



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Wednesday, September 16, 2020
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET
DENVER, CO 80202

Re: Permit Modification Approval for PROSPER 2H
47-095-02700-00-00

Lateral Length

ANTERO RESOURCES CORPORATION

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

A handwritten signature in blue ink, appearing to read 'James A. Martin', is positioned above the printed name and title.

James A. Martin
Chief

Operator's Well Number: PROSPER 2H
Farm Name: RICHARD D. PYLES
U.S. WELL NUMBER: 47-095-02700-00-00
Horizontal 6A New Drill
Date Modification Issued: September 16, 2020

Promoting a healthy environment.

WW-6B
(04/15)

API NO. 47-095 - 02700
OPERATOR WELL NO. Prosper Unit 2H
Well Pad Name: Pyles Pad

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Antero Resources Corporation 494507062 095 - Tyler Ellsworth Porter Falls 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Prosper Unit 2H Well Pad Name: Pyles Pad

3) Farm Name/Surface Owner: Richard D. Pyles Public Road Access: US Route 34

4) Elevation, current ground: 1081' Elevation, proposed post-construction: ~1081'

5) Well Type (a) Gas Oil Underground Storage

Other

(b) If Gas Shallow Deep

Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale: 7100' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 7100' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 19500' MD

11) Proposed Horizontal Leg Length: 9795'

12) Approximate Fresh Water Strata Depths: 61'

13) Method to Determine Fresh Water Depths: 47-095-01958

14) Approximate Saltwater Depths: 2200'

15) Approximate Coal Seam Depths: None Identified

16) Approximate Depth to Possible Void (coal mine, karst, other): None Anticipated

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No

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Office of Oil and Gas

(a) If Yes, provide Mine Info: Name: _____ SEP 10 2020

Depth: _____

Seam: _____

WV Department of
Environmental Protection

Owner: _____

WW-6B
(04/15)

API NO. 47- 095 - 02700

OPERATOR WELL NO. Prosper Unit 2H

Well Pad Name: Pyles Pad

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	80	80	CTS, 77 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	300	300	CTS, 417 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2500	2500	CTS, 1018 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	23#	19500	19500	4954 Cu. Ft
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	24"	0.438"	1530	50	Class A	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	1000	Class A	~1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A	~1.18
Intermediate							
Production	5-1/2"	8-3/4" & 8-1/2"	0.415"	12,630	2500	Lead-H/POZ & Tail - H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners							

PACKERS

Kind:	N/A			
Sizes:	N/A			
Depths Set:	N/A			

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SEP 10 2020

WV Department of
Environmental Protection

WW-6B
(10/14)

API NO. 47- 095 - 02700

OPERATOR WELL NO. Prosper Unit 2H

Well Pad Name: Pyles Pad

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill, perforate, fracture a new horizontal shallow well and complete Marcellus Shale.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Antero plans to pump Slickwater into the Marcellus Shale formation in order to ready the well for production. The fluid will be comprised of approximately 99 percent water and sand, with less than 1 percent special-purpose additives as shown in the attached "List of Anticipated Additives Used for Fracturing or Stimulating Well."

Anticipated Max Pressure - 9300 lbs

Anticipated Max Rate - 80 bpm

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 23.71 acres

22) Area to be disturbed for well pad only, less access road (acres): 10.00 acres

23) Describe centralizer placement for each casing string:

Conductor: no centralizers

Surface Casing: one centralizer 10' above the float shoe, one on the insert float collar and one every 4th joint spaced up the hole to surface.

Intermediate Casing: one centralizer above float joint, one centralizer 5' above float collar and one every 4th collar to surface.

Production Casing: one centralizer at shoe joint and one every 3 joints to top of cement in intermediate casing.

24) Describe all cement additives associated with each cement type:

Conductor: no additives, Class A cement.

Surface: Class A cement with 2-3% calcium chloride and 1/4 lb of flake

Intermediate: Class A cement with 1/4 lb of flake, 5 gallons of clay treat

Production: Lead cement- 50/50 Class H/Poz + 1.5% salt + 1% C-45 + 0.5% C-16a + 0.2% C-12 + 0.45% C-20 + 0.05% C-51

Production: Tail cement- Class H + 45 PPS Calcium Carbonate + 1.0% FL-160 + 0.2% ACGB-47 + 0.05% ACSA-51 + 0.2% ACR-20

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SEP 10 2020

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25) Proposed borehole conditioning procedures:

Conductor: blowhole clean with air, run casing, 10 bbls fresh water.

Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

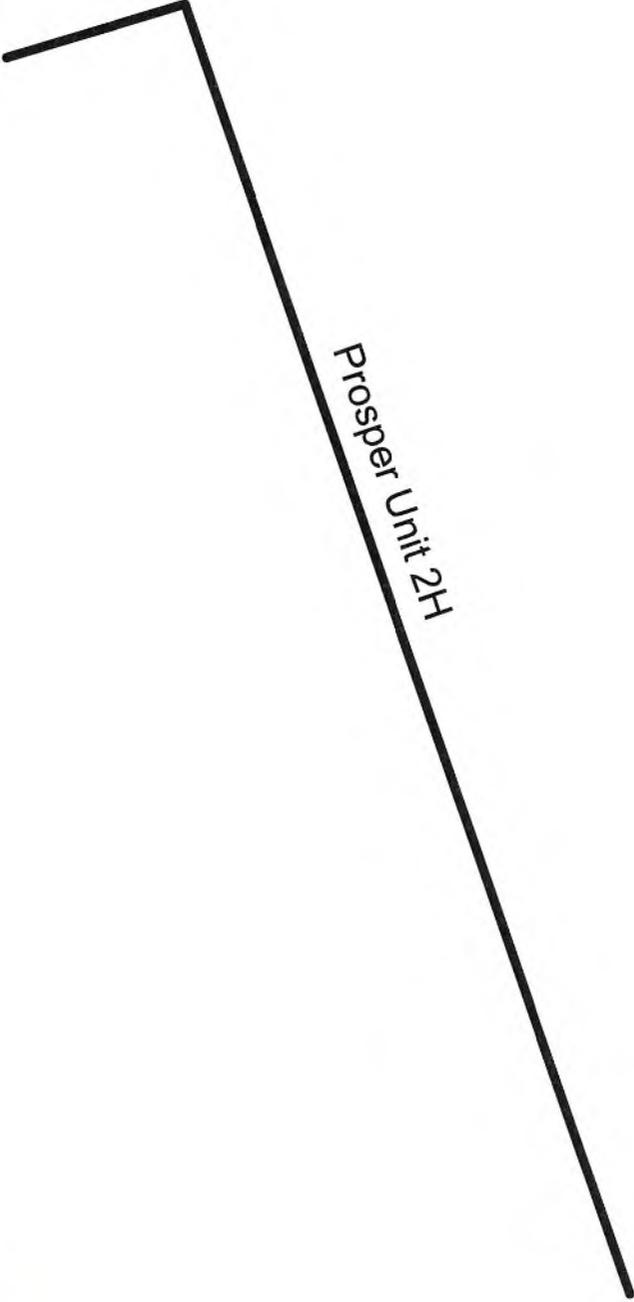
Intermediate: blowhole clean with air, trip to surface casing shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate 40 bbls brine water followed by 10 bbls fresh water and 25 bbls bentonite mud, pump 10 bbls fresh water.

Production: circulate with 14 lb/gal NaCl mud, trip to middle of lateral, circulate, pump high viscosity sweep, trip to base of curve, pump high viscosity sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbls fresh water, pump 48 bbls barite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water.

*Note: Attach additional sheets as needed.



PERMIT MODIFICATION API # 47-095-02700



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Office of Oil and Gas

SEP 10 2020

WV Department of
Environmental Protection

Antero Resources Corporation	
Prosper Unit 2H - AOR	
REMARKS	
No Wells of Interest	
April 14, 2020	

