

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

API 47-095-02759 County Tyler District Ellsworth  
Quad Porter Falls 7.5' Pad Name Thin Air Field/Pool Name -----  
Farm name Clara Suzanne Wallace & Rickie Wallace Well Number Purple 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 4375391m Easting 517803m  
Landing Point of Curve Northing 4375635.99m Easting 518123.46m  
Bottom Hole Northing 4380344m Easting 516547m

Elevation (ft) 1200' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine  
Mud Type(s) and Additive(s)  
Air - Foam & 4% KCL  
Mud - Polymer

Date permit issued 9/20/2021 Date drilling commenced 11/12/2021 Date drilling ceased 2/26/2022  
Date completion activities began 3/27/2022 Date completion activities ceased 7/2/2022  
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 328' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1660' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by:

**APPROVED**

09/15/2023

*[Handwritten Signature]*  
5/24/23

API 47- 095 - 02759 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Purple 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"	125.5'	New	78.67#, X-60	N/A	Y
Surface	17-1/2"	13-3/8"	485'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2656'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	23809'	New	20#, P-110	N/A	Y
Tubing		2-3/8"	7038'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	279 sx	15.6	1.18	329	0'	8 Hrs.
Surface	Class A	515 sx	15.6	1.20	618	0'	8 Hrs.
Coal							
Intermediate 1	Class A	903 sx	15.6	1.19	1075	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	2094 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.26 (Tail)	2638	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 23809' MD, 6825' TVD (BHL), 6880' (Deepest Point Drilled) Loggers TD (ft) 23766' MD  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6190'

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

09/15/2023



API 47- 095 - 02759 Farm name Clara Suzanne Wallace & Rickie Wallace Well number Purple Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6829' (TOP)</u>	<u>TVD</u>	<u>7244' (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 1568 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 11205 mcfpd Oil 468 bpd NGL --- bpd Water 1113 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	

**\*PLEASE SEE ATTACHED EXHIBIT 3**


Please insert additional pages as applicable.

Drilling Contractor H & P Drilling  
Address 912 N Eagle Valley Rd City Howard State PA Zip 16841

Logging Company Nine Energy Services  
Address 6500 West Fwy City Fort Worth State TX Zip 76116

Cementing Company Schlumberger US Land  
Address 1080 US-33 City Weston State WV Zip 26452

Stimulating Company Halliburton  
Address 3000 W. Sam Houston Pkwy City Houston State TX Zip 76114

Please insert additional pages as applicable.

Completed by Carly Marvel Telephone 303-357-7373  
Signature Carly Marvel Title Permitting Agent Date 3/23/2023

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

09/15/2023 

LATITUDE 39°32'30"

383'

LATITUDE 39°32'30"

4,468' TO BOTTOM HOLE

3,923' TO BOTTOM HOLE

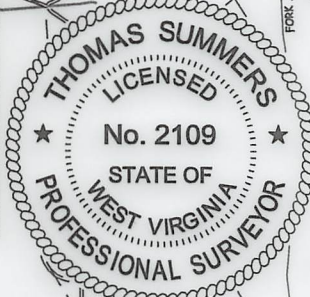
5,012'

LONGITUDE 80°45'00"

LONGITUDE 80°47'30"

Antero Resources Corporation Well No. Purple Unit 2H

Table listing surveyors for Ellsworth District - Tyler County and Green District - Wetzel County.

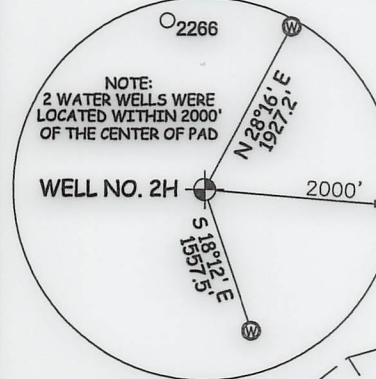


AS DRILLED DATA: WELL 2H TOP HOLE INFORMATION: N: 377,010ft E: 1,635,284ft LAT: 39°31'40.47" LON: 80°47'34.89" BOTTOM HOLE INFORMATION: N: 393,333ft E: 1,631,433ft LAT: 39°34'21.23" LON: 80°48'27.06" WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE 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: 4,375,391m E: 517,803m BOTTOM HOLE INFORMATION: N: 4,380,344m E: 516,547m

- 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.

