

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

API 47 - 085 - 10419 County Ritchie District Union
Quad Oxford 7.5' Pad Name Cashew Field/Pool Name -----
Farm name Elmer W. Pierce Well Number Elklick 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 4335823m Easting 512288m
Landing Point of Curve Northing 4335713.12m Easting 512483.41m
Bottom Hole Northing 4332047m Easting 513748m

Elevation (ft) 1040' 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 4/6/2022 Date drilling commenced 5/17/2022 Date drilling ceased 9/3/2022
Date completion activities began 10/21/2022 Date completion activities ceased 12/14/2022
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 184,53,236' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1847,1759,1709' Void(s) encountered (Y/N) depths No
Coal depth(s) ft None Reported Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:
APPROVED
EMK
05/11/2023

API 47-085 - 10419 Farm name Elmer W. Pierce Well number Elklick 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	20"	16"	130'	New	62.64#, X-60	N/A	Y
Surface	13-1/2"	10-3/4"	351'	New	40.5#, J-55	N/A	Y
Coal							
Intermediate 1	9-7/8"	7-5/8"	2566'	New	26.4#, L-80	N/A	Y
Intermediate 2							
Intermediate 3							
Production	6-3/4"	5"	19454'	New	18#, P-110CY	N/A	Y
Tubing		2-3/8"	6473'		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	81 sx	15.6	1.18	96	0'	8 Hrs.
Surface	Class A	220 sx	15.8	1.17	257	0'	8 Hrs.
Coal							
Intermediate 1	Class A	563 sx	15.8	1.16	653	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	745 sx (Lead)	11 (Lead), 8.33 (Tail)	2.7 (Lead)	2012	-500' into Intermediate casing	8 Hrs.
Tubing							

Drillers TD (ft) 21600' MD, 6900' TVD (BHL), 6434' (Deepest Point Drilled) Loggers TD (ft) 21600' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 5667'

