west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

PERMIT MODIFICATION APPROVAL

November 02, 2015

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET
DENVER, CO 80202

Re: Permit Modification Approval for API Number 1706654, Well #: ROLLINS UNIT 1H

Extend Lateral and Change Spacing

Oil and Gas Operator:
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.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

Taylor Baum For

Gene Smith
Assistant Chief of Permitting
Office of Oil and Gas

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

October 21, 2015

West Virginia Department of Environmental Protection
Office of Oil and Gas
Attn: Ms. Melanie Hankins
601 57th Street
Charleston, WV 25304

Ms. Melanie Hankins:

Antero Resources Corporation (Antero) would like to submit the following permit modifications for approved wells on the existing Revival Pad. We are requesting to change the spacing of the laterals extend the horizontal lateral length which will change the bottom hole locations of the McCue Unit 1H (API# 47-017-06655), McCue Unit 2H (API# 47-017-06656), and Rollins Unit 1H (API# 47-017-06654).

Attached you will find the following documents:

- REVISED Form WW-6B, which shows the revised MD and Production Casing/Cement program
- REVISED Form WW-6A1, which shows the leases we will be drilling into
- REVISED Mylar Plat, which shows the new bottom hole location

If you have any questions please feel free to contact me at (303) 357-7330.

Thank you in advance for your consideration.

Sincerely,

Megan C. Darling

Megan Darling
Permitting Agent
Antero Resources Corporation

4701706654 Mod

Enclosures

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Office of Oil and Gas
OCT 22 2015
WV Department of
Environmental Protection

WW-6B
(04/15)

API# 47-017-06654 PERMIT MODIFICATION

API NO. 47- 017 - 06654
OPERATOR WELL NO. Rollins Unit 1H
Well Pad Name: Existing Revival Pad

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

1) Well Operator: Antero Resources Corp.	494488557	017 - Doddridge	Grant	Smithburg 7.5'
	Operator ID	County	District	Quadrangle

2) Operator's Well Number: Rollins Unit 1H Well Pad Name: Existing Revival Pad

3) Farm Name/Surface Owner: Williams, Larry et al Public Road Access: CR 30

4) Elevation, current ground: 1,376' Elevation, proposed post-construction: 1,376'

5) Well Type (a) Gas X Oil ____ Underground Storage ____
Other ____
(b)If Gas Shallow X Deep ____
Horizontal X

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale: 7,500' TVD, Anticipated Thickness - 55 feet, Associated Pressure - 2,950#

8) Proposed Total Vertical Depth: 7,500'

9) Formation at Total Vertical Depth: Marcellus Shale

10) Proposed Total Measured Depth: 16,000'

11) Proposed Horizontal Leg Length: 7,517'

12) Approximate Fresh Water Strata Depths: 450'

13) Method to Determine Fresh Water Depths: Gains-Koch Unit 1H (API# 47-017-06218) on same pad.

14) Approximate Saltwater Depths: 1079', 1808'

15) Approximate Coal Seam Depths: 328', 863'

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 X

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

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WW-6B
(04/15)

API# 47-017-06654 PERMIT MODIFICATION

API NO. 47- 017 - 06654
OPERATOR WELL NO. Rollins Unit 1H
Well Pad Name: Existing Revival 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	20"	New	H-40	94#	40'	40'	CTS 109 Cu. Ft.
Fresh Water	13-3/8"	New	J-55/H-40	54.5#/48#	510'	510' * See #19	CTS 708 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2,450'	2,450'	CTS 998 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	20#	16,000'	16,000'	4,007 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#		7,100'	
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"	2730/1730	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"	0.361"	12630	2500	Lead-H/POZ & Tail - H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11200			
Liners							

PACKERS

Kind:	N/A			
Sizes:	N/A			
Depths Set:	N/A			

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WV Department of
Environmental Protection

WW-6B
(10/14)

API# 47-017-06654 PERMIT MODIFICATION

API NO. 47- 017 - 06654
OPERATOR WELL NO. Rollins Unit 1H
Well Pad Name: Existing Revival Pad

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 freshwater 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."

