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west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, April 5, 2024  
PERMIT MODIFICATION APPROVAL  
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION  
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for GALARRAGA UNIT 1H  
47-103-03633-00-00

**Adding 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.

James A. Martin  
Chief

Operator's Well Number: GALARRAGA UNIT 1H  
Farm Name: ANTERO RESOURCES CORPORATION  
U.S. WELL NUMBER: 47-103-03633-00-00  
Horizontal 6A New Drill  
Date Modification Issued: 4/5/2024

Promoting a healthy environment.

04/05/2024

WW-6B  
(04/15)

API NO. 47-103 - 03633  
OPERATOR WELL NO. Galarraga Unit 1H MOD  
Well Pad Name: Fluharty 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 103 - Wetzel Green Porter Falls 7.5'  
Operator ID County District Quadrangle
- 2) Operator's Well Number: Galarraga Unit 1H MOD Well Pad Name: Fluharty Pad
- 3) Farm Name/Surface Owner: Antero Resources Corporation Public Road Access: Co Rd 28
- 4) Elevation, current ground: 1214' Elevation, proposed post-construction: 1181' - PROPOSED
- 5) Well Type (a) Gas  Oil  Underground Storage   
Other \_\_\_\_\_  
(b) If Gas Shallow  Deep   
Horizontal
- 6) Existing Pad: Yes or No Yes
- 7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus Shale: 7300' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#
- 8) Proposed Total Vertical Depth: 7300' TVD
- 9) Formation at Total Vertical Depth: Marcellus
- 10) Proposed Total Measured Depth: 25300' MD
- 11) Proposed Horizontal Leg Length: 16800' \*Open to modification at a later date
- 12) Approximate Fresh Water Strata Depths: 307'
- 13) Method to Determine Fresh Water Depths: 47103012450000 Offset well records. Depths have been adjusted according to surface elevations.
- 14) Approximate Saltwater Depths: 2289'
- 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: \_\_\_\_\_

18)

**CASING AND TUBING PROGRAM**

<b>TYPE</b>	<b>Size (in)</b>	<b>New or Used</b>	<b>Grade</b>	<b>Weight per ft. (lb/ft)</b>	<b>FOOTAGE: For Drilling (ft)</b>	<b>INTERVALS: Left in Well (ft)</b>	<b>CEMENT: Fill-up (Cu. Ft.)/CTS</b>
Conductor	20"	New	J-55	94#	100'	100'	CTS, 96 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	357'	357'	CTS, 372 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2900'	2900'	CTS, 1181 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P110-ICY	23#	25300'	25300'	CTS, 5447 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

<b>TYPE</b>	<b>Size (in)</b>	<b>Wellbore Diameter (in)</b>	<b>Wall Thickness (in)</b>	<b>Burst Pressure (psi)</b>	<b>Anticipated Max. Internal Pressure (psi)</b>	<b>Cement Type</b>	<b>Cement Yield (cu. ft./k)</b>
Conductor	20"	24"	0.375"	2250	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"	14,360	2500	Class G/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			

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

Drill a new horizontal shallow well into the Marcellus Shale.

\*Antero will be air drilling the fresh water string which makes it difficult to determine when fresh water is encountered. Therefore, we have built in a buffer for the casing setting depth which helps to ensure that all fresh water zones are covered.

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): 45.48 acres

22) Area to be disturbed for well pad only, less access road (acres): 11.67 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 G/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.

