

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

API 47-017-06938 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 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 4353043m Easting 527563m
Landing Point of Curve Northing 4353096.11m Easting 527941.10m
Bottom Hole Northing 4348935m Easting 529785m

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

JUN 2 2023

WV Department of
Environmental Protection

Date permit issued 7/7/2022 Date drilling commenced 9/12/2022 Date drilling ceased 12/6/2022
Date completion activities began 1/15/2023 Date completion activities ceased 3/4/2023
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:
7/8/23
IMR 02/09/2024

API 47-017 - 06938 Farm name Brian D. Lemley & Christy M. Lemaster ET AL. Well number Phebe 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	20"	20"	130'	New	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	917'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	3491'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	23063'	New	20#, P-110-ICY	N/A	Y
Tubing		2-3/8"	7738'		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	1200 sx	15.8	1.16	1392	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	3680 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.25 (Tail)	4600	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 23063' MD, 7259' TVD (BHL), 7259' (Deepest Point Drilled) Loggers TD (ft) 23063' MD **RECEIVED**
 Deepest formation penetrated Marcellus Plug back to (ft) N/A Office of Oil and Gas
 Plug back procedure N/A **JUN 2 2023**

Kick off depth (ft) 7020' WV Department of Environmental Protection

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

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

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

API 47- 017 - 06938

Farm name Brian D. Lemley & Christy M. Lemaster ET AL.

Well number Phebe Unit 2H

PRODUCING FORMATION(S)

DEPTHS

<u>Marcellus</u>	<u>7167' (TOP)</u>	<u>TVD</u>	<u>7866' (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 2976 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 9580.16 mcfpd Oil 0.01 bpd NGL --- bpd Water 1.13 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
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***PLEASE SEE ATTACHED EXHIBIT 3**

					RECEIVED
					Office of Oil and Gas
					JUN 2 2023
					WV Department of Environmental Protection

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 Energy Services
 Address 3000 W. Sam Houston Pkwy City Houston State TX Zip 76114

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 5/30/2023

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

02/09/2024

LATITUDE 39°20'00"

3882'

8,434' TO BOTTOM HOLE
LATITUDE 39°17'30"

LONGITUDE 80°37'30"

LONGITUDE 80°40'00"

LONGITUDE 80°37'30"

Antero Resources Corporation
Well No. Phebe Unit 2H

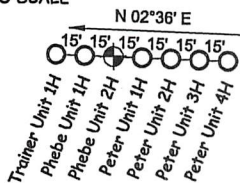
AS DRILLED DATA:

WELL 2H TOP HOLE INFORMATION:
N: 303,141ft E: 1,666,088ft
LAT: 39°19'34.61" LON: 80°40'49.40"
BOTTOM HOLE INFORMATION:
N: 289,539ft E: 1,673,153ft
LAT: 39°17'21.08" LON: 80°39'17.28"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
N: 4,353,043m E: 527,563m
BOTTOM HOLE INFORMATION:
N: 4,348,935m E: 529,785m

PAD LAYOUT

NOT TO SCALE

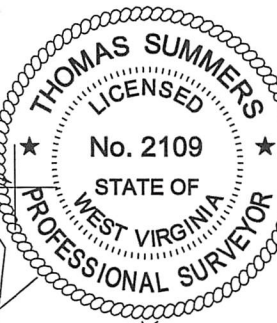


GRANT DISTRICT - DODDRIDGE COUNTY

9-34	HFP LLC
10-25	DENNIS POWELL
13-05	HFP LLC
13-11	JEFFERY HILL
13-11.1	JEFFERY HILL
13-11.2	JEFFERY HILL
13-20	DANNY MARSHALL
13-20.2	SKYLINE COMMUNICATIONS
13-20.4	DANNY MARSHALL
13-25	ALDEN MOORE
13-26	JOHN ARCHER
13-35	JEFFERY HILL
14-03	ANDREW LETT
14-12	ANDREW LETT
14-12.1	ANDREW LETT
14-13	ETHEL CHILDERS
14-27	JOHN ARCHER
14-28	JOHN ARCHER
14-29	SARAH BUTLER
14-31.1	MARVIN SWENTZEL
14-32	JOHN ARCHER
14-33	NEIL SWENTZEL
14-33.1	NEIL SWENTZEL
14-33.2	ALVIN SWENTZEL
14-39	PAUL BAKER
14-43	DANNY MARSHALL
14-44	CHARLES POWELL
16-03	CAROL BOYD
17-02	MARVIN SWENTZEL
17-03	ALVIN SWENTZEL
17-09	DWAYNE BUNTING
17-9.1	SHIRLEY BUNTING
17-9.2	SHIRLEY BUNTING
17-11	DOUGLAS LUTZ
17-18	TOBEY NUTT
17-19	GARY HYATT
17-31	KIMBERLY TUSTIN
17-31.1	SAMMY GAIN
17-31.2	TOBY GAIN
17-32.1	DAVID KIMBALL
17-33	SHARON POWELL
17-91	RICHARD NICHOLSON
17-92	PATRICIA WOLFORD
17-93	MARK MATHENY
17-94	CHERLOTTE SAMPLES
17-95	LARRY FERGUSON
17-96	RICHARD BARNETT
17-97	DAVID KIMBALL
17-98	JOSHUA HARRIS
17-99	TOD INGRAM
17-60	ALFRED GEISLER
17-61	MARK MATHENY
17-62	DAVY WETZEL
17-63	RICHARD DAVIS
17-64	COLE DOTSON
17-66	JULIE MATHENY