WV NORTH ZONE GRID NORTH



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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

JOB # 20-013WA DRAWING # PURPLE2HAD 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

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

DATE 10/11/22 OPERATOR'S WELL# PURPLE UNIT #2H

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_ 47 - 095 - 02759 (IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X STATE COUNTY PERMIT LOCATION: ELEVATION 1,200' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER SURFACE OWNER CLARA SUZANNE WALLACE & RICKIE WALLACE ACREAGE 60 ACRES +/- OIL & GAS ROYALTY OWNER PHILLIP K. GEORGE; RICHARD J. FERRELL ET AL; LEASE ACREAGE 60 AC.±; 27.9 AC.± COASTAL FOREST RESOURCES COMPANY; LARRY CARROLL ET UX; MACK PERCY GAS WELL INC.; BARBARA K. BAKER ET VIR; 12.13 AC.±; 70 AC.±; 163.13 AC.±; 112 AC.± MURIEL SHERWOOD; JOHN BENNETT; ROBERT E. CLARK ET AL; LEE & HALL ROYALTIES; JAMES W. YOHO ET UX; DAVID L. SMITH; DAVID L. SMITH 163.96 AC.±; 103.05 AC.±; 53.25 AC.±; 49.68 AC.±; 119.69 AC.±; 27 AC.±; 50 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 6,825' TVD 23,809' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME

PERMIT

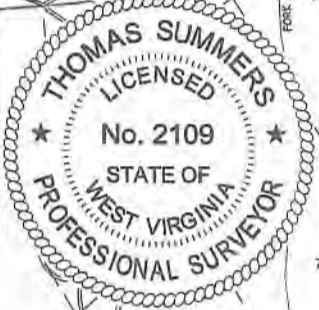
09/15/2023

LATITUDE 39°32'30"

383'

Antero Resources Corporation Well No. Purple Unit 2H

Ellsworth District - Tyler County	
07-07	Lillie Gump
07-08	Lillie Gump
07-09	Harold Yost
07-10	William Hope
07-11	William Hope
07-12	William Hope
07-13	William Hope
07-14	William Hope
07-15	John Bennett
07-16	John Bennett
07-23	Harold Yost
07-25	BB Farm Investments LLC
07-26	William Hope
07-27	James Kleeh
11-14	Paul Thomas
11-15	BB Farm Investments LLC
11-16	James Kleeh
11-17	James Kleeh
11-18	Sarah Sine
11-18.1	Sarah Sine
11-19	Elzie Hall
11-20	Edward Quirk
11-21	Edward Quirk
11-22	Nile Harris
11-29	Edward Quirk
11-60	Michael Martin
12-01	James Kleeh
12-02	Gary Midcap
12-07	Coastal Forest Resources Co.
12-08	Shirley Carroll
12-09	Coastal Forest Resources Co.
12-10	Michael Martin
12-11	Rickie Wallace
12-12	Rockford Energy LLC
12-13	Eric Fisher
12-33	Richard Neff
Green District - Wetzel County	
11-39	Michael Smith
11-40	David Smith Et Al
15-2	Barbara Clark
15-2.1	Robert Clark
15-3	Robert Clark
15-6	Robert Clark
15-10	Antero Midstream LLC



**AS DRILLED DATA:**  
 WELL 2H TOP HOLE INFORMATION:  
 N: 377,010ft E: 1,635,284ft  
 LAT: 39°31'40.47" LON: 80°47'34.89"  
 BOTTOM HOLE INFORMATION:  
 N: 393,333ft E: 1,631,433ft  
 LAT: 39°34'21.23" LON: 80°48'27.06"  
 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: 4,375,391m E: 517,803m  
 BOTTOM HOLE INFORMATION:  
 N: 4,380,344m E: 516,547m

- 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.

