



**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

September 29, 2015

**WELL WORK PERMIT**

**Horizontal 6A Well**

This permit, API Well Number: 47-8510248, issued to ANTERO RESOURCES CORPORATION, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

  
James Martin

Chief

Operator's Well No: ALLSTATE UNIT 1H  
Farm Name: WILLIAMSON, ANDREW

**API Well Number: 47-8510248**

**Permit Type: Horizontal 6A Well**

Date Issued: 09/29/2015

**Promoting a healthy environment.**

**10/02/2015**

# PERMIT CONDITIONS

470851024C

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

## CONDITIONS

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1. Operator shall take additional measures with this permitted activity to avoid communication with offset wells. Such additional measures are described in the attached addendum. This addendum is part of the terms of the well work permit, and includes a description of depth and completed formations of offset wells. Also included is a description of monitoring activities that will take place during fracturing operations of the permitted well work.
1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACOE). Through this permit, you are hereby being advised to consult with USACOE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.

## PERMIT CONDITIONS 470851024C

6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to [DEPOOGNotify@wv.gov](mailto:DEPOOGNotify@wv.gov) within 30 days of commencement of drilling.



4708510248

**REVISED Addendum for Antero pads in Ritchie County, WV**

Allstate Unit 1H      Yolanda Pad

The following outlines the process to be undertaken by Antero Resources prior to and during completion process of wells in Ritchie County.

- Investigate all wells within 1320' of new wells - for all identified Marcellus vertical wells and any existing well(s) with an interval that is less than 1500 feet from the deepest formation drilled (including, but not specific to the Alexander formation) to the top of Marcellus:
  - Contact operator of all wells
  - Confirm well status, producing horizon, well completion/stimulation information
  - Discuss plans to stimulate the horizontal Marcellus wells and the plans for monitoring potential impact on shallow wells
  - Make sure all vertical wells (with an interval that is less than 1500 feet from the deepest formation drilled to the top of Marcellus) have adequate wellhead equipment, including pressure gauges
  - Provide shallow well operator with frac dates and develop plan for monitoring during stimulation
  - If well waters out during frac, shut it in until after stimulation, and install adequate well control equipment prior to swabbing in the impacted shallow well
- Control fracturing parameters during job to limit fracture height growth
  - Limit rate and limit pressures for each segment of fracturing stages

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10/02/2015

4708510248

WW-6B  
(04/15)

API NO. 47-085  
OPERATOR WELL NO. Allstate Unit 1H  
Well Pad Name: Yolanda Pad

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

1) Well Operator: Antero Resources Corporation | 494488557 | 085-Ritchie | Union | Pullman 7.5'  
Operator ID County District Quadrangle

2) Operator's Well Number: Allstate Unit 1H Well Pad Name: Yolanda Pad

3) Farm Name/Surface Owner: Williamson, Andrew, et al Public Road Access: CR 9

4) Elevation, current ground: 1144' Elevation, proposed post-construction: 1144'

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

Other

(b) If Gas Shallow X Deep 4708510248

Horizontal X

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- 50 feet, Associated Pressure- 3000#

8) Proposed Total Vertical Depth: 6900' TVD

9) Formation at Total Vertical Depth: Marcellus Shale

10) Proposed Total Measured Depth: 13500' MD

11) Proposed Horizontal Leg Length: 6098'

12) Approximate Fresh Water Strata Depths: 125'

13) Method to Determine Fresh Water Depths: O'Neil Unit 1H (API# 47-085-09964) on same pad.

14) Approximate Saltwater Depths: 2000', 2002'

15) Approximate Coal Seam Depths: 343'

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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Page 1 of 3  
WV Department of Environmental Protection

10/02/2015

WW-6B  
(04/15)

API NO. 47-085

4708510248

OPERATOR WELL NO. Alistate Unit 1H

Well Pad Name: Yolanda 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, 38 Cu. Ft.
Fresh Water	13-3/8"	New	J-55/H-40	54.5#/48#	300'	300'	CTS, 417 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2400'	2400'	CTS, 977 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	20#	13500'	13500'	3335 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+HPOZ & Tail-H	H/HPOZ-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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Page 2 of 3  
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Environmental Protection  
10/02/2015

WW-6B  
(10/14)

API NO. 47- 085  
OPERATOR WELL NO. Allstate Unit 1H  
Well Pad Name: Yolanda Pad

4708510248

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.