(NAD) 27 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
N: 14,280,894ft E: 1,730,800ft
POINT OF ENTRY INFORMATION:
N: 14,281,721ft E: 1,733,125ft
BOTTOM HOLE INFORMATION:
N: 14,267,416ft E: 1,738,088ft

MINERAL OWNERSHIP	
B	CREED JONES ET AL
C	DELORIS NADINE DAVIS
D	MARIETTE LEMLEY ET AL
E	SIDNEY AUSTIN SMITH TRUST LLC
F	DELORIS NADINE DAVIS
G	CEM HOLDINGS LLC
H	CHAD W. JOHNSON
I	SIDNEY THOMPSON
J	PAULA KAY REYNOLDS
K	MIKE ROSS INC.
L	Z.T. BALL ET AL
M	KAREN R. BEHM
N	ANTERO MINERALS LLC
O	LARRY C. CALICOAT
P	RANDALL E. SHEARER
Q	RANDALL E. SHEARER
R	EMAX GAS CO. ET AL
S	F. G. ORR ET AL
T	LINDA R. NEPPS



JOB # 17-030WA
DRAWING # PHEBE2HAD
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 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

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 #2H

API WELL # 47 - 017 - 06938
STATE COUNTY PERMIT

DATE 02/09/2024

LEASE ACREAGE 66.87 AC±; 50 AC±; 148.4 AC±; 41.89 AC±; 98 AC±; 79.06 AC±; 137 AC±; 138 AC±; 6.29 AC±; 37.25 AC±; 147 AC±; 49.5 AC±; 172 AC±; 189.88 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 7,259' TVD 23,063' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS
ADDRESS 1615 WYNKOOP STREET ADDRESS 535 WHITE OAKS BLVD
DENVER, CO 80202 BRIDGEPORT, WV 26330

LATITUDE 39°20'00"

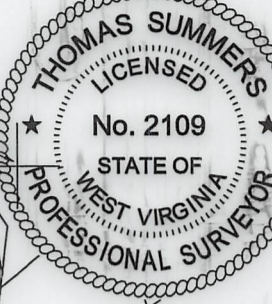
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Antero Resources Corporation Well No. Phebe Unit 2H

AS DRILLED DATA:

WELL 2H TOP HOLE INFORMATION: N: 303,141ft E: 1,666,088ft ... WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE.

(NAD) 83 (UTM) ZONE 17 COORDS: WELL 2H TOP HOLE INFORMATION: N: 4,353,043m E: 527,563m

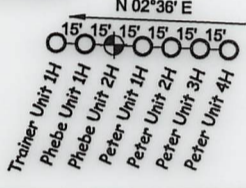


WV NORTH ZONE GRID NORTH

LONGITUDE 80°37'30" LONGITUDE 80°40'00"

