

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

API 47-017-06937 County Doddridge District Grant
Quad Smithburg 7.5' Pad Name Lemley Pad Field/Pool Name -----
Farm name Brian D. Lemley & Christy M. Lemaster ET AL. Well Number Phebe 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 4353048m Easting 527563m
Landing Point of Curve Northing 4353096.11m Easting 527941.10m
Bottom Hole Northing 4348821m Easting 529417m

Elevation (ft) 1304' 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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JUN 2 2023
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Date permit issued 7/7/2022 Date drilling commenced 9/12/2022 Date drilling ceased 11/25/2022
Date completion activities began 1/15/2023 Date completion activities ceased 3/11/2023
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 357', 613', 856' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1460', 1673' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 980' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

APPROVED

Reviewed by:
IMR
7/18/23 02/09/2024

API 47-017 - 06937 Farm name Brian D. Lemley & Christy M. Lemaster ET AL. Well number Phebe 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"	130'	New	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	916'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3365'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	22748'	New	20#, P-110-ICY	N/A	Y
Tubing		2-3/8"	7473'		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	195 sx	15.6	1.18	230	0'	8 Hrs.
Surface	Class A	1032 sx	15.8	1.16	1197	0'	8 Hrs.
Coal							
Intermediate 1	Class A	1155 sx	15.8	1.16	1340	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	3610 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.25 (Tail)	4513	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 22748' MD, 7169' TVD (BHL), 7217' (Deepest Point Drilled) Loggers TD (ft) 22748' MD

Deepest formation penetrated Marcellus Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 6525'

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Conductor - 0
Surface - 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface
Intermediate - 1 above float joint, 1 above float collar, 1 every 4th joint to surface
Production - 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS JUN 2 2023

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS WV Department of Environmental Protection

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

LATITUDE 39°20'00"

3882'

LATITUDE 39°17'30"

Antero Resources Corporation Well No. Phebe Unit 1H

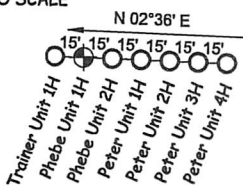
AS DRILLED DATA:

WELL 1H TOP HOLE INFORMATION: N: 303,156ft E: 1,666,088ft ... WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE.

(NAD) 83 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 4,353,048m E: 527,563m

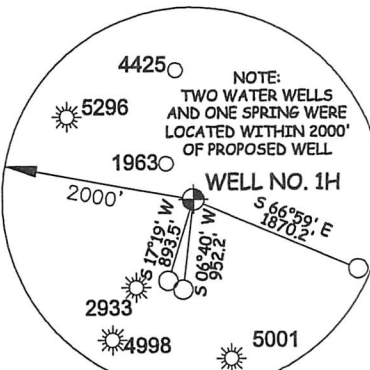
PAD LAYOUT

NOT TO SCALE



NOTE

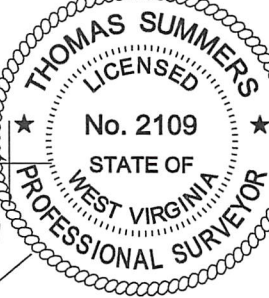
- 1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.



GRANT DISTRICT - DODDRIDGE COUNTY

Table listing landowners and their parcel numbers (e.g., 9-34 HFP LLC, 10-25 DENNIS POWELL, 13-05 HFP LLC, etc.)

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 14,280,909ft E: 1,730,800ft



MINERAL OWNERSHIP

Table listing mineral owners and their interests (e.g., B CREED JONES ET AL, C DEBORIS NADINE DAVIS, D MARIETTE LEMLEY ET AL, etc.)