WV NORTH ZONE GRID NORTH

LONGITUDE 80°45'00"

LONGITUDE 80°47'30"



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



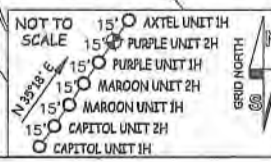
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

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

JOB # 20-013WA  
 DRAWING # PURPLE2HAD  
 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 10/11/22	OPERATOR'S WELL# PURPLE UNIT #2H



**(NAD) 27 (UTM) ZONE 17 COORDS:**  
 WELL 2H TOP HOLE INFORMATION:  
 N: 14,354,214ft E: 1,698,779ft  
 POINT OF ENTRY INFORMATION:  
 N: 14,354,806ft E: 1,699,950ft  
 BOTTOM HOLE INFORMATION:  
 N: 14,370,465ft E: 1,694,657ft

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_ 47 - 095 - 02759  
 (IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X STATE COUNTY PERMIT  
 LOCATION: ELEVATION 1,200' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK  
 QUADRANGLE PORTER FALLS 7.5' DISTRICT ELLSWORTH COUNTY TYLER  
 SURFACE OWNER CLARA SUZANNE WALLACE & RICKIE WALLACE ACREAGE 60 ACRES +/-  
 OIL & GAS ROYALTY OWNER PHILLIP K. GEORGE; RICHARD J. FERRELL ET AL; LEASE ACREAGE 60 AC.±; 27.9 AC.±  
 COASTAL FOREST RESOURCES COMPANY; LARRY CARROLL ET UX; MACK PERCY GAS WELL INC.; BARBARA K. BAKER ET VIR; 12.13 AC.±; 70 AC.±; 163.13 AC.±; 112 AC.±  
 MURIEL SHERWOOD; JOHN BENNETT; ROBERT E. CLARK ET AL; LEE & HALL ROYALTIES; JAMES W. YOHO ET UX; DAVID L. SMITH; DAVID L. SMITH; 163.98 AC.±; 103.05 AC.±; 53.25 AC.±; 49.68 AC.±; 119.89 AC.±; 27 AC.±; 50 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 6,825' TVD 23,809' MD  
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM  
 ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD  
 FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

09/15/2023

COUNTY NAME PERMIT

API 47-095-02759 Farm Name Clara Suzanne Wallace & Rickie Wallace Well Number Purple Unit 2H

**Exhibit 1**


Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	03/27/2022	15018.8	14974.0	60	Marcellus
2	04/30/2022	14934.9	14768.5	60	Marcellus
3	05/01/2022	14732.8	14566.4	60	Marcellus
4	05/01/2022	14530.7	14364.3	60	Marcellus
5	05/01/2022	14328.6	14162.2	60	Marcellus
6	05/02/2022	14126.5	13960.1	60	Marcellus
7	05/02/2022	13924.4	13758.0	60	Marcellus
8	05/02/2022	13722.3	13555.9	60	Marcellus
9	05/03/2022	13520.3	13353.8	60	Marcellus
10	05/04/2022	13318.2	13151.7	60	Marcellus
11	05/06/2022	13116.1	12949.7	60	Marcellus
12	05/08/2022	12914.0	12747.6	60	Marcellus
13	05/09/2022	12711.9	12545.5	60	Marcellus
14	05/10/2022	12509.8	12343.4	60	Marcellus
15	05/11/2022	12307.7	12141.3	60	Marcellus
16	05/12/2022	12105.6	11939.2	60	Marcellus
17	05/13/2022	11903.5	11737.1	60	Marcellus
18	05/13/2022	11701.4	11535.0	60	Marcellus
19	05/14/2022	11499.3	11332.9	60	Marcellus
20	05/14/2022	11297.2	11130.8	60	Marcellus
21	05/15/2022	11095.1	10928.7	60	Marcellus
22	05/16/2022	10893.0	10726.6	60	Marcellus
23	05/16/2022	10690.9	10524.5	60	Marcellus
24	05/17/2022	10488.8	10322.4	60	Marcellus
25	05/18/2022	10286.7	10120.3	60	Marcellus
26	05/18/2022	10084.6	9918.2	60	Marcellus
27	05/19/2022	9882.5	9716.1	60	Marcellus
28	05/19/2022	9680.5	9514.0	60	Marcellus
29	05/20/2022	9478.4	9311.9	60	Marcellus
30	05/21/2022	9276.3	9109.9	60	Marcellus
31	05/21/2022	9074.2	8907.8	60	Marcellus
32	05/22/2022	8872.1	8705.7	60	Marcellus
33	05/22/2022	8670.0	8503.6	60	Marcellus
34	05/22/2022	8467.9	8301.5	60	Marcellus
35	05/23/2022	8265.8	8099.4	60	Marcellus
36	05/23/2022	8063.7	7897.3	60	Marcellus
37	05/24/2022	7861.6	7695.2	60	Marcellus
38	05/24/2022	7659.5	7493.1	60	Marcellus
39	05/24/2022	7457.4	7291.0	60	Marcellus

