



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, June 23, 2022
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET
DENVER, CO 80202

Re: Permit Modification Approval for ELKLICK 1H
47-085-10419-00-00

Lateral Extension. Total Measured Depth 18500' to 21600'. Horizontal Lateral Length 10634' to 13220'. Updated Leases

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: ELKLICK 1H
Farm Name: ELMER W PIERCE
U.S. WELL NUMBER: 47-085-10419-00-00
Horizontal 6A New Drill
Date Modification Issued: 06/23/2022

Promoting a healthy environment.

06/24/2022

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

1) Well Operator: Antero Resources Corporation 494507062 085-Ritchie Union Oxford 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Elklick Unit 1H MOD Well Pad Name: Cashew Pad

3) Farm Name/Surface Owner: Elmer W. Pierce Public Road Access: Pleasant Hollow Road

4) Elevation, current ground: 1040' Elevation, proposed post-construction: ~1019'

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: 6900' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2850#

8) Proposed Total Vertical Depth: 6900' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 21,600' MD

11) Proposed Horizontal Leg Length: 13,220'

12) Approximate Fresh Water Strata Depths: 53', 236'

13) Method to Determine Fresh Water Depths: 47-085-07654

14) Approximate Saltwater Depths: 1709', 1847'

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

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

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May
06/24/2022
6-16-22

WW-6B
(04/15)

API NO. 47- 085 - 10419
 OPERATOR WELL NO. Ellick Unit 1H MOD
 Well Pad Name: Cashew 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	16"	New	H-40	65#	80	80	CTS, 63 Cu. Ft.
Fresh Water	10-3/4"	New	J/K-55	40.4#	300	300	CTS, 164 Cu. Ft.
Coal	7-5/8"	New	P-110CY	26.4#	2500	2500	CTS, 698 Cu. Ft.
Intermediate							
Production	5"	New	P-110CY	18#	21,600	21,600	2161 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	16"	20"	0.375"	1530	50	Class A	~1.16
Fresh Water	10-3/4"	13-1/2"	0.35"	2730	1000	Class A	~1.16
Coal	7-5/8"	9-7/8"	0.328"	9410	1500	Class A	~1.16
Intermediate							
Production	5"	6-3/4"	0.362"	15,840	12,000	Class G/H	~1.6
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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06/24/2022

1-11-27

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): 33.75 acres

22) Area to be disturbed for well pad only, less access road (acres): 14.29 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 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

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 berite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water

*Note: Attach additional sheets as needed.