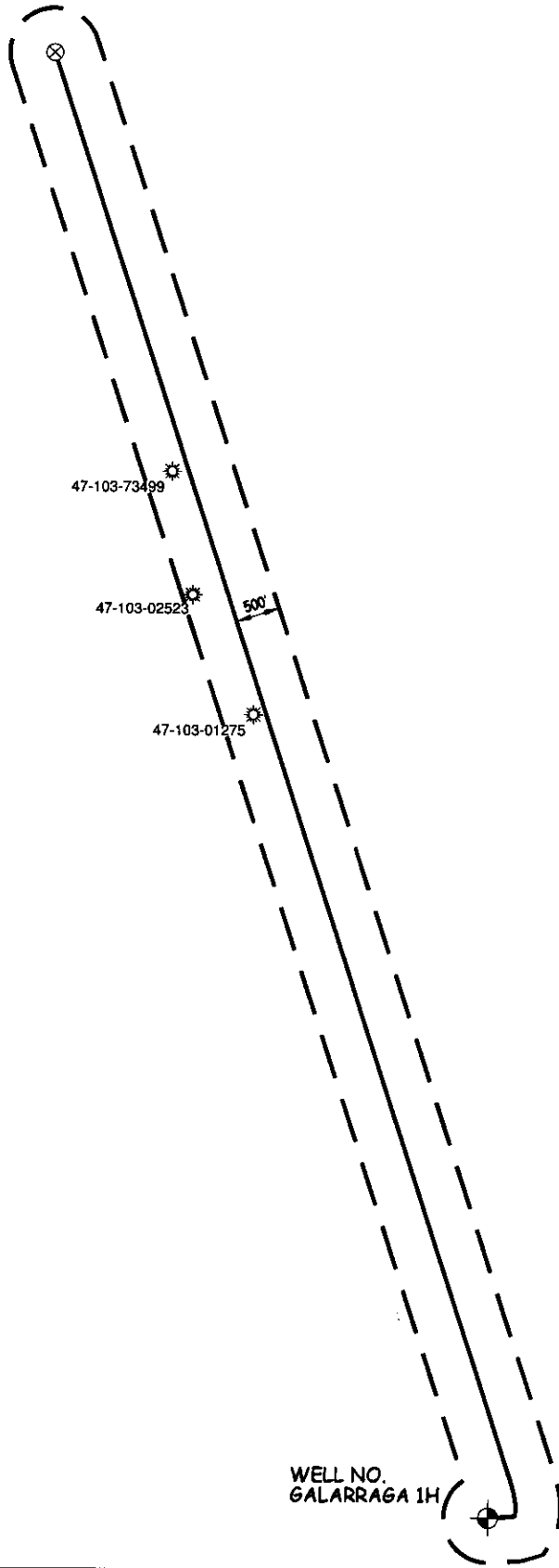
Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

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.

# FLUHARTY PAD ANTERO RESOURCES CORPORATION



Office  
 MAR 25  
 2024

WELL NO.  
 GALARRAGA 1H

<b>WILLOW LAND SURVEYING, PLLC</b> P.O. BOX 17, PENNSBORO, WV 26415 (304) 659-1717		<b>SCALE : 1-INCH = 2000-FEET</b> 0'                      2000'                      4000'                      6000' 	
DATE: 01/09/24	DRAWN BY: D.R.R.	JOB #: 23-011WA	FILE: GALARRAGA1HAOR.DWG
		<span style="color: red;">04/05/2024</span>	

UWI (APINum)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Producible Formation(s) not perf'd
47103012750000	YOHO JAMES	1	PARDEE EXPLORATION CO	COASTAL CORP THE	4,007		Allegheny, Pottsville, Warren	Weir, Benson, Alexander
47103025230000	YOHO JAMES	1	BLACKROCK ENTERPRISES LLC	GASTAR EXPL USA INC	6,494		Marcellus	
47103734990000	F C WELLS	1	UNKNOWN	UNKNOWN				

RECEIVED  
 Office of Oil and Gas  
 MAR 25 2024  
 WV Department of  
 Environmental Protection

4710303633

LATITUDE 39°35'00"

6,441'

LATITUDE 39°37'30"

11,631' TO BOTTOM HOLE

4,355'  
3,201' TO BOTTOM HOLE  
LONGITUDE 80°47'30"