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

05/11/2023

API 47-085-10419 Farm Name Elmer W. Pierce Well Number Elklick Unit 1H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	10/21/2022	19306.4	19261.6	60	Marcellus
2	10/21/2022	19223.9371	19057.6226	60	Marcellus
3	10/22/2022	19021.95968	18855.6452	60	Marcellus
4	10/22/2022	18819.98226	18653.6677	60	Marcellus
5	10/23/2022	18618.00484	18451.6903	60	Marcellus
6	10/23/2022	18416.02742	18249.7129	60	Marcellus
7	10/24/2022	18214.05	18047.7355	60	Marcellus
8	10/24/2022	18012.07258	17845.7581	60	Marcellus
9	10/25/2022	17810.09516	17643.7806	60	Marcellus
10	10/25/2022	17608.11774	17441.8032	60	Marcellus
11	10/26/2022	17406.14032	17239.8258	60	Marcellus
12	10/26/2022	17204.1629	17037.8484	60	Marcellus
13	10/27/2022	17002.18548	16835.871	60	Marcellus
14	10/27/2022	16800.20806	16633.8935	60	Marcellus
15	10/28/2022	16598.23065	16431.9161	60	Marcellus
16	10/28/2022	16396.25323	16229.9387	60	Marcellus
17	10/28/2022	16194.27581	16027.9613	60	Marcellus
18	10/29/2022	15992.29839	15825.9839	60	Marcellus
19	10/29/2022	15790.32097	15624.0065	60	Marcellus
20	10/30/2022	15588.34355	15422.029	60	Marcellus
21	10/30/2022	15386.36613	15220.0516	60	Marcellus
22	10/31/2022	15184.38871	15018.0742	60	Marcellus
23	10/31/2022	14982.41129	14816.0968	60	Marcellus
24	10/31/2022	14780.43387	14614.1194	60	Marcellus
25	11/1/2022	14578.45645	14412.1419	60	Marcellus
26	11/1/2022	14376.47903	14210.1645	60	Marcellus
27	11/1/2022	14174.50161	14008.1871	60	Marcellus
28	11/2/2022	13972.52419	13806.2097	60	Marcellus
29	11/2/2022	13770.54677	13604.2323	60	Marcellus
30	11/3/2022	13568.56935	13402.2548	60	Marcellus
31	11/3/2022	13366.59194	13200.2774	60	Marcellus
32	11/4/2022	13164.61452	12998.3	60	Marcellus
33	11/4/2022	12962.6371	12796.3226	60	Marcellus
34	11/5/2022	12760.65968	12594.3452	60	Marcellus
35	11/5/2022	12558.68226	12392.3677	60	Marcellus
36	11/5/2022	12356.70484	12190.3903	60	Marcellus
37	11/5/2022	12154.72742	11988.4129	60	Marcellus
38	11/5/2022	11952.75	11786.4355	60	Marcellus
39	11/6/2022	11750.77258	11584.4581	60	Marcellus
40	11/6/2022	11548.79516	11382.4806	60	Marcellus
41	11/6/2022	11346.81774	11180.5032	60	Marcellus
42	11/6/2022	11144.84032	10978.5258	60	Marcellus
43	11/6/2022	10942.8629	10776.5484	60	Marcellus
44	11/7/2022	10740.88548	10574.571	60	Marcellus
45	11/7/2022	10538.90806	10372.5935	60	Marcellus
46	11/7/2022	10336.93065	10170.6161	60	Marcellus
47	11/7/2022	10134.95323	9968.63871	60	Marcellus
48	11/8/2022	9932.975806	9766.66129	60	Marcellus
49	11/8/2022	9730.998387	9564.68387	60	Marcellus
50	11/8/2022	9529.020968	9362.70645	60	Marcellus
51	11/8/2022	9327.043548	9160.72903	60	Marcellus
52	11/8/2022	9125.066129	8958.75161	60	Marcellus
53	11/8/2022	8923.08871	8756.77419	60	Marcellus
54	11/9/2022	8721.11129	8554.79677	60	Marcellus
55	11/9/2022	8519.133871	8352.81935	60	Marcellus
56	11/9/2022	8317.156452	8150.84194	60	Marcellus
57	11/9/2022	8115.179032	7948.86452	60	Marcellus
58	11/9/2022	7913.201613	7746.8871	60	Marcellus
59	11/10/2022	7711.224194	7544.90968	60	Marcellus
60	11/10/2022	7509.246774	7342.93226	60	Marcellus
61	11/10/2022	7307.269355	7140.95484	60	Marcellus
62	11/10/2022	7105.291935	6938.97742	60	Marcellus
63	11/10/2022	6903.314516	6737	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	10/21/2022	65.0	8674	7904	3095	174720	224529	N/A
2	10/21/2022	65.0	8597	6748	3767	416980	279359	N/A
3	10/22/2022	69.9	8658	6837	2840	402241	252991	N/A
4	10/22/2022	69.9	8485	7158	3317	407326	313668	N/A
5	10/23/2022	72.3	8562	7613	3270	412626	335750	N/A
6	10/23/2022	71.7	8592	6944	3586	399113	315756	N/A
7	10/24/2022	68.0	8578	6615	3388	414221	312566	N/A
8	10/24/2022	73.0	8705	6803	3784	414877	312568	N/A
9	10/25/2022	78.8	8715	7630	4212	402722	292811	N/A
10	10/25/2022	77.6	8584	8648	3263	414857	309488	N/A
11	10/26/2022	80.5	8524	7676	3220	407070	303849	N/A
12	10/26/2022	81.3	8569	8774	3435	399783	298270	N/A
13	10/27/2022	75.6	8580	3903	3213	409191	312769	N/A
14	10/27/2022	79.8	8621	8261	3488	411389	302824	N/A
15	10/28/2022	79.7	8664	5912	3498	407317	303931	N/A
16	10/28/2022	75.4	8453	8456	3188	399652	302972	N/A
17	10/28/2022	76.6	8479	6459	3001	411863	298611	N/A
18	10/29/2022	77.0	8495	8306	2861	414963	302471	N/A
19	10/29/2022	77.3	8476	8344	3085	417529	306651	N/A
20	10/30/2022	78.5	8474	4365	2995	418943	308652	N/A
21	10/30/2022	76.1	8373	7916	3101	399453	294510	N/A
22	10/31/2022	82.3	8492	5166	3082	405347	293349	N/A
23	10/31/2022	83.7	8424	8719	3045	413721	303559	N/A
24	10/31/2022	75.9	8208	6710	3135	400816	286712	N/A
25	11/1/2022	81.7	8389	6395	3660	415640	303665	N/A
26	11/1/2022	82.2	8465	6686	3228	410769	292619	N/A
27	11/1/2022	84.4	8600	6167	3053	409316	294580	N/A
28	11/2/2022	82.8	8579	6232	3137	408155	300382	N/A
29	11/2/2022	87.1	8500	6666	3361	402704	297725	N/A
30	11/3/2022	85.2	8454	5595	3386	400798	325453	N/A
31	11/3/2022	86.4	8163	6200	3437	409066	295949	N/A
32	11/4/2022	82.4	8127	8331	2842	401484	309533	N/A
33	11/4/2022	83.3	8223	4673	3317	401299	294894	N/A
34	11/5/2022	83.0	8078	6938	3489	416125	317081	N/A
35	11/5/2022	88.7	8132	5670	3239	415695	359987	N/A
36	11/5/2022	89.1	8064	7180	2889	415435	306171	N/A
37	11/5/2022	87.1	7867	5814	2837	414205	309906	N/A
38	11/5/2022	86.3	7704	6787	3115	412940	303282	N/A
39	11/6/2022	89.7	7483	4063	2887	402052	307431	N/A
40	11/6/2022	88.2	7591	5997	2928	401923	298191	N/A
41	11/6/2022	88.4	7742	6441	3067	403074	296790	N/A
42	11/6/2022	85.0	7768	6220	2926	410763	302419	N/A
43	11/6/2022	86.4	7500	5517	3040	412013	303478	N/A
44	11/7/2022	86.9	7726	6508	3185	410846	299128	N/A
45	11/7/2022	85.9	7567	6732	3163	405355	296585	N/A
46	11/7/2022	87.8	7526	6696	3338	397915	291054	N/A
47	11/7/2022	80.9	7426	5721	3693	405820	354447	N/A
48	11/8/2022	85.4	7491	5755	3357	401975	290001	N/A
49	11/8/2022	85.9	7264	6766	3453	406122	285992	N/A
50	11/8/2022	82.5	7716	5198	3279	413244	292728	N/A
51	11/8/2022	85.7	7600	6497	3496	411683	291146	N/A
52	11/8/2022	89.1	7964	6164	2692	409581	284055	N/A
53	11/8/2022	84.6	7248	6876	3062	407613	288922	N/A
54	11/9/2022	85.7	7410	7301	3122	404783	292649	N/A
55	11/9/2022	84.4	7441	6048	3216	403328	282412	N/A
56	11/9/2022	86.7	7281	5666	3476	403899	282165	N/A
57	11/9/2022	87.8	7378	6485	3206	404293	290509	N/A
58	11/9/2022	86.0	7388.0	6805.0	3153.0	414157.0	297159.0	N/A
59	11/10/2022	81.7	7060.0	5666.0	2971.0	401290.0	286770.0	N/A
60	11/10/2022	79.6	7048.0	5433.0	2524.0	415667.0	296288.0	N/A
61	11/10/2022	86.7	7227.0	5008.0	2928.0	415543.0	289138.0	N/A
62	11/10/2022	84.7	7294.0	5502.0	3192.0	403818.0	275798.0	N/A
63	11/10/2022	81.5	6882.0	6486.0	2838.0	397938.0	288809.0	N/A
AVERAGE		82	8,037	6,552	3,207	25,475,046	18,843,907	TOTAL

