



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, June 26, 2019
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for GABITALALEK UNIT 1H
47-095-02580-00-00

Extending lateral

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

A handwritten signature in blue ink, appearing to read 'James A. Martin', is written over the typed name and title.

Operator's Well Number: GABITALALEK UNIT 1H
Farm Name: GARY D. DAWSON ET UX
U.S. WELL NUMBER: 47-095-02580-00-00
Horizontal 6A New Drill
Date Modification Issued: 6/26/2019

Promoting a healthy environment.

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 Centerville Shirley 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Gabitalalek Unit 1H Well Pad Name: Dawson Pad

3) Farm Name/Surface Owner: Gary D. Dawson et ux Public Road Access: State Route 18

4) Elevation, current ground: 1009' Elevation, proposed post-construction: _____

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- 2800#

8) Proposed Total Vertical Depth: 6900' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 19800' MD

11) Proposed Horizontal Leg Length: 11814'

12) Approximate Fresh Water Strata Depths: 115', 320', 455'

13) Method to Determine Fresh Water Depths: Offset well records. Depths have been adjusted according to surface elevations.

14) Approximate Saltwater Depths: 551', 1583', 1830'

15) Approximate Coal Seam Depths: 275', 424', 975'

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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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# | 505 *see # 19 | 505 *see # 19 | CTS, 702 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 | 5037 Cu. Ft. |
| Tubing | 2-3/8" | New | N-80 | 4.7# | | | |
| Liners | | | | | | | |

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6/26/2019

| 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-HPOZ & 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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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.

*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

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6/26/2019

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): Existing 28.65 acres

22) Area to be disturbed for well pad only, less access road (acres): Existing 9.14 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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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.

LATITUDE 39°25'00"

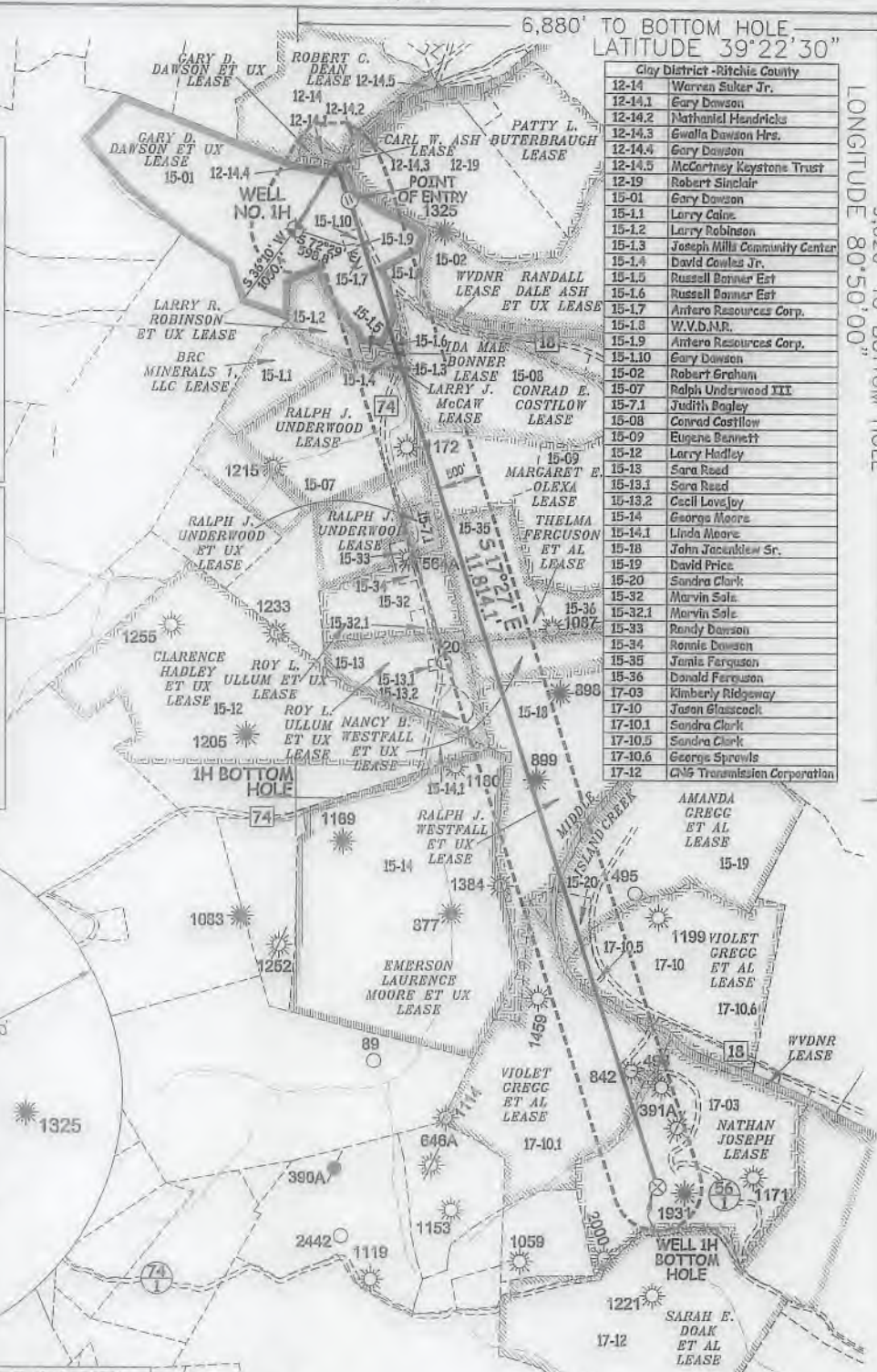
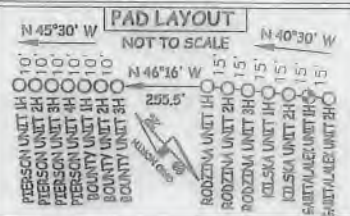
11,208'