### Antero Resources Corporation Well No. Galarraga #1H

**NOTE**  
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.

#### 1H BOTTOM HOLE

A1	LILLIE BLANCHE SMITH TESTAMENTARY TRUST
A2	LILLIE BLANCHE SMITH TESTAMENTARY TRUST
B1	BRU APPALACHIAN MINERALS I, LLC.
B2	BRU APPALACHIAN MINERALS I, LLC.
B3	BRU APPALACHIAN MINERALS I, LLC.
C	WILLIAM W. FLETCHER, JR., BY UX
D	LILLIE BLANCHE SMITH TESTAMENTARY TRUST
E	WYNR
F	LILLIE BLANCHE SMITH TESTAMENTARY TRUST
G	SHIBEN ESTATES, INC.
H	NANCY LOU O'NEIL LASURE
I	CSX TRANSPORTATION, INC.
J1	WILL E. MORRIS HEIRS TRUST
J2	WILL E. MORRIS HEIRS TRUST
J3	WILL E. MORRIS HEIRS TRUST
J4	WILL E. MORRIS HEIRS TRUST
K	DAVID L. SHREVE AND ESTER SHREVE
L	JEFFERY T. BROWN AND CYNTHIA J. BROWN
M1	J. WELLS KAHN, BY AL
M2	J. WELLS KAHN, BY AL
N	LAWRENCE P. LEMON AND ANITA M. LEMON
O	CAUL PHILLIPS ATKINSON
P	BENJAMIN R. YOHO
Q	STONE HILL MINERALS HOLDINGS, LLC.
R	COASTAL FOREST RESOURCES COMPANY
S	BENJAMIN R. YOHO
T1	TOMMEY J. CUMP AND JEAN ANN CUMP
T2	TOMMEY J. CUMP AND JEAN ANN CUMP
U	JOHN MATHEW STALEY
V	DAVID LEE SMITH
W	MICHAEL EUGENE SMITH
AA	DAVID LEE SMITH
AB	ROBERT HARRY MYERS, SR.
AC	JOHN MATHEW STALEY