09/15/2023 

API 47-095-02758 Farm Name Clara Suzanne Wallace & Rickie Wallace Well Number Purple Unit 1H

**EXHIBIT 2**

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	03/27/2022	79.2	8254	7192	3830	173720	202421	N/A
2	04/30/2022	78.0	7825	5377	3936	403140	317189	N/A
3	05/01/2022	78.6	7869	5568	4826	408250	313568	N/A
4	05/01/2022	73.6	7672	5626	3752	400770	319231	N/A
5	05/01/2022	79.0	7917	6048	4586	407930	318141	N/A
6	05/02/2022	79.5	7888	5713	4204	409975	321292	N/A
7	05/02/2022	78.8	8132	5581	4068	380935	295580	N/A
8	05/02/2022	79.3	7864	5469	3958	403705	300333	N/A
9	05/03/2022	79.0	8212	5448	4042	399745	301406	N/A
10	05/04/2022	78.6	8104	6333	3945	403085	301848	N/A
11	05/06/2022	75.2	8494	5822	4134	401190	428063	N/A
12	05/08/2022	79.5	7782	5707	3526	408070	309458	N/A
13	05/09/2022	78.7	7716	5638	4923	392395	298297	N/A
14	05/10/2022	79.0	7834	7554	4523	399775	279750	N/A
15	05/11/2022	77.3	7722	5488	4989	402370	336402	N/A
16	05/12/2022	79.6	7983	7653	4723	395335	304335	N/A
17	05/13/2022	79.0	7838	6340	4195	406750	307818	N/A
18	05/13/2022	79.6	7705	7430	5187	402160	294576	N/A
19	05/14/2022	79.5	7441	5697	5021	399751	301533	N/A
20	05/14/2022	79.8	7368	5880	4303	404040	297445	N/A
21	05/15/2022	79.1	7693	7951	4130	407900	365200	N/A
22	05/16/2022	77.3	7400	5599	4920.37	410515	591442	N/A
23	05/16/2022	79.0	7496	6899	5108	411560	308525	N/A
24	05/17/2022	79.9	7508	3696	4478	405955	311024	N/A
25	05/18/2022	80.4	7229	3921	4445	411700	297808	N/A
26	05/18/2022	79.3	7157	5811	4665	410335	288869	N/A
27	05/19/2022	77.0	7094	5427	5015	403760	304453	N/A
28	05/19/2022	79.6	7349	5479	4241	406690	276609	N/A
29	05/20/2022	79.3	7239	5508	4329	402025	293112	N/A
30	05/21/2022	76.4	7143	5399	4566	403285	305954	N/A
31	05/21/2022	79.4	6953	4821	4365	408825	282757	N/A
32	05/22/2022	77.1	6959	4801	4446	400730	295689	N/A
33	05/22/2022	79.8	7031	4514	4696	402780	283478	N/A
34	05/22/2022	77.9	7139	6217	4150	406195	336266	N/A
35	05/23/2022	77.8	7159.98	5908.73	4732.34	400270	281868	N/A
36	05/23/2022	79.8	6686	5863	4295	403710	275054	N/A
37	05/24/2022	77.4	6891	3202	3554	400455	273964	N/A
38	05/24/2022	79.9	6713	4630	4072	394130	276717	N/A
39	05/24/2022	79.5	6717	4959	3837	393110	266145	N/A
	AVERAGE	79	7,517	5,697	4,377	15,487,021	12,063,620	TOTAL