Max Pressure - 9300 lbs
Max Rate - 80 bpm

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 15.45 Existing Acres

22) Area to be disturbed for well pad only, less access road (acres): 4.95 Existing 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 + 0.5% C51.
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

47-017-06654
MOP

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.

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OCT 22 2015

*Note: Attach additional sheets as needed.

WV Department of
Environmental Protection

API# 47-017-06654 PERMIT MODIFICATION

WW-6A1
(5/13)

Operator's Well No. Rollins 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:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Dominion Transmission, Inc. Lease				
	Dominion Transmission, Inc.	Antero Resources Corporation	1/8+	0412/0236

*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

4701706654 Mod

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: VP - Production

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OCT 22 2015
WV Department of
Environmental Protection

FORM WW-6A1
EXHIBIT 1

API# 47-017-06654 PERMIT MODIFICATION

FILED
JUN 10 2013
IN THE OFFICE OF SECRETARY OF STATE

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

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

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 Appalachian Corporation
2. Date Certificate of Authority was issued in West Virginia: 6/25/2008
3. Corporate name has been changed to: (Attach one Certified Copy of Name Change as filed in home State of incorporation.) Antero Resources Corporation
4. Name the corporation elects to use in WV: (due to home state name not being available) Antero Resources Corporation
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 — Contact Name
   (303) 357-7310 — Phone Number

   4 7 0 1 7 0 6 6 5 4 MOD

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

   Print Name of Signer: Alvyn A. Schopp Title/Capacity: Authorized Person
   Signature: [signature] Date: June 10, 2013

*Important Legal Notice Regarding Signature: Per West Virginia Code §31D-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.

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OCT 22 2015
WV Department of Environmental Protection

WW-6A1

API# 47-017-06654 PERMIT MODIFICATION

Operator's Well Number Rollins 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
Larry G. Williams Lease			
Larry G. Williams	ABA Oil & Gas, LLC	1/8	0202/0662
ABA Oil & Gas, LLC	R&K Oil & Gas, Inc.	Assignment	0210/0040
R&K Oil & Gas, Inc.	Bluestone Energy Partners	Assignment	0234/0080
Bluestone Energy Partners	Antero Resources Bluestone LLC, a wholly owned subsidiary of Antero Resources Appalachian Corporation	Affidavit Regarding Merger	DB 0288/0001
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
Mt. Salem Revival Grounds, Inc. Lease			
Mt. Salem Revival Grounds, Inc.	Key Oil Company	1/8	0193/0292
Key Oil Company	Antero Resources Appalachian Corporation	Assignment	0260/0603
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
Mariette Lemley et al Lease			
Mariette Lemley, et al	S&K Land Company	1/8	0114/0075
S&K Land Company	Mert Development, Inc.	Assignment	0115/0110
Mert Development, Inc.	Continental Reserves 1980-E	Assignment	0123/0022
Continental Reserves 1980-E	Appalachian Energy Development Corporation	Assignment	0150/0251
Appalachian Energy Development Corporation	Appalachian Energy Reserves, Inc.	Affidavit of Identity	Recital in MB 0019/0210
Appalachian Energy Reserves, Inc.	Jay Shearer	Assignment	0179/0146
Jay Shearer	Clowser Production Company	Assignment	0285/0420
Clowser Production Company	Antero Resources Appalachian Corporation	Assignment	0285/0417
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
Lydia Mae Rollins Lease			
Lydia Mae Rollins, Executrix for the estate of Carl W. Rollins	Key Oil Company	1/8	0196/0675
Key Oil Company	Antero Resources Appalachian Corporation	Assignment	0256/0285
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
DEPI Lease			
Dominion Exploration & Production, Inc.	Dominion Appalachian Development, LLC	1/8	0230/0407
Dominion Appalachian Development, LLC	Antero Resources Appalachian Corporation	Assignment	0231/0145
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
Clarence W. Mutschelknaus Lease			
Clarence W. Mustschelknaus, et ux	Clarence W. Mutschelknaus	1/8	0239/0368
Clarence W. Mutschelknaus	Bluestone Energy Partners	Assignment	0247/0074
Bluestone Energy Partners	Antero Resources Bluestone LLC, a wholly owned subsidiary of Antero Resources Appalachian Corporation	Affidavit Regarding Merger	DB 0288/0001
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
DEPI Lease			
Dominon Exploration & Production, Inc.	Dominion Appalachian Development, LLC	1/8	0230/0362
Dominion Appalachian Development, LLC	Antero Resources Appalachian Corporation	Assignment	0231/0145
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
DEPI Lease			
Dominon Exploration & Production, Inc.	Dominion Appalachian Development, LLC	1/8	0230/0434
Dominion Appalachian Development, LLC	Antero Resources Appalachian Corporation	Assignment	0231/0145
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**