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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
Sandy Siltstone, tr LS	100	280	100	280
Sandy Siltstone, occ LS	280	430	280	430
Shaly Siltstone, tr SS	430	490	430	490
Shaly Siltstone, Coal	490	520	490	520
Shaly Siltstone, occ SS, tr Coal	520	610	520	610
Shaly Siltstone	610	730	610	730
Silty Shale, tr ls, coal	730	820	730	820
Sandy Shale, tr coal	820	970	820	970
Shaly Sandstone, tr coal	970	1,300	970	1,300
Sandy Shale, occ Siltstone	1,300	1,540	1,300	1,540
Silty Shale, occ sandstone	1,540	1,930	1,540	1,930
Shale, occ sandstone	1,930	2,050	1,930	2,050
Sandy Siltstone, occ shale	2,050	1,845	2,050	1,847
Big Lime	1,875	2,388	1,847	2,392
Fifty Foot Sandstone	2,388	2,568	2,362	2,573
Gordon	2,568	2,868	2,543	2,874
Fifth Sandstone	2,868	2,964	2,844	2,971
Bayard	2,964	3,674	2,941	3,703
Speechley	3,674	3,837	3,673	3,873
Balltown	3,837	4,383	3,843	4,428
Bradford	4,383	4,781	4,398	4,834
Benson	4,781	5,031	4,804	5,093
Alexander	5,031	6,221	5,063	6,366
Sycamore	6,015	6,191	6,111	6,336
Middlesex	6,191	6,300	6,336	6,529
Burkett	6,300	6,342	6,529	6,632
Tully	6,342	6,360	6,632	6,685
Marcellus	6,360	NA	6,685	NA

