



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

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

PERMIT MODIFICATION APPROVAL
Horizontal 6A / Horizontal 6A Well - 1

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for CHARLESTON UNIT 3H
47-085-10244-00-00

Updating Lease Information

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: CHARLESTON UNIT 3H
Farm Name: JACKSON, STEPHEN C.
U.S. WELL NUMBER: 47-085-10244-00-00
Horizontal 6A / Horizontal 6A Well - 1
Date Issued: 1/20/2017

Promoting a healthy environment.

01/27/2017



January 19, 2017

Antero Resources
1615 Wynkoop Street
Denver, CO 80202
Office 303.357.7310
Fax 303.357.7315

West Virginia Department of Environmental Protection
Office of Oil and Gas
Attn: Mr. Joshua Westbrook
601 57th Street
Charleston, WV 25304

Mr. Westbrook:

Antero Resources Corporation (Antero) would like to submit the following permit modification for an approved well on the existing Buck Run Pad. We are requesting to update the lease information from "Barbara Eppley Lease" to "M.H. Jones, et ux. Lease" for the Charleston Unit 3H (API# 47-085-10244).

Attached you will find the following documents showing the updated lease label:

- REVISED Mylar Plat
- REVISED Form WW-6A1

If you have any questions please feel free to contact me at (303) 357-7233.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Kara Quackenbush".

Kara Quackenbush
Permitting Agent
Antero Resources Corporation

Enclosures

01/27/2017

**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>Harvey Weigle Heirs Lease</u>			
Harley Weigle Heirs	J & J Enterprises, Inc.	1/8	0178/0571
J & J Enterprises	Eastern American Energy Company	Assignment	0231/0732
Eastern American Energy Corporation	Energy Corporation of America	Merger	DB 0306/0836
Energy Corporation of America	Antero Resources Appalachian Corporation	Assignment	0257/0377
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Constance K. Griffith Lease</u>			
Constance K. Griffith	EQT Production Company	1/8	0256/0738
EQT Production Company	Antero Resources Corporation	Assignment	0282/0175
<u>M.H. Jones, et ux Lease</u>			
M.H. Jones, et ux	P.G. McKeon	1/8	0032/0025
P.G. McKeon	Carnegie Natural Gas	Assignment	0041/0357
Carnegie Natural Gas	Carnegie Production Company	Assignment	0228/0859
Carnegie Production Company	EQT Production Company	Certificate of Registration of Trade Name	Exhibit 2
EQT Production Company	Antero Resources Corporation	*Partial Assignment	0282/0175
<u>Orma M. Wilson Johnson Lease</u>			
Orma M. Wilson Johnson, Trustee of the Orma M. Wilson Johnson Declaration of Trust	Antero Resources Appalachian Corporation	1/8+	0264/0905
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Edward J. Jones, et al Lease</u>			
Edward J. Jones, et al	Herman Dotson	1/8	0094/0288
Herman Dotson	M.A. Murphy	Assignment	0097/0243
M.A. Murphy	Key Oil Company	Assignment	0220/0069
Key Oil Company	Antero Resources Appalachian Corporation	*Partial Assignment of Oil and Gas Leases	0253/0747
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1

Received
Office of Oil & Gas
JUL 14 2016

*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

**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:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>Carlton Boyce, et ux Lease</u>				
	Carlton Boyce, et ux	B & M Associates	1/8	0217/0365
	B & M Associates	Key Oil Company	Assignment	0217/0585
	Key Oil Company	Antero Resources Appalachian Corporation	Assignment	0253/0747
	Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
*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.				

**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: Mark Mauz 

Its: VP, Gas, Marketing & Transportation

Received
Office of Oil & Gas

Page 1 of JUL 14 2016

01/27/2017

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.wv.gov
E-mail: business@wv.gov

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

APPLICATION FOR
AMENDED CERTIFICATE
OF AUTHORITY

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

**** 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 statements:

- Name under which the corporation was authorized to transact business in WV: Antero Resources Appalachian Corporation
- Date Certificate of Authority was issued in West Virginia: 6/26/2008
- Corporate name has been changed to: Antero Resources Corporation
(Attach one Certified Copy of Name Change as filed in home State of incorporation.)
- Name the corporation elects to use in WV: Antero Resources Corporation
(due to home state name not being available)
- Other amendments: (attach additional pages if necessary)
- 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.)
Alvyn A. Schopp (303) 357-7310
Contact Name Phone Number

7. Signature information (See below **Important Legal Notice Regarding Signature**):

Print Name of Signer: Alvyn A. Schopp Title/Capacity: Authorized Person

Signature: [Handwritten Signature] Date: June 10, 2013

Important Legal Notice Regarding Signature For West Virginia Code §31D-1-122. 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.

Form CP-4

Issued by the Office of the Secretary of State

Revised 4/13

Received
Office of Oil & Gas

JUL 14 2016

State of West Virginia



Certificate

I, Natalie E. Tennant, Secretary of State of the State of West Virginia, hereby certify that

EQT PRODUCTION COMPANY

has filed a "Certificate of Registration of Trade Name" in my office according to the provisions of Chapter 47 of the West Virginia Code and was found to conform to law.