6,880' TO BOTTOM HOLE
LATITUDE 39°22'30"

Antero Resources Corporation
Well No. Gabitalalek Unit 1H

NOTES:
WELL 1H TOP HOLE INFORMATION:
N: 323,503ft E: 1,611,910ft
LAT: 39°22'48.23" LON: 80°52'22.73"
BOTTOM HOLE INFORMATION:
N: 312,574ft E: 1,616,076ft
LAT: 39°21'00.85" LON: 80°51'27.58"
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: 4,358,971m E: 510,954m
BOTTOM HOLE INFORMATION:
N: 4,355,663m E: 512,279m



Clay District - Ritchie County

| | |
|---------|-------------------------------|
| 12-14 | Warren Suter Jr. |
| 12-14.1 | Gary Dawson |
| 12-14.2 | Nathaniel Handricks |
| 12-14.3 | Gwella Dawson Hrs. |
| 12-14.4 | Gary Dawson |
| 12-14.5 | McCortney Keystone Trust |
| 12-19 | Robert Sinclair |
| 15-01 | Gary Dawson |
| 15-1.1 | Larry Cain |
| 15-1.2 | Larry Robinson |
| 15-1.3 | Joseph Mills Community Center |
| 15-1.4 | David Cowles Jr. |
| 15-1.5 | Russell Bonner East |
| 15-1.6 | Russell Bonner East |
| 15-1.7 | Antero Resources Corp. |
| 15-1.8 | W.V.D.M.R. |
| 15-1.9 | Antero Resources Corp. |
| 15-1.10 | Gary Dawson |
| 15-02 | Robert Graham |
| 15-07 | Ralph Underwood III |
| 15-7.1 | Judith Bagley |
| 15-08 | Conrad Costilow |
| 15-09 | Eugene Bennett |
| 15-12 | Larry Hadley |
| 15-13 | Sara Read |
| 15-13.1 | Sara Read |
| 15-13.2 | Cecil Lovejoy |
| 15-14 | George Moore |
| 15-14.1 | Linda Moore |
| 15-18 | John Jacekiew Sr. |
| 15-19 | David Price |
| 15-20 | Sandra Clark |
| 15-32 | Marvin Sole |
| 15-32.1 | Marvin Sole |
| 15-33 | Randy Dawson |
| 15-34 | Ronnie Dawson |
| 15-35 | Jamie Ferguson |
| 15-36 | Donald Ferguson |
| 17-03 | Kimberly Ridgeway |
| 17-10 | Jason Glasscock |
| 17-10.1 | Sandra Clark |
| 17-10.5 | Sandra Clark |
| 17-10.6 | George Sprewls |
| 17-12 | GN5 Transmission Corporation |

