

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

API 47-095-02700 County Tyler District Ellsworth
Quad Porter Falls Pad Name Pyles Pad Field/Pool Name -----
Farm name Richard D Pyles Well Number Prosper 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop St 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 4372715m Easting 514002m
Landing Point of Curve Northing 4372238.82m Easting 514730.42m
Bottom Hole Northing 4370011m Easting 515528m

Elevation (ft) 1081' 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 06/05/2020 Date drilling commenced 8/12/2020 Date drilling ceased 10/14/2020
Date completion activities began 11/14/2020 Date completion activities ceased 2/20/2021
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

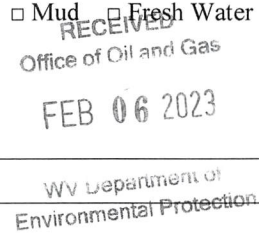
Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 61 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2200 Void(s) encountered (Y/N) depths N
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

APPROVED

Reviewed by:

SMY
2/20/23
03/17/2023



API 47-095 - 02700 Farm name Richard D Pyles Well number Prosper 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	24"	20"	80'	New	94# H-40	N/A	Y
Surface	17-1/2"	13-3/8"	346'	New	54.5# J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2625'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"	5-1/2"	16891'	New	20# P-110	N/A	Y
Tubing		2-3/8"	7054'		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	285 sx	15.6	1.18	60	0	8 Hrs
Surface	Class A	430 sx	15.6	1.20	93	0	8 Hrs
Coal							
Intermediate 1	Class A	883 sx	15.6	1.19	189	0	8 Hrs
Intermediate 2							
Intermediate 3							
Production	Class H	792 sx (Lead) 2493 sx (Tail)	13.5 (Lead), 15.2(Tail)	1.4 (Lead), 1.26 (Tail)	559	-500' into Intermediate Casing	8 Hrs
Tubing							

Drillers TD (ft) 16936' MD, 6701' TVD (BHL), 6724' (Deepest Point Drilled) Loggers TD (ft) 16936' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6116'

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 on top of cement

RECEIVED
Office of Oil and Gas
FEB 06 2023

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WV Department of Environmental Protection

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

03/17/2023
J. M. ...
D. B. ...

API 47- 095 - 02700 Farm name Richard D Pyles Well number Prosper 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Marcellus	6617' (Top) TVD	7110' (Top) MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2800 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 8358 mcfpd Oil 245 bpd NGL --- bpd Water 348 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)
	0		0		
*PLEASE SEE ATTACHED EXHIBIT 3					

RECEIVED
Office of Oil and Gas
FEB 06 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 Schlumberger Oilfield Services
Address 300 Schlumberger Dr City Sugarland State TX Zip 77478