7,905' 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

7,471' to Bottom Hole
13,767' to Top Hole

Antero Resources
Well No. Prosper 2H
BHL MOD
Antero Resources Corporation



Wellhead Layout

- Vulcan Unit 1H 47-095-02701
- Vulcan Unit 2H 47-095-02702
- Prosper Unit 1H 47-095-02699
- Proposed Prosper Unit 2H 47-095-02700
- 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: 368,439.02' Latitude: 39°30'13.93"
E: 1,622,665.23' Longitude: 80°50'14.29"
Bottom Hole coordinates are
N: 359,485.75' Latitude: 39°28'46.16"
E: 1,627,509.43' Longitude: 80°49'10.82"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,372,715.475m N: 4,370,012.490m
E: 514,002.514m E: 515,523.833m
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Notes:
Well No. Prosper Unit 2H
UTM Zone 17, NAD 1927
Top Hole Coordinates
N: 14,345,436.11'
E: 1,686,309.14'
Point of Entry Coordinates
N: 14,345,795.16'
E: 1,688,023.59'
Bottom Hole Coordinates
N: 14,336,567.96'
E: 1,691,300.40'

Well Location References



	Bearing	Dist.
L1	S 34°42' E	1,259.6'
L2	S 75°55' W	2,070.8'
L3	N 75°35' W	1,522.9'
L4	N 47°34' E	1,166.0'
L5	N 79°08' E	1,752.2'



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, 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
- Found corner, as noted
- Existing Well, as noted
- Digitized Well
- Existing Road
- Existing Road
- Surface boundary (approx.)
- Interior surface tracts (approx.)

FILE NO: 189-54-E-19
DRAWING NO: Prosper Unit 2H Well Plat
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: June 30 2020
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
SURFACE OWNER: Richard D. Pyles ACREAGE: 168.5
ROYALTY OWNER: Richard D. & Cathy J. Pyles (4); Joseph L. Sitko, et ux; 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) BHL MOD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,100' TVD 19,500' 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 Well Plat
 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: June 30 2020
 OPERATOR'S WELL NO. Prosper 2H
 API WELL NO. MOD1
 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 47:1734; 64; 45;
 SURFACE OWNER: Richard D. Pyles Mary B. Hoover; Anthony Bruce Parr, et ux; Clarence W. Mutschelknaus Sr. & Clarence W. Mutschelknaus Jr. (2); 79.042; 33; 3;
 Gary L. Weekley; Rosemary Haught; Carol J. Knapp; Ronald P. Webb; ACREAGE: 168.5 5.79; 14; 45; 65;
 ROYALTY OWNER: Richard D. & Cathy J. Pyles (4); Joseph L. Sitko, et ux; BRC Appalachian Minerals I, LLC; LEASE NO: ACREAGE: 39; 80; 82.75; 113
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 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD 7,100' TVD
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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

7,905' to Bottom Hole

1,120' to Top Hole

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

Antero Resources
Well No. Prosper 2H
BHL MOD
Antero Resources Corporation



Wellhead Layout

- Vulcan Unit 1H
47-095-02701
- Vulcan Unit 2H
47-095-02702
- Prosper Unit 1H
47-095-02699
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47-095-02700
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47-095-02695
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47-095-02696
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TOP LONGITUDE 80 - 50 - 00
BTM LONGITUDE 80 - 47 - 30

Notes:
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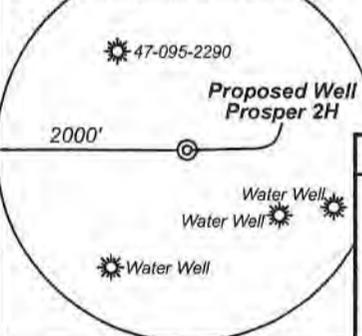
	Bearing	Dist.
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L2	S 75°55' W	2,070.8'
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Bradley D. Miller
Bradley D. Miller, P.S. 2167

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

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- Interior surface tracts (approx.)

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

DATE: June 30 20 20
OPERATOR'S WELL NO. Prosper 2H
API WELL NO
47 - 095 - 02700
STATE COUNTY PERMIT

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PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD LEASE NO: ACREAGE: 39; 80; 82.75; 113
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,100' TVD
19,500' 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

7,471' to Bottom Hole
13,767' to Top Hole

WW-6A1
(5/13)

Operator's Well No. Prosper Unit 2H

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>Richard D. Pyles Lease</u>	Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590

*Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

RECEIVED
Office of Oil and Gas

SEP 10 2020

WV Department of Environmental Protection

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Antero Resources Corporation
 By: Tim Rady
 Its: VP of Land