LONGITUDE 80°50'00"

13,332'

LONGITUDE 80°50'00"

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.



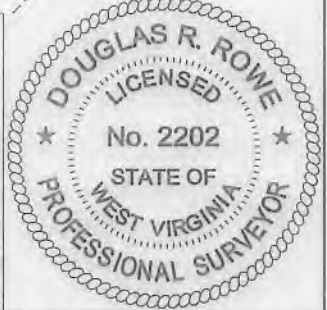
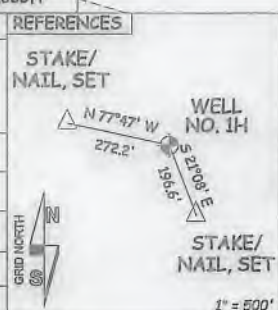
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

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.

(NAD) 27 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 14,300,342ft E: 1,676,309ft
POINT OF ENTRY INFORMATION:
N: 14,300,695ft E: 1,676,927ft
BOTTOM HOLE INFORMATION:
N: 14,289,489ft E: 1,680,855ft

JOB # 18-032WA
DRAWING # GABITALALEK1HR2
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

LEGEND
----- Surface Owner Boundary Lines +/-
----- Interior Surface Tracts +/-
----- Existing Fence
----- Found monument, as noted
DOUGLAS R. ROWE P.S. 2202
DATE 4/10/19
OPERATOR'S WELL# GABITALALEK UNIT #1H



WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 ___ 095 ___ 02580
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X STATE COUNTY PERMIT
LOCATION: ELEVATION 1,009' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' (TH) WEST UNION 7.5' (BH) DISTRICT CENTERVILLE COUNTY TYLER
SURFACE OWNER GARY D. DAWSON ET UX ACREAGE 104.27 ACRES +/-
OIL & GAS ROYALTY OWNER GARY D. DAWSON ET UX; CARL W. ASH; IDA MAE BONNER; LARRY J. MCCAIG; LEASE ACREAGE 104.27 AC. +/- 0.54 AC.; 2.33 AC.; 1.75 AC.;
RALPH J. UNDERWOOD; CONRAD E. COSTILOW; MARGARET E. OLEYA; THELMA FERGUSON ET AL.; NANCY B. WESTFALL ET UX; 57 AC. +/- 58.75 AC. +/- 79.5 AC. +/- 49 AC. +/- 26 AC. +/-
RALPH J. WESTFALL ET UX; W.V.D.N.R.; AMANDA GREGG ET AL.; VIOLET GREGG ET AL.; VIOLET GREGG ET AL.; NATHAN JOSEPH 94 AC. +/- 64.78 AC. +/- 85 AC. +/- 90 AC. +/- 114 AC. +/- 147 AC. +/-
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER X REDRILL ___ FRACTURE OR STIMULATE X
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) MOD BHL PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,900' TVD 19,800' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

