



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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Thursday, December 5, 2024
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for Jessica Unit 1H
47-095-02899-00-00

Extended 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 written over a white rectangular area. The signature is fluid and cursive.

James A. Martin
Chief

Operator's Well Number: Jessica Unit 1H
Farm Name: Antero Resources Corporation
U.S. WELL NUMBER: 47-095-02899-00-00
Horizontal 6A New Drill
Date Modification Issued: 12/5/2024

Promoting a healthy environment.

12/06/2024

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

1) Well Operator: Antero Resources Corporation

<u>494507062</u>	<u>095 - Tyler</u>	<u>Lincoln</u>	<u>Paden City</u>
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Operator ID County District Quadrangle

2) Operator's Well Number: Jessica Unit 1H MOD Well Pad Name: Shinn Pad

3) Farm Name/Surface Owner: Antero Resources Corporation Public Road Access: Badger Run Road

4) Elevation, current ground: 1043' Elevation, proposed post-construction: 1036'

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: 6700' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2800#

8) Proposed Total Vertical Depth: 6700' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 19800' MD

11) Proposed Horizontal Leg Length: 9592.4'

12) Approximate Fresh Water Strata Depths: 328

13) Method to Determine Fresh Water Depths: 47-095-02781

14) Approximate Saltwater Depths: 1440

15) Approximate Coal Seam Depths: N/A

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

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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WW-6B
(04/15)

API NO. 47- 095 - 02899
 OPERATOR WELL NO. Jessica Unit 1H MOD
 Well Pad Name: Shinn 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#	100	100	CTS, 96 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	378	378	CTS, 394 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#	19800	19800	4062 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/L	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	1000	Class A/L	~1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A/L	~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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12/06/2024

Smiley
11/28/24

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

Drill, perforate, fracture a new 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): 38.08 acres

22) Area to be disturbed for well pad only, less access road (acres): 16.29 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/L cement.
Surface: Class A/L cement with 2-3% calcium chloride and 1/4 lb of flake
Intermediate: Class A/L 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

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.

Smay
11/27/24

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DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
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*CK# 4036825
\$ 7500⁰⁰
11/12/2024*

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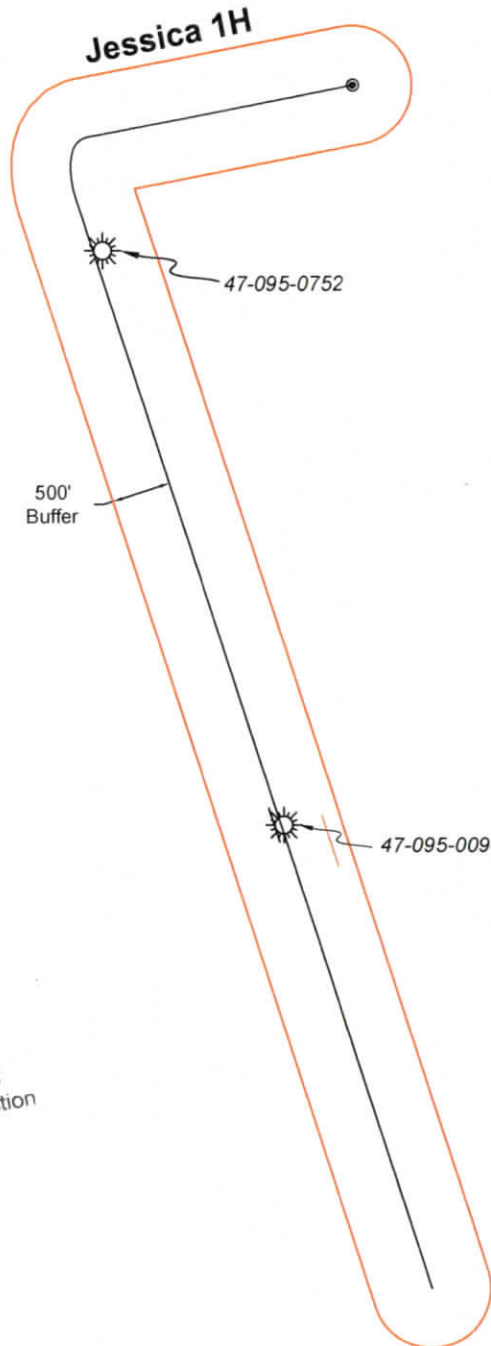
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LEGEND