PAD LAYOUT

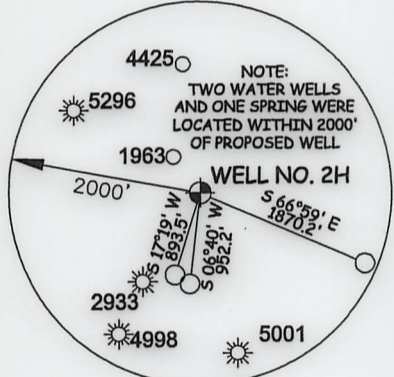
NOT TO SCALE



GRID NORTH

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 well numbers, including HFP LLC, DENNIS POWELL, JEFFERY HILL, DANNY MARSHALL, SKYLINE COMMUNICATIONS, ALDEN MOORE, JOHN ARCHER, ANDREW LETT, ETHEL CHILDERS, JOHN ARCHER, SARAH BUTLER, MARVIN SWENTZEL, NEIL SWENTZEL, ALVIN SWENTZEL, PAUL BAKER, DANNY MARSHALL, CHARLES POWELL, CAROL BOYD, MARVIN SWENTZEL, ALVIN SWENTZEL, DWAYNE BUNTING, SHIRLEY BUNTING, SHIRLEY BUNTING, DOUGLAS LUTZ, TOBEY NUTT, GARY HYATT, KIMBERLY TUSTIN, SAMMY GAIN, TOBY GAIN, DAVID KIMBALL, SHARON POWELL, RICHARD NICHOLSON, PATRICIA WOLFORD, MARK MATHENY, CHERLOTTE SAMPLES, LARRY FERGUSON, RICHARD BARNETT, DAVID KIMBALL, JOSHUA HARRIS, TOD INGRAM, ALFRED GETSLER, MARK MATHENY, DAVY WETZEL, RICHARD DAVIS, COLE DOTSON, JULIE MATHENY.

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MINERAL OWNERSHIP table listing owners like B CREED JONES ET AL, C DELORIS NADINE DAVIS, D MARIETTE LEMLEY ET AL, E SIDNEY AUSTIN SMITH TRUST LLC, F DELORIS NADINE DAVIS, G CEM HOLDINGS LLC, H CHAD W. JOHNSON, I SIDNEY THOMPSON, J PAULA KAY REYNOLDS, K MIKE ROSS INC., L E.T. BALL ET AL, M KEAREN R. BRUN, N ANTERO MINERALS LLC, O LARRY C. CALICOAT, P RANDALL E. SHEARER, Q RANDALL E. SHEARER, R EMAX GAS CO. ET AL, S F. G. ORR ET AL, T LINDA R. NEPPS.

JOB # 17-030WA DRAWING # PHEBE2HAD 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

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 2H

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; DELORIS NADINE DAVIS; LEASE ACREAGE 66.87 AC±; 50 AC±; 148.4 AC±; GEM HOLDINGS LLC; SIDNEY THOMPSON; PAULA KAY REYNOLDS; MIKE ROSS INC.; Z.T. BALL ET AL; ANTERO MINERALS LLC; LARRY C. CALICOAT; 41.89 AC±; 98 AC±; 79.06 AC±; 137 AC±; 138 AC±; 6.29 AC±; 37.25AC±; RANDALL E. SHEARER; EMAX GAS CO. ET AL; F. G. ORR ET AL; LINDA R. NEPPS 147AC±; 49.5 AC±; 172 AC±; 189.88 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 7,259' TVD 23,063' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS ADDRESS 1615 WYNKOOP STREET DENVER, CO 80202 ADDRESS 535 WHITE OAKS BLVD BRIDGEPORT, WV 26330