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): 15.35 existing acres

22) Area to be disturbed for well pad only, less access road (acres): 1.37 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 + 0.05% 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.

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Page 3 of 3  
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WW-9  
(2/15)

API Number 47 - 085 - \_\_\_\_\_  
Operator's Well No. Asstate Unit 1H

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION **67 085 10245**  
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Antero Resources Corporation OP Code 494488557

Watershed (HUC 10) South Fork Hughes River Quadrangle Pullman 7.5'

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: Drilling and Flowback Fluids and Cuttings

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 60 mil (existing)

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- Reuse (at API Number Future permitted well locations when applicable. API# will be provided on Form WR-34)
- Off Site Disposal (Supply form WW-9 for disposal location) (Meadowfill Landfill Permit #SWF-1032-98)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: Yes

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Surface - Air/Freshwater, Intermediate - Dust/Silt Foam, Production - Water Based Mud

-If oil based, what type? Synthetic, petroleum, etc. N/A

Additives to be used in drilling medium? Please See Attachment

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Stored in tanks, removed offsite and taken to landfill.

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

-Landfill or offsite name/permit number? Meadowfill Landfill (Permit #SWF-1032-98)

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

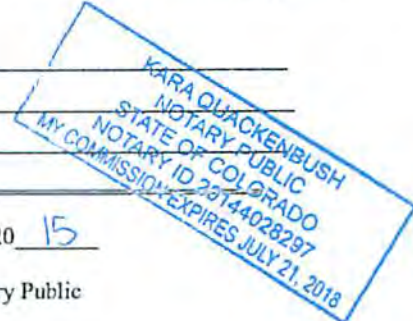
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Cole Kilstrom*

Company Official (Typed Name) Cole Kilstrom

Company Official Title Environmental & Regulatory Manager



Subscribed and sworn before me this 20 day of August, 20 15

*Kara Quackenbush*

Notary Public

My commission expires July 21, 2018

10/02/2015



**Antero Resources Corporation**

Proposed Revegetation Treatment: Acres Disturbed 15.35 existing acres Prevegetation pH 6.0

Lime 2-3 Tons/acre or to correct to pH 6.5

Fertilizer type Hay or straw or Wood Fiber (will be used where needed)

Fertilizer amount 500 lbs/acre

Mulch 2-3 Tons/acre

Pit (0.90) + Pad (1.37) + Clearing (8.59) + Disturbed Acres (2.8) + Access Road (1.72) = 15.35 existing acres

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Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	Fox Tail / Grassy	40
		Perennial Rye Grass	30
*or type of grass seed requested by surface owner		Crown Vetch	20
		*or type of grass seed requested by surface owner	

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Daniel W. Cowan

Comments: present a mulch all at area no less than 2 ton per acre maintain all CWS during operation

Title: oil & gas impact

Date: 8-26-15

Field Reviewed?  Yes  No

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## ***Form WW-9 Additives Attachment***

### **SURFACE INTERVAL**

1. Fresh Water
2. Soap –Foamer AC
3. Air

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### **INTERMEDIATE INTERVAL**

#### ***STIFF FOAM RECIPE:***

- 1) 1 ppb Soda Ash / Sodium Carbonate-Alkalinity Control Agent
- 2) 1 ppb Conqor 404 ( 11.76 ppg) / Corrosion Inhibitor
- 3) 4 ppb KLA-Gard ( 9.17 ppg) / Amine Acid Complex-Shale Stabilizer
- 4) 1ppb Mil Pac R / Sodium Carboxymethylcellulose-Filtration Control Agent
- 5) 12 ppb KCL / Potassium Chloride-inorganic Salt
- 6) Fresh Water 80 bbls
- 7) Air

