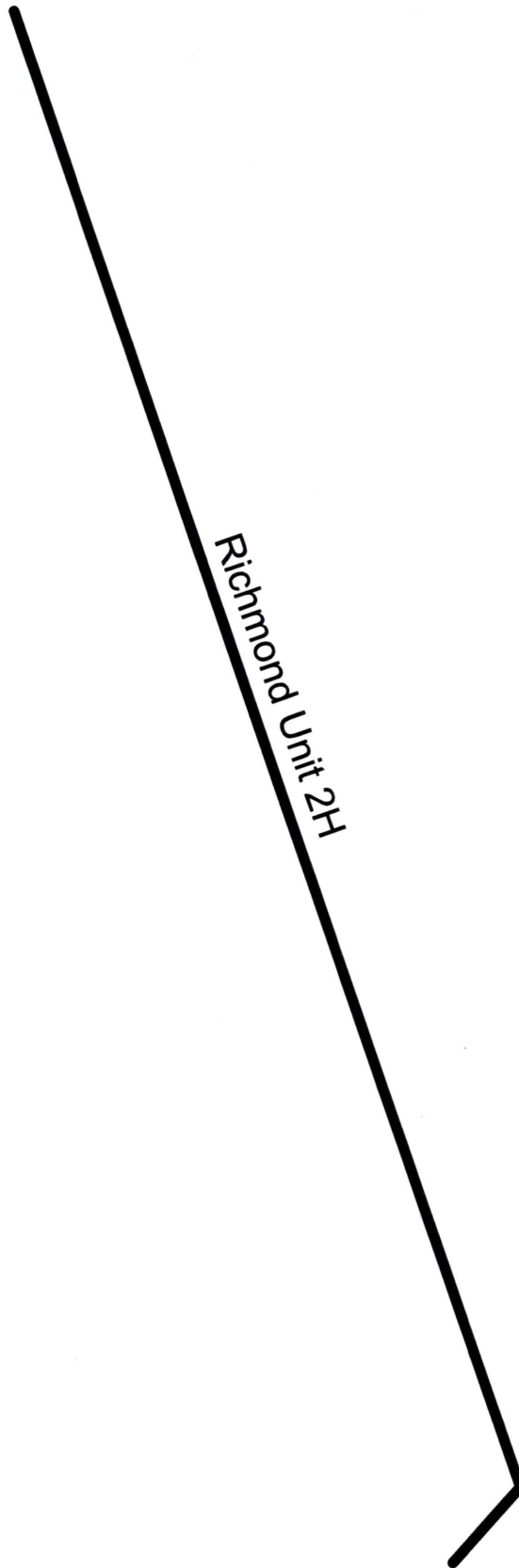




PERMIT MODIFICATION API # 47-095-02691



RECEIVED
Office of Oil and Gas
JUN 08 2020
WV Department of
Environmental Protection



Antero Resources Corporation

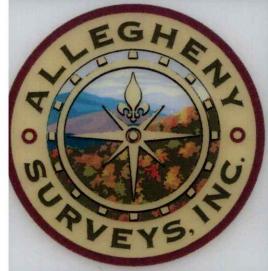
Richmond Unit 2H - AOR



REMARKS
No Wells of Interest

January 21, 2020

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



Richmond 2H
Bottom Hole

Page 1 of 2

9,251' to Bottom Hole

4,851' to Top Hole

TOP HOLE LATITUDE 39 - 30 - 00
 BTM HOLE LATITUDE 39 - 35 - 00

Notes
 West Virginia Coordinate System
 of 1927, North Zone
 based upon Differential GPS Measurements.
 Well No. Richmond Unit 2H Top Hole coordinates are
 N: 366,711.19' Latitude: 39°29'56.30"
 E: 1,618,908.80' Longitude: 80°51'01.88"
 Bottom Hole coordinates are
 N: 382,535.94' Latitude: 39°32'32.07"
 E: 1,614,742.52' Longitude: 80°51'58.10"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,372,169.946m N: 4,376,969.841m
 E: 512,866.877m E: 511,517.272m
 Plat orientation and corner and well references
 are based upon the grid north meridian.
 Well location references are based upon the magnetic
 meridian.