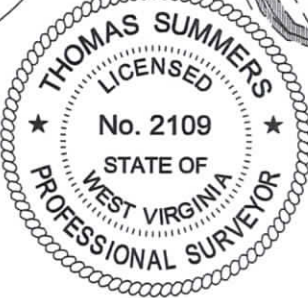
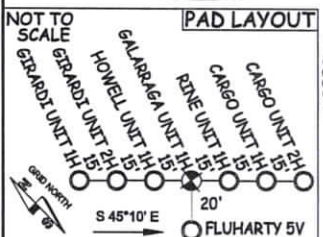
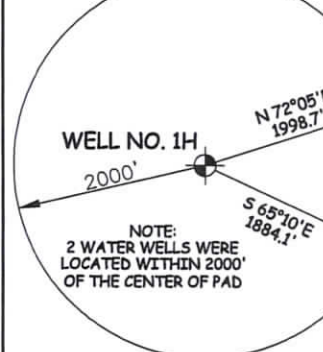
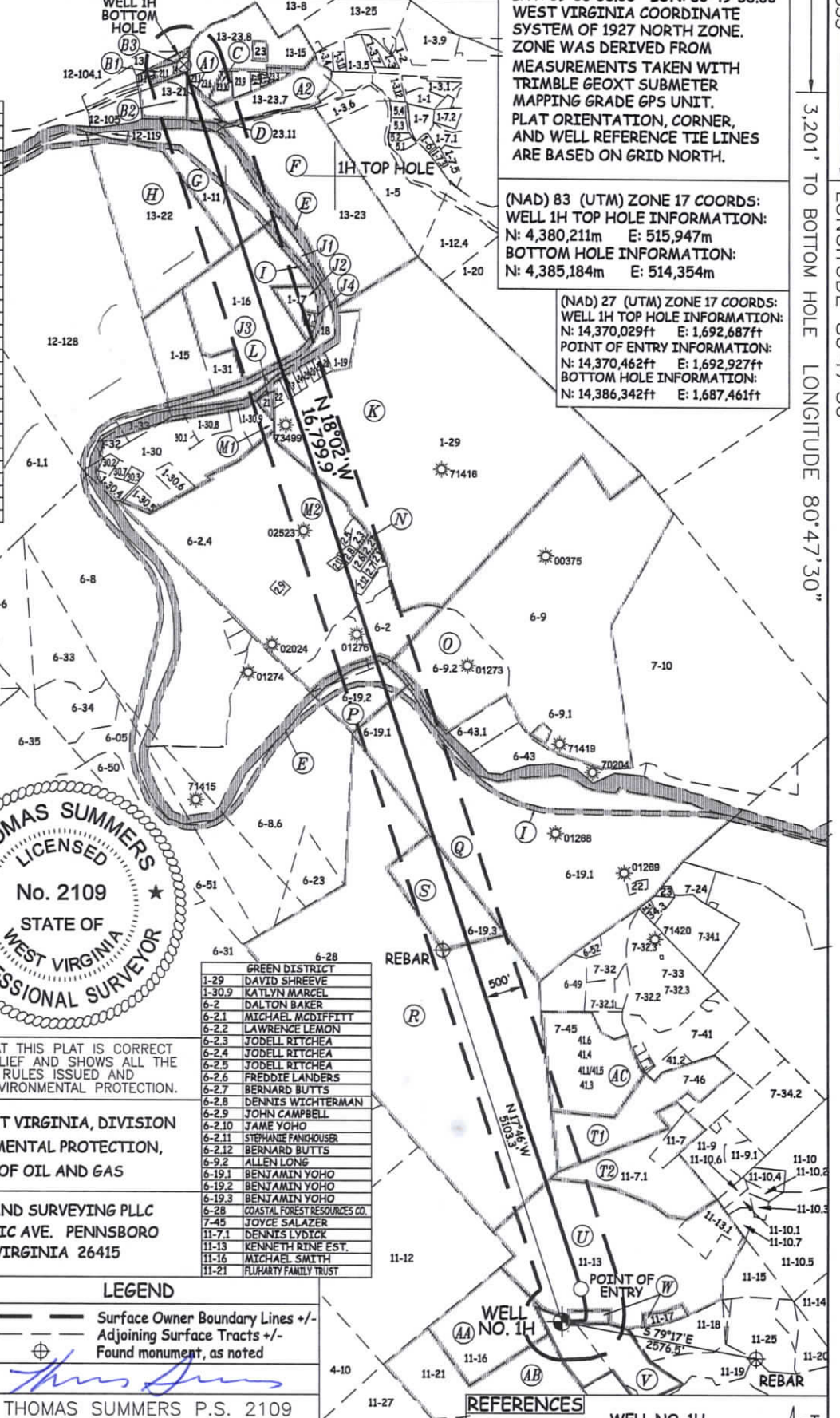
MAGNOLIA DISTRICT	13-23.7	BARRY KIRKLAND	1-17.1	CHRISTOPHER HOWELL	
12-119	NANCY LASURE	13-23.8	JEROME SANDS	1-18	JUANITA DIXON
13-13	RUTH BLAKE	13-23.9	RICHARD JOY	1-21	JEFFERY BROWN
13-13.1	WSD PROPERTIES LLC	13-23.10	WILLIAM FLETCHER	1-22	GREGORY GRIFFITH
13-14	WVDOH	13-23.11	BARRY KIRKLAND	1-23	SHERWIN TOOTHMAN
13-21	WSD PROPERTIES LLC		GREEN DISTRICT	1-24	DIANE VASQUEZ
13-21.1	WVDOH	1-11	STEVEN HOWELL	1-25	RONALD MILLER
13-23	TH EXPLORATION II LLC	1-15	JACOB MORGAN	1-26	DEBRA MASON
13-23.1	ROBERT GORBY	1-16	MARK HOWELL	1-27	LOYD DENNIS JR.
13-23.6	ROBERT GORBY	1-17	EDGAR HOWELL	1-28	VINCENT GREENE

**NOTES:**  
WELL 1H TOP HOLE INFORMATION:  
N: 392,930ft E: 1,629,455ft  
LAT: 39°34'16.97" LON: 80°48'52.25"  
BOTTOM HOLE INFORMATION:  
N: 409,334ft E: 1,624,500ft  
LAT: 39°36'58.36" LON: 80°49'58.63"  
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 1H TOP HOLE INFORMATION:  
N: 4,380,211m E: 515,947m  
BOTTOM HOLE INFORMATION:  
N: 4,385,184m E: 514,354m