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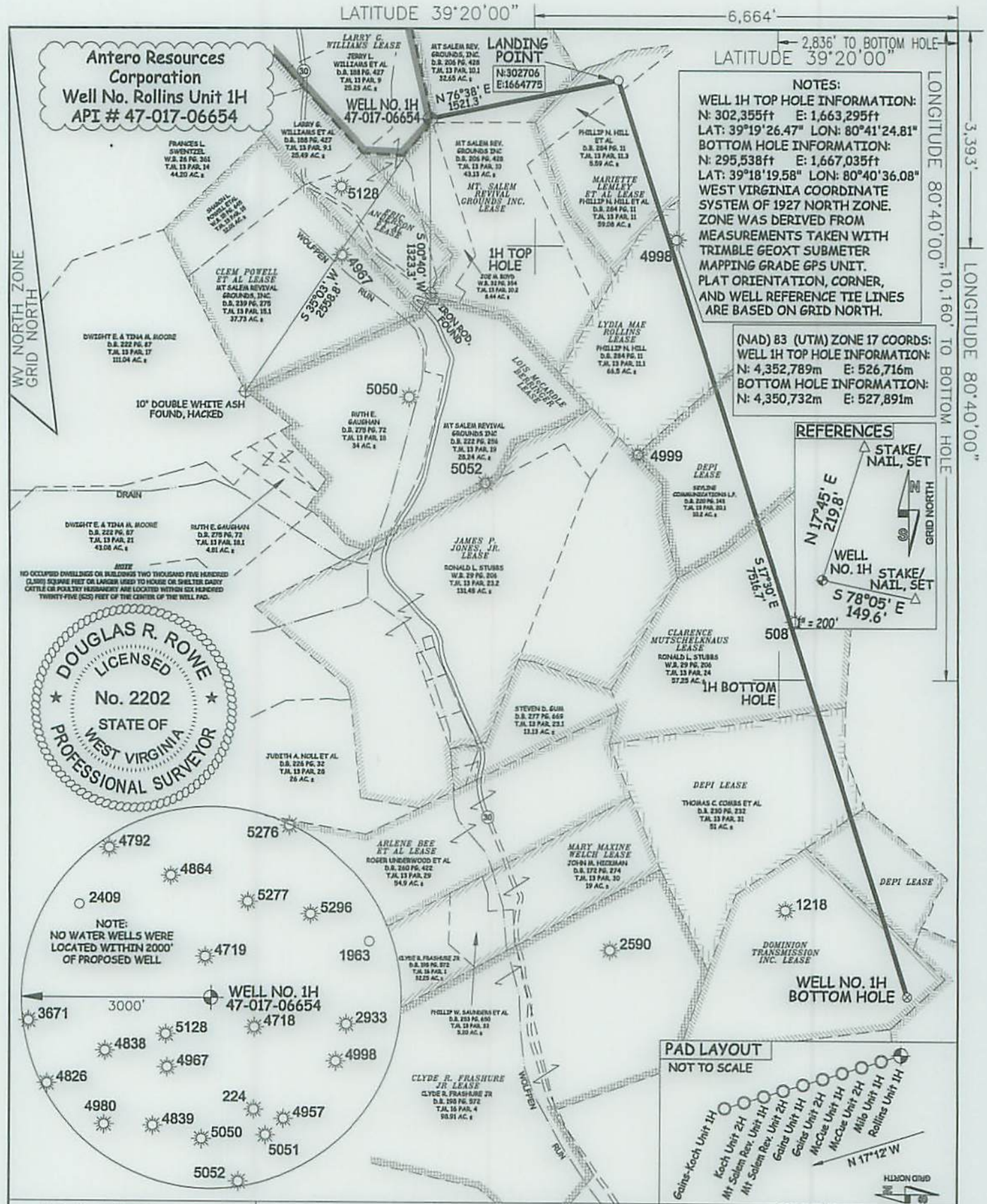
Environmental Protection