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 2/2/2023

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

03/17/2023

API 47-095-02700 Farm Name Richard D Pyles, Well Number Prosper Unit 2H

Exhibit 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	11/14/2020	16813.1	16766.4	60	Marcellus
2	11/15/2020	16727.84861	16563.0917	60	Marcellus
3	11/15/2020	16527.74028	16362.9833	60	Marcellus
4	11/16/2020	16327.63194	16162.875	60	Marcellus
5	11/16/2020	16127.52361	15962.7667	60	Marcellus
6	11/16/2020	15927.41528	15762.6583	60	Marcellus
7	11/21/2020	15727.30694	15562.55	60	Marcellus
8	11/22/2020	15527.19861	15362.4417	60	Marcellus
9	11/22/2020	15327.09028	15162.3333	60	Marcellus
10	11/22/2020	15126.98194	14962.225	60	Marcellus
11	11/23/2020	14926.87361	14762.1167	60	Marcellus
12	11/23/2020	14726.76528	14562.0083	60	Marcellus
13	11/24/2020	14526.65694	14361.9	60	Marcellus
14	11/24/2020	14326.54861	14161.7917	60	Marcellus
15	11/25/2020	14126.44028	13961.6833	60	Marcellus
16	11/25/2020	13926.33194	13761.575	60	Marcellus
17	11/25/2020	13726.22361	13561.4667	60	Marcellus
18	11/26/2020	13526.11528	13361.3583	60	Marcellus
19	11/26/2020	13326.00694	13161.25	60	Marcellus
20	11/27/2020	13125.89861	12961.1417	60	Marcellus
21	11/28/2020	12925.79028	12761.0333	60	Marcellus
22	11/28/2020	12725.68194	12560.925	60	Marcellus
23	11/29/2020	12525.57361	12360.8167	60	Marcellus
24	11/29/2020	12325.46528	12160.7083	60	Marcellus
25	11/30/2020	12125.35694	11960.6	60	Marcellus
26	11/30/2020	11925.24861	11760.4917	60	Marcellus
27	11/30/2020	11725.14028	11560.3833	60	Marcellus
28	12/1/2020	11525.03194	11360.275	60	Marcellus
29	12/1/2020	11324.92361	11160.1667	60	Marcellus
30	12/2/2020	11124.81528	10960.0583	60	Marcellus
31	12/3/2020	10924.70694	10759.95	60	Marcellus
32	12/3/2020	10724.59861	10559.8417	60	Marcellus
33	12/4/2020	10524.49028	10359.7333	60	Marcellus
34	12/4/2020	10324.38194	10159.625	60	Marcellus
35	12/4/2020	10124.27361	9959.51667	60	Marcellus
36	12/5/2020	9924.165278	9759.40833	60	Marcellus
37	12/5/2020	9724.056944	9559.3	60	Marcellus
38	12/5/2020	9523.948611	9359.19167	60	Marcellus
39	12/5/2020	9323.840278	9159.08333	60	Marcellus
40	12/5/2020	9123.731944	8958.975	60	Marcellus
41	12/6/2020	8923.623611	8758.86667	60	Marcellus
42	12/6/2020	8723.515278	8558.75833	60	Marcellus
43	12/6/2020	8523.406944	8358.65	60	Marcellus
44	12/6/2020	8323.298611	8158.54167	60	Marcellus
45	12/6/2020	8123.190278	7958.43333	60	Marcellus
46	12/7/2020	7923.081944	7758.325	60	Marcellus
47	12/7/2020	7722.973611	7558.21667	60	Marcellus
48	12/8/2020	7522.865278	7358.10833	60	Marcellus
49	12/7/2020	7322.756944	7158	60	Marcellus