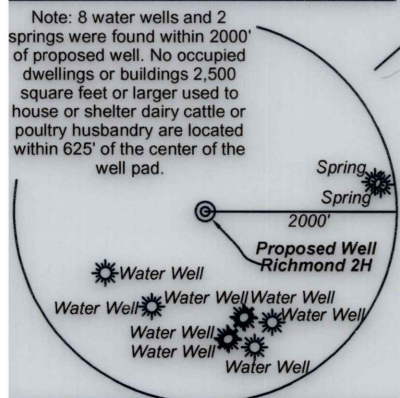
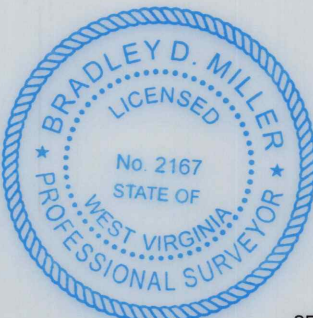
LONGITUDE 80 - 50 - 00
 375' to Top Hole

Well Location References (NTS)



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



FILE NO: 49-54-E-19
 DRAWING NO: Richmond 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: May 21 2020
 OPERATOR'S WELL NO. Richmond 2H
 API WELL NO. MOD
 47 - 095 - 02691
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Built 1,004' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Porter Falls
 DISTRICT: Ellsworth COUNTY: Tyler 90.168; 101.38;
 SURFACE OWNER: Roger D. Blizzard Patricia Ann Heintzman; BRC Appalachian Minerals I, LLC; Jerry R. Brown; David E. Bowyer; 20; 75.47; 119;
 & Ruth E. Spencer Susan Ertel; Dennis M. Strode; Nina & Phillip Whitefield; Nina A. Whitefield; ACREAGE: 102.62 44.85; 20; 66.65;
 Linda Lou Moore; Dale E. Pipes; J&N Management Enterprises, LLC; Allen Smith; 100; 100; 53.75;
 ROYALTY OWNER: Heritage Resources Marcellus Minerals, LLC; Roger D. Blizzard; Samuel Rogers; LEASE NO: ACREAGE: 25; 76.25; 30; 67
 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: 24,900' MD 7,000' TVD

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

Legend

- Proposed gas well
- Monument, as noted
- Existing Well, as noted
- Creek or Drain
- Road
- Surface boundary (approx.)
- Interior surface tracts (approx.)
- District Line

	Bearing	Dist.
L1	S 36°35' E	903.4'
L2	N 27°42' W	1,686.4'
L3	N 41°22' E	1,406.5'
L4	N 67°27' E	1,184.4'
L5	N 47°52' E	1,029.8'