09/15/2023 



## EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Shaly Siltstone, tr LS	91	275	91	275
Sandy Siltstone, Coal	275	335	275	335
Silty Sandstone	335	425	335	425
Shaly Siltstone, occ LS	425	635	425	635
Sandy Siltstone, occ LS	635	965	635	965
Shaly Siltstone, occ SS	965	1,025	965	1,025
Shaly Siltstone	1,025	1,435	1,025	1,435
Sandy Siltstone, occ Shale	1,435	1,525	1,435	1,525
Silty Sandstone, tr coal	1,525	1,615	1,525	1,615
Silty Sandstone, coal, tr shale	1,615	1,735	1,615	1,735
Silty Sandstone, occ shale	1,735	1,885	1,735	1,885
Shaly Sandstone, coal, occ slst	1,885	2,125	1,885	2,125
Silty Sandstone, coal, occ Shale	2,125	2,083	2,125	2,113
Big Lime	2,108	2,965	2,113	3,016
Fifty Foot Sandstone	2,965	3,096	2,991	3,152
Gordon	3,096	3,406	3,127	3,472
Fifth Sandstone	3,406	3,488	3,447	3,557
Bayard	3,488	4,158	3,532	4,247
Speechley	4,158	4,456	4,222	4,551
Balltown	4,456	4,932	4,526	5,040
Bradford	4,932	5,177	5,015	5,293
Benson	5,177	5,424	5,268	5,549
Alexander	5,424	6,661	5,524	6,870
Sycamore	6,518	6,636	6,697	6,845
Middlesex	6,636	6,736	6,845	7,001
Burkett	6,736	6,766	7,001	7,063
Tully	6,766	6,829	7,063	7,244
Marcellus	6,829	NA	7,244	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.

09/15/2023 

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/27/2022
Job End Date:	5/24/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02759-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	PURPLE UNIT 2H
Latitude:	39.52791000
Longitude:	-80.79303000
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,879
Total Base Water Volume (gal):	12,343,296
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	86.91170	Density = 8.50
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.18924	

Handwritten signature or initials.

FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
Sand-Premium White-30/50	Halliburton	Proppant					
				Listed Below			
Sand-Premium White-30/70	Halliburton	Proppant					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			

WG-35 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
MC DF-7250	MultiChem	Defoamer					
				Listed Below			

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

			Crystalline silica, quartz	14808-60-7	100.00000	12.82917	
			Complex Amine Compound	Proprietary	60.00000	0.04778	
			Hydrochloric acid	7647-01-0	30.00000	0.03995	
			Guar gum	9000-30-0	100.00000	0.03709	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02389	
			Surfactant	Proprietary	5.00000	0.00398	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00398	
			Glutaraldehyde	111-30-8	30.00000	0.00248	
			Ethoxylated alcohols	Proprietary	30.00000	0.00083	
			Alkoxyated polyhydric alcohol	Proprietary	1.00000	0.00080	
			Organic chloride compound	Proprietary	1.00000	0.00080	
			Ammonium persulfate	7727-54-0	100.00000	0.00077	

			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00041	
			Methanol	67-56-1	100.00000	0.00025	
			Oxylated phenolic resin	Proprietary	30.00000	0.00023	
			Ethanol	64-17-5	1.00000	0.00008	
			Modified thiourea polymer	Proprietary	30.00000	0.00005	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00005	
			Didecyldimethylammoniu m chloride	68910-32-7	60.00000	0.00001	
			Organic salt #2	Proprietary	0.01000	0.00001	
			Organic salt #1	Proprietary	0.01000	0.00001	
			Formaldehyde	50-00-0	0.01000	0.00001	
			Acrylamide	79-06-1	0.01000	0.00001	
			Nitrated acetate salt	Proprietary	0.01000	0.00001	
			Sodium glycolate	2836-32-0	0.01000	0.00001	
			Sodium hydroxide	1310-73-2	0.01000	0.00001	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			Aldehyde	Proprietary	5.00000	0.00001	
			1-Octadecene	112-88-9	1.00000	0.00000	
			1-Hexadecene	629-73-2	1.00000	0.00000	
			Sulfuric acid	7664-93-9	1.00000	0.00000	
			Alkylbenzene Derivatives	Proprietary	1.00000	0.00000	

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

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

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

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

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