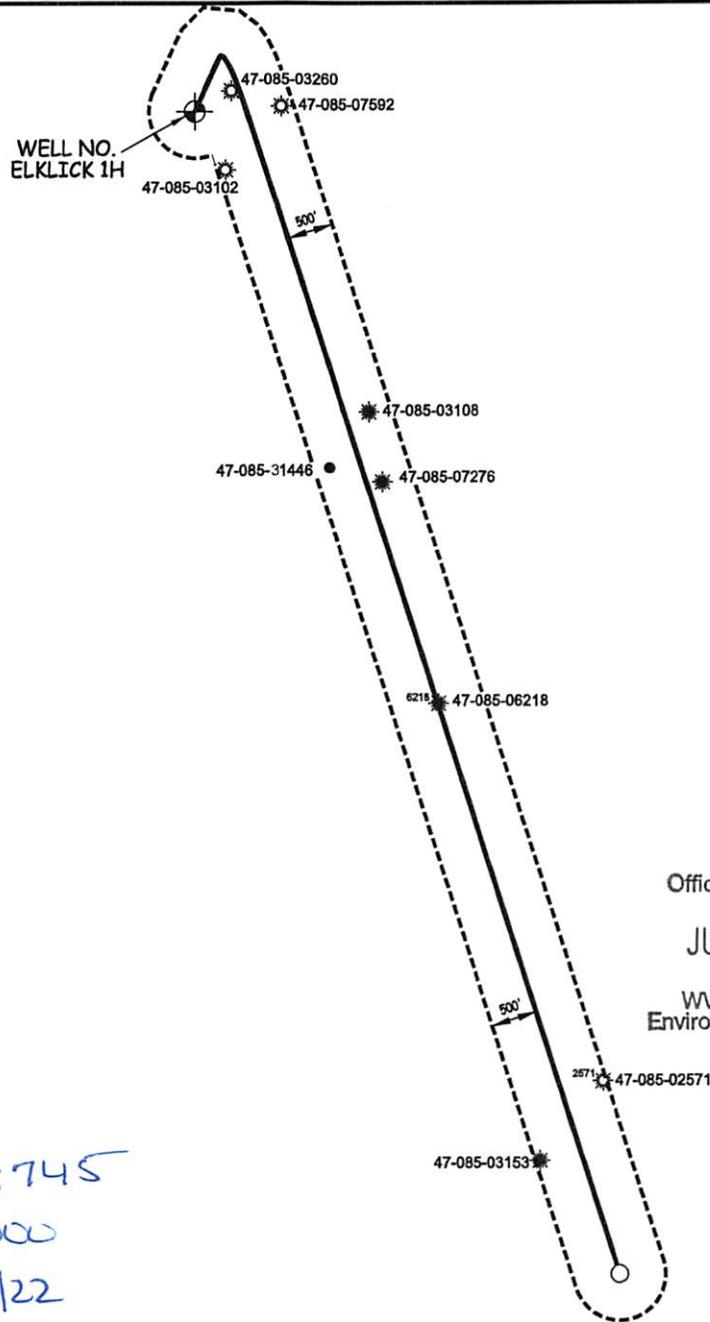
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Page 3 of 3
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06/21/2022
6-16-22

CASHEW PAD ANTERO RESOURCES CORPORATION



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JUN 3 2022

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*CHK# 4008745
Amt \$5,000
Date 5/31/22*

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JUN 03 2022

WV Department of
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WILLOW LAND SURVEYING, PLLC
P.O. BOX 17, PENNSBORO, WV 26415
(304) 659-1717

JOB #: 22-005WA

FILE: ELCLICK1HAOR.DWG

DATE: 05/27/22

DRAWN BY: T.B.S.

SCALE : 1-INCH = 2000-FEET



06/24/2022

UWI (API Num)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Productible Formation(s) not perf'd
47085032600000	R L KEISTER	3	R & R OIL & GAS LLC	OIL STATES SALES	2,013		Big Injun	Gordon, Berea
47085075920000	JETT MYRTLE ET AL	1	CHARITY GAS INC	STALNAKER GENE INC	5,231	3800 - 5200	Alexander, Riley, Benson	Gordon, Berea
47085032800000	S JETT	1	R & R OIL & GAS LLC	FRIESTAD FRANCIS	1,954		Big Injun	Gordon, Berea
47085015620000	O D JETT	1	P & M OIL CO	P & M OIL CO	1,890			Gordon, Berea
47085030870000	S & M COOPER	1	FERRELL WILLARD E	FERRELL WILLARD E	2,300			Gordon, Berea
47085021060000	EARL HARDMAN	2	KIMCO	VANDERGRIFT ALICE	2,247	2219 - 2233	Weir	Gordon, Berea
4708505230000	DEBERRY LUCILLE C	12757	ROSS & WHARTON GAS	CONSOL GAS SUPPLY CRP	5,036	1894 - 1924	Weir	Gordon, Berea
47085058150000	DEBERRY LUCILLE	1	DEEM J F O & G LLC	PETROLEUM RESOURCES	5,200	2002 - 2090	Weir	Gordon, Berea
4708506170000	IRA D COX 1	4977	PITTSBURGH&W VA GAS	PITTSBURGH&W VA GAS	2,531		Big Injun	Gordon, Berea