RECEIVED
Office of Oil and Gas

FEB 06 2023

WV Department of
Environmental Protection

03/17/2023

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	11/14/2020	78.25	8180		3781	186870	221590	N/A
2	11/15/2020	85.64	8364	5921	4583	418150	314171	N/A
3	11/15/2020	87.95	8423	5843	4668	415590	344535	N/A
4	11/16/2020	88.11	8337	4923	4372	417390	307124	N/A
5	11/16/2020	90.09	8439	5053	4418	413410	306349	N/A
6	11/16/2020	85.71	8390	5129	4176	413820	306791	N/A
7	11/21/2020	88.14	8617	3687	3703	415010	312046	N/A
8	11/22/2020	65.34	8158	6590	4397	418860	346432	N/A
9	11/22/2020	87.59	8562	6506	3903	417490	290953	N/A
10	11/22/2020	88.87	8643	4764	3846	417130	286821	N/A
11	11/23/2020	91.38	8587	6808	4147	420410	292536	N/A
12	11/23/2020	88.64	8580	5016	4226	418830	286421	N/A
13	11/24/2020	25.81	8335.45	6660.64	3969.46	21210	191806	N/A
14	11/24/2020	90.12	8714	5527	3573	421290	310377	N/A
15	11/25/2020	95.54	8637	5884	3699	418780	304333	N/A
16	11/25/2020	95.42	8736	5359	4142	418710	302346	N/A
17	11/25/2020	50.82	7875	8035	3282	417830	327377	N/A
18	11/26/2020	47.14	8069	7631	3697	419630	331585	N/A
19	11/26/2020	89.5	8061	5121	3805	412270	300564	N/A
20	11/27/2020	86.68	8108	5502	4817	417640	300456	N/A
21	11/28/2020	95.33	8579	5914	3696	416100	301391	N/A
22	11/28/2020	94.92	8458	5577	2448	419340	299056	N/A
23	11/29/2020	57.33	7562	8771	4691	413940	488724	N/A
24	11/29/2020	92.03	7797	3953	3729	414650	321300	N/A
25	11/30/2020	92.25	8284	5465	3648	411680	287862	N/A
26	11/30/2020	93.66	7989	5236	4047	414640	284641	N/A
27	11/30/2020	92.47	8231	5681	3537	420230	295202	N/A
28	12/1/2020	91.03	7952	5554	4332	404270	283901	N/A
29	12/1/2020	93.69	7933	5454	3589	415600	295083	N/A
30	12/2/2020	75.69	7780	6328	4388	414700	428104	N/A
31	12/3/2020	88.34	7726	5524	3780	416560	286044	N/A
32	12/3/2020	82.04	7133	5742	4395	412890	372295	N/A
33	12/4/2020	96.39	8110	5353	4041	415990	279904	N/A
34	12/4/2020	88.86	7576	5895	3935	414780	274538	N/A
35	12/4/2020	93.49	8170	5667	4391	410260	280945	N/A
36	12/5/2020	94.38	7875	5428	4107	412720	286832	N/A
37	12/5/2020	91.06	7688	5817	4235	417870	284588	N/A
38	12/5/2020	93.17	7721	5559	4335	413640	286046	N/A
39	12/5/2020	92.46	7550	6110	4584	416390	291753	N/A
40	12/5/2020	92.26	7567	6454	4517	417130	290810	N/A
41	12/6/2020	94.61	7610	6384	4163.37	409760	291119	N/A
42	12/6/2020	92.05	7282	5103	3976	413150	283497	N/A
43	12/6/2020	94.52	7476	6220	4295	414100	283662	N/A
44	12/6/2020	92.69	7526	5872	4327	412640	279294	N/A
45	12/6/2020	92.57	7153	5166	3907	412740	284862	N/A
46	12/7/2020	92.16	7211		4125.75	409430	285837	N/A
47	12/7/2020	93.16	7283	5926	4146.64	414960	284423	N/A
48	12/8/2020	86.56	9113.53	6832.53	4942.66	408680	363336	N/A
49	12/7/2020	91.17	7145.31	5793.99	4300.49	411780	283982	N/A
	AVG=	86	8,026	5,803	4,078	19,720,940	14,843,644	TOTAL

RECEIVED
Office of Oil and Gas

FEB 06 2023

WV Department of
Environmental Protection

03/17/2023
JPM
2/20/23

EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Shale	79	124	79	124
Shaley Siltstone	124	474	124	474
Silty Shale	474	574	474	574
Siltstone, Tr Shale	574	724	574	724
Silty Shale	724	824	724	824
Shaley Sandstone	824	1,024	824	1,024
Shale, Tr Siltstone	1,024	1,274	1,024	1,274
Shale, Tr Sandstone	1,274	1,524	1,274	1,524
Silty Shale	1,524	1,624	1,524	1,624
Sandstone, Tr Shale	1,624	1,724	1,624	1,724
Sandy Shale	1,724	1,774	1,724	1,774
Shaley Siltstone	1,774	1,824	1,774	1,824
Shale	1,824	1,973	1,824	2,019
Big Lime	1,999	2,702	2,045	2,779
Fifty Foot Sandstone	2,702	2,789	2,779	2,869
Gordon	2,789	3,113	2,869	3,211
Fifth Sandstone	3,113	3,177	3,211	3,279
Bayard	3,177	4,045	3,279	4,182
Speechley	4,045	4,183	4,182	4,324
Balltown	4,183	4,717	4,324	4,879
Bradford	4,717	5,006	4,879	5,179
Benson	5,006	5,395	5,179	5,586
Alexander	5,395	6,459	5,586	6,744
Sycamore	6,316	6,433	6,566	6,718
Middlesex	6,433	6,534	6,718	6,883
Burkett	6,534	6,561	6,883	6,938
Tully	6,561	6,617	6,938	7,110
Marcellus	6,617	NA	7,110	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.

