/A
11	6/21/2023	96.85	10437	4989	4099	415980	7270.7812	N/A
12	6/21/2023	91.93447	9973.886	5004.29	4011.513	426200	7602.9124	N/A
13	6/21/2023	95.12	10447	4725	3847	420000	7047.7569	N/A
14	6/22/2023	96.58	10387	4129	3885	408700	7070.1148	N/A
15	6/22/2023	94.61625	10009.81	5023.36	4023.742	405980	7309.7098	N/A
16	6/22/2023	97.14	10326	4571	4031	398228	6922.6369	N/A
17	6/23/2023	97.44	10452	4520	4071	413320	6984.816	N/A
18	6/23/2023	98.00971	10267.9	4941.65	4122.577	409760	7317.3243	N/A
19	6/23/2023	97.65	10344	4422	4050	419000	7260.6252	N/A
20	6/24/2023	98.08	10241	3256	3924	421200	6984.8395	N/A
21	6/24/2023	97.09	10399	5131	3963	415720	7462.5983	N/A
22	6/24/2023	96.52	10025	4902	4354	405442	7085.6055	N/A
23	6/25/2023	98.34	10084	3498	3845	399425	6832.0036	N/A
24	6/25/2023	96.94	10071	3700	4178	414480	7395.3367	N/A
25	6/25/2023	97.36	10023	4921	3905	402700	6735.1164	N/A
26	6/26/2023	98.12	9993	4031	3753	420700	6980.9417	N/A
27	6/26/2023	97.77436	9993.713	3807.02	3777.036	412440	7246.3426	N/A
28	6/26/2023	97.05	10034	5149	3990	393140	7190	N/A
29	6/27/2023	97.05	9974	4353	3895	403242	6806.6152	N/A
30	6/27/2023	97.16097	10067.5	5116.58	3532.172	419608	7372.9617	N/A
31	6/27/2023	96.82	10084	5498	3756	418800	7068.3779	N/A
32	6/28/2023	98.1	9996	5054	3913	397655	6613.1512	N/A
33	6/28/2023	97.76324	9957.685	4654.32	3679.214	408900	7131.2626	N/A
34	6/28/2023	97.24632	9772.811	5226	4105.504	415320	7219.9798	N/A
35	6/28/2023	97.44	9860	3568	3978	394772	6667.5733	N/A
36	6/29/2023	97.45169	9939.923	4617.14	3993.708	416520	7119.8957	N/A
37	6/29/2023	96.82	9089	4305	3759	417400	7415.2545	N/A
38	6/29/2023	97.65	9087	5156	3796	414700	7077.7698	N/A
39	6/30/2023	97.27	9015	5157	3737	414720	7275.2193	N/A
40	6/30/2023	97.67543	9082.416	5127.78	3749.973	420540	7157.075	N/A
41	6/30/2023	97.24	9049	5098	3803	414360	7218.495	N/A
42	7/1/2023	97.63	9073	5368	3667	418260	7051.8943	N/A
43	7/1/2023	97.56337	8998.881	5141	3639.561	422600	7249.4395	N/A
44	7/1/2023	95.69	9018	5911	3604	410860	7139.9224	N/A
45	7/2/2023	96.89	9087	5069	3885	409620	6918.6919	N/A
46	7/2/2023	60.73	6859	5445	3417	415720	8807.781	N/A
47	7/2/2023	95.45	8883	4240	3796	413400	7217.7371	N/A
48	7/2/2023	97.25	9039	5386	3930	417820	7414.2993	N/A
49	7/3/2023	97.1	9012	4561	3799	413860	7065.9295	N/A
50	7/3/2023	96.85	9067	5559	4100	406200	6714.2645	N/A
51	7/3/2023	96.59329	8956.937	5308.24	4292.927	416880	6971.7788	N/A
52	7/3/2023	96.54631	8975.626	5177.48	4115.533	412020	7025.7902	N/A
53	7/3/2023	96.8	8956	4996	3939	411720	7036.1971	N/A
54	7/3/2023	97.62	8735	4664	3765	416360	6923.7933	N/A
55	7/4/2023	97.14	8900	5098	3713	414780	6987.7638	N/A
56	7/4/2023	97.24	8897	4932	3631	407020	6713.0471	N/A
57	7/4/2023	97.06637	8763.299	4921.68	3684.921	417240	6894.895	N/A
58	7/4/2023	97.12	8785	5272	3393	418320	7224.7155	N/A
59	7/4/2023	97.57529	8829.042	5119.11	3632.811	416040	7351.5229	N/A
60	7/4/2023	96.62	8793	5478	3530	412440	7073.6862	N/A
