



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

Friday, November 2, 2018
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET
DENVER, CO 80202

Re: Permit Modification Approval for CHRISTOPHER UNIT 2H
47-085-10358-00-00

Modified lateral length 10791'

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: CHRISTOPHER UNIT 2H
Farm Name: DANIEL M. HAYMOND IV, ET AL
U.S. WELL NUMBER: 47-085-10358-00-00
Horizontal 6A New Drill
Date Modification Issued: 11/02/2018

Promoting a healthy environment.

WW-6B
(04/15)

Permit Modification - API# 47-085-10358
API NO. 47-085 - 10358
OPERATOR WELL NO. Christopher Unit 2H
Well Pad Name: Lettie 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 085 - Ritchie Clay Pennsboro 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Christopher Unit 2H Well Pad Name: Lettie Pad

3) Farm Name/Surface Owner: Daniel M. Haymond IV, et al Public Road Access: Stull Hill Rd.

4) Elevation, current ground: 970' Elevation, proposed post-construction: _____

5) Well Type (a) Gas Oil _____ Underground Storage _____

Other _____

(b) If Gas Shallow Deep _____

Horizontal _____

Michael Goff
7-31-18

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale: 6800' TVD, Anticipated Thickness- 75 feet, Associated Pressure- 2800#

8) Proposed Total Vertical Depth: 6800' TVD

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 20600 MD

11) Proposed Horizontal Leg Length: 10791'

12) Approximate Fresh Water Strata Depths: 408'

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

14) Approximate Saltwater Depths: 1760'

15) Approximate Coal Seam Depths: 622'

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: _____

Received

AUG 2 2018

Office of Oil and Gas
WV Dept. of Environmental Protection

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#	460' *see #19	460' *see #19	CTS, 639 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#	20600'	20600'	5257 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#		7100'	
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	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"/0.33"	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"	0.451"	14,530	2500	LEAD-HPOZ & TBI-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			

Received

AUG 2 2018

MAG

7-31-18

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

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 14.68 Acres

22) Area to be disturbed for well pad only, less access road (acres): 6.86 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 barite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water.

*Note: Attach additional sheets as needed.

MAG
7-31-18



47095024060000



RECEIVED
Office of Oil and Gas
JUL 23 2018
WV Department of
Environmental Protection



Antero Resources Corporation

Christopher Unit 2H - AOR



WELL SYMBOLS
Gas Well 
Waiting on Completion 

47085069580000



UWI (API Num)	Well Name	Well Number	Operator	Historical Operator	TD	Perforated Interval (shallowest, deepest)	Perforated Formation(s)	Producing Formation(s) not perfr d
47085069580000	HOSKINS WILSON ETAL	WK-175	ENERGY CORP OF AMER	KEPCO INCORPORATED	5999	4506 - 5844	Riley, Benson, Alexander	Big Injun, Weir
47095024060000	COPPER JOHN UNIT	3H	ANTERO RESOURCES CORPORATION	ANTERO RESOURCES CORPORATION	14907	N/A	Marcellus Fm	N/A

RECEIVED
Office of Oil and Gas

JUL 23 2018

WV Department of
Environmental Protection

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>Irene Nutter Haymond Trust Lease</u>			
Irene Nutter Haymond Trust	DC Petroleum, Inc.	1/8+	0257/0085
DC Petroleum, Inc.	Antero Resources Appalachian Corporation	Assignment	0257/0763
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
RECEIVED Office of Oil and Gas JUL 23 2018			
<u>Perkins Oil and Gas Co. Lease</u>			
Perkins Oil and Gas Co	Antero Resources Corporation	1/8+	0311/0923
<u>Wilson Hoskins et ux Lease</u>			
Wilson Hoskins et ux	Chase Petroleum	1/8	0162/0267
Chase Petroleum	KEPCO Inc	WV Department of Environmental Protection Assignment	0164/0198
KEPCO Inc	J. Makowski Associates Inc	Assignment	0176/0092
J. Makowski Associates Inc	J&J Enterprises	Assignment	0178/0666
J&J Enterprises	Eastern American Energy Corporation	Merger	0231/0732
Eastern American Energy Corporation	Energy Corporation of America	Merger	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>Roseann Doak Lease</u>			
Roseann Doak	Antero Resources Appalachian Corporation	1/8	0261/0865
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Irene Nutter Haymond Trust Lease</u>			
Irene Nutter Haymond Trust	DC Petroleum, Inc	1/8	0257/0085
DC Petroleum, Inc	Antero Resources Appalachian Corporation	Partial Assignment	0257/0763
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Gene Hoskins et ux Lease</u>			
Gene Hoskins et ux	Antero Resources Corporation	1/8+	0479/0728
<u>Patricia A. Heitzman Lease (14 - 1.1)</u>			
Patricia A. Heitzman	Antero Resources Corporation	1/8+	0479/0728
<u>Patricia A. Heitzman Lease (11 - 22)</u>			
Patricia A Heitzman	Antero Resources Appalachian Corporation	1/8+	0395/0314
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Robert Bruce Ferrell Lease</u>			
Robert Bruce Ferrell	Antero Resources Corporation	1/8+	0444/0160