- Proposed gas well
- ☀ Existing Well, as noted
- ☀ Digitized Well, as noted



The orientation of this survey is Grid North, and its coordinate base is the West Virginia Coordinate System of 1927, North Zone



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Bridgeport Office
Phone: (304) 848-5035
Fax: (304) 848-5037

172 Thompson Drive
Bridgeport, WV 26330

PARTY CHIEF: C. Lynch	DRAWN BY: B. Miller
RESEARCH: J. Miller	PREPARED: November 13, 2024
SURVEYED: Dec. 2016	PROJECT NO: 32-54-L-17
FIELD CREW: C.L., K.M.	DRAWING NO: Jessica 1HAOR

Sheet 1 of 1



Scale: 1 inch = 1500 feet

12/06/2024

UWI (APINum)	Well Name	Well Number	Operator	Hist Oper	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Producible Formation(s) not perf'd
47095007520000	STARKEY CLAIR	S	LIPPIZAN PETROLEUM INC	EMES JIM PET	3,433	2846 - 2889	Gordon	Alexander, Weir, Berea, Warren
47095009340000	HEINTZMAN EMERGY & HELEN	1-A	BOWYER DAVID	PETROLEUM DEV CORP	5,796	5300 - 5334	Rhinestreet	Benson, Alexander, Weir, Berea, Warren

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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>A: Raymond B. Heintzman, et ux Lease</u>			
Raymond B. Heintzman, et ux	McCombs Conrad & Barrett	1/8	207/136
McCombs Conrad & Barrett	Appalachian Exploration & Development, Inc	Assignment	207/487
Appalachian Exploration & Development, Inc	The Carter-Jones Lumber Company	Assignment	233/563
The Carter-Jones Lumber Company	Applied Mechanics Corporation	Assignment	258/132
Applied Mechanics Corporation	Triad Hunter, LLC	Assignment	385/566
Triad Hunter, LLC	Antero Resources Corporation	Assignment	496/776
<u>B: Nevin Porter, et al Lease</u>			
Nevin Porter, et al	Antero Resources Corporation	1/8+	464/467
<u>C: Virginia A. Nalley Lease</u>			
Virginia A. Nalley	SEP Appalachia, LLC	1/8+	315/758
SEP Appalachia, LLC	Antero Resources Corporation	Agreement	JOA
<u>G: The Norma T. Long Trust Lease</u>			
The Norma T. Long Trust	Antero Resources Corporation	1/8+	276/296
<u>H: The Norma T. Long Trust Lease</u>			
The Norma T. Long Trust	Antero Resources Corporation	1/8+	276/296
<u>J: Helen Heintzman, et vir Lease</u>			
Helen Heintzman, et vir	Larry R. Henthorn	1/8	320/672
Larry R. Henthorn	Triad Hunter LLC	Assignment	439/400
Triad Hunter, LLC	Antero Resources Corporation	Assignment	56/718
<u>N: Lydle S. & Melodee A. Matheny Lease</u>			
Lydle S. & Melodee A. Matheny	Antero Resources Corporation	1/8+	200/90
<u>O: Harry H. Huff, II, et ux Lease</u>			
Harry H. Huff, II, et ux	Antero Resources Corporation	1/8+	138/7
<u>N: Lydle S. & Melodee A Matheny Lease</u>			
Lydle S. & Melodee A. Matheny	Antero Resources Corporation	1/8+	200/90
<u>P: Richard D. Lewis, et ux Lease</u>			
Richard D. Lewis, et ux	Antero Resources Corporation	1/8+	137/602
<u>AJ: David E. Wells, et ux Lease</u>			
David E. Wells, et ux	Antero Resources Corporation	1/8+	559/506
<u>X: Amelia D. Hubbard Lease</u>			
Amelia D. Hubbard	Antero Resources Corporation	1/8+	28/565
<u>AJ: David E. Wells, et ux Lease</u>			
David E. Wells, et ux	Antero Resources Corporation	1/8+	559/506

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- (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>AO: Walter J. West Lease</u>	Walter J. West Triad Hunter, LLC	Triad Hunter, LLC Antero Resources Corporation	1/8+ Assignment	385/576 56/718