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LATITUDE 39°12'30" 6,971'
 LATITUDE 39°10'00" 2,201' TO BOTTOM HOLE

Antero Resources Corporation
Well No. Ellick 1H

NOTES:

WELL 1H TOP HOLE INFORMATION:
 N: 247,468ft E: 1,615,018ft
BOTTOM HOLE INFORMATION:
 N: 234,999ft E: 1,619,604ft
 LAT: 39°08'14.69" LON: 80°50'27.94"
 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: 4,335,823m E: 512,288m
BOTTOM HOLE INFORMATION:
 N: 4,332,047m E: 513,748m

(NAD) 27 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
 N: 14,224,397ft E: 1,680,684ft
POINT OF ENTRY INFORMATION:
 N: 14,224,519ft E: 1,681,208ft
BOTTOM HOLE INFORMATION:
 N: 14,212,011ft E: 1,685,475ft

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.

Southwest District - Doddridge County		Union District - Ritchie County	
12-1	David Ball	21-4	Larry Gander
12-2	David Ball	21-6	WF Smith
12-2.1	Trustees of Baptist Church	21-6.1	Lois Gander
12-3	South Fork Cemetery	21-7	Elmer Pierce
12-4	Kevin Ball	21-7.1	Larry Gander
12-5	Isaac Richards	21-7.2	Larry Gander
12-6	James Haught	21-8	Brian Vansant
13-42	James Haught	21-8.1	Brian Vansant
13-43	Jeffrey Bailey	21-8.2	Brian Vansant
13-44	Brown Goodwin	21-8.3	Brian Vansant
13-45	Charles Leonard	21-8.4	Brian Vansant
13-70	Brown Goodwin	21-10	James Beck
16-1	Coy Adams	21-10.1	Harvey Shepler
16-5	Arden Cogar	21-10.2	James Beck
16-10	Danita Hiley	21-11	Brian Harriman
		21-12	Brian Vansant
		21-13	Mark Vansant
		21-14	Danita Hiley
		21-15	Brian Harriman
		27-2	Randall Hess
		27-3	Steven Lusk
		27-3.1	Kenny Osbourne
		27-3.2	Kenny Osbourne
		27-3.3	Kenny Osbourne
		27-3.4	Kent Grotjan
		27-3.5	Joshua Friedman
		27-4	Miles Ball
		27-5	M E Church
		27-6	Kenny Osbourne
		27-8	Kenny Osbourne
		27-9	Brian Vansant
		27-10	James Haught
		27-11	Miles Ball
		27-11.1	Kent Grotjan
		27-12	Douglas Maxson
		27-12.1	Douglas Maxson
		27-12.2	Douglas Maxson
		27-13	Mary Deberry
		27-14	Linda Jennings
		27-16	Clarence Bush
		27-17	Patricia Shepler
		27-18	Daryl Shepler
		27-19	Terrill Henderson
		27-19.1	Santi Itallano
		27-19.2	Santi Itallano
		27-19.3	Santi Itallano
		27-22	Clarence Bush
		27-23	Jon Bennell
		27-23.1	Jon Bennell
		27-23.2	Daryl Shepler
		27-23.3	Darlene Nailor
		27-24	Harold Pierce
		27-24.1	WV DOT

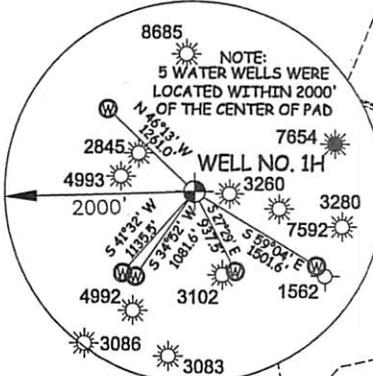
WV NORTH ZONE
 GRID NORTH

10,654' TO BOTTOM HOLE

13,431'

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"