Marcellus

*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.

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LATITUDE 39°12'30" 6,971'

LATITUDE 39°10'00" 2,312' TO BOTTOM HOLE

10,196' TO BOTTOM HOLE

13,431'

LONGITUDE 80°50'00"

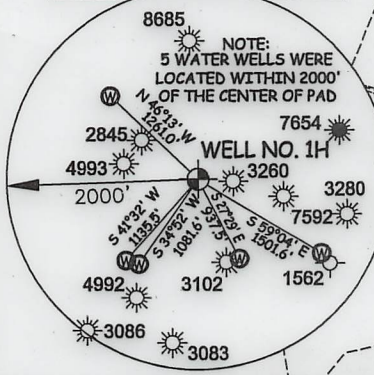
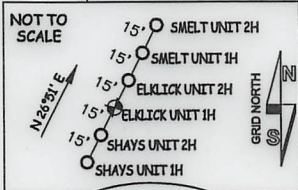
LONGITUDE 80°50'00"

Antero Resources Corporation Well No. Ellick 1H

AS DRILLED DATA: WELL 1H TOP HOLE INFORMATION: N: 247,468ft E: 1,615,018ft LAT: 39°10'17.24" LON: 80°51'28.51" BOTTOM HOLE INFORMATION: N: 235,459ft E: 1,619,500ft LAT: 39°08'19.23" LON: 80°50'29.34" 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: 4,335,823m E: 512,288m BOTTOM HOLE INFORMATION: N: 4,332,187m E: 513,714m

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 14,224,397ft E: 1,680,684ft POINT OF ENTRY INFORMATION: N: 14,224,506ft E: 1,681,221ft BOTTOM HOLE INFORMATION: N: 14,212,469ft E: 1,685,363ft



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 # 21-015WA DRAWING # ELKCLICK1HAD 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 03/17/23 OPERATOR'S WELL# ELKCLICK 1H

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.