***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****



JOB # 14-062WA
DRAWING # ROLLINSUNIT1HR2
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 DEPTARTMENT 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

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

DLRR
DOUGLAS R. ROWE P.S. 2202

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

DATE 10/20/15
OPERATOR'S WELL# ROLLINS UNIT #1H

API WELL # 47 – 017 – 06654 MOD HLA
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1,402' ORIGINAL - 1,376' AS-DRILLED WATERSHED HEADWATERS OF MIDDLE ISLAND CREEK
QUADRANGLE SMITHBURG 7.5' DISTRICT GRANT COUNTY DODDRIDGE
SURFACE OWNER LARRY WILLIAMS ET AL ACREAGE 25.49 ACRES +/-
OIL & GAS ROYALTY OWNER LARRY G. WILLIAMS; MT. SALEM REVIVAL GROUNDS INC.; MARIETTE LEMLEY ET AL; LYDIA MAE ROLLINS; DEPI; CLARENCE MUTSCHELKNAUS; DEPI; DEPI; DOMINION TRANSMISSION INC. LEASE ACREAGE 35.11 ACRES±; 83 ACRES±; 66.87 ACRES±; 66 AC.±; 36 AC.±; 57 AC.±; 51 AC.±; 43.5 AC.±; 46 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 7,500' TVD 16,000' MD

COUNTY NAME PERMIT

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

FORM WW-6

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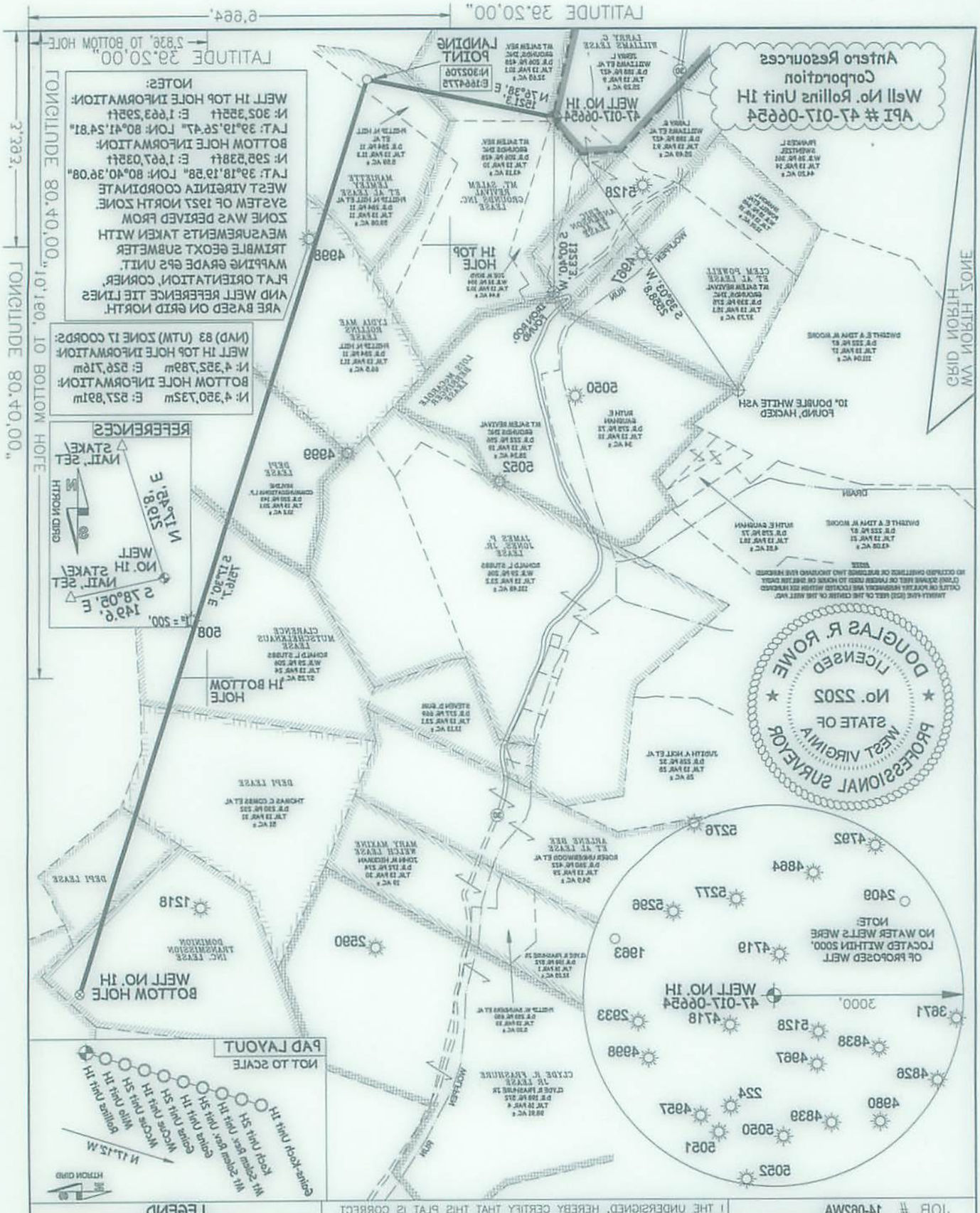
Office of Oil and Gas
OCT 22 2015
WV Department of Environmental Protection