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

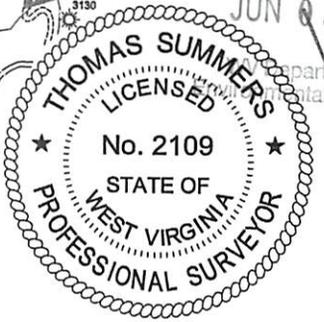
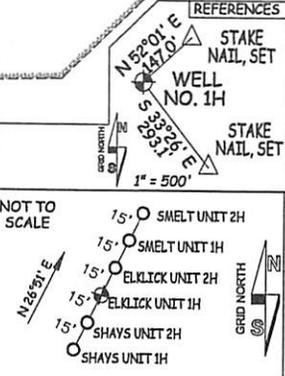
JOB # 21-015WA
 DRAWING # ELCLICK1HR
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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

THOMAS SUMMERS P.S. 2109

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

DATE 05/26/22
 OPERATOR'S WELL# ELCLICK 1H



RECEIVED Office of Oil and Gas
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 Department of Environmental Protection

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL 47 - 085 - 10419
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW STATE COUNTY PERMIT
 LOCATION: ELEVATION 1,040'-ORIGINAL 1,019'-PROPOSED WATERSHED SOUTH FORK HUGHES RIVER
 QUADRANGLE OXFORD 7.5 DISTRICT UNION COUNTY RITCHIE
 SURFACE OWNER ELMER W. PIERCE ACREAGE 67.78 ACRES +/-
 OIL & GAS ROYALTY OWNER R. F. KEISTER ET AL; B. GUY WHITEHAIR ET UX; RALPH JETT ET UX; LEASE ACREAGE 70 AC.±; 17 AC.±; 148 AC.±;
 JAY-BEE ROYALTY, LLC; T.M. GRIFFIN ET UX; O. M. BRITTON ET AL; D.J. RICHARDS ET UX; 38 AC.±; 140 AC.±; 50 AC.±; 38.2 AC.±;
 MAUDE PIERCE ET AL; CHAD W. JOHNSON; MARY LUCILLE DEBERRY; ANTERO MINERALS LLC; HARVEY SHEPLER ET AL 60.26 AC.±; 165 AC.±; 81.26 AC.±; 107.16 AC.±; 188 AC.±
 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
 TARGET FORMATION MARCELLUS PLUG & ABANDON CLEAN OUT & REPLUG
 WELL OPERATOR ANTERO RESOURCES CORP. ESTIMATED DEPTH 6,900' TVD 21,600' MD
 ADDRESS 1615 WYNKOOP ST. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
 FORM WW-6 DENVER, CO 80202 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME

PERMIT

06/24/2022

LATITUDE 39°12'30" 6,971'

LATITUDE 39°10'00" 2,201' TO BOTTOM HOLE

Antero Resources Corporation Well No. Ellick 1H

NOTES:

WELL 1H TOP HOLE INFORMATION: N: 247,468ft E: 1,615,018ft... BOTTOM HOLE INFORMATION: N: 234,999ft E: 1,619,604ft...

(NAD) 83 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 4,335,823m E: 512,288m...

(NAD) 27 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 14,224,397ft E: 1,680,684ft...

NOTE: NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER...

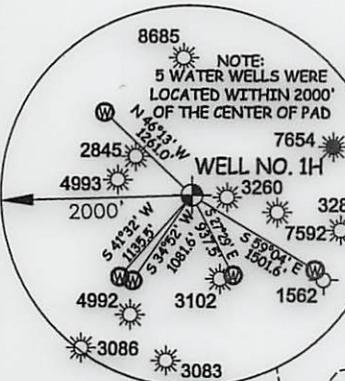


Table listing landowners and leaseholders in Southwest District - Doddridge County and Union District - Ritchie County.