**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

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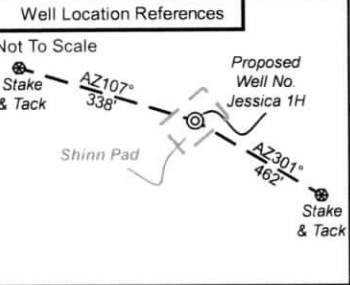
The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity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

Well Operator: Antero Resources Corporation
 By: Tim Rady
 Its: Senior Vice President of Land

Antero Resources
Well No. Jessica 1H
BHL MOD
Antero Resources Corporation



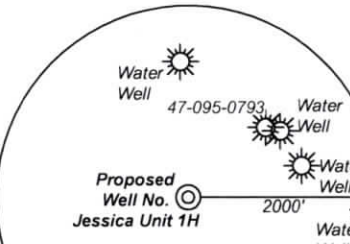
Page
1 of 2



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

Bradley D. Miller, P.S. 2167



Note: Four 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.

	Bearing	Dist.
L1	N 05°51' E	805.5'
L2	N 26°35' W	3,314.7'
L3	S 45°03' E	1,458.4'
L4	N 69°15' E	3,422.0'
L5	S 67°11' W	2,530.6'

7,958' to Bottom Hole

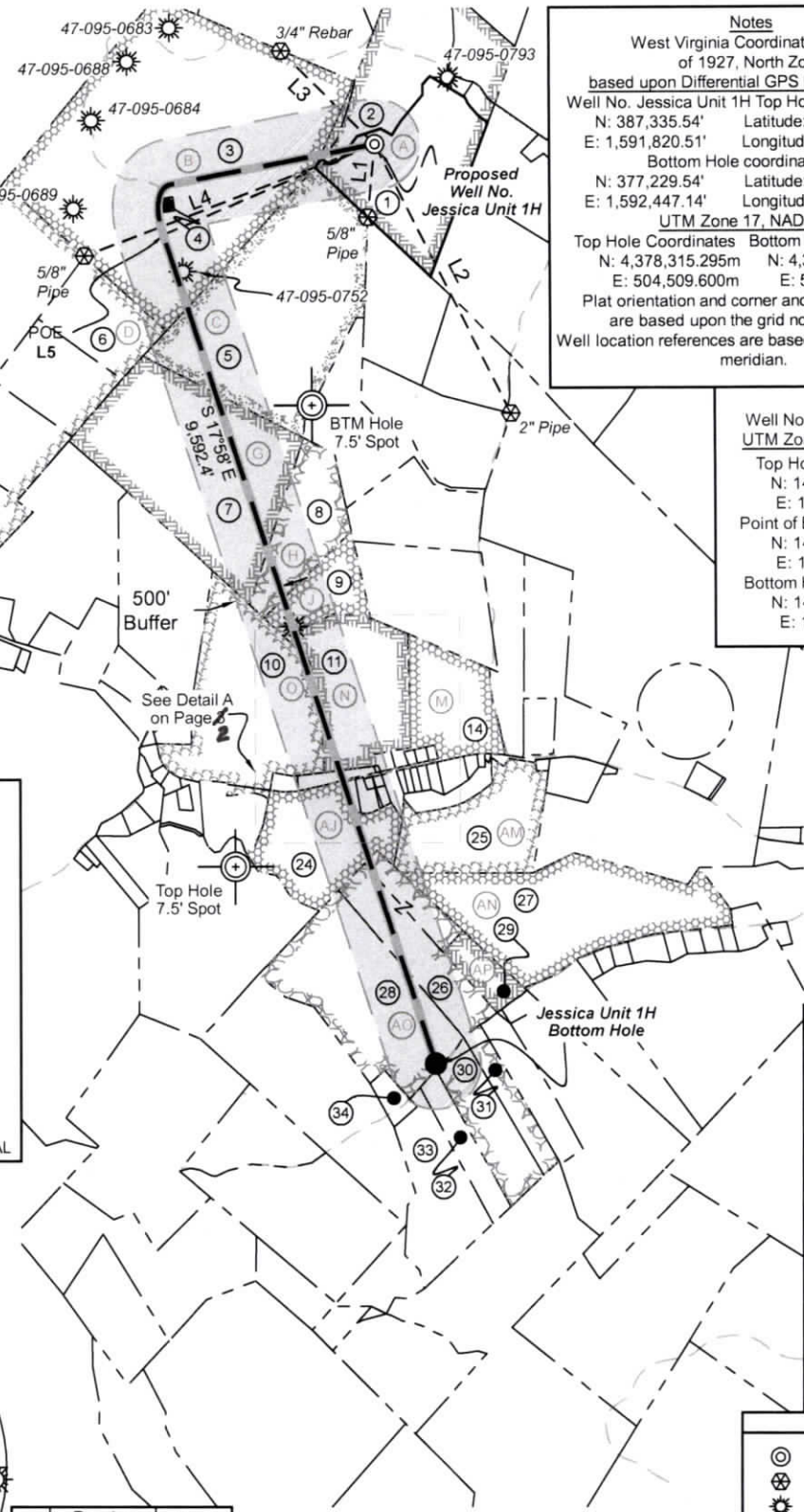
8,743' to Top Hole

TOP HOLE LATITUDE 39 - 35 - 00
 BTM HOLE LATITUDE 39 - 32 - 30

LONGITUDE 80 - 55 - 00

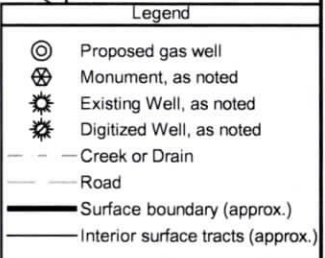