61	7/4/2023	85.85953	8062.306	5152.14	3976.839	412080	8208.5462	N/A
62	7/5/2023	97.8117	8878.081	5252.65	3540.72	419140	7192.374	N/A
63	7/5/2023	97.66982	8722.52	5318.55	4300.449	415400	7551.8626	N/A
64	7/5/2023	97.21723	8476.185	5695.04	3470.533	412860	6897.699	N/A
65	7/5/2023	96.30395	8192.476	5296.27	3581.86	418880	6839.1319	N/A
66	7/5/2023	97.26	8226	5384	3644	416660	6778.5555	N/A
67	7/5/2023	97.4737	8195.247	5280.23	3613.448	404400	7045.7814	N/A
68	7/6/2023	98.32267	8451.022	5028.68	3545.682	401810	6875.6969	N/A
69	7/6/2023	97.66182	8511.695	5058.92	3623.294	412200	7077.551	N/A
70	7/6/2023	96.86	8225	5027	3649	417300	7093.3029	N/A
71	7/6/2023	97.67	8517	5716	3611	394370	6839.1771	N/A
72	7/6/2023	99.96	8669	5506	3738	416180	6896.4467	N/A
73	7/7/2023	96.00502	8994.943	5727.36	3642.933	402850	6932.6255	N/A
74	7/7/2023	97.43	8651	5337	4204	413840	6999.6386	N/A
75	7/7/2023	96.96	8132	5662	3892	410360	6991.1074	N/A
76	7/7/2023	97.05	8385	5320	4099	420160	7280.6917	N/A
77	7/7/2023	97.34179	8143.894	3627.26	3590.185	412680	7008.4531	N/A
78	7/7/2023	97.32	8238	5592	3877	419420	6760.6052	N/A
79	7/7/2023	98.11462	8552.92	5504.09	3692.883	416220	7045.245	N/A
80	7/8/2023	98.555	8212.331	5831.42	3794.538	413780	7147.96	N/A
81	7/8/2023	98.46791	7917.618	4743.27	3748.092	408180	7106.7562	N/A
82	7/8/2023	98.06961	8036.27	5481.17	3630.855	409370	7253.3231	N/A
83	7/8/2023	97.81303	7641.621	5508.23	3704.303	428600	7120.1014	N/A
84	7/8/2023	97.56	7582	5459	3853	417500	7109.6273	N/A
85	7/8/2023	97.31516	7662.286	5806.21	3637.161	398750	6948.8205	N/A
86	7/8/2023	98.14092	7555.647	5291.84	3636.802	398130	7042.5857	N/A
87	7/9/2023	97.99	7549	5610	3640	409600	7142.6819	N/A
88	7/9/2023	98.56577	7542.88	5751.88	3397.881	416820	7143.2029	N/A
89	7/9/2023	95.73	7189	5694	4296	421900	8349.6148	N/A
AVERAGE		95.5	9,120	5,042	3,830	36,385,110	633,296	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
Silty Sandstone	70	170	70	170
Silty Shale	170	330	170	330
shaly sand	330	420	330	420
Shale	420	850	420	850
Dolomitic Shale	850	1,000	850	1,000
Shaly Siltstone	1,000	1,100	1,000	1,100
Silty Sandstone	1,100	1,320	1,100	1,320
Shaly Sand	1,320	1,470	1,320	1,470
Sandstone	1,470	1,720	1,470	1,720
Silty, Shaly, Sandstone	1,720	1,760	1,720	1,760
Sandstone, Tr Shale, Tr Coal	1,760	1,800	1,760	1,800
Silty Sandstone	1,800	1,880	1,800	1,880
Shaly Siltstone	1,880	2,062	1,880	2,117
Big Lime	2,092	2,905	2,147	2,998
Fifty Foot Sandstone	2,905	2,974	2,998	3,069
Gordon	2,974	3,191	3,069	3,296
Fifth Sandstone	3,191	3,446	3,296	3,561
Bayard	3,446	4,090	3,561	4,232
Speechley	4,090	4,323	4,232	4,477
Balltown	4,323	4,786	4,477	4,967
Bradford	4,786	5,085	4,967	5,285
Benson	5,085	5,461	5,285	5,682
Alexander	5,461	6,552	5,682	6,868
Sycamore	6,414	6,522	6,694	6,838
Middlesex	6,522	6,610	6,838	6,985
Burkett	6,610	6,629	6,985	7,026
Tully	6,629	6,690	7,026	7,192
Marcellus	6,690	NA	7,192	NA