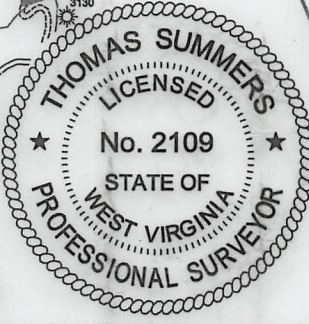


Table listing landowners and leases in the area, including David Ball, Trustees of Baptist Church, South Fork Cemetery, Kevin Ball, Isaac Richards, James Haught, Jeffrey Bailey, Brown Goodwin, Charles Leonard, Brown Goodwin, Coy Adams, Arden Cogar, Danita Hilley, Larry Gander, WF Smith, Lois Gander, Elmer Pierce, Brian Vansant, James Beck, Harvey Shepler, James Beck, Brian Harriman, Brian Vansant, Mark Vansant, Danita Hilley, Brian Harriman, Randall Hess, Steven Lusk, Kenny Osbourne, Kenny Osbourne, Kenny Osbourne, Kent Graf Jan, Joshua Friedman, Miller Ball, M E Church, Kenny Osbourne, Kenny Osbourne, Brian Vansant, James Haught, James Haught, Alles Ball, Kent Graf Jan, Douglas Maxson, Douglas Maxson, Douglas Maxson, Mary Deberry, Linda Jennings, Clarence Bush, Patricia Shepler, Daryl Shepler, Terrell Henderson, Santi Italliano, Santi Italliano, Santi Italliano, Clarence Bush, Jon Bonnell, Jon Bonnell, Daryl Shepler, Darlene Nailor, Harold Pierce, WVDOT.

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 085 - 10419 (IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X STATE COUNTY PERMIT LOCATION: ELEVATION 1,019' -AS BUILT WATERSHED SOUTH FORK HUGHES RIVER QUADRANGLE OXFORD 7.5' DISTRICT UNION COUNTY RITCHIE SURFACE OWNER ELMER W. PIERCE ACREAGE 67.78 ACRES +/- 05/11/2023 OIL & GAS ROYALTY OWNER R. F. KEISTER ET AL; B. GUY WHITEHAIR ET UX; RALPH JETT ET UX; LEASE ACREAGE 70 AC.±; 17 AC.±; 148 AC.±; JAY-BEE ROYATLY, LLC.; T.M. GRIFFIN ET UX; O. M. BRITTON ET AL; D.J. RICHARDS ET UX; 38 AC.±; 140 AC.±; 50 AC.±; 38.2 AC.±; MAUDE PIERCE ET AL; CHAD W. JOHNSON; MARY LUCILLE DEBERRY; ANTERO MINERALS LLC; HARVEY SHEPLER ET AL 60.26 AC.±; 165 AC.±; 81.26 AC.±; 107.16 AC.±; 188 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 6,401' TVD 19,454' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS ADDRESS 1615 WYNKOOP ST. ADDRESS 535 WHITE OAKS BLVD BRIDGEPORT, WV 26330

LATITUDE 39°12'30"

6,971'

LATITUDE 39°10'00"

2,312' TO BOTTOM HOLE

Antero Resources Corporation Well No. Ellick 1H

AS DRILLED DATA: WELL 1H TOP HOLE INFORMATION: N: 247,468ft E: 1,615,018ft LAT: 39°10'17.24" LON: 80°51'28.51" BOTTOM HOLE INFORMATION: N: 235,459ft E: 1,619,500ft LAT: 39°08'19.23" LON: 80°50'29.34" 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: 4,335,823m E: 512,288m BOTTOM HOLE INFORMATION: N: 4,332,187m E: 513,714m

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 14,224,397ft E: 1,680,684ft POINT OF ENTRY INFORMATION: N: 14,224,506ft E: 1,681,221ft BOTTOM HOLE INFORMATION: N: 14,212,469ft E: 1,685,363ft

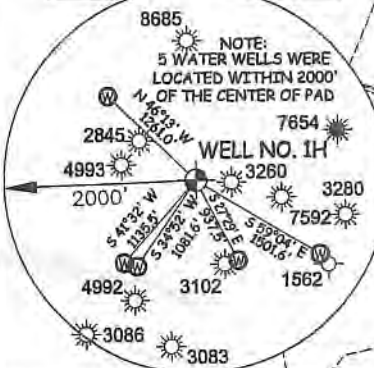
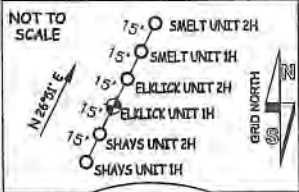


Table listing landowners and lease information for the area, including names like David Ball, Larry Gander, and various lease numbers.