WELL NO. 1H BOTTOM HOLE

JOB # 17-030WA DRAWING # PHEBE1HAD SCALE 1" = 2000' MINIMUM DEGREE OF ACCURACY SUBMETER

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

LEGEND Surface Owner Boundary Lines +/- Interior Surface Tracts +/- Proposed Well Path As Drilled Well Path

THOMAS SUMMERS P.S. 2109

DATE 05/09/23 OPERATOR'S WELL# PHEBE UNIT #1H

API WELL # 47 - 017 - 06937 STATE COUNTY PERMIT

DATE 02/09/2024

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X LOCATION: ELEVATION 1,304' AS BUILT WATERSHED MCELROY CREEK QUADRANGLE SMITHBURG 7.5 DISTRICT GRANT COUNTY DODDRIDGE SURFACE OWNER BRIAN D. LEMLEY & CHRISTY M. LEMASTER ET AL ACREAGE 59.08 ACRES +/- OIL & GAS ROYALTY OWNER MARIETTE LEMLEY ET AL; SIDNEY AUSTIN SMITH TRUST LLC; CHAD W. JOHNSON; LEASE ACREAGE 66.87 AC±; 50 AC±; 31.96 AC±; JOYCE A. BATES; SIDNEY THOMPSON; PAULA KAY REYNOLDS; Z.T. BALL ET UX; WILLIAM C. HUNTER; ANTERO MINERALS LLC; WILLIAM C. HUNTER; 47.88 AC±; 98 AC±; 79.06 AC±; 138 AC±; 11.85 AC±; 6.29 AC±; 21.75 AC±; GARY G. WILCOX; EMAX GAS CO. ET AL; EMAX GAS CO. ET AL; PERRY TATE; F. G. ORR ET AL; LINDA R. NEPPS; RANDALL E. SHEARER 6.9 AC±; 49.5 AC±; 81 AC±; 70 AC±; 172 AC±; 189.88 AC±; 212.5 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 7,169' TVD 22,748' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS ADDRESS 1615 WYNKOOP STREET ADDRESS 535 WHITE OAKS BLVD BRIDGEPORT, WV 26330

LATITUDE 39°20'00"

3882'

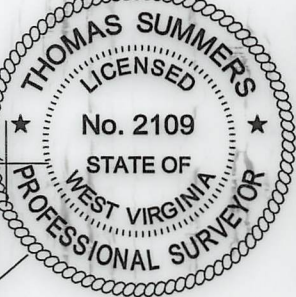
Antero Resources Corporation Well No. Phebe Unit 1H

AS DRILLED DATA:

WELL 1H TOP HOLE INFORMATION: N: 303,156ft E: 1,666,088ft LAT: 39°19'34.75" LON: 80°40'49.39" BOTTOM HOLE INFORMATION: N: 289,185ft E: 1,671,938ft LAT: 39°17'17.42" LON: 80°39'32.66" 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: 4,353,048m E: 527,563m BOTTOM HOLE INFORMATION: N: 4,348,821m E: 529,417m

WV NORTH ZONE GRID NORTH



LONGITUDE 80°37'30"

LONGITUDE 80°40'00"

Table of Mineral Ownership listing names and well identifiers such as B CREED JONES ET AL, C DELORIS NADINE DAVIS, etc.

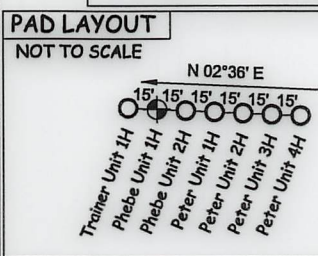
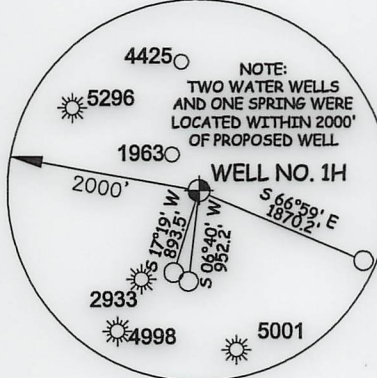


Table listing landowners in Grant District - Doddridge County, including names like HFP LLC, Dennis Powell, Jeffery Hill, etc.

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 14,280,909ft E: 1,730,800ft POINT OF ENTRY INFORMATION: N: 14,281,291ft E: 1,732,020ft BOTTOM HOLE INFORMATION: N: 14,267,042ft E: 1,736,880ft



JOB # 17-030WA DRAWING # PHEBE1HAD SCALE 1" = 2000' MINIMUM DEGREE OF ACCURACY SUBMETER PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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 WILLLOW LAND SURVEYING PLLC 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

LEGEND: Surface Owner Boundary Lines +/-, Interior Surface Tracts +/-, Proposed Well Path, As Drilled Well Path. Signature of Thomas Summers.