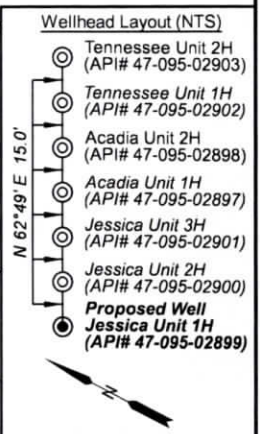
10,526' to Top Hole

5,445' to Bottom Hole



Notes
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Jessica Unit 1H Top Hole coordinates are
 N: 387,335.54' Latitude: 39°33'15.96"
 E: 1,591,820.51' Longitude: 80°56'51.65"
 Bottom Hole coordinates are
 N: 377,229.54' Latitude: 39°31'36.18"
 E: 1,592,447.14' Longitude: 80°56'41.58"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,378,315.295m N: 4,375,239.625m
 E: 504,509.600m E: 504,751.830m
 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. Jessica Unit 1H UTM Zone 17, NAD 1927
 Top Hole Coordinates
 N: 14,363,808.82'
 E: 1,655,163.90'
 Point of Entry Coordinates
 N: 14,362,788.90'
 E: 1,652,848.84'
 Bottom Hole Coordinates
 N: 14,353,718.14'
 E: 1,655,958.89'



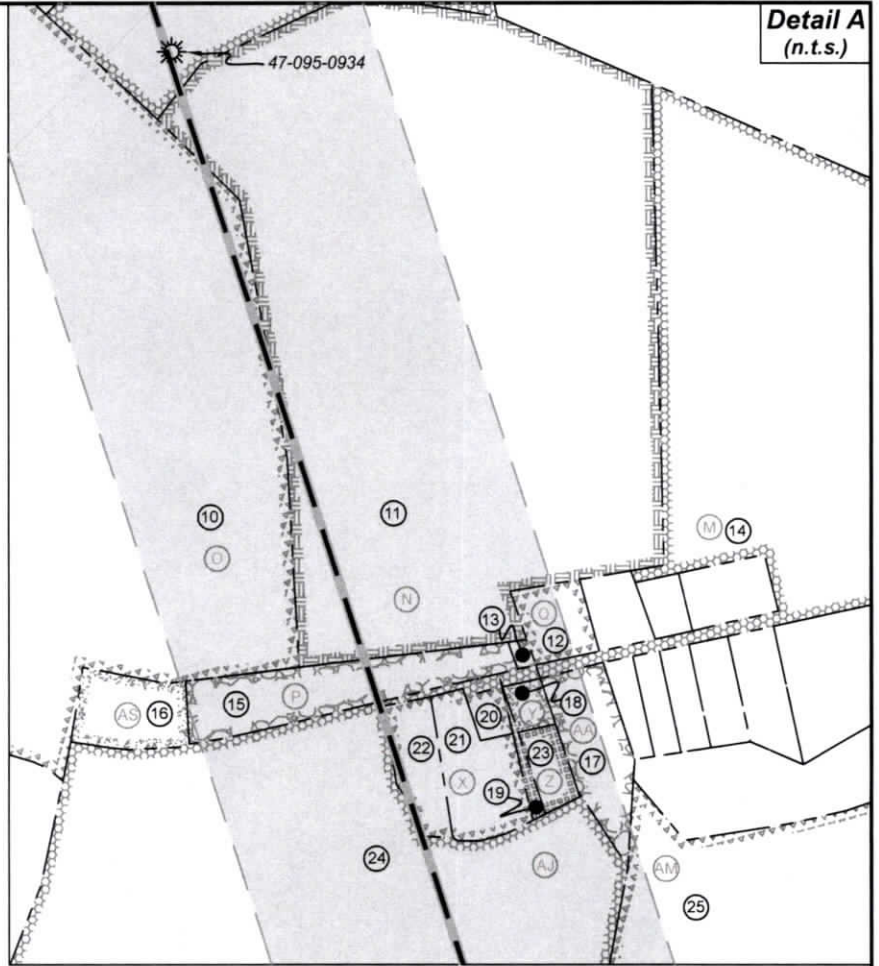
FILE NO: 32-54-L-17
 DRAWING NO: Jessica Unit 1H BHL MOD
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: Submeter
 PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