Co-tenancy utilization – At least 7 mineral owners in tract. At least 75% of the royalty owners have executed a lease on the tract. The interests of the remaining co-tenants were acquired pursuant to the Co-tenancy Modernization and Majority Protection Act

WW-6A1

Operator's Well Number Prosper Unit 2H

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

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Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>Richard D. Pyles Lease (TM 16 PCL 42)</u>			
Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590
<u>BRC Minerals LLC Lease</u>			
BRC Minerals LLC	Statoil USA Onshore Properties Inc	Assignment	0378/0764
Statoil USA Onshore Properties Inc	SWN Exchange LLC	Assignment	0470/0668
SWN Exchange LLC	SWN Production Company	Merger	0009/0404
SWN Production Company	Antero Exchange Properties	Assignment	0544/0242
Antero Exchange Properties	Antero Resources Corporation	Merger	0525/0315
<u>Richard D. Pyles Lease (TM 16 PCL 42)</u>			
Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590
<u>Richard D. Pyles Lease (TM 16 PCL 42.1)</u>			
Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590
<u>Richard D. Pyles Lease (TM 16 PCL 42.2)</u>			
Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590
<u>Richard D. Pyles Lease (TM 16 PCL 42.3)</u>			
Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590
<u>Gary L. Weekley Lease</u>			
Gary L. Weekley	Antero Resources Corporation	1/8+	0404/0199
<u>Clarence W. Mutschelknaus Sr. & Clarence W. Jr. Lease (TM 22 PCL 6)</u>			
Clarence W. Mutschelknaus Sr. & Clarence W. Jr.	Antero Resources Corporation	1/8+	0529/0453
<u>Rosemary Haught Lease</u>			
Rosemary Haught	Statoil USA Onshore Properties	1/8	0472/0370
Statoil USA Onshore Properties	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0022/0144
<u>Clarence W. Mutschelknaus Sr. & Clarence W. Jr. Lease (TM 22 PCL 6)</u>			
Clarence W. Mutschelknaus Sr. & Clarence W. Jr.	Antero Resources Corporation	1/8+	0529/0453

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*Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

CONTINUED ON NEXT PAGE

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>Clarence W. Mutschelknaus Sr. & Clarence W. Jr. Lease (TM 22 PCL 6)</u>			
Clarence W. Mutschelknaus Sr. & Clarence W. Jr.	Antero Resources Corporation	1/8+	0529/0453
<u>Ronald P. Webb Lease</u>			
Ronald P. Webb	Antero Resources Corporaiton	1/8+	0044/0697
<u>Mary B. Hoover Lease</u>			
Mary B. Hoover	PetroEdge Energy LLC	1/8+	0389/0549
PetroEdge Energy LLC	Statoil USA Onshore Properties	Assignment	0406/0147
Statoil USA Onshore Properties	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001
<u>Carol J. Knapp Lease</u>			
Carol J. Knapp	JB Production Company	1/8	0388/0141
JB Production Company	Statoil USA Onshore Properties	Assignment	0469/0419
Statoil USA Onshore Properties	EQT Production Company	Assignment	0539/0239
EQT Production Company	Antero Resources Corporation	Assignment	0663/0001

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Antero Resources
1615 Wynkoop Street
Denver, CO 80202
Office 303.357.7310
Fax 303.357.7315

September 8, 2020

West Virginia Department of Environmental Protection
Office of Oil and Gas
Attn: Ms. Laura Adkins
601 57th Street
Charleston, WV 25304

CHK# 220080
\$5000.00

Ms. Laura Adkins:

Antero Resources Corporation (Antero) would like to submit the following permit modification for the following expedited approved well on the existing Pyles Pad: Prosper Unit 2H (API # 47-095-02700).

Attached you will find the following documents:

- REVISED Form WW-6B, which shows the updated POE & Measured Depth
- REVISED Form WW-6A1, which shows the new leases we will be drilling into
- REVISED Mylar Plat, which shows the new Lateral Length & Estimated Measured Depth
- AOR & As-Built Design

If you have any questions please feel free to contact me at (303) 357-7223.

Thank you in advance for your consideration.

Sincerely,

Megan Griffith
Permitting Agent
Antero Resources Corporation

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Enclosures