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS. WELLS: OIL, GAS, LIQUID INJECTION, WASTE DISPOSAL. LOCATION: ELEVATION 1,304' AS BUILT, QUADRANGLE SMITHBURG 7.5', DISTRICT GRANT, COUNTY DODDRIDGE. SURFACE OWNER BRIAN D. LEMLEY & CHRISTY M. LEMASTER ET AL. ACREAGE 59.08 ACRES +/-.

02/09/2024

COUNTY NAME PERMIT

API 47-017-06937 Farm Name Brian D. Lemley & Christy M. Lemaster ET AL Well Number Phebe Unit 1H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1/15/2023	22690	22586	60	Marcellus
2	1/16/2023	22548.48423	22382.9054	60	Marcellus
3	1/16/2023	22347.38964	22181.8108	60	Marcellus
4	1/16/2023	22146.29505	21980.7162	60	Marcellus
5	1/17/2023	21945.20045	21779.6216	60	Marcellus
6	1/17/2023	21744.10586	21578.527	60	Marcellus
7	1/18/2023	21543.01126	21377.4324	60	Marcellus
8	1/18/2023	21341.91667	21176.3378	60	Marcellus
9	1/19/2023	21140.82207	20975.2432	60	Marcellus
10	1/19/2023	20939.72748	20774.1486	60	Marcellus
11	1/20/2023	20738.63288	20573.0541	60	Marcellus
12	1/20/2023	20537.53829	20371.9595	60	Marcellus
13	1/20/2023	20336.44369	20170.8649	60	Marcellus
14	1/21/2023	20135.3491	19969.7703	60	Marcellus
15	1/21/2023	19934.2545	19768.6757	60	Marcellus
16	1/21/2023	19733.15991	19567.5811	60	Marcellus
17	1/22/2023	19532.06532	19366.4865	60	Marcellus
18	1/22/2023	19330.97072	19165.3919	60	Marcellus
19	1/23/2023	19129.87613	18964.2973	60	Marcellus
20	1/23/2023	18928.78153	18763.2027	60	Marcellus
21	1/23/2023	18727.68694	18562.1081	60	Marcellus
22	1/24/2023	18526.59234	18361.0135	60	Marcellus
23	1/24/2023	18325.49775	18159.9189	60	Marcellus
24	1/24/2023	18124.40315	17958.8243	60	Marcellus
25	1/25/2023	17923.30856	17757.7297	60	Marcellus
26	1/25/2023	17722.21396	17556.6351	60	Marcellus
27	1/25/2023	17521.11937	17355.5405	60	Marcellus
28	1/26/2023	17320.02477	17154.4459	60	Marcellus
29	1/26/2023	17118.93018	16953.3514	60	Marcellus
30	1/26/2023	16917.83559	16752.2568	60	Marcellus
31	1/27/2023	16716.74099	16551.1622	60	Marcellus
32	1/27/2023	16515.6464	16350.0676	60	Marcellus
33	1/27/2023	16314.5518	16148.973	60	Marcellus
34	1/28/2023	16113.45721	15947.8784	60	Marcellus
35	1/28/2023	15912.36261	15746.7838	60	Marcellus
36	1/28/2023	15711.26802	15545.6892	60	Marcellus
37	1/28/2023	15510.17342	15344.5946	60	Marcellus
38	1/29/2023	15309.07883	15143.5	60	Marcellus
39	1/29/2023	15107.98423	14942.4054	60	Marcellus
40	1/30/2023	14906.88964	14741.3108	60	Marcellus
41	1/30/2023	14705.79505	14540.2162	60	Marcellus
42	1/30/2023	14504.70045	14339.1216	60	Marcellus
43	1/30/2023	14303.60586	14138.027	60	Marcellus
44	1/30/2023	14102.51126	13936.9324	60	Marcellus
45	1/31/2023	13901.41667	13735.8378	60	Marcellus
46	1/31/2023	13700.32207	13534.7432	60	Marcellus
47	1/31/2023	13499.22748	13333.6486	60	Marcellus
48	1/31/2023	13298.13288	13132.5541	60	Marcellus
49	1/31/2023	13097.03829	12931.4595	60	Marcellus
50	1/31/2023	12895.94369	12730.3649	60	Marcellus
51	1/31/2023	12694.8491	12529.2703	60	Marcellus
52	2/1/2023	12493.7545	12328.1757	60	Marcellus
53	2/1/2023	12292.65991	12127.0811	60	Marcellus
54	2/1/2023	12091.56532	11925.9865	60	Marcellus
55	2/1/2023	11890.47072	11724.8919	60	Marcellus
56	2/1/2023	11689.37613	11523.7973	60	Marcellus
57	2/2/2023	11488.28153	11322.7027	60	Marcellus
58	2/2/2023	11287.18694	11121.6081	60	Marcellus
59	2/2/2023	11086.09234	10920.5135	60	Marcellus
60	2/2/2023	10884.99775	10719.4189	60	Marcellus
61	2/2/2023	10683.90315	10518.3243	60	Marcellus
62	2/2/2023	10482.80856	10317.2297	60	Marcellus
63	2/3/2023	10281.71396	10116.1351	60	Marcellus
64	2/3/2023	10080.61937	9915.04054	60	Marcellus
65	2/3/2023	9879.524775	9713.94595	60	Marcellus
66	2/3/2023	9678.43018	9512.85135	60	Marcellus
67	2/3/2023	9477.335586	9311.75676	60	Marcellus
68	2/3/2023	9276.240991	9110.66216	60	Marcellus
69	2/3/2023	9075.146396	8909.56757	60	Marcellus
70	2/4/2023	8874.051802	8708.47297	60	Marcellus
71	2/4/2023	8672.957207	8507.37838	60	Marcellus
72	2/4/2023	8471.862613	8306.28378	60	Marcellus
73	2/4/2023	8270.768018	8105.18919	60	Marcellus
74	2/4/2023	8069.673423	7904.09459	60	Marcellus
75	2/5/2023	7868.578829	7703	60	Marcellus