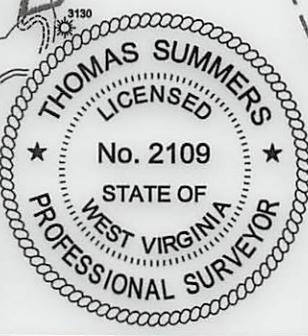
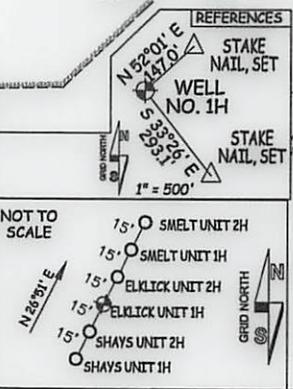
I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

Table with job information: JOB # 21-015WA, DRAWING # ELCLICK1HR, SCALE 1" = 2000', LEGEND, DATE 05/26/22, OPERATOR'S WELL # ELCLICK 1H.



Form containing well details: WELL TYPE: OIL GAS X LIQUID INJECTION, LOCATION: ELEVATION 1,040'-ORIGINAL 1,019'-PROPOSED, SURFACE OWNER: ELMER W. PIERCE, OIL & GAS ROYALTY OWNER: R. F. KEISTER ET AL...

10,654' TO BOTTOM HOLE

13,431'

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"

06/24/2022

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>R.F. Keister, et al Lease</u>			
R.F. Keister, et al	G.L. Yaste	1/8	0105/0504
G.L. Yaste	D.L.Y., Inc.	Assignment	0112/0302
D.L.Y.m Inc.	Betty Jean Stalkner and Rosalee Roberts	Assignment	0132/0565
Betty Jean Stalkner and Rosalee Roberts	R & S Gas Company	Assignment	0147/0548
R & S Gas Company	BET-RO Inc	Assignment	0147/0554
BET-RO Inc	Roberts Energy Corporation	Assignment	0240/0036
Roberts Energy Corporation	Antero Resources Corporation	Assignment	0329/0138
<u>B. Guy Whitehair Lease</u>			
B. Guy Whitehair	L.E. Mossor and Harry Haddox	1/8	0107/0343
L.E. Mossor and Harry Haddox	Francis Friestad	Assignment	0089/0497
Francis Friestad	W.H. Thomson	Assignment	0152/0213
W.H. Thomson	BET-RO Inc	Assignment	0177/0011
BET-RO Inc	Jesam Energy	Assignment	0204/0134
Jesam Energy	Roberts Energy	Assignment	0204/0705
Roberts Energy	Key Oil Company	Assignment	0258/0619
Key Oil Company	Antero Resources Appalachian Corporation	Assignment	0263/0629
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	0046/0523
<u>R.F. Keister et al Lease</u>			
R.F. Keister et al	G.L. Yaste	1/8	0105/0504
G.L. Yaste	D.L.Y., Inc.	Assignment	0112/0302
D.L.Y.m Inc.	Betty Jean Stalkner and Rosalee Roberts	Assignment	0132/0565
Betty Jean Stalkner and Rosalee Roberts	R & S Gas Company	Assignment	0147/0548
R & S Gas Company	BET-RO Inc	Assignment	0147/0554
BET-RO Inc	Roberts Energy Corporation	Assignment	0240/0036
Roberts Energy Corporation	Antero Resources Corporation	Assignment	0329/0138
<u>Ralph Jett, et ux Lease</u>			
Ralph Jett, et ux	W.R. Development Co. Inc.	1/8	0191/0378
W.R. Development Co. Inc.	Whittle Corporation	Assignment	0254/0910
Whittle Corporation	Antero Resources Appalachian Corporation	Assignment	0255/0526
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	0015/0702
<u>Jay-Bee Royalty, LLC Lease</u>			
Jay-Bee Royalty, LLC	Antero Resources Corporation	1/8+	0330/0506
<u>T.M. Griffin, et ux Lease</u>			
T.M. Griffin, et ux	The Philadelphia Company of West Virginia	1/8	0029/0385
The Philadelphia Company of West Virginia	Pittsburgh and West Virginia Gas Company	Assignment	0032/0253
Pittsburgh and West Virginia Gas Company	Equitable Gas Company	Conveyance	0126/0473