RECEIVED
Office of Oil and Gas

FEB 06 2023

WV Department of
Environmental Protection

03/17/2023

7,890' to Bottom Hole

1,120' to Top Hole

TOP HOLE LATITUDE 39 - 32 - 30
BTM HOLE LATITUDE 39 - 30 - 00

TOP LONGITUDE 80 - 50 - 00
BTM LONGITUDE 80 - 47 - 30

13,766' to Top Hole

7,476' to Bottom Hole

Antero Resources
Well No. Prosper 2H
As-Drilled
Antero Resources Corporation



Wellhead Layout

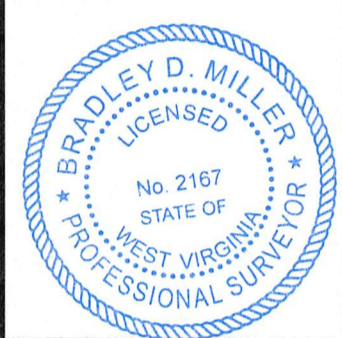
- Vulcan Unit 1H 47-095-02701
- Vulcan Unit 2H 47-095-02702
- Prosper Unit 1H 47-095-02699 As-Drilled
- Prosper Unit 2H 47-095-02700 As-Drilled
- Friend Unit 1H 47-095-02695
- Friend Unit 2H 47-095-02696
- Seagrave Unit 1H 47-095-02697
- Seagrave Unit 2H 47-095-02698

Notes:
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Well No. Prosper Unit 2H Top Hole coordinates are
N: 368,439.47' Latitude: 39°30'13.94"
E: 1,622,665.51' Longitude: 80°50'14.29"
Bottom Hole coordinates are
N: 359,480.90' Latitude: 39°28'46.11"
E: 1,627,524.04' Longitude: 80°49'10.63"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,372,715.614m N: 4,370,011.087m
E: 514,002.597m E: 515,528.309m
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

Prosper Unit 2H As-Drilled POE Coordinates
West Virginia Coordinate System of 1927, North Zone
N: 368,539.84'
E: 1,624,520.55'
Latitude: 39°30'15.20"
Longitude: 80°49'50.64"
UTM Zone 17, NAD 1983
N: 4,372,755.641m
E: 514,567.231m

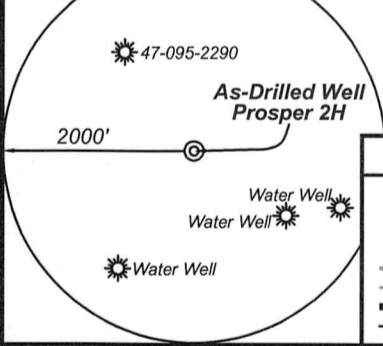
	Bearing	Dist.
L1	S 34°44' E	1,259.4'
L2	S 75°56' W	2,070.4'
L3	N 75°34' W	1,522.7'
L4	N 47°33' E	1,166.5'



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.

Bradley D. Miller
Bradley D. Miller, P.S. 2167

Note: 3 water wells were found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.



Legend

- Proposed gas well (circle with cross)
- Found corner, as noted (circle with dot)
- Existing Well, as noted (star)
- Digitized Well (circle with cross)
- Existing Road (dashed line)
- Existing Road (solid line)
- Surface boundary (approx.) (dotted line)
- Interior surface tracts (approx.) (dashed line)