JOB # 14-082WA	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 PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
DRAWING # ROLLINSUNIT1H2	
SCALE 1" = 1000'	
MINIMUM DEGREE OF ACCURACY SUBMETER	STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS	WILLOW LAND SURVEYING PLLC 220 MASONIC AVE. 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 1,402' ORIGINAL - 1,376' AS-DRILLED WATERSHED HEADWATERS OF MIDDLE ISLAND CREEK	
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SURFACE OWNER LARRY WILLIAMS ET AL ACREAGE 25.49 ACRES +/-	
OIL & GAS ROYALTY OWNER LARRY G. WILLIAMS; MT. SALEM REVIVAL GROUNDS INC.; MARIETTE LEMLEY ET AL; LEASE ACREAGE 35.11 ACRES±; 83 ACRES±; 88.87 ACRES±; LYDIA MAE ROLLINS; DEPI; CLARENCE MUTSCHELKNAUS; DEPI; DEPI; DOMINION TRANSMISSION INC. 66 AC.±; 36 AC.±; 57 AC.±; 51 AC.±; 42 AC.±; 42 AC.±; 42 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 7,500' TVD, 20,000' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313
FORM WW-6

LEGEND

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

DOUGLAS R. ROWE P.S. 2202

DATE 10/20/15

OPERATOR'S WELL # ROLLINS UNIT #1H

API WELL # 47 - 017 - 06654 H6A

PERMIT

COUNTY

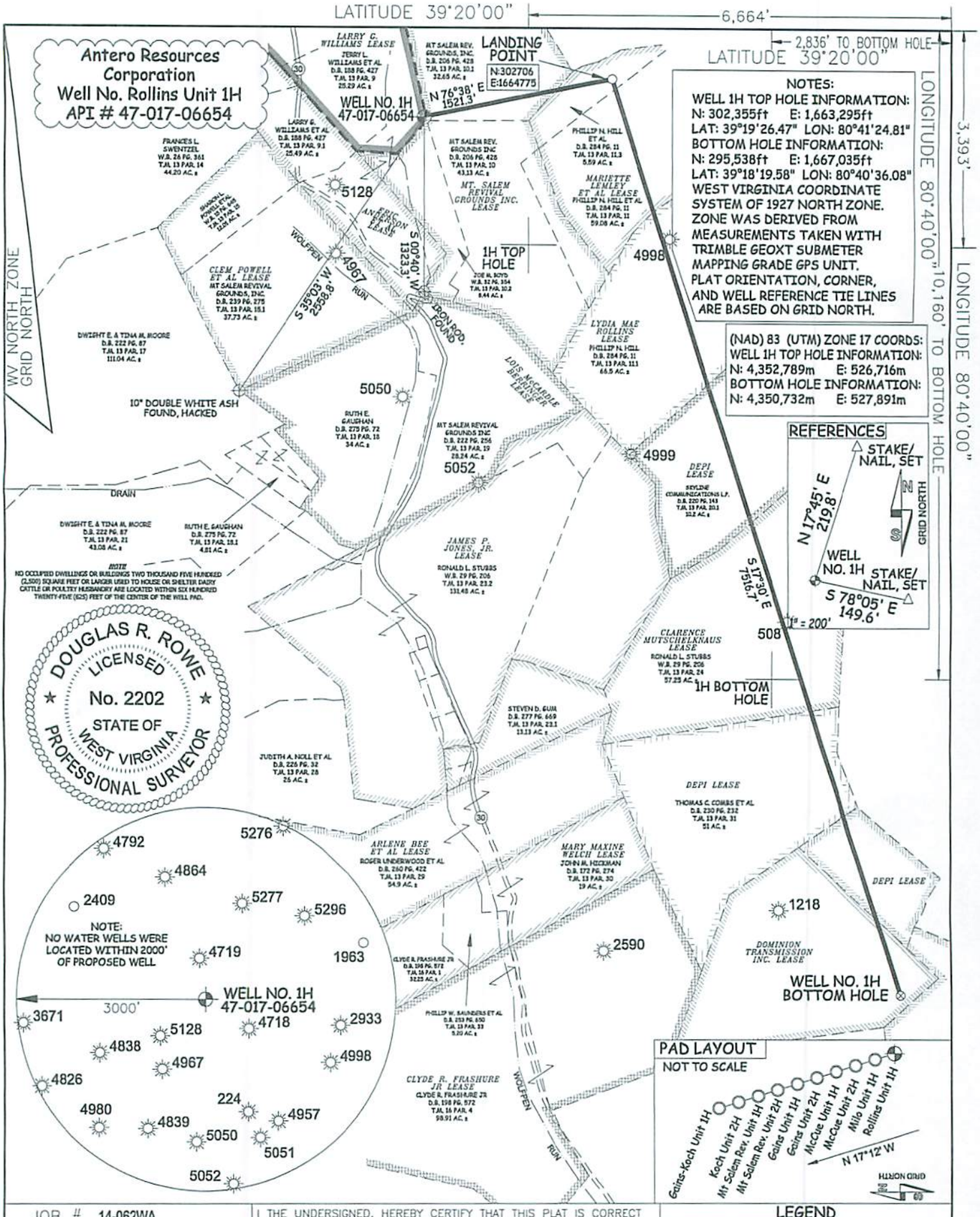
STATE

TIMEP

COUNTY

NAME

Office of Oil and Gas
NOV 02 2015
WV Department of Environmental Protection



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SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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

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

LEGEND
Surface Owner Boundary Lines +/-
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DOUGLAS R. ROWE P.S. 2202

DATE 10/20/15
OPERATOR'S WELL# ROLLINS UNIT #1H

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

API WELL # 47 – 017 – 06654 MOD
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
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QUADRANGLE SMITHBURG 7.5' DISTRICT GRANT COUNTY DODDRIDGE
SURFACE OWNER LARRY WILLIAMS ET AL ACREAGE 25.49 ACRES +/-
OIL & GAS ROYALTY OWNER LARRY G. WILLIAMS; MT. SALEM REVIVAL GROUNDS INC; MARIETTE LEMLEY ET AL; LYDIA MAE ROLLINS; DEPI; CLARENCE MUTSCHELKNAUS; DEPI; DEPI; DOMINION TRANSMISSION INC. LEASE ACREAGE 35.11 ACRES±; 83 ACRES±; 66.67 ACRES±; 66 AC.±; 36 AC.±; 57 AC.±; 54 AC.±; 33.8 AC.±; 46 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 7,500' TVD 16,000' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

FORM WW-6

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WV Department of Environmental Protection