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JAN 05 2024

WV Department of
Environmental Protection

02/16/2024

LATITUDE 39°35'00" 926'

LATITUDE 39°37'30"

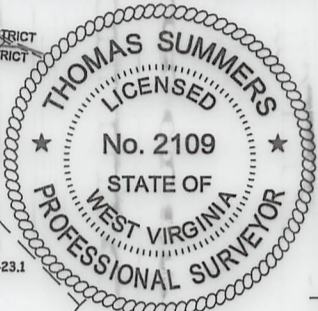
Antero Resources Corporation Well No. Cider Run Unit 2H

Table listing leaseholders for Ellsworth District - Tyler County, including Daniel Witschey, Michael Daugherty, and others.

AS DRILLED DATA: WELL 2H TOP HOLE INFORMATION: N: 384,462ft E: 1,623,097ft... BOTTOM HOLE INFORMATION: N: 402,049ft E: 1,615,614ft...

(NAD) 83 (UTM) ZONE 17 COORDS: WELL 2H TOP HOLE INFORMATION: N: 4,377,599m E: 514,053m... BOTTOM HOLE INFORMATION: N: 4,382,919m E: 511,684m

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 2H TOP HOLE INFORMATION: N: 14,361,458ft E: 1,686,474ft... POINT OF ENTRY INFORMATION: N: 14,361,977ft E: 1,684,552ft...



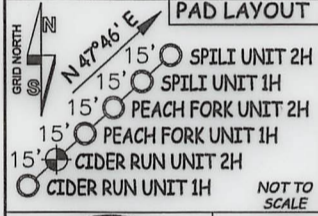
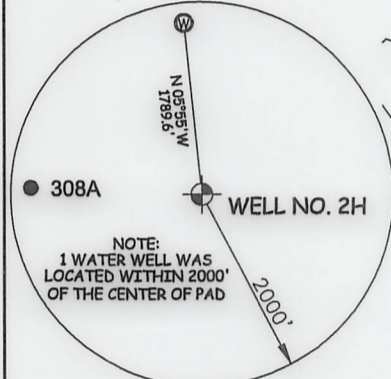
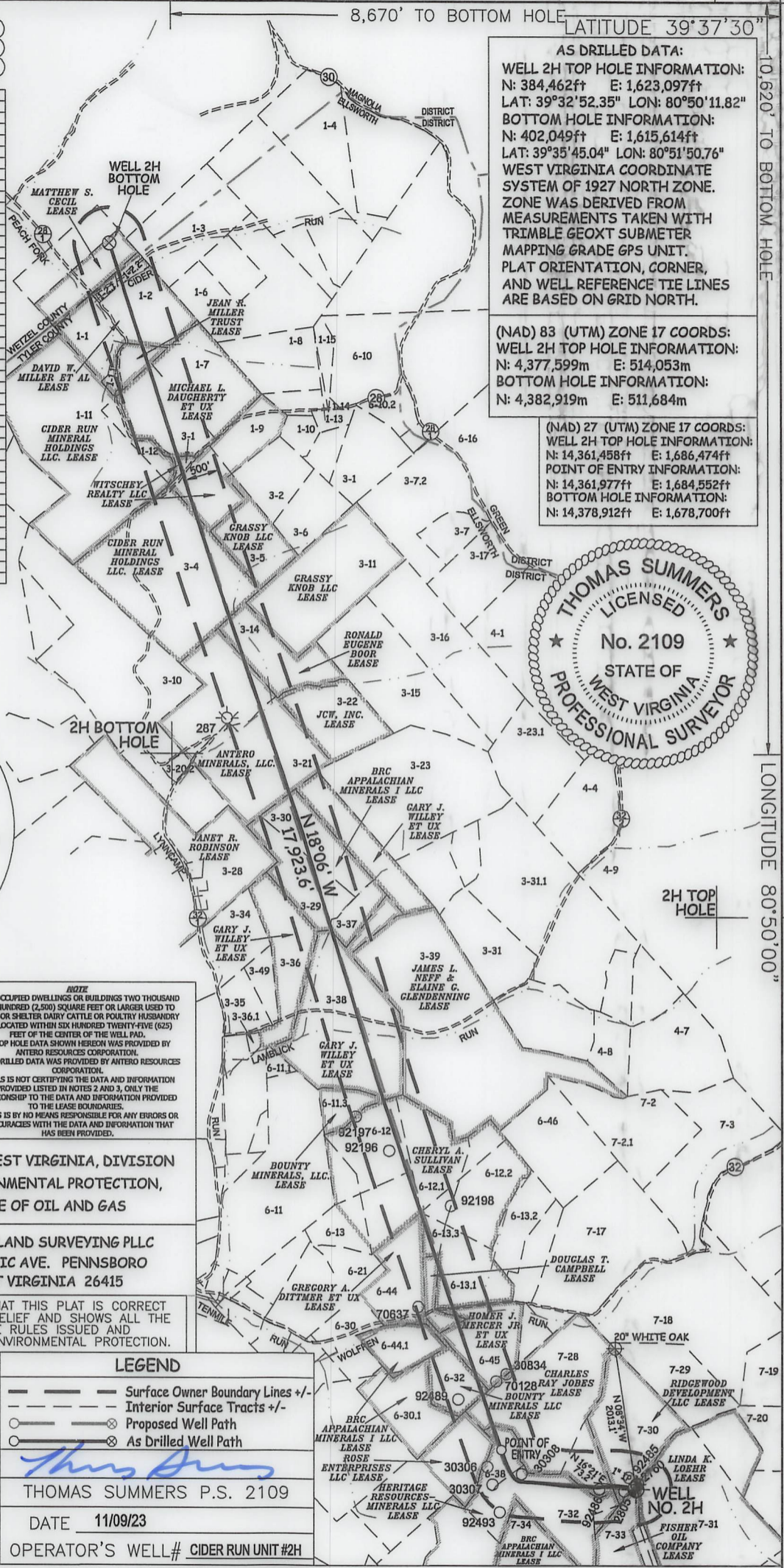
WV NORTH ZONE GRID NORTH