COUNTY NAME

PERMIT

WW-6A1

Operator's Well Number Gabitalalek Unit 1H

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>Gary D. Dawson et ux Lease (TM 15 PCL 1)</u> | | | |
| Gary D. Dawson et ux | Antero Resources Corporation | 1/8+ | 0459/0133 |
| <u>Carl W. Ash Lease</u> | | | |
| Carl W. Ash | Antero Resources Corporation | 1/8+ | 0499/0831 |
| <u>Gary D. Dawson et ux Lease (TM 12 PCL 14)</u> | | | |
| Gary D. Dawson et ux | Antero Resources | 1/8+ | 0459/0133 |
| <u>Ida Mae Bonner Lease</u> | | | |
| Ida Mae Bonner | Antero Resources Corporation | 1/8+ | 0558/0259 |
| <u>Larry J. McCaw Lease</u> | | | |
| Larry J. McCaw | Antero Resources Corporation | 1/8+ | 0557/0816 |
| <u>Ralph J. Underwood et ux Lease</u> | | | |
| Ralph J. Underwood et ux | Chesterfield Energy Corporation | 1/8 | 0265/0430 |
| Chesterfield Energy Corporation | Dominion Appalachian Development | Assignment | 0312/0505 |
| Dominion Appalachian Development | CONSOL Gas Appalachian Development | Name Change | 0009/0124 |
| CONSOL Gas Appalachian Development | CONSOL Gas Reserves | Merger | 0009/0144 |
| CONSOL Gas Reserves | CONSOL Gas Company | Merger | 0009/0156 |
| CONSOL Gas Company | CNX Gas Company LLC | Name Change | 0009/0206 |
| CNX Gas Company LLC | Antero Resources Corporaiton | Assignment | 0626/0386 |
| <u>Conrad E. Costillo Lease</u> | | | |
| Conrad E. Costillo | Antero Resources Corporation | 1/8+ | 0505/0644 |
| Antero Resources Corporation | Noble Energy Inc | Assignment | 0546/0770 |
| Noble Energy Inc | HG Energy II Appalachia LLC | Assignment | 0570/0096 |
| HG Energy II Appalachia LLC | Antero Resources Corporation | Agreement | 0645/0348 |
| <u>Margaret E. Olexa Lease</u> | | | |
| Margaret E. Olexa | Ronald H Woodburn | 1/8 | 0377/0013 |
| Ronald H Woodburn | Sancho Oil & Gas Corporation | Assignment | 0455/0706 |
| Sancho Oil & Gas Corporation | Antero Resources Corporation | Assignment | 0498/0605 |
| Antero Resources Corporation | CNX Gas Company LLC | Assignment | 0503/0754 |
| CNX Gas Company LLC | Antero Resources Corporation | Assignment | 0626/0386 |

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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

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| Grantor, lessor, etc. | Grantee, lessee, etc. | Royalty | Book/Page |
|--|--|-------------|-----------|
| Thelma Ferguson et al Lease | | | |
| Thelma Ferguson et al | Kepeco Inc | 1/8 | 0249/0171 |
| Kepeco Inc | Eastern Kentucky Company | Name Change | 0001/0006 |
| Eastern Kentucky Company | Kepeco Inc | Assignment | 0261/0392 |
| Kepeco Inc | Union Drilling Inc | Name Change | 0001/0010 |
| Union Drilling Inc | Equitable Resources Exploration Inc | Assignment | 0274/0070 |
| Equitable Resources Exploration Inc | Equitable Resources Energy Company | Assignment | 0280/0186 |
| Equitable Resources Energy Company | Enervest East Limited Partnership | Assignment | 0313/0145 |
| Enervest East Limited Partnership | The Houston Exploration Company | Assignment | 0342/0160 |
| The Houston Exploration Company | Seneca Upshur Petroleum Inc | Assignment | 0344/0158 |
| Seneca Upshur Petroleum Inc | Seneca Upshur Petroleum LLC | Merger | 0009/0198 |
| Seneca Upshur Petroleum LLC | Antero Resources Appalachian Corporation | Assignment | 0402/0132 |
| Antero Resources Appalachian Corporation | Antero Resources Corporation | Name Change | Exhibit 1 |
| Antero Resources Corporation | CNX Gas Company LLC | Assignment | 0425/0701 |
| CNX Gas Company LLC | Antero Resources Corporation | Assignment | 0626/0386 |
| Nancy B. Westfall Lease | | | |
| Nancy B. Westfall | Antero Resources Corporation | 1/8+ | 0635/0676 |
| Ralph J. Westfall et ux Lease | | | |
| Ralph J. Westfall et ux | Royal Resources Corporation | 1/8 | 0200/0111 |
| Royal Resources Corporation | L&M Associates Inc | Assignment | 0223/0176 |
| L&M Associates Inc | Anvil Oil Company Inc | Assignment | 0267/0016 |
| Anvil Oil Company Inc | Dominion Appalachian Development Inc | Assignment | 0323/0383 |
| Dominion Appalachian Development Inc | Dominion Appalachian Development LLC | Name Change | 0001/0015 |
| Dominion Appalachian Development LLC | Consol Gas Appalachian Development LLC | Name Change | 0009/0131 |
| Consol Gas Appalachian Development LLC | Consol Gas Reserves Inc | Merger | 0009/0144 |
| Consol Gas Reserves Inc | Consol Gas Company | Merger | 0009/0156 |
| Consol Gas Company | CNX Gas Company | Merger | 0009/0206 |
| CNX Gas Company | Noble Energy Inc | Assignment | 0388/0286 |
| Noble Energy Inc | CNX Gas Company | Assignment | 0550/0273 |
| CNX Gas Company | Antero Resources Corporation | Agreement | 0262/0386 |
| WVDNR Lease | | | |
| WVDNR | Antero Resources Corporation | 1/8+ | 0553/0295 |