02/09/2024

COUNTY NAME

PERMIT

API 47-017-06938 Farm Name Brian D. Lemley & Christy M. Lemaster ET AL Well Number Phebe Unit 2H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1/16/2023	22945	22901	60	Marcellus
2	1/17/2023	22863.25901	22696.5541	60	Marcellus
3	1/17/2023	22660.81306	22494.1081	60	Marcellus
4	1/18/2023	22458.36712	22291.6622	60	Marcellus
5	1/18/2023	22255.92117	22089.2162	60	Marcellus
6	1/18/2023	22053.47523	21886.7703	60	Marcellus
7	1/19/2023	21851.02928	21684.3243	60	Marcellus
8	1/19/2023	21648.58333	21481.8784	60	Marcellus
9	1/20/2023	21446.13739	21279.4324	60	Marcellus
10	1/20/2023	21243.69144	21076.9865	60	Marcellus
11	1/20/2023	21041.2455	20874.5405	60	Marcellus
12	1/21/2023	20838.79955	20672.0946	60	Marcellus
13	1/21/2023	20636.3536	20469.6486	60	Marcellus
14	1/22/2023	20433.90766	20267.2027	60	Marcellus
15	1/22/2023	20231.46171	20064.7568	60	Marcellus
16	1/22/2023	20029.01577	19862.3108	60	Marcellus
17	1/23/2023	19826.56982	19659.8649	60	Marcellus
18	1/23/2023	19624.12387	19457.4189	60	Marcellus
19	1/23/2023	19421.67793	19254.973	60	Marcellus
20	1/24/2023	19219.23198	19052.527	60	Marcellus
21	1/24/2023	19016.78604	18850.0811	60	Marcellus
22	1/24/2023	18814.34009	18647.6351	60	Marcellus
23	1/25/2023	18611.89414	18445.1892	60	Marcellus
24	1/25/2023	18409.4482	18242.7432	60	Marcellus
25	1/25/2023	18207.00225	18040.2973	60	Marcellus
26	1/26/2023	18004.55631	17837.8514	60	Marcellus
27	1/26/2023	17802.11036	17635.4054	60	Marcellus
28	1/26/2023	17599.66441	17432.9595	60	Marcellus
29	1/27/2023	17397.21847	17230.5135	60	Marcellus
30	1/27/2023	17194.77252	17028.0676	60	Marcellus
31	1/27/2023	16992.32658	16825.6216	60	Marcellus
32	1/28/2023	16789.88063	16623.1757	60	Marcellus
33	1/28/2023	16587.43468	16420.7297	60	Marcellus
34	1/28/2023	16384.98874	16218.2838	60	Marcellus
35	1/29/2023	16182.54279	16015.8378	60	Marcellus
36	1/29/2023	15980.09685	15813.3919	60	Marcellus
37	1/29/2023	15777.6509	15610.9459	60	Marcellus
38	1/29/2023	15575.20495	15408.5	60	Marcellus
39	1/29/2023	15372.75901	15206.0541	60	Marcellus
40	1/30/2023	15170.31306	15003.6081	60	Marcellus
41	1/30/2023	14967.86712	14801.1622	60	Marcellus
42	1/30/2023	14765.42117	14598.7162	60	Marcellus
43	1/30/2023	14562.97523	14396.2703	60	Marcellus
44	1/30/2023	14360.52928	14193.8243	60	Marcellus
45	1/30/2023	14158.08333	13991.3784	60	Marcellus
46	1/31/2023	13955.63739	13788.9324	60	Marcellus
47	1/31/2023	13753.19144	13586.4865	60	Marcellus
48	1/31/2023	13550.7455	13384.0405	60	Marcellus
49	1/31/2023	13348.29955	13181.5946	60	Marcellus
50	1/31/2023	13145.8536	12979.1486	60	Marcellus
51	1/31/2023	12943.40766	12776.7027	60	Marcellus
52	2/1/2023	12740.96171	12574.2568	60	Marcellus
53	2/1/2023	12538.51577	12371.8108	60	Marcellus
54	2/1/2023	12336.06982	12169.3649	60	Marcellus
55	2/1/2023	12133.62387	11966.9189	60	Marcellus
56	2/1/2023	11931.17793	11764.473	60	Marcellus
57	2/2/2023	11728.73198	11562.027	60	Marcellus
58	2/2/2023	11526.28604	11359.5811	60	Marcellus
59	2/2/2023	11323.84009	11157.1351	60	Marcellus
60	2/2/2023	11121.39414	10954.6892	60	Marcellus
61	2/2/2023	10918.9482	10752.2432	60	Marcellus
62	2/2/2023	10716.50225	10549.7973	60	Marcellus
63	2/2/2023	10514.05631	10347.3514	60	Marcellus
64	2/3/2023	10311.61036	10144.9054	60	Marcellus
65	2/3/2023	10109.16441	9942.45946	60	Marcellus
66	2/3/2023	9906.718468	9740.01351	60	Marcellus
67	2/3/2023	9704.272523	9537.56757	60	Marcellus
68	2/3/2023	9501.826577	9335.12162	60	Marcellus
69	2/4/2023	9299.380631	9132.67568	60	Marcellus
70	2/4/2023	9096.934685	8930.22973	60	Marcellus
71	2/4/2023	8894.488739	8727.78378	60	Marcellus