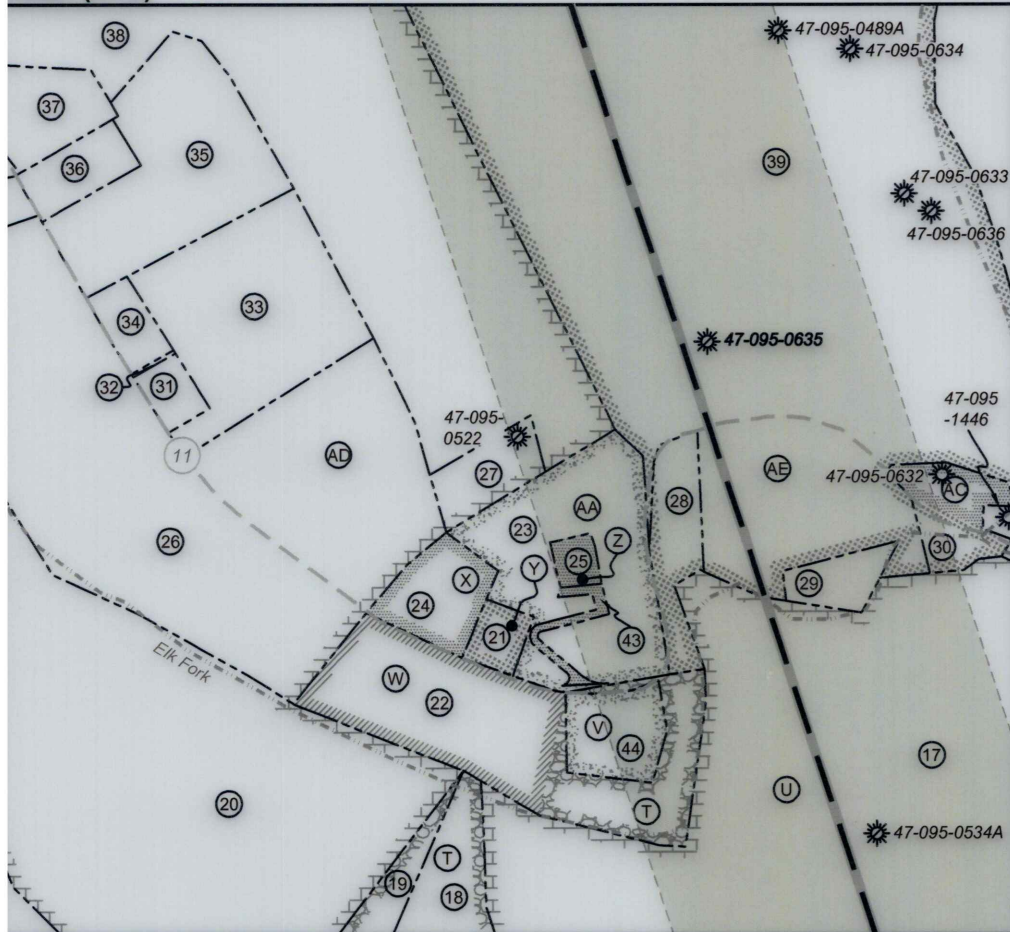
14,967' to Bottom Hole



ID	TM/Par	Owner	Bk/Pg	Acres
1	15-33	Roger D. Blizzard, et al	340/170	102.62
2	15-32	William S. & Opal Marie Nash	335/188	78.58
3	15-30	Thomas C. Grinage, et al	458/73	124.08
4	15-31	Roger D. Blizzard, et al	342/782	25
5	15-38	Rodney A. & Candis L. Nash	351/701	85.48
6	15-30.1	Roger D. Blizzard, et al	343/427	101.38
7	15-12	Roger Matthes	319/22	61
8	15-11	Roger Matthes	318/137	115.47
9	15-7	Roger Matthes	319/22	41.72
10	15-6	James F. & Connie L. Billiter, et al	288/325	59.5
11	10-59	Goldie A. Mathews	115/485	10.08
12	10-58	Jeffery A. & Cheryl L. Ferrell	325/334	52
13	10-56	Mary K Neff	413/731	22.06
14	10-57	Charles E. & Laura L. Friend	334/836	84.39
15	10-60	J.S. & Goldie A. Mathews	129/58	17.67
16	10-46	Opal Carol Tallman	282/382	114
17	10-43	Kevin S. & Melinda S. Goff	431/799	100
18	10-42	Kevin S. & Melinda S. Goff	431/799	25.5
19	10-41	Kevin S. & Melinda S. Goff	431/799	2.66
20	10-36	Randy Lee & Mary Lou Michael	230/499	24.65
21	10-37.3	H.H. Snider	158/151	0.50
22	10-37	Sandra Fanti	425/827	1.31


ID	TM/Par	Owner	Bk/Pg	Acres
23	10-37.1	Wayne H. & Violet L. Mercer	226/473	5.05
24	10-37.2	Kenneth L. & Gladys L. Vancamp	431/194	1.36
25	10-39	Elk Fork Cemetery Association	143/308	0.32
26	10-15	Kevin S. Goff & Melinda S. Goff	423/695	18.50
27	10-15.9	Becky S. & Everett E. Neff, II	322/751	1.03
28	10-40	Avril Dewayne Matthews	421/565	1.43
29	10-14.1	Triad Energy Corp. of WV Inc.	329/604	1
30	10-14.3	Elk Fork Church	299/126	1.495
31	10-16	Ruby M. Watson	256/45	0.488
32	10-15.5	Ruby M. Watson	289/359	0.0292
33	10-15.7	Frank W., Jr. & Ruby M. Watson	317/383	5.226
34	10-15.4	Frank W., Jr. & Ruby M. Watson	343/309	0.65
35	10-15.8	Frank & Ruby Watson	427/47	5.229
36	10-17	Sandra K. Metz	342/153	0.89
37	10-18	Wendy S. Gustavich	331/365	1.9
38	10-15.6	Wayne H. & Violet Mercer	317/378	35.82
39	10-14	Kevin S. & Melinda S. Goff	597/808	97.065
40	10-3	Kevin S. & Melinda S. Goff	597/808	53.75
41	10-2	Patricia Ann Heintzman	W13/384	73.26
42	6-36	Dennis & Clista Heintzman	297/640	417.6
43	10-38	Elk Fork Cemetery Association	142/271	0.46
44	10-37	Sandra Fanti	425/827	1.31

Detail (NTS)



Leases	
A	Heritage Resources
B	Marcellus Minerals, LLC
C	William S. Nash, et al
D	Helen E. Boggs
E	Jerry R. Brown
F	B. Fred Hill Jr.
G	Roger D. Blizzard
H	Reita Jane Hall
I	Samuel Rogers
J	Linda Lou Moore
K	Dale E. Pipes
L	Sandra E. Merrigan
M	David E. Bowyer
N	Joseph Shoemaker
O	Kenneth R. Barker
P	J&N Management Enterprises LLC
Q	Rockford Energy, LLC
R	A. DeWayne Matthews
S	Allen Smith
T	Charles Eugene Friend, et ux
U	Kevin S. Goff, et ux
V	Susan Ertel
W	Sandra Fanti
X	Kevin S. Goff, et ux
Y	Kenneth L. Van Camp, et ux
Z	Carter R. Snider
AA	Elk Fork Cemetery
AB	Wayne H. Mercer, et ux
AC	Elk Fork Church of Christ
AD	Ridgewood Development LLC
AE	Dennis M. Strode
AF	Nina & Phillip Whitefield
AG	Patricia Ann Heintzman
AH	Norma Smith
AI	BRC Appalachian Minerals I, LLC
AJ	Nina A. Whitefield

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