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****CONTINUED ON NEXT PAGE****

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| Grantor, lessor, etc. | Grantee, lessee, etc. | Royalty | Book/Page |
|--|---|------------------|------------------|
| Amanda Gregg et al Lease | | | |
| Amanda Gregg et al | Hope Natural Gas Company | 1/8 | 0081/0137 |
| Hope Natural Gas Company | Consolidated Gas Supply Corporation | Assignment | 0169/0026 |
| Consolidated Gas Supply Corporation | Consolidated Gas Transmission Corporation | Assignment | 0249/0287 |
| Consolidated Gas Transmission Corporation | CNG Transmission Corporation | Name Change | 0051/0795 |
| CNG Transmission Corporation | Dominion Transmission Inc | Name Change | 0210/0287 |
| Dominion Transmission Inc | Consol Energy Holdings LLC | Assignment | 0374/0187 |
| Consol Energy Holdings LLC | Consol Gas Company | Name Change | 0384/0191 |
| Consol Gas Company | CNX Gas Company LLC | Name Change | 0384/0191 |
| CNX Gas Company LLC | Antero Resources Corporation | Agreement | 0626/0386 |
| Violet Gregg et al Lease (TM 17 PCL 10) | | | |
| Violet Gregg et al | James F. Doan | 1/8 | 0254/0243 |
| James F. Doan | Appalachian Energy Development | Assignment | 0254/0243 |
| Appalachian Energy Development | Anvil Oil Company | Assignment | 0256/0386 |
| Anvil Oil Company | Dominion Appalachian Development | Assignment | 0323/0383 |
| Dominion Appalachian Development | Consol Gas Appalachian Development LLC | Name Change | 0009/0131 |
| Consol Gas Appalachian Development LLC | Consol Gas Reserves Inc | Merger | 0009/0144 |
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| Consol Gas Company | CNX Gas Company | Merger | 0009/0206 |
| CNX Gas Company | Noble Energy Inc | Assignment | 0388/0286 |
| Noble Energy Inc | CNX Gas Company LLC | Assignment | 0550/0273 |
| CNX Gas Company LLC | Antero Resources Corporation | Agreement | 0626/0386 |
| WVDNR Lease | | | |
| WVDNR | Antero Resources Corporation | 1/8+ | 0553/0295 |
| Violet Gregg et al Lease (TM 17 PCL 10.1) | | | |
| Violet Gregg et al | James F. Doan | 1/8 | 0196/0238 |
| James F. Doan | Anvil Oil Company Inc | Assignment | 0254/0245 |
| Anvil Oil Company Inc | Anvil Oil & Gas Company | Name Change | WVSOS |
| Anvil Oil & Gas Company | Dominion Appalachian Development Inc | Assignment | 0323/0383 |
| Dominion Appalachian Development Inc | Consol Gas Appalachian Development | Name Change | 0009/0131 |
| Consol Gas Appalachian Development | Consol Gas Reserves Inc | Merger | 0009/0144 |
| Consol Gas Reserves Inc | Consol Gas Company | Merger | 0009/0156 |
| Consol Gas Company | CNX Gas Company LLC | Name Change | 0009/0206 |
| CNX Gas Company LLC | Antero Resources Corporation | Agreement | 0648/0156 |