72	2/4/2023	8692.042793	8525.33784	60	Marcellus
73	2/4/2023	8489.596847	8322.89189	60	Marcellus
74	2/4/2023	8287.150901	8120.44595	60	Marcellus
75	2/5/2023	8084.704955	7918	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	1/16/2023	73.3	10171.0	7707	6008	175210	216506	N/A
2	1/17/2023	90.2	10449.8	6440.36	5736.617	416260	314916	N/A
3	1/17/2023	90.8	10359.4	6657.94	5643.742	416000	324609	N/A
4	1/18/2023	90.9	10319.0	4638	5366	414070	302253	N/A
5	1/18/2023	89.9	10388.6	6834.04	5547.815	412110	288293	N/A
6	1/18/2023	91.2	10270.0	6511	5567	394790	283618	N/A
7	1/19/2023	87.3	10266.4	5169.8	5286.207	413180	294021	N/A
8	1/19/2023	87.6	10287.0	4504	5395	407890	293071	N/A
9	1/20/2023	90.3	10309.0	3459	5493	411280	295149	N/A
10	1/20/2023	90.6	10262.8	6212.16	5497.619	405320	286597	N/A
11	1/20/2023	91.5	10106.0	6104	5292	417360	294396	N/A
12	1/21/2023	92.5	10290.0	6112	5567.339	413380	291915	N/A
13	1/21/2023	90.6	10270.0	6259	5648	414640	288155	N/A
14	1/22/2023	90.9	10197.0	4207	5485	410120	292451	N/A
15	1/22/2023	92.2	10210.1	6529.13	5273.737	400340	286353	N/A
16	1/22/2023	91.1	10194.2	6698.66	5333.304	405070	280672	N/A
17	1/23/2023	89.8	10235.0	7074	4634	411420	288056	N/A
18	1/23/2023	91.0	10254.0	6719	5270	409560	287305	N/A
19	1/23/2023	92.6	10228.5	6507.24	5341.364	411050	318427	N/A
20	1/24/2023	92.2	10173.0	6087	5078	414000	292228	N/A
21	1/24/2023	95.1	10145.0	6170	5615	408270	284254	N/A
22	1/24/2023	95.1	10244.0	6231	5625	406270	284601	N/A
23	1/25/2023	92.3	9883.0	5862	4884	408050	290023	N/A
24	1/25/2023	93.9	9974.0	6265	5502	416550	307708	N/A
25	1/25/2023	94.3	9960.7	6691.58	5344.795	415740	281999	N/A
26	1/26/2023	94.4	10211.0	6219	5238	412850	283812	N/A
27	1/26/2023	96.0	9895.0	5945	5238	410550	351467	N/A
28	1/26/2023	96.8	9947.9	6194.99	5723.848	408180	275971	N/A
29	1/27/2023	94.9	9732.7	5917.09	5293.232	412840	283037	N/A
30	1/27/2023	95.9	9709.0	5882	5116	396080	278128	N/A
31	1/27/2023	97.1	9600.2	6204.97	5593.271	413890	283960	N/A
32	1/28/2023	96.9	9550.5	5854.84	5540.919	415450	282685	N/A
33	1/28/2023	95.9	9351.0	6236.97	5133.862	402010	285120	N/A
34	1/28/2023	97.1	9022.0	5949	5422	400010	283683	N/A
35	1/29/2023	97.4	9008.0	5820.07	5306.076	417870	293416	N/A
36	1/29/2023	96.7	9204.4	3584.29	5394.238	418440	292135	N/A
37	1/29/2023	95.6	8992.0	6525	4967	398460	284674	N/A
38	1/29/2023	89.4	9106.0	5921.87	5285.925	395280	306054	N/A
39	1/29/2023	95.7	9100.9	6007.84	5438.419	412550	304184	N/A
40	1/30/2023	97.1	8989.6	5846.57	5587.505	398660	280411	N/A
41	1/30/2023	97.6	9110.2	5790.61	4699.421	412460	286799	N/A
42	1/30/2023	91.9	8727.4	5915.39	4933.135	398790	334073	N/A
43	1/30/2023	95.9	9040.6	6082.84	5396.546	396640	278417	N/A
44	1/30/2023	96.7	9115.0	6391	4493	411110	290976	N/A
45	1/30/2023	97.3	8843.5	6090.59	4573.354	417730	290145	N/A
46	1/31/2023	97.4	8765.0	5896	4984	417280	294252	N/A
47	1/31/2023	97.3	8688.0	5557	5484	398250	308084	N/A
48	1/31/2023	95.9	8788.0	5949	5029	411600	284775	N/A
49	1/31/2023	96.3	8621.0	5740	5598	408570	291498	N/A
50	1/31/2023	96.2	8556.5	5840.85	4924.609	401020	332107	N/A
51	1/31/2023	97.4	8803.4	5971.35	5285.082	409490	284939	N/A
52	2/1/2023	98.0	8743.3	5574.7	5150.024	416740	285932	N/A
53	2/1/2023	98.1	8739.8	5809.24	4907.594	401720	282410	N/A
54	2/1/2023	95.5	8655.8	5920.53	5326.046	396480	281409	N/A
55	2/1/2023	64.4	6826.0	5731	5351	397320	437913	N/A
56	2/1/2023	98.0	8457.2	5856.57	5253.749	410210	331809	N/A
57	2/2/2023	97.8	8438.1	5662.42	4636.744	396170	270359	N/A
58	2/2/2023	98.2	8712.0	5627.0	4682.0	408150	278186	N/A
59	2/2/2023	96.2	8512.5	5686.2	4878.7	413780	284981	N/A