(NAD) 27 (UTM) ZONE 17 COORDS:  
WELL 1H TOP HOLE INFORMATION:  
N: 14,370,029ft E: 1,692,687ft  
POINT OF ENTRY INFORMATION:  
N: 14,370,462ft E: 1,692,927ft  
BOTTOM HOLE INFORMATION:  
N: 14,386,342ft E: 1,687,461ft

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

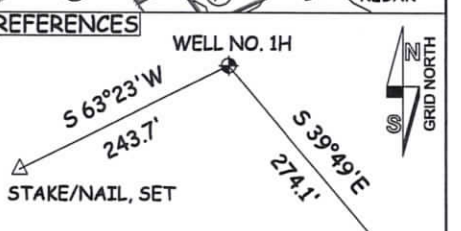
GREEN DISTRICT	6-28
1-29	DAVID SHREVE
1-30.9	KATLYN MARCEL
6-2	DALTON BAKER
6-2.1	MICHAEL MCDIFFITT
6-2.2	LAWRENCE LEMON
6-2.3	JODELL RITCHEA
6-2.4	JODELL RITCHEA
6-2.5	JODELL RITCHEA
6-2.6	FREDDIE LANDERS
6-2.7	BERNARD BUTTS
6-2.8	DENNIS WICHTERMAN
6-2.9	JOHN CAMPBELL
6-2.10	JAME YOHO
6-2.11	STEPHANIE FANGHOUSER
6-2.12	BERNARD BUTTS
6-9.2	ALLEN LONG
6-19.1	BENJAMIN YOHO
6-19.2	BENJAMIN YOHO
6-19.3	BENJAMIN YOHO
6-28	COASTAL FOREST RESOURCES CO.
7-45	JOYCE SALAZER
11-7.1	DENNIS LYDICK
11-13	KENNETH RINE EST.
11-16	MICHAEL SMITH
11-21	FLUHARTY FAMILY TRUST

JOB # 21-011WA  
DRAWING # GALARRAGA1HR  
SCALE 1" = 2000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

**LEGEND**  
— Surface Owner Boundary Lines +/-  
- - - Adjoining Surface Tracts +/-  
⊕ Found monument, as noted

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

DATE 02/21/24  
OPERATOR'S WELL# GALARRAGA UNIT #1H  
47 - 103 - 03633  
STATE COUNTY PERMIT



WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
LOCATION: ELEVATION PROPOSED - 1,181' WATERSHED FISHING CREEK 1" = 200'

QUADRANGLE PORTER FALLS 7.5' DISTRICT GREEN COUNTY WETZEL  
SURFACE OWNER ANTERO RESOURCES CORPORATION ACREAGE 46.95 ACRES±  
OIL & GAS ROYALTY OWNER DAVID L. SMITH LEASE ACREAGE 67 ACRES±  
PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER  REDRILL \_\_\_ FRACTURE OR STIMULATE   
PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) MOD-BHL PLUG & ABANDON \_\_\_ CLEAN OUT & REPLUG \_\_\_  
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,300' TVD 25,300' MD  
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT KEVIN ELLIS  
ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202 ADDRESS 535 WHITE OAK BLVD. BRIDGEPORT, WV 26330