*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.

WW-6A1
(5/13)

Operator's Well No. Christopher Unit 2H

**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>Frank Grass et al Lease</u>	Frank Grass et al Sancho Oil & Gas Corporation	Sancho Oil & Gas Corporation Antero Resources Corporation	1/8 Assignment	0335/0601 0436/0177


*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: Kevin Kilstrom 
 Its: Senior Vice President - Production

RECEIVED
Office of Oil and Gas

JUL 23 2018

WV Department of
Environmental Protection

FILED

JUN 10 2013

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



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

APPLICATION FOR
AMENDED CERTIFICATE
OF AUTHORITY

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

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

**** 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 Appalachian Corporation
- 2. Date Certificate of Authority was issued in West Virginia: 6/25/2008
- 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.)

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 531D-1-129. 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.

RECEIVED
Office of Oil and Gas

JUL 23 2013

WV Department of
Environmental Protection

LATITUDE 39°22'30"

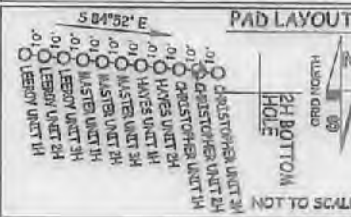
9,996'

LATITUDE 39°25'00"

Antero Resources Corporation
Well No. Christopher Unit 2H

NOTES:
WELL 2H TOP HOLE INFORMATION:
N: 318,120ft E: 1,601,260ft
LAT: 39°21'53.41" LON: 80°54'37.27"
BOTTOM HOLE INFORMATION:
N: 329,151ft E: 1,600,099ft
LAT: 39°23'42.24" LON: 80°54'54.27"
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.

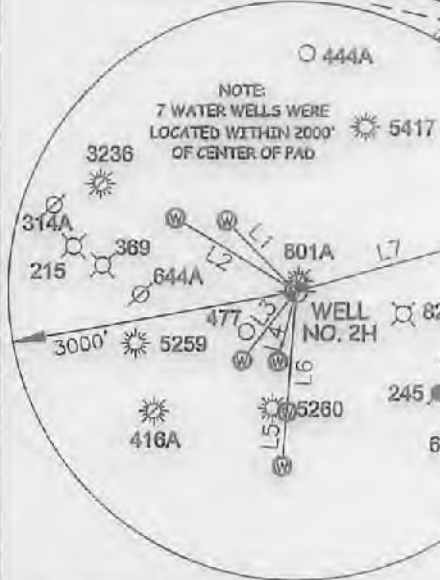
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
N: 4,357,277m E: 507,737m
BOTTOM HOLE INFORMATION:
N: 4,360,631m E: 507,327m