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

DATE: November 1 2024
 OPERATOR'S WELL NO. Jessica Unit 1H
 API WELL NO
 47 - 095 - 02899
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: Existing Grade 1,043' Proposed Grade 1,036' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Paden City
 DISTRICT: Lincoln COUNTY: Tyler 12/06/2024
 SURFACE OWNER: Antero Resources Corporation ACREAGE: 52.51
 ROYALTY OWNER: Raymond B. Heintzman, et ux LEASE NO: ACREAGE: 100
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD 6,700' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 19,800' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Kevin Ellis
 ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.
 Denver, CO 80202 Bridgeport, WV 26330



ID	TM-Par	Owner	Bk/Pg	Acres
1	8-21.2	Antero Resources Corporation	296/494	35.52
2	8-21	Antero Resources Corporation	296/490	52.51
3	8-19	Olive Branch Animal Rescue	333/804	173.48
4	8-19.1	Hope Gas, Inc.	337/454	0.52
5	8-39	Virginia A. Nalley	190/482	70.65
6	8-38.4	Carl W. Woolwine	636/677	21.32
7	8-54	Virginia A. Nalley	190/482	63.01
8	8-55	Douglas Ray Carson, Jr.	595/111	25.62
9	8-56	Douglas Ray Carson, Jr.	595/111	14.96
10	12-16	Harry H. II & Rebecca A. Huff	230/546	45.11
11	12-17	Lylde S. & Melodee A. Matheny	504/633	36.00
12	12A-8	James O. & Nancy J. McMullen	341/483	0.79
13	12-40.7	Lylde S. & Melodee A. Matheny	535/275	0.08
14	12-18	David E. & Shelley R. Maxwell	307/676	29.04
15	12-40.6	Richard D. & Rachel D. Lewis	535/275	2.39
16	12-40.3	Amelia D. Hubbard	WB29/784	1.25
17	12A-15	Shirley G. Wilson	166/81	1.50
18	12A-14	Andrew M. Weekley	427/536	0.29
19	12-40.4	Andrew M. Weekley	427/536	0.16
20	12A-13	Amerlia D. Hubbard	WB75/343	0.29
21	12-40.1	Amelia D. Hubbard	WB75/343	1.61
22	12-40.5	Amelia D. Hubbard	WB75/343	0.96
23	12-40.2	Andrew M. Weekley	427/536	0.49
24	12-40	David E. Wells	335/133	34.38
25	12-41	Shaun M. & Carrie A. Meckley	633/569	43.28
26	12-53.5	Walter J. West	359/817	29.04
27	12-71.1	James Perry & Melissa Flesher	316/137	63.45
28	12-53.4	Walter J. West	359/817	52.95
29	12-53.8	Daniel J. & Donald E. Regan	372/164	7.80
30	12-53	Walter J. West	359/817	18.33
31	12-53.3	Walter J. West	359/817	9.04
32	12-53.7	John Backel & Mary Beth Tomaselli	321/138	10.01
33	12-53.6	Roller Coaster Resources LLC	259/698	27.26
34	12-52.1	Roller Coaster Resources LLC	259/698	3.45