Therefore, I hereby issue this

CERTIFICATE OF REGISTRATION OF TRADE NAME

authorizing it to transact business in West Virginia under the assumed name of

CARNEGIE PRODUCTION COMPANY

Received
Office of Oil & Gas
JUL 14 2016



Given under my hand and the Great Seal of the State of West Virginia on this day of April 9, 2009

Natalie E. Tennant

Secretary of State

LATITUDE 39°20'00"

8,711'

5,599' TO BOTTOM HOLE

LATITUDE 39°20'00"

LONGITUDE 80°55'00"

6,365'

LONGITUDE 80°55'00"

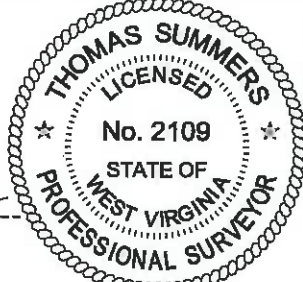
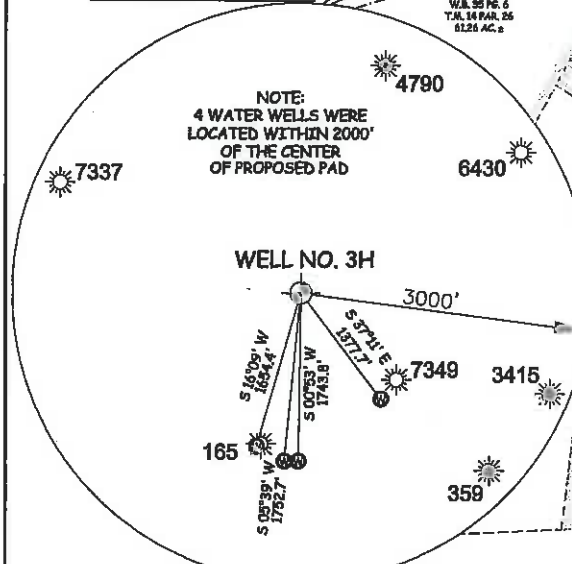
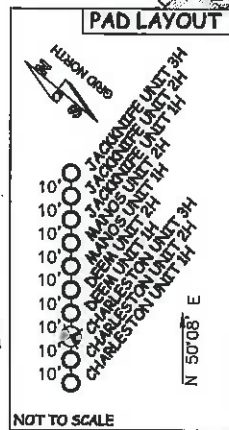
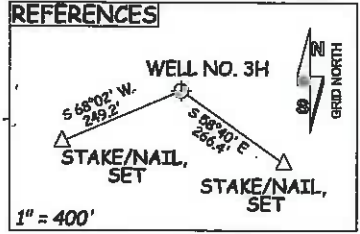
14,989' TO BOTTOM HOLE

COUNTY NAME PERMIT

Antero Resources Corporation Well No. Charleston Unit 3H

NOTES:
 WELL 3H TOP HOLE INFORMATION:
 N: 300,452ft E: 1,590,484ft
 LAT: 39°18'57.10" LON: 80°56'50.84"
 BOTTOM HOLE INFORMATION:
 N: 291,779ft E: 1,593,460ft
 LAT: 39°17'31.85" LON: 80°56'11.21"
 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 3H TOP HOLE INFORMATION:
 N: 4,351,839m E: 504,544m
 BOTTOM HOLE INFORMATION:
 N: 4,349,212m E: 505,495m



LEGEND

---	Surface Owner Boundary Lines +/-
---	Interior Surface Tracts +/-
-x-x-x-x-	Existing Fence
⊕	Found monument, as noted

THOMAS SUMMERS P.S. 2109
 DATE 07/12/16
 OPERATOR'S WELL # CHARLESTON UNIT #3H

API WELL # 47 - 085 - 10244
 STATE COUNTY PERMIT

JOB # 15-037WA
 DRAWING # CHARLESTON3H
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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
 P.O. BOX 17 PENNSBORO WEST VIRGINIA 26415

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

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
 LOCATION: ELEVATION 1,162' ORIGINAL - 1,127' AS-DRILLED WATERSHED NORTH FORK HUGHES RIVER

QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE

SURFACE OWNER STEPHEN C. JACKSON ET AL ACREAGE 40.835 ACRES +/-
 OIL & GAS ROYALTY OWNER HARVEY WEIGLE HEIRS; CONSTANCE K. GRIFFITH; M. H. JONES ET UX; LEASE ACREAGE 51 ACRES±; 31 AC±; 200 ACRES±;
 ORMA M. WILSON JOHNSON; EDWARD J. JONES ET AL; CARLTON BOYCE ET UX 42 ACRES±; 73 ACRES±; 201 ACRES±

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW FORMATION X
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG & ABANDON CLEAN OUT & REPLUG ESTIMATED DEPTH 6,600' TVD 16,500' MD
 TARGET FORMATION MARCELLUS
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
 DENVER, CO 80202 CHARLESTON, WV 25313

01/27/2017