FILE NO: 189-54-E-19
DRAWING NO: Prosper Unit 2H As-Drilled
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: February 24 2021
OPERATOR'S WELL NO. Prosper 2H
API WELL NO
47 - 095 - 02700
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: As-Built 1081' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Shirley
DISTRICT: Ellsworth COUNTY: Tyler 03/17/2023
SURFACE OWNER: Richard D. Pyles Mary B. Hoover; Anthony Bruce Parr, et ux; Clarence W. Mutschelknaus Sr. & Clarence W. Mutschelknaus Jr. (2); 47.1734; 64; 79.042; 33; 3;
ROYALTY OWNER: Richard D. & Cathy J. Pyles (4); BRC Appalachian Minerals I, LLC; Gary L. Weekley; Rosemary Haught; Carol J. Knapp; Ronald P. Webb; ACREAGE: 168.5 5.79; 14; 45; 65;
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled LEASE NO: ACREAGE: 39; 80; 82.75; 113
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 6,701' TVD 16,936' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System
ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
Denver, CO 80202 Charleston, WV 25313



ID	TM/Par	Owner	DB/PG	Acres
1	16-42	Richard D. Pyles	379/20	168.5
2	16-24	Harry Eastham, et al	AR54/518	64.00
3	16-22	Joseph L. Jr. & Karen Sitko	296/13	81.70
4	16-44	Robert A. Pyles, et al	335/482	87.82
5	16-42.1	Richard D. Pyles	336/815	4.56
6	16-42.2	Bonnie J. Hair	569/105	2.44
7	16-42.3	Richard D. Pyles	379/20	3.00
8	16-39	Richard D. & Cathy J. Pyles	490/566	48.51
9	16-43	Alfred L. Eddy	344/22	37.10
10	16-40	Gary L. Weekley	WB 22/601	5.79
11	16-38	Antero Resources Corp.	662/782	15.00
12	22-4	Stephen H. & Barbara J. Dunthorn	216/40	69.00
13	22-6	Antero Resources Corp.	662/782	131.57
14	22-5	Antero Resources Corp.	662/782	84.67
15	22-40	Ronald P. & Sandra L. Webb	282/1	65.00
16	22-17	Dorothy Mae Stevens Irrevocable Trust	453/610	82.75
17	22-39	Ronald P. & Sandra L. Webb	270/587	45.00
18	22-38	Bruce & Sandra L. Parr	368/790	113.00
19	22-23.1	Raymond L. Parr	284/350	18.00
20	22-23.2	Anthony B. Parr	440/62	17.00
21	22-34	Raymond L. Parr, et al	329/181	55.25
22	22-23	Anthony B. Parr	440/62	17.00
23	22-35	Marie Eddy	344/358	52.96
24	22-33	Donald & Wilma Weekley	262/587	65.75
25	28-43	Wanda J. Parr	327/435	8.02
26	28-45	Wanda J. Parr	349/18	4.55
27	28-42	Robert H. Anderson	238/76	0.99
28	28-34	Shirl N. Baker, Jr.	WB 38/1	0.50
29	28-32	B.W. Weekley	107/562	33.31
30	28-33	B.W. Weekley	107/562	25.30
31	28-35	Shirl N. Baker, Jr.	WB 38/1	32.00
32	28-36	Jim & Sandra Young	368/797	46.50
33	28-44	Shirl N. Baker, et al	WB 38/1	0.02

Leases	
A	Richard D. & Cathy J. Pyles
B	Helen E. Boggs
C	Joseph L. Sitko, et ux
D	BRC Appalachian Minerals I, LLC
E	James F. Doan, et ux
F	Dustin A. Hendershot
G	Richard D. & Cathy J. Pyles
H	Richard D. & Cathy J. Pyles
I	Richard D. & Cathy J. Pyles
J	Alfred Lonzo Eddy
K	Gary L. Weekley
L	Taryn E. Pilling
M	Clarence W. Mutschelknaus Sr. & Clarence W. Mutschelknaus Jr.
N	Ridgetop Capital II, LP
O	Rosemary Haught
P	BRC Appalachian Minerals I, LLC
Q	Clarence W. Mutschelknaus Sr. & Clarence W. Mutschelknaus Jr.
R	Mary B. Hoover
S	Ronald P. Webb
T	Carol J. Knapp
U	Anthony Bruce Parr, et ux
V	Open
W	Judith Remley Phillip
X	Nancy L. Mains
Y	Dale H. Parr
Z	Larry Stevens
AA	Richard L. White, II
AB	Wanda J. Parr
AC	Elizabeth Ann Weekley
AD	Lucille Adams
AE	Lucille Adams
AF	Elizabeth A. Weekley
AG	Bounty Minerals LLC
AH	Jim & Sandra Young