Leases	
A	Raymond B. Heintzman, et ux
B	Nevin Porter, et al
C	Virginia A. Nalley
D	Victoria Keller, et al
G	The Norma T. Long Trust
H	The Norma T. Long Trust
J	Helen Heintzman, et vir
M	David E. Maxwell, et ux
N	Lylde S. & Melodee A. Matheny
O	Harry H. Huff, II, et ux
P	Richard D. Lewis, et ux
Q	James O. McMullen, et ux
X	Amelia D. Hubbard
Y	Andrew Weekley
Z	Andrew Weekley
AA	Shirley G. Wilson
AJ	David E. Wells, et ux
AM	Roy L. Craig
AN	James Perry & Melissa B. Flesher
AO	Walter J. West
AP	Donald E. Regan
AS	Amelia D. Hubbard

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 ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.
 Denver, CO 80202 Bridgeport, WV 26330

Antero Resources
Well No. Jessica 1H
BHL MOD
Antero Resources Corporation

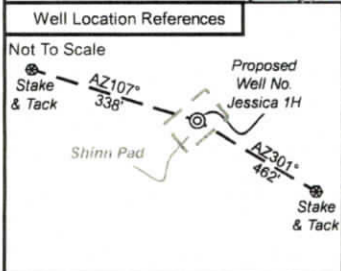


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TOP HOLE LATITUDE 39 - 35 - 00
 BTM HOLE LATITUDE 39 - 32 - 30

Notes
 West Virginia Coordinate System
 of 1927, North Zone
 based upon Differential GPS Measurements.
 Well No. Jessica Unit 1H Top Hole coordinates are
 N: 387,335.54' Latitude: 39°33'15.96"
 E: 1,591,820.51' Longitude: 80°56'51.65"
 Bottom Hole coordinates are
 N: 377,229.54' Latitude: 39°31'36.18"
 E: 1,592,447.14' Longitude: 80°56'41.58"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,378,315.295m N: 4,375,239.625m
 E: 504,509.600m E: 504,751.830m
 Plat orientation and corner and well references
 are based upon the grid north meridian.
 Well location references are based upon the magnetic
 meridian.