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API 47-017-06997 Farm Name Brian D. Lemley & Christy M. Lemaster ET AL Well Number Phebe 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	1/15/2023	49.1	8238.0	6478	5383	77400	160933	N/A
2	1/16/2023	91.5	10201.5	6161.46	5336.679	392340	318827	N/A
3	1/16/2023	90.5	10341.8	4706.59	5265.956	398600	309170	N/A
4	1/16/2023	91.7	10371.0	6862	5342	396510	277327	N/A
5	1/17/2023	92.5	10346.2	6295.65	5432.533	413900	308654	N/A
6	1/17/2023	85.8	9996.0	6684	5422	397420	404566	N/A
7	1/18/2023	88.6	10358.8	4984.99	5603.227	401820	285668	N/A
8	1/18/2023	92.3	10150.4	6356.86	5631.525	407730	356017	N/A
9	1/19/2023	95.3	10277.0	5405	5801	412530	299580	N/A
10	1/19/2023	91.8	10087.0	7525.82	5451.958	396980	290017	N/A
11	1/20/2023	92.1	10132.0	4761	5339	414080	290761	N/A
12	1/20/2023	90.5	10197.5	7631.41	5200.143	406100	284133	N/A
13	1/20/2023	93.3	10210.0	6681	4891	409040	287827	N/A
14	1/21/2023	93.2	10120.0	5032	5332	413020	291690	N/A
15	1/21/2023	94.0	10330.1	6740	5235.519	409460	282802	N/A
16	1/21/2023	92.3	10021.0	5144	5370	418500	295691	N/A
17	1/22/2023	91.3	10095.0	5850	5236	414280	291636	N/A
18	1/22/2023	93.4	10191.0	6833.41	5146.024	413620	290244	N/A
19	1/23/2023	93.4	10091.0	7132	5299	397520	283015	N/A
20	1/23/2023	93.2	10157.2	6521.62	4955.936	397440	282149	N/A
21	1/23/2023	94.3	9930.0	6283	5872	405580	289991	N/A
22	1/24/2023	95.1	10108.0	5599	5973	415090	290066	N/A
23	1/24/2023	96.1	9959.0	6324	5311	410590	284142	N/A
24	1/24/2023	95.7	9927.3	5988.91	5872.125	412640	284834	N/A
25	1/25/2023	95.7	10053.1	5794.03	5384.558	407990	286972	N/A
26	1/25/2023	94.2	9903.0	6116	5689	411708	280708	N/A
27	1/25/2023	95.2	9824.0	5947	5594	392810	276128	N/A
28	1/26/2023	96.2	9900.1	5842.87	5346.099	414360	289710	N/A
29	1/26/2023	95.6	9573.0	5980	6245	400060	274053	N/A
30	1/26/2023	96.5	9922.8	5833.12	5153.961	398810	273797	N/A
31	1/27/2023	97.1	9790.0	5699.62	5285.861	415010	281166	N/A
32	1/27/2023	96.0	9590.0	7179	5636	414680	283010	N/A
33	1/27/2023	96.6	9041.6	5570.06	5575.467	408500	283790	N/A
34	1/28/2023	97.3	8857.8	5203.58	5572.102	395510	275367	N/A
35	1/28/2023	96.3	9073.0	5929	5574	397130	280660	N/A
36	1/28/2023	96.7	8872.0	5225	5569	399330	288532	N/A