RECEIVED
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Environmental Protection

WW-6A1
(5/13)

Operator's Well No. Gabitalalek Unit 1H

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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>Nathan Joseph Lease</u> | | | | |
| | Nathan Joseph | Central Development Company | 1/8 | 0061/0344 |
| | Central Development Company | Carnegie Natural Gas Company | Assignment | 0340/0368 |
| | Carnegie Natural Gas Company | Murvin Oil Company | Assignment | 0340/0368 |
| | Murvin Oil Company | Murvin & Meier Oil Company | Assignment | 0318/0233 |
| | Murvin & Meier Oil Company | Antero Resources Appalachian Corporation | Partial Assignment | 0423/0840 |
| | Antero Resources Appalachian Corporation | CNX Gas Company | Assignment | 0468/0769 |
| | CNX Gas Company | Antero Resources Corporation | Agreement | 0626/0386 |

*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: Kevin Kilstrom
 Its: Senior Vice President - Production

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Environmental Protection

**FORM WV-6A1
EXHIBIT 1**

FILED

JUN 10 2013

Natalie E. Tennant
Secretary of State
1900 Kanawha Blvd E
Bldg 1, Suite 157-K
Charleston, WV 25305



IN THE OFFICE OF
SECRETARY OF STATE

Fenney Barker, Manager
Corporations Division
Tel: (304)558-8000
Fax: (304)558-8381
Website: www.wvscd.com
E-mail: business@wvscd.com

Office Hours: Monday - Friday
8:30 a.m. - 5:00 p.m. ET

FILE ONE ORIGINAL
(Two if you want a filed
stamp) copy returned to you)
FEE: \$25.00

**APPLICATION FOR
AMENDED CERTIFICATE
OF AUTHORITY**

*** In accordance with the provisions of the West Virginia Code, the undersigned corporation hereby ***
applies for an Amended Certificate of Authority and submits the following statement:

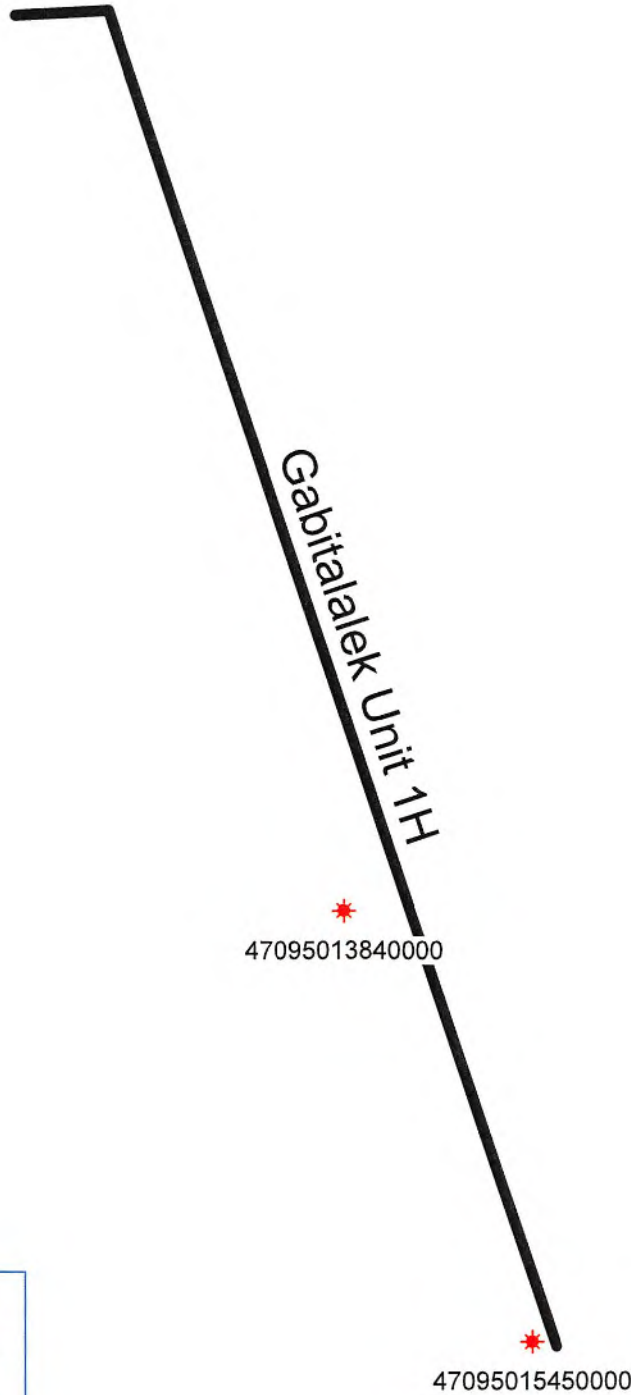
1. Name under which the corporation was authorized to transact business in WV: Antero Resources Appalachia Corporation
2. Date Certificate of Authority was issued in West Virginia: 6/28/2008
3. Corporate name has been changed to: Antero Resources Corporation
(Attach one Certified Copy of Name Change as filed in home State of incorporation.)
4. Name the corporation elects to use in WV: Antero Resources Corporation
(due to home state name not being available)
5. Other amendments: _____
(attach additional pages if necessary)

6. Name and phone number of contact person. (This is optional, however, if there is a problem with the filing, listing a contact person and phone number may avoid having to return or reject the document.)
Alwyn A. Schopp (303) 357-7310
Contact Name Phone Number

7. Signature information (See below **Important Legal Notice Regarding Signatures**):
Print Name of Signer: Alwyn A. Schopp Title/Capacity: Authorized Person
Signature: [Handwritten Signature] Date: June 10, 2013

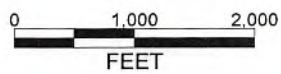
Important Legal Notice Regarding Signatures For West Virginia Code §31D-1-12b. Penalty for signing false document. Any person who signs a document he or she knows is false in any material respect and knows that the document is to be delivered to the secretary of state for filing is guilty of a misdemeanor and, upon conviction thereof, shall be fined not more than one thousand dollars or confined in the county or regional jail not more than one year, or both.


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Antero Resources Corporation

Gabitalalek Unit 1H - AOR



 WELL SYMBOLS
Gas Well

December 3, 2018

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| UWI (APINum) | Well Name | Well Number | Operator | Hist Oper | TD | Perforated Interval (shallowest, deepest) | Perforated Formation(s) | Producible Formation(s) not perf'd |
|----------------|---------------------|-------------|---------------------|--------------------|-------|---|-------------------------|------------------------------------|
| 47095013840000 | WESTFALL RALPH | 1 | CONSOL GAS COMPANY | ANVIL OIL COMPANY | 5,120 | 4862 - 4870 | Benson | Riley, Big Injun, Weir, Alexander |
| 47095015450000 | JOSEPH NATHAN HEIRS | 1 | MURVIN&MEIER OIL CO | MURVIN OIL COMPANY | 5,271 | 4997 - 5130 | Bradford, Benson, Elk | Riley, Alexander, Big Injun, Weir |

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