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 # 21-015WA DRAWING # ELCLICK1HAD 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 03/17/23 OPERATOR'S WELL# ELCLICK 1H

Professional seal for Thomas Summers, State of West Virginia Professional Surveyor, No. 72109, dated APR 07 2023.

Form containing well details: WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL 47 - 085 - 10419 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X STATE COUNTY PERMIT LOCATION: ELEVATION 1,019' AS BUILT WATERSHED SOUTH FORK HUGHES RIVER QUADRANGLE OXFORD 7.5 DISTRICT UNION COUNTY RITCHIE SURFACE OWNER ELMER W. PIERCE ACREAGE 67.78 ACRES +/- 05/11/2023 OIL & GAS ROYALTY OWNER R. F. KEISTER ET AL; B. GUY WHITEHAIR ET UX; RALPH JETT ET UX; LEASE ACREAGE 70 AC +/- 17 AC +/- 148 AC +/- JAY-BEE ROYATLY, LLC; T.M. GRIFFIN ET UX; O. M. BRITTON ET AL; D.J. RICHARDS ET UX; 38 AC +/- 140 AC +/- 50 AC +/- 38.2 AC +/- MAUDE PIERCE ET AL; CHAD W. JOHNSON; MARY LUCILLE DEBERRY; ANTERO MINERALS LLC; HARVEY SHEPLER ET AL 60.26 AC +/- 165 AC +/- 81.26 AC +/- 107.16 AC +/- 188 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 6,401' TVD 19,454' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS ADDRESS 1615 WYNKOOP ST. ADDRESS 535 WHITE OAKS BLVD BRIDGEPORT, WV 26330

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/21/2022
Job End Date:	11/10/2022
State:	West Virginia
County:	Ritchie
API Number:	47-085-10419-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	ELKCLICK UNIT 1H
Latitude:	39.17146000
Longitude:	-80.85792000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,434
Total Base Water Volume (gal):	19,774,436
Total Base Non Water Volume:	0

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Division of Oil and Gas



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	86.63359	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.13994	

OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
Chemstream StimSTREAM FR 2800	Chemstream, Inc.	Friction Reducer					
				Listed Below			
HYDROCHLORI C ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			

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MC B-8614A	MultiChem	Biocide					
				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	13.13049	
			Hydrochloric acid	7647-01-0	30.00000	0.03784	
			Guar gum	9000-30-0	100.00000	0.02370	
			Distillates, (petroleum), hydrotreated light	64742-47-8	25.00000	0.01689	
			Complex Amine Compound	Proprietary	60.00000	0.00573	
			Alcohols, C11-14-iso, C-13-rich, ethoxylated	78330-21-9	5.00000	0.00338	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.00287	
			Glutaraldehyde	111-30-8	30.00000	0.00243	
			Ammonium persulfate	7727-54-0	100.00000	0.00076	
			Surfactant	Proprietary	5.00000	0.00048	
			Sobitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00048	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00040	
			Methanol	67-56-1	100.00000	0.00024	
			Oxylated phenolic resin	Proprietary	30.00000	0.00023	
			Ethoxylated alcohols	Proprietary	5.00000	0.00011	
			Alkoxylated polyhydric alcohol	Proprietary	1.00000	0.00010	
			Organic chloride compound	Proprietary	1.00000	0.00010	
			Ethanol	64-17-5	1.00000	0.00008	
			Modified thiourea polymer	Proprietary	30.00000	0.00007	

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			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007	
			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	0.00001	
			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			Organic salt #2	Proprietary	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	
			Acrylamide	79-06-1	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	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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