60	2/2/2023	96.5	8493.2	5662.5	4937.3	403630	287468	N/A
61	2/2/2023	97.0	8432.5	5788.3	5141.0	414520	341901	N/A
62	2/2/2023	98.0	8230.0	5891.0	5419.0	415800	289018	N/A
63	2/2/2023	97.4	8141.0	5830.0	5341.0	410070	286786	N/A
64	2/3/2023	97.8	8130.8	6113.2	5239.4	398800	284787	N/A
65	2/3/2023	98.2	8285.3	5972.0	5337.4	412470	292098	N/A
66	2/3/2023	96.8	7943.0	5367.0	5394.0	414290	288694	N/A
67	2/3/2023	96.7	8123.0	5725.0	5513.0	396660	277984	N/A
68	2/3/2023	96.3	8061.0	5859.0	5633.0	399460	277793	N/A
69	2/4/2023	64.1	6168.9	5967.2	5673.0	416830	329065	N/A
70	2/4/2023	91.4	7858.0	5967.0	5673.0	399500	329065	N/A
71	2/4/2023	96.0	7958.6	5874.7	5558.3	412570	287994	N/A
72	2/4/2023	95.9	7840.0	5787.0	5236.0	409820	279712	N/A
73	2/4/2023	96.6	7937.0	5993.0	4538.0	400400	283026	N/A
74	2/4/2023	98.3	7828.4	6224.2	4935.9	398820	280362	N/A
75	2/5/2023	98.2	7755.1	5979.8	4801.4	408620	280073	N/A
	AVERAGE	94	9,176	5,931	5,276	30,376,820	22,061,203	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
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	2,119	1,970	2,194
Big Lime	2,149	2,730	2,194	2,852
Fifty Foot Sandstone	2,730	2,905	2,822	3,036
Gordon	2,905	3,263	3,006	3,428
Fifth Sandstone	3,263	3,320	3,398	3,489
Bayard	3,320	4,003	3,459	4,228
Speechley	4,003	4,257	4,198	4,506
Balltown	4,257	4,777	4,476	5,076
Bradford	4,777	5,236	5,046	5,574
Benson	5,236	5,538	5,544	5,905
Alexander	5,538	6,926	5,875	7,433
Sycamore	6,756	6,896	7,235	7,403
Middlesex	6,896	7,050	7,403	7,625
Burkett	7,050	7,081	7,625	7,679
Tully	7,081	7,167	7,679	7,866
Marcellus	7,167	NA	7,866	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 departures.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/16/2023
Job End Date:	2/4/2023
State:	West Virginia
County:	Doddridge
API Number:	47-017-06938-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Phebe 2H
Latitude:	39.32628000
Longitude:	-80.68039000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,257
Total Base Water Volume (gal):	23,241,017
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	86.26526	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.14885	

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Chemstream StimSTREAM FR 9750	Chemstream Oilfield Services	Friction Reducer					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
100 Mesh Permian	Halliburton	Proppant					
				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			
HYDROCHLORI C ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
LEGEND(TM) LD-7750W	MultiChem	Scale Control					
				Listed Below			

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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	13.51939	
			Hydrochloric acid	7647-01-0	30.00000	0.03937	
			Distillates (petroleum), hydrotreated light	64742-47-8	25.00000	0.01596	
			Methanol	67-56-1	100.00000	0.00712	
			Alcohols, C11-14-iso, C- 13-rich, ethoxylated	78330-21-9	5.00000	0.00319	
			Glutaraldehyde	111-30-8	30.00000	0.00242	
			Guar gum	9000-30-0	100.00000	0.00234	
			Sodium chloride	7647-14-5	5.00000	0.00057	
			Phosphoric Acid Salt	Proprietary	5.00000	0.00057	
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00040	
			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	
			Ammonium persulfate	7727-54-0	100.00000	0.00006	
			Oxylated phenolic resin	Proprietary	30.00000	0.00002	
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	
			Hexadecene	629-73-2	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	

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* 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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