FILE NO: 189-54-E-19
 DRAWING NO: Prosper Unit 2H As-Drilled
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY:
 Submeter
 PROVEN SOURCE OF ELEVATION:
 WV DOT, Harrisville, WV

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: February 24 2021
 OPERATOR'S WELL NO. Prosper 2H
 API WELL NO
 47 - 095 - 02700
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: As-Built 1081' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Shirley
 DISTRICT: Ellsworth COUNTY: Tyler 03/17/2023
 SURFACE OWNER: Richard D. Pyles Mary B. Hoover; Anthony Bruce Parr, et ux; ACREAGE: 168.5
 ROYALTY OWNER: Richard D. & Cathy J. Pyles (4); BRC Appalachian Minerals I, LLC; LEASE NO: ACREAGE: 39; 80; 82.75; 113
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 6,701' TVD 16,936' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System
 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
 Denver, CO 80202 Charleston, WV 25313

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/14/2020
Job End Date:	12/7/2020
State:	West Virginia
County:	Tyler
API Number:	47-095-02700-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Prosper 2H
Latitude:	39.50387000
Longitude:	-80.83730000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,707
Total Base Water Volume (gal):	15,275,065
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 Blend	Halliburton	Base Fluid	Water	7732-18-5	100.00000	86.62959	Density = 8.50
Ingredients	Listed Above	Listed Above		7732-18-5	100.00000	0.16499	

RECEIVED
 Office of Oil and Gas
 FEB 06 2023
 WV Department of Environmental Protection

FLUID Enviro-Syn HCR-7000-WL	Fluid Energy Group	Acid Replacement					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
Sand-Premium White-40/70	Halliburton	Proppant					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			

RECEIVED
 Office of Oil and Gas
 FEB 06 2023
 WV Department of
 Environmental Protection

SM

MC B-8614	Halliburton	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	13.15808	
			Hydrochloric acid	7647-01-0	30.00000	0.03717	
			Complex Amine Compound	Proprietary	60.00000	0.03292	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01646	
			Guar gum	9000-30-0	100.00000	0.01123	
			Proprietary	Proprietary	20.00000	0.00275	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00274	
			Surfactant	Proprietary	5.00000	0.00274	
			Glutaraldehyde	111-30-8	30.00000	0.00245	
			Proprietary	Proprietary	10.00000	0.00138	
			Ethoxylated alcohols	Proprietary	5.00000	0.00056	
			Alkoxyated polyhydric alcohol	Proprietary	1.00000	0.00055	
			Organic chloride compound	Proprietary	1.00000	0.00055	
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00041	
			Methanol	67-56-1	100.00000	0.00032	
			Ammonium persulfate	7727-54-0	100.00000	0.00019	
			Ethanol	64-17-5	1.00000	0.00008	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007	
			Modified thiourea polymer	Proprietary	30.00000	0.00007	
			Oxylated phenolic resin	Proprietary	30.00000	0.00006	

WV Department of Environmental Protection

FEB 06 2023

RECEIVED
Office of Oil and Gas

SPM

			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			Phosphoric acid	7664-38-2	0.10000	0.00001	
			Organic salt #2	Proprietary	0.01000	0.00001	
			Sodium glycolate	2836-32-0	0.01000	0.00001	
			Formaldehyde	50-00-0	0.01000	0.00001	
			Sodium hydroxide	1310-73-2	0.01000	0.00001	
			Organic salt #1	Proprietary	0.01000	0.00001	
			Acrylamide	79-06-1	0.01000	0.00001	
			Nitrated acetate salt	Proprietary	0.01000	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)

RECEIVED
Office of Oil and Gas
FEB 06 2023
WV Department of
Environmental Protection