10,620' TO BOTTOM HOLE

12,916'

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"



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.



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

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.

JOB # 20-011WA DRAWING # CIDRRUN2HAD 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 11/09/23 OPERATOR'S WELL # CIDER RUN UNIT #2H

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL 47 095 02840 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW STATE COUNTY PERMIT LOCATION: ELEVATION 1,233' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER SURFACE OWNER EDWARD YOST ESTATE ACREAGE 109.06 ACRES +/- LEASE ACREAGE 45.67 ACRES± OIL & GAS ROYALTY OWNER FISHER OIL COMPANY

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 6,672' TVD 25,152' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS ADDRESS 1615 WYNKOOP ST. ADDRESS 535 WHITE OAK BLVD. BRIDGEPORT, WV 26330

02/16/2024

LATITUDE 39°35'00" 926'

8,670' TO BOTTOM HOLE

LATITUDE 39°37'30"

10,620' TO BOTTOM HOLE

12,916'

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"

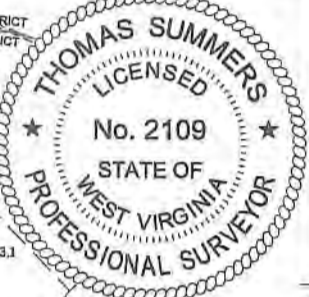
Antero Resources Corporation Well No. Cider Run Unit 2H

ELLSWORTH DISTRICT - TYLER COUNTY	
1-1	DANIEL WITSCHY
1-1.1	DANIEL WITSCHY
1-1.2	RICHARD KOEHLER
1-2	ANNETTE FINKLE
1-2.1	RUBY CARROLL
1-2.2	RUBY CARROLL
1-3	DANIEL WITSCHY
1-7	MICHAEL DAUGHERTY
1-9	WITSCHY REALTY INC.
1-11	DANIEL WITSCHY
1-12	DANIEL WITSCHY
3-1	WITSCHY REALTY INC.
3-4	DANIEL WITSCHY
3-5	JOYCE MORRIS
3-10	STEVEN HIGGINS
3-11	JOYCE MORRIS
3-14	CARL RUCKER
3-21	JCW INC.
3-22	JCW INC.
3-28	RHODA MORGAN
3-29	GARY WILLEY
3-30	GARY WILLEY
3-36	GARY WILLEY
3-37	GARY WILLEY
3-38	GARY WILLEY
3-39	PAUL STRICKLAND
6-12	TIMOTHY MCHENRY
6-12.1	TIMOTHY MCHENRY
6-12.2	NANCY MERCER
6-13.1	NANCY MERCER
6-13.3	TIMOTHY MCHENRY
6-30.1	LARRY ADAMS
6-32	JAMES TEMPLE
6-38	ROBERT MERCER
6-44	GREGORY DITTMER
6-44.1	SCOTT STRAIGHT
6-45	HOMER MERCER
7-28	EDWARD YOST
7-30	FLODE YOST
7-31	EDWARD YOST
7-32	ROBERT MERCER
7-33	GARY MIDCAP
7-34	J. B. RICE