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Office of Oil and Gas

JUN 23 2022

WV Department of
Environmental Protection

06/24/2022

6-16-22

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
Equitable Gas Company	Equitrans, Inc	Assignment	0154/0475
Equitrans, Inc.	EQT Capital Corporation	Merger	0006/0751
EQT Capital Corporation	Equitable Resources, Inc	Merger	0023/032
Equitable Resources, Inc	Equitrans, LP	Assignment	0329/0645
Equitrans, LP	Equitable Production - Eastern States, Inc	Assignment	0234/0830
Equitable Production - Eastern States, Inc	Equitable Production Company	Merger	0281/0346
Equitable Production Company	EQT Production Company	Name Change	0218/0346
EQT Production Company	Antero Resources Corporation	Assignment	0323/0964
<u>O.M. Britton, et al Lease</u>			
O.M. Britton, et al	L.G. Piggott	1/8	0078/0337
L.G. Piggott	Dorothy W. Piggott, Carolyn Erambert, Janet W. Coffman, Lucia C. Anderson, and Dorthy Black Chase Petroleum, Inc	Assignment	0151/0137
Dorothy W. Piggott, Carolyn Erambert, Janet W. Coffman, Lucia C. Anderson, and Dorthy Black Chase Petroleum, Inc	Antero Resources Appalachian Corporation	Assignment	0159/0383
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	0254/0133 0015/0705
<u>D.J. Richards, et ux Lease</u>			
D.J. Richards, et ux	S.W. Young	1/8	0051/0365
S.W. Young	B.W. Foley	Assignment	0064/0271
B.W. Foley	J.D. Foley	Assignment	0075/0051
J.D. Foley	F.S. Deem	Assignment	0075/0051
F.S. Deem	W.H. Mossor	Assignment	0075/0053
W.H. Mosor	S.W. Jack Jr., S.W. Jack Drilling Company	Assignment	0130/0385
S.W. Jack Jr., S.W. Jack Drilling Company	J&J Enterprises, Inc	Assignment	0130/0392
J&J Enterprises, Inc	Eastern American Energy Corporation	Assignment	0231/0732
Eastern American Energy Corporation	Energy Corporation of America	Merger	0006/0450
Energy Corporation of America	Antero Resources Appalachian Corporation	Assignment	0264/0266
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	0015/0705
<u>Maude Pierce, et al Lease</u>			
Maude Pierce, et al	W.H. Mossor	1/8	0090/0113
W.H. Mossor	Term Energy Corporation	Assignment	0132/0314
Term Energy Corporation	Antero Resources Appalachian Corporation	Assignment	0257/0362
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	0015/0705
<u>Chad W. Johnson Lease</u>			
Chad W. Johnson	Antero Resources Corporation	1/8+	0329/0663

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WV Department of
Environmental Protection

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6-16-22

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>Mary Lucille Deberry Lease</u> Mary Lucille Deberry	Antero Resources Corporation	1/8+	330/338
<u>Antero Minerals LLC Lease</u> Antero Minerals LLC	Antero Resources Corporation	1/8+	394/103

*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.

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Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>Harvey Shepler et al Lease</u>				
	Harvey Shepler et al	L.E. Mossor	1/8	107/451
	L.E. Mossor	Francis Friestad	Assignment	148/326
	Francis Friestad	W.H Thomson	Assignment	198/705
	W.H. Thomson	BET-RO	Assignment	222/426
	BET-RO	William K. Stalnaker	Assignment	227/461
	William K Stalnaker	Key Oil	Assignment	254/1086
	Key Oil	Antero Resources Appalachian Corporation	Assignment	255/22
	Antero Resources Appalachian Corp.	Antero Resources Corporation	Name Change	15/705

*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.

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 VP of Land

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