### **PRODUCTION INTERVAL**

1. Alpha 1655  
Salt Inhibitor
2. Mil-Carb  
Calcium Carbonate
3. Cottonseed Hulls  
Cellulose-Cottonseed Pellets – LCM
4. Mil-Seal  
Vegetable, Cotton & Cellulose-Based Fiber Blend – LCM
5. Clay-Trol  
Amine Acid Complex – Shale Stabilizer
6. Xan-Plex  
Viscosifier For Water Based Muds
7. Mil-Pac (All Grades)  
Sodium Carboxymethylcellulose – Filtration Control Agent
8. New Drill  
Anionic Polyacrylamide Copolymer Emulsion – Shale Stabilizer
9. Caustic Soda  
Sodium Hydroxide – Alkalinity Control
10. Mil-Lime  
Calcium Hydroxide – Lime
11. LD-9  
Polyether Polyol – Drilling Fluid Defoamer
12. Mil Mica  
Hydro-Biotite Mica – LCM

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13. Escaid 110  
Drilling Fluid Solvent – Aliphatic Hydrocarbon
14. Ligco  
Highly Oxidized Leonardite – Filtration Control Agent
15. Super Sweep  
Polypropylene – Hole Cleaning Agent
16. Sulfatrol K  
Drilling Fluid Additive – Sulfonated Asphalt Residuum
17. Sodium Chloride, Anhydrous  
Inorganic Salt
18. D-D  
Drilling Detergent – Surfactant
19. Terra-Rate  
Organic Surfactant Blend
20. W.O. Defoam  
Alcohol-Based Defoamer
21. Perma-Lose HT  
Fluid Loss Reducer For Water-Based Muds
22. Xan-Plex D  
Polysaccharide Polymer – Drilling Fluid Viscosifier
23. Walnut Shells  
Ground Cellulosic Material – Ground Walnut Shells – LCM
24. Mil-Graphite  
Natural Graphite – LCM
25. Mil Bar  
Barite – Weighting Agent
26. X-Cide 102  
Biocide
27. Soda Ash  
Sodium Carbonate – Alkalinity Control Agent
28. Clay Trol  
Amine Acid complex – Shale Stabilizer
29. Sulfatrol  
Sulfonated Asphalt – Shale Control Additive
30. Xanvis  
Viscosifier For Water-Based Muds
31. Milstarch  
Starch – Fluid Loss Reducer For Water Based Muds
32. Mil-Lube  
Drilling Fluid Lubricant

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**911 Address**  
**2475 Mountain Drive**  
**Pennsboro, WV 26415**

# Well Site Safety Plan

## Antero Resources

**Well Name:** Allstate Unit 1H, Allstate Unit 3H, McCabe Unit 2H, McCabe Unit 3H, Nicholson Unit 1H, Nicholson Unit 2H, O'Neil Unit 1H and O'Neil Unit 2H