WV NORTH ZONE GRID NORTH

TM-Per	Surface Owner	Book/Pg	Acres
Tyler County			
11-05	Mary E. Adkins	255/139	79.7 AC
11-14.1	Mary E. Adkins	208/139	46.29 AC
11-13	Gary A. Barnard	247/586	284.33 AC
11-14	Mary E. Adkins	205/139	81 AC
11-14.6	Mary E. Adkins	255/139	21.33 AC
11-16	Patricia Heintzman	36/549	48.13 AC
11-21	Patricia Heintzman	36/549	33.88 AC
11-22	Patricia Heintzman	36/549	149.5 AC
11-20	Patricia Heintzman	36/547	20.5 AC
11-19	Patricia Heintzman	36/549	10 AC
Ritchie County			
08-08	Cliff W. Perkins Et Al	289/1020	24.1 AC
09-07	Daniel Haymond IV	334/355	168 AC
08-10	David Weadly Rev. Trust	265/204	203.86 AC
04-01	Daniel M. Haymond III Et Al	22/305	13 AC
04-02	Daniel M. Haymond III Et Al	22/305	16.28 AC
04-05	Christopher Haymond Et Al	334/343	15 AC
04-06	Adeline D. Warner	48/560	15.5 AC
04-07	Daniel M. Haymond III Et Al	22/305	12 AC
04-08	Daniel M. Haymond III Et Al	22/305	11.75 AC
04-08.1	Daniel M. Haymond III Et Al	22/305	10 AC
04-09	Christin Haymond	346/484	111.48 AC
04-10	Wahel L. Martin Et Al	212/725	75.168 AC
04-10.1	Perkins Oil & Gas Inc.	316/760	0.995 AC
04-10.2	Perkins Oil & Gas Inc.	316/760	19.772 AC
04-12	Alfred Jones	300/480	48.47 AC
04-13	Antero Resources Corp.	341/528	1.25 AC
04-13.1	Trustee Patricia Ann, Bkly.	124/569	1 AC
04-14	Jacob Cox	340/525	5.747 AC
04-14.3	Rochly McClain	286/361	1 AC
04-15	Christopher Haymond	214/99	1.33 AC
04-16	Charles Stull	193/778	1 AC
04-22	Donald Frens	262/167	42.22 AC
04-22.1	Jacob Cox	340/525	5.91 AC
04-23	Mary Lou Dawson	283/263	0.781 AC
04-25	Dino Noland	297/27	1.12 AC
04-26	Gregory Dar	302/532	0.709 AC
04-27	Perkins Oil & Gas Inc.	308/603	29.889 AC
04-27.1	Perkins Oil & Gas Inc.	308/603	0.79 AC
04-30.1	James Lopater	219/107	60 AC

LINE	BEARING	DIST.
L1	N 44°29' W	1030.7'
L2	N 58°42' W	1467.2'
L3	S 36°14' W	908.2'
L4	S 14°39' W	747.3'
L5	S 04°35' W	1820.0'
L6	S 04°09' W	1253.6'
L7	N 74°14' E	1942.9'



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

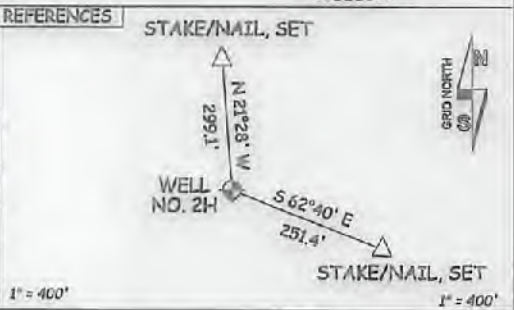
(NAD) 27 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
N: 14,294,785ft E: 1,665,754ft
POINT OF ENTRY INFORMATION:
N: 14,295,639ft E: 1,668,056ft
BOTTOM HOLE INFORMATION:
N: 14,305,790ft E: 1,664,409ft

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.



JOB # 17-017WA
DRAWING # CHRISTOPHER2HR
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 +/-
X Existing Fence
⊕ Found monument, as noted
THOMAS SUMMERS P.S. 2109
DATE 07/18/18
OPERATOR'S WELL # CHRISTOPHER UNIT #2H



WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL 47 - 035 - 10358
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW STATE COUNTY PERMIT
LOCATION: ELEVATION 970' - AS BUILT WATERSHED NORTH FORK HUGHES RIVER
QUADRANGLE PENNSBORO 7.5' (TH) - MIDDLEBOURNE 7.5' (BH) DISTRICT CLAY COUNTY RITCHIE
SURFACE OWNER DANIEL M. HAYMOND IV ET AL ACREAGE 111.48 ACRES +/-
OIL & GAS ROYALTY OWNER IRENE NUTTER HAYMOND TRUST; PERKINS OIL & GAS CO.; WILSON HOSKINS ET UX; ROSE ANN DOMK; LEASE ACREAGE 375 AC±; 84 AC±; 120 AC±; 15,963 AC±;
GENE L. HOSKINS ET UX; PATRICIA A. HEINTZMAN; PATRICIA A. HEINTZMAN; FRANK GRASS ET AL; ROBERT BRUCE FERRELL 87 AC±; 60 AC±; 149.5 AC±; 431.29 AC±; 28.12 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 PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,800' TVD 20,800' 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

LONGITUDE 80°52'30"

LONGITUDE 80°52'30"

LONGITUDE 80°52'30"

LONGITUDE 80°52'30"