37	1/28/2023	97.1	9020.0	6063.73	4514.138	401510	282330	N/A
38	1/29/2023	96.6	8918.4	6145.73	5262.374	415240	292249	N/A
39	1/29/2023	97.3	8798.8	5016.93	5484.982	397420	282848	N/A
40	1/30/2023	97.3	8891.0	6032	5339	396290	276785	N/A
41	1/30/2023	95.7	9020.0	5806	4996	397540	317645	N/A
42	1/30/2023	95.3	8753.3	6234.83	5177.97	394120	275509	N/A
43	1/30/2023	95.4	8666.1	5597.15	5196.456	364350	301432	N/A
44	1/30/2023	97.1	8483.0	5335	5326	396770	277703	N/A
45	1/31/2023	97.2	8682.0	5635	5436	406728	287416	N/A
46	1/31/2023	98.2	8533.0	6165	5141	411300	344043	N/A
47	1/31/2023	96.6	8730.2	5971.36	5109.703	404880	322927	N/A
48	1/31/2023	96.7	8536.0	6483	5349	413830	307309	N/A
49	1/31/2023	95.6	8429.0	6040	5546	413630	285729	N/A
50	1/31/2023	95.9	8508.5	6050.82	5345.217	417890	292497	N/A
51	1/31/2023	97.8	8652.0	5697	5472	406350	286015	N/A
52	2/1/2023	97.8	8613.8	5564.51	5329.322	408080	281573	N/A
53	2/1/2023	95.4	8487.0	5737	5410	412960	288704	N/A
54	2/1/2023	95.8	8545.0	7027	5110	411590	299207	N/A
55	2/1/2023	96.2	8432.7	5609.78	5629.55	415220	283290	N/A
56	2/1/2023	97.8	8331.9	5418.86	4934.715	403170	277605	N/A
57	2/2/2023	98.4	8538.1	5716.04	5060.236	415240	277723	N/A
58	2/2/2023	97.8	8698.0	5899.0	4690.0	400668	277407	N/A
59	2/2/2023	95.2	8707.4	5715.3	5380.3	395370	279368	N/A
60	2/2/2023	96.9	8140.0	5780.0	4857.0	405760	287803	N/A
61	2/2/2023	94.6	8151.9	6121.3	5333.7	378600	286145	N/A
62	2/2/2023	97.6	8133.5	5738.7	5383.1	408780	284837	N/A
63	2/3/2023	98.1	8102.0	6064.0	5478.0	396000	283888	N/A
64	2/3/2023	98.0	8209.0	6164.0	5022.0	394260	285021	N/A
65	2/3/2023	96.6	8346.6	5675.0	5138.6	394840	276120	N/A
66	2/3/2023	95.3	8019.0	5588.0	4669.0	395690	279508	N/A
67	2/3/2023	96.0	8078.5	5747.2	5440.9	393350	274152	N/A
68	2/3/2023	97.1	7989.5	6270.7	5287.8	402320	277892	N/A
69	2/3/2023	98.1	7986.1	5858.8	5470.7	417150	289976	N/A
70	2/4/2023	97.9	7920.1	5781.9	4912.1	402200	281539	N/A
71	2/4/2023	96.3	8080.5	6329.3	4134.4	397290	275053	N/A
72	2/4/2023	96.1	7935.6	5532.5	5074.8	411000	284975	N/A
73	2/4/2023	97.3	7791.1	5575.7	4890.2	396800	277122	N/A
74	2/4/2023	97.0	7608.1	5969.9	5461.4	395580	278175	N/A
75	2/5/2023	97.6	7759.0	5486.0	3677.0	403320	277620	N/A
	AVERAGE	95	9,113	5,959	5,291	29,981,174	21,610,773	TOTAL