04/05/2024

COUNTY NAME PERMIT

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>V: David Lee Smith Lease</u> David Lee Smith	Antero Resources Corporation	1/8+	273A/0442
<u>W: Michael Eugene Smith Lease</u> Michael Eugene Smith	Antero Resources Corporation	1/8+	273A/0435
<u>U: John Mathew Staley Lease</u> John Mathew Staley	Antero Resources Corporation	1/8+	266A/0026
<u>R: Coastal Forest Resources Company Lease</u> Coastal Forest Resources Company Drilling Appalachian Corporation	Drilling Appalachian Corporation Antero Resources Corporation	1/8+ Assignment	092A/0906 177A/0451
<u>S: Benjamin R. Yoho Lease</u> Benjamin R. Yoho	Antero Resources Corporation	1/8+	290A/0336
<u>Q: Stone Hill Minerals Holdings, LLC. Lease</u> Stone Hill Minerals Holdings, LLC.	Antero Resources Corporation	1/8+	259A/0769
<u>P: Benjamin R. Yoho Lease</u> Benjamin R. Yoho	Antero Resources Corporation	1/8+	290A/0332
<u>I: CSX Transportation, Inc. Lease</u> CSX Transportation, Inc.	Antero Resources Corporation	1/8+	275A/0895
<u>P: Benjamin R. Yoho Lease</u> Benjamin R. Yoho	Antero Resources Corporation	1/8+	290A/0332
<u>E: WVDNR Lease</u> WVDNR	Antero Resources Corporation	1/8+	323A/0531
<u>M2: J. Wells Eakin, Et Al Lease</u> J. Wells Eakin, Et Al Sutton's Exploration & Production Company, LLC Gastar Exploration USA, Inc. Gastar Exploration Inc. Gastar Exploration Inc. TH Exploration II, LLC	Sutton's Exploration & Production Company, LLC Gastar Exploration USA, Inc. Gastar Exploration Inc. Th Exploration II, LLC Antero Resources Corporation	1/8 Assignment Merger Assignment Assignment	090A/0234 102A/0524 0013/0270 173A/0431 270A/0067
<u>K: David L. Shreve and Ester Shreve Lease</u> David L. Shreve and Ester Shreve	Antero Resources Corporation	1/8+	264A/0495
<u>E: WVDNR Lease</u> WVDNR	Antero Resources Corporation	1/8+	323A/0531
<u>I: CSX Transportation, Inc. Lease</u> CSX Transportation, Inc.	Antero Resources Corporation	1/8+	275A/0895
<u>J3: Will E. Morris Heirs Trust Lease</u> Will E. Morris Heirs Trust	Antero Resources Corporation	1/8+	328A/0541

04/05/2024



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Chapter 22, Article 6A, Section 5(a)(5)  
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Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<b>G: Shiben Estates, Inc. Lease</b> Shiben Estates, Inc.	Antero Resources Corporation	1/8+	307A/0680
<b>I: CSX Transportation, Inc. Lease</b> CSX Transportation, Inc.	Antero Resources Corporation	1/8+	275A/0895
<b>G: Shiben Estates, Inc. Lease</b> Shiben Estates, Inc.	Antero Resources Corporation	1/8+	307A/0680
<b>E: WVDNR Lease</b> WVDNR	Antero Resources Corporation	1/8+	323A/0531
<b>D: Lillie Blanche Smith Testamentary Trust Lease</b> Lillie Blanche Smith Testamentary Trust	Antero Resources Corporation	1/8+	317A/0814
<b>A1: Lillie Blanche Smith Testamentary Trust Lease</b> Lillie Blanche Smith Testamentary Trust	Antero Resources Corporation	1/8+	317A/0814
<b>B2: BRC Appalachian Minerals I, LLC. Lease</b> BRC Appalachian Minerals I, LLC. BRC Working Interest Company, LLC Chesapeake Appalachia, LLC SWN Production Company Antero Exchange Properties LLC	BRC Working Interest Company, LLC Chesapeake Appalachia, LLC SWN Production Company Antero Exchange Properties LLC Antero Resources Corporation	1/8+ Assignment Assignment Assignment Merger	102A/0505 103A/0470 157A/0540 177A/0533 0009/0404

\*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.

\*Co-tenancy utilization – Antero is utilizing the Co-tenancy Modernization and Majority Protection Act to proceed with development of certain royalty owners' interests in this tract.

\*\* Pooling/Unitization – Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool certain owners in this tract.

04/05/2024

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Chapter 22, Article 6A, Section 5(a)(5)  
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Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<b>B1: BRC Appalachian Minerals I, LLC Lease</b>				
	BRC Appalachian Minerals I, LLC	BRC Working Interest Company LLC	1/8+	102A/0505
	BRC Working Interest Company LLC	Chesapeake Appalachia LLC	Assignment	103A/0470
	Chesapeake Appalachia LLC	SWN Production Company	Assignment	157A/0540
	SWN Production Company	Antero Exchange Properties LLC	Assignment	177A/0533
	<b>Antero Exchange Properties LLC</b>	<b>Antero Resources Corporation</b>	<b>Merger</b>	<b>0009/0404</b>

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\*\*Pooling/Unitization – Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool certain owners in this tract.

**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

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