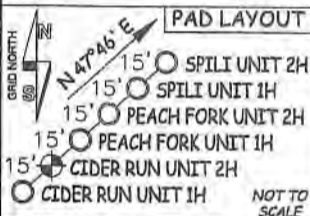
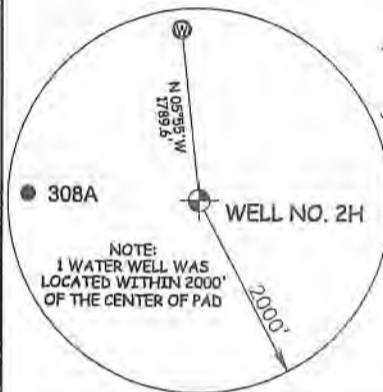
AS DRILLED DATA:
 WELL 2H TOP HOLE INFORMATION:
 N: 384,462ft E: 1,623,097ft
 LAT: 39°32'52.35" LON: 80°50'11.82"
 BOTTOM HOLE INFORMATION:
 N: 402,049ft E: 1,615,614ft
 LAT: 39°35'45.04" LON: 80°51'50.76"
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE.
 ZONE WAS DERIVED FROM MEASUREMENTS TAKEN 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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 BOTTOM HOLE INFORMATION:
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WV NORTH ZONE GRID NORTH



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- TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
- AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
- WAS 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 BODIES/OWNERS.
- WAS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.



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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JOB # 20-011WA
 DRAWING # CIDERRUN2HAD
 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 11/09/23
 OPERATOR'S WELL# CIDER RUN UNIT #2H

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 095 - 02840
 (IF "GAS") PRODUCTION STORAGE ___ DEEP ___ SHALLOW STATE COUNTY PERMIT
 LOCATION: ELEVATION 1,233' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER
 SURFACE OWNER EDWARD YOST ESTATE ACREAGE 109.06 ACRES +/-
 OIL & GAS ROYALTY OWNER FISHER OIL COMPANY LEASE ACREAGE 45.67 ACRES +/-

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 6,672' TVD 25,152' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS
 ADDRESS 1615 WYNKOOP ST. ADDRESS 535 WHITE OAK BLVD.
 DENVER, CO 80202 BRIDGEPORT, WV 26330

02/16/2024

COUNTY NAME

PERMIT

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/17/2023
Job End Date:	7/9/2023
State:	West Virginia
County:	Tyler
API Number:	47-095-02840-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	CIDER RUN UNIT 2H
Latitude:	39.54795200
Longitude:	-80.83644100
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	9,186
Total Base Water Volume (gal):	27,877,072
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	86.30653	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.16421	

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MC B-8614A	MultiChem	Biocide					
				Listed Below			
100 Mesh Permian	Halliburton	Proppant					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
FDP-S1464-22	Halliburton	Friction Reducer					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				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	13.50687	
		Hydrochloric acid	7647-01-0	30.00000	0.03853	
		Complex amine compound	Proprietary	60.00000	0.02749	

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			Hydrotreated distillate	Proprietary	30.00000	0.01374	
			Guar gum	9000-30-0	100.00000	0.00371	
			Glutaraldehyde	111-30-8	30.00000	0.00249	
			Ethoxylated alcohol	Proprietary	5.00000	0.00229	
			Ammonium chloride	12125-02-9	5.00000	0.00229	
			Fatty nitrogen derived amides	Proprietary	5.00000	0.00229	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00046	
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00046	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00041	
			Methanol	67-56-1	100.00000	0.00024	
			Ammonium persulfate	7727-54-0	100.00000	0.00012	
			Ethanol	64-17-5	1.00000	0.00008	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007	
			Modified thiourea polymer	Proprietary	30.00000	0.00007	
			Oxylated phenolic resin	Proprietary	30.00000	0.00004	
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000	

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 WV Department of Environmental Protection

- * 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)