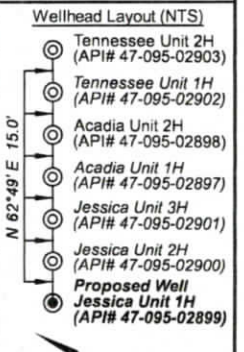
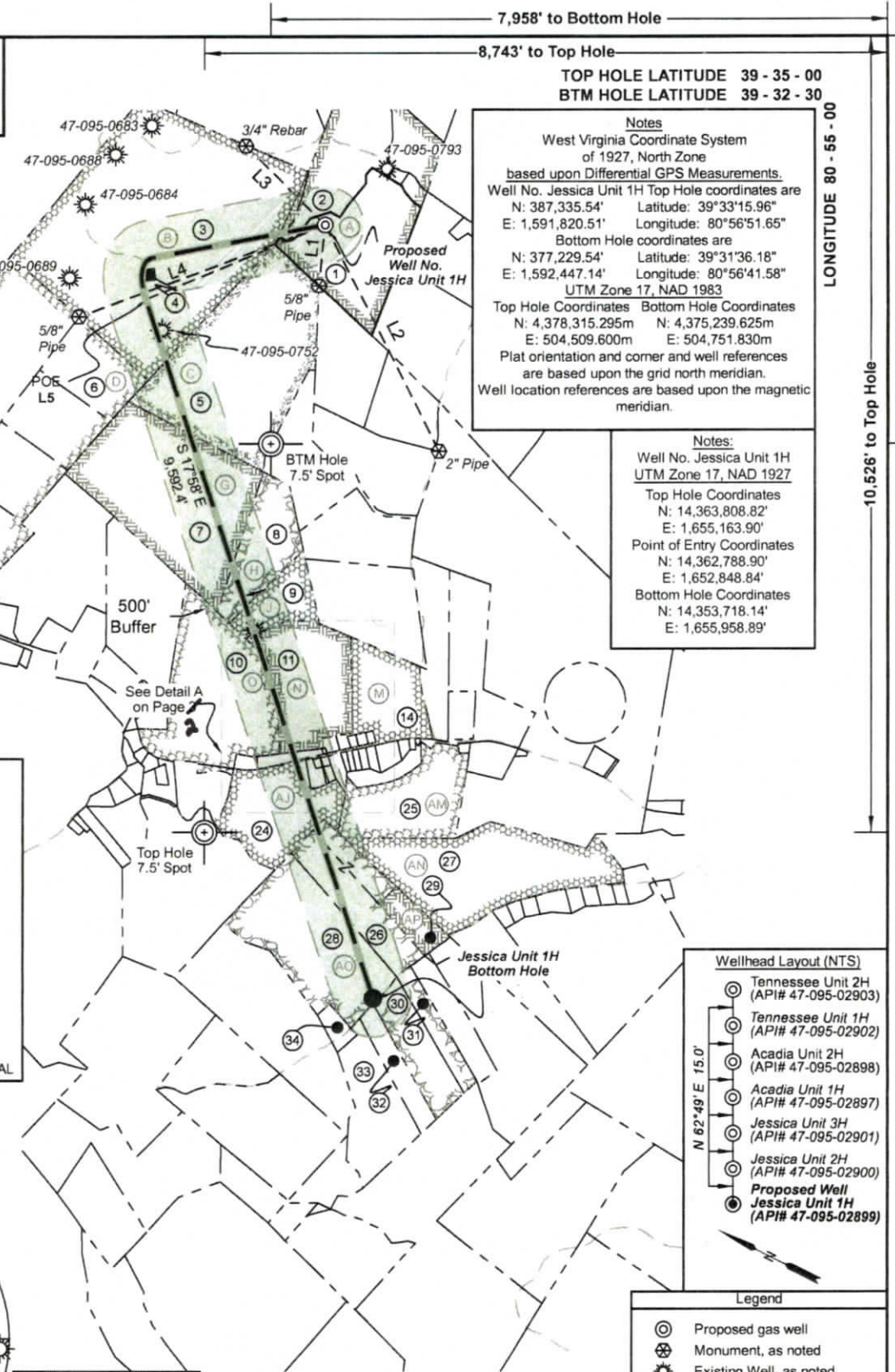
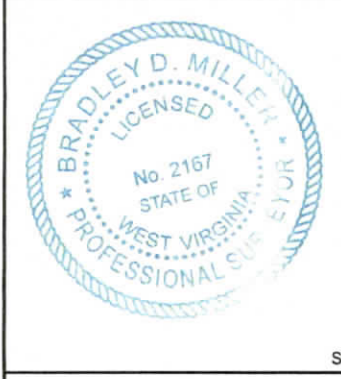
Notes:
 Well No. Jessica Unit 1H
 UTM Zone 17, NAD 1927
 Top Hole Coordinates
 N: 14,363,808.82'
 E: 1,655,163.90'
 Point of Entry Coordinates
 N: 14,362,788.90'
 E: 1,652,848.84'
 Bottom Hole Coordinates
 N: 14,353,718.14'
 E: 1,655,958.89'



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.

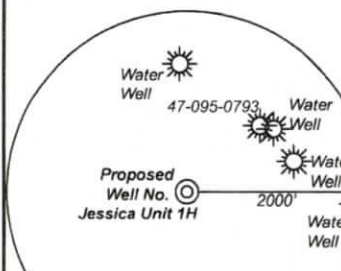
Bradley D. Miller

Bradley D. Miller, P.S. 2167



Legend

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



Note: Four 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.

	Bearing	Dist.
L1	N 05°51' E	805.5'
L2	N 26°35' W	3,314.7'
L3	S 45°03' E	1,458.4'
L4	N 69°15' E	3,422.0'
L5	S 67°11' W	2,530.6'

FILE NO: 32-54-L-17
 DRAWING NO: Jessica Unit 1H BHL MOD
 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: November 1 2024
 OPERATOR'S WELL NO. Jessica Unit 1H
 API WELL NO
 47 - 095 - 02899
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: Proposed Grade 1,036' Existing Grade 1,043' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Paden City
 DISTRICT: Lincoln COUNTY: Tyler
 SURFACE OWNER: Antero Resources Corporation ACREAGE: 52.51
 ROYALTY OWNER: Raymond B. Heintzman, et ux LEASE NO: ACREAGE: 12/06/2024

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD 6,700' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 19,800' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Kevin Ellis
 ADDRESS: 1615 Wynkoop Street ADDRESS: 535 White Oaks Blvd.
 Denver, CO 80202 Bridgeport, WV 26330

JMK
 11/22/24