02/09/2024

EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Sandstone, rr Siltstone	100	450	100	450
Silty Sandstone, tr Shale	450	510	450	510
Silty Sandstone, com Coal	510	630	510	630
Silty Sandstone	570	720	570	720
Sandstone, com LS	630	720	630	720
Silty Sandstone	720	780	720	780
Silty Sandstone, tr Shale	780	1,070	780	1,070
Sandstone, rr Siltstone	1,070	1,220	1,070	1,220
Silty Sandstone	1,220	1,520	1,220	1,520
Silty Sandstone, com Shale	1,520	1,670	1,520	1,670
Sandstone	1,670	1,770	1,670	1,770
Silty Sandstone, tr Shale	1,770	1,870	1,770	1,870
Sandstone, tr Coal	1,870	1,920	1,870	1,920
Sandstone	1,920	1,970	1,920	1,970
Silty Sandstone	1,970	2,128	1,970	2,161
Big Lime	2,158	2,736	2,161	2,783
Fifty Foot Sandstone	2,736	2,914	2,753	2,963
Gordon	2,914	3,268	2,933	3,316
Fifth Sandstone	3,268	3,331	3,286	3,380
Bayard	3,331	4,010	3,350	4,059
Speechley	4,010	4,255	4,029	4,303
Balltown	4,255	4,791	4,273	4,846
Bradford	4,791	5,245	4,816	5,337
Benson	5,245	5,534	5,307	5,653
Alexander	5,534	6,931	5,623	7,193
Sycamore	6,755	6,901	6,984	7,163
Middlesex	6,901	7,050	7,163	7,393
Burkett	7,050	7,077	7,393	7,443
Tully	7,077	7,160	7,443	7,651
Marcellus	7,160	NA	7,651	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.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/15/2023
Job End Date:	2/5/2023
State:	West Virginia
County:	Doddridge
API Number:	47-017-06937-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Phebe 1H
Latitude:	39.32632000
Longitude:	-80.68040000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,216
Total Base Water Volume (gal):	22,755,640
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
Fresh Water	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	86.16781	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.15342	

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LEGEND(TM) LD-7750W	MultiChem	Scale Control					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Chemstream StimSTREAM FR 9750	Chemstream Oilfield Services	Friction Reducer					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			

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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	13.61253
			Hydrochloric acid	7647-01-0	30.00000	0.04068
			Distillates (petroleum), hydrotreated light	64742-47-8	25.00000	0.01561
			Methanol	67-56-1	100.00000	0.00724
			Guar gum	9000-30-0	100.00000	0.00347
			Alcohols, C11-14-iso, C-13-rich, ethoxylated	78330-21-9	5.00000	0.00312
			Glutaraldehyde	111-30-8	30.00000	0.00243
			Sodium chloride	7647-14-5	5.00000	0.00058
			Phosphoric Acid Salt	Proprietary	5.00000	0.00058
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00041
			Ammonium persulfate	7727-54-0	100.00000	0.00009
			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	0.00008
			Modified thiourea polymer	Proprietary	30.00000	0.00008
			Oxylated phenolic resin	Proprietary	30.00000	0.00003
			Hexadecene	629-73-2	5.00000	0.00001
			Ethoxylated alcohols	Proprietary	5.00000	0.00001
			Propargyl alcohol	107-19-7	5.00000	0.00001
			Formaldehyde	50-00-0	0.10000	0.00001
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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