**Pad Location:** YOLANDA PAD  
Ritchie County/Union District

**GPS Coordinates:** Lat 39°11'43.9"/Long -80°53'03.5" (NAD83)

### Driving Directions:

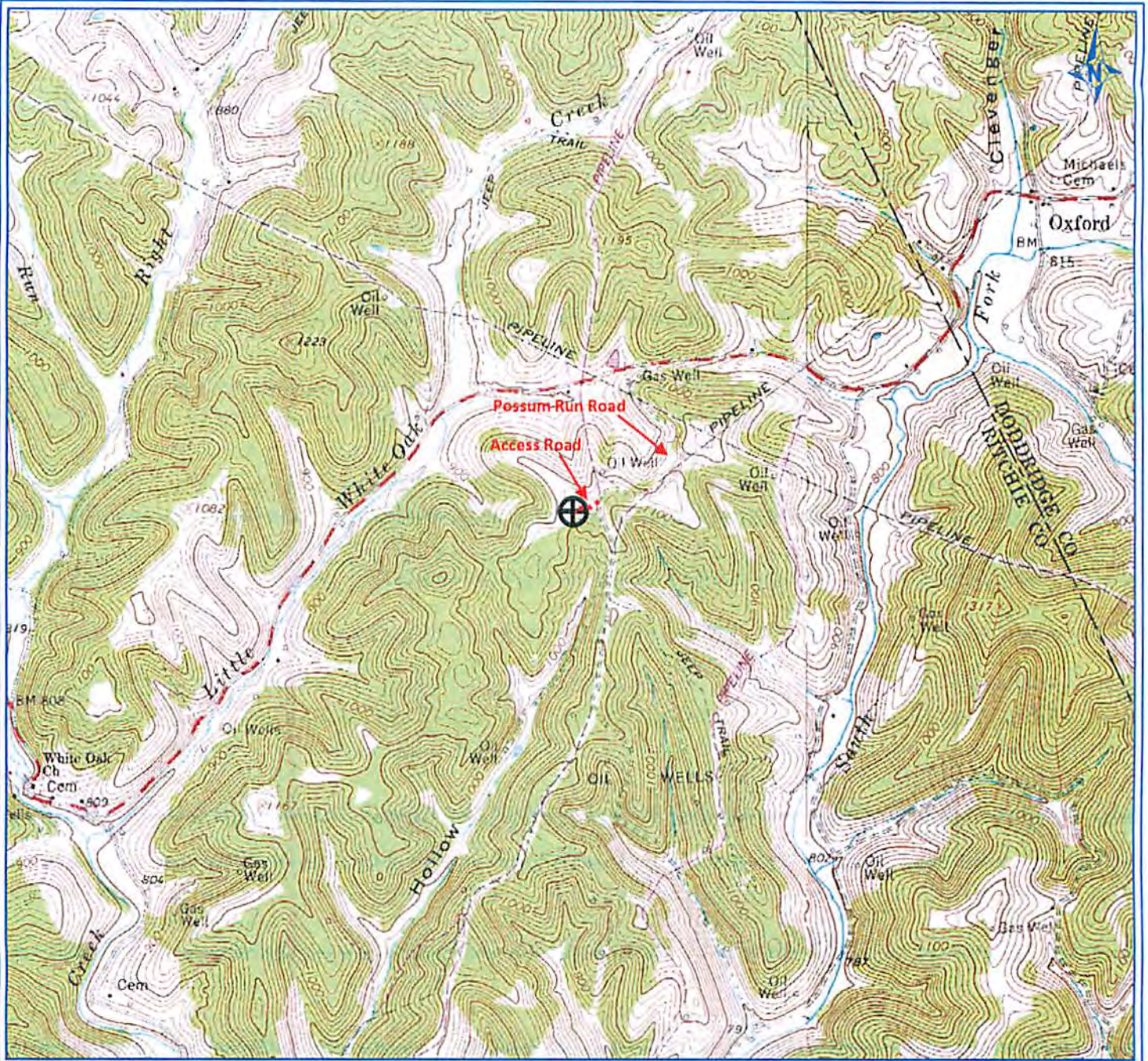
From the intersection of I-50 and County Route 74 (just South East of the town Pennsboro) head south on W Virginia S for 7.4 miles. Take a left onto Co Rd 9/Main St., continue to follow Co Rd. 9 for 4.3 miles. Take a sharp right on to Possum Rd. for 0.5 miles, lease road will be on the right.

**EMERGENCY (24 HOUR) CONTACT 1-800-878-1373**

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*David W. [Signature]*



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Antero Resources Corporation

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Office of Oil and Gas  
APPALACHIAN BASIN

AUG 24 2015  
Allstate Unit 1H

RITCHIE COUNTY

REMARKS  
QUADRANGLE: PULLMAN  
WATERSHED: SOUTH FORK HUGHES RIVER  
DISTRICT: UNION



February 24, 2015 10/02/2015

LATITUDE 39°12'30" 2,655'

(NAD) 83 (UTM) ZONE 17 COORDS:  
WELL 1H TOP HOLE INFORMATION:  
N: 4,338,478m E: 510,000m  
BOTTOM HOLE INFORMATION:  
N: 4,340,250m E: 509,212m

Antero Resources Corporation  
Well No. Allstate Unit 1H

NOTES:  
WELL 1H TOP HOLE INFORMATION:  
N: 256,308ft E: 1,607,655ft  
LAT: 39°11'43.50" LON: 80°53'03.73"  
BOTTOM HOLE INFORMATION:  
N: 262,165ft E: 1,605,168ft  
LAT: 39°12'41.00" LON: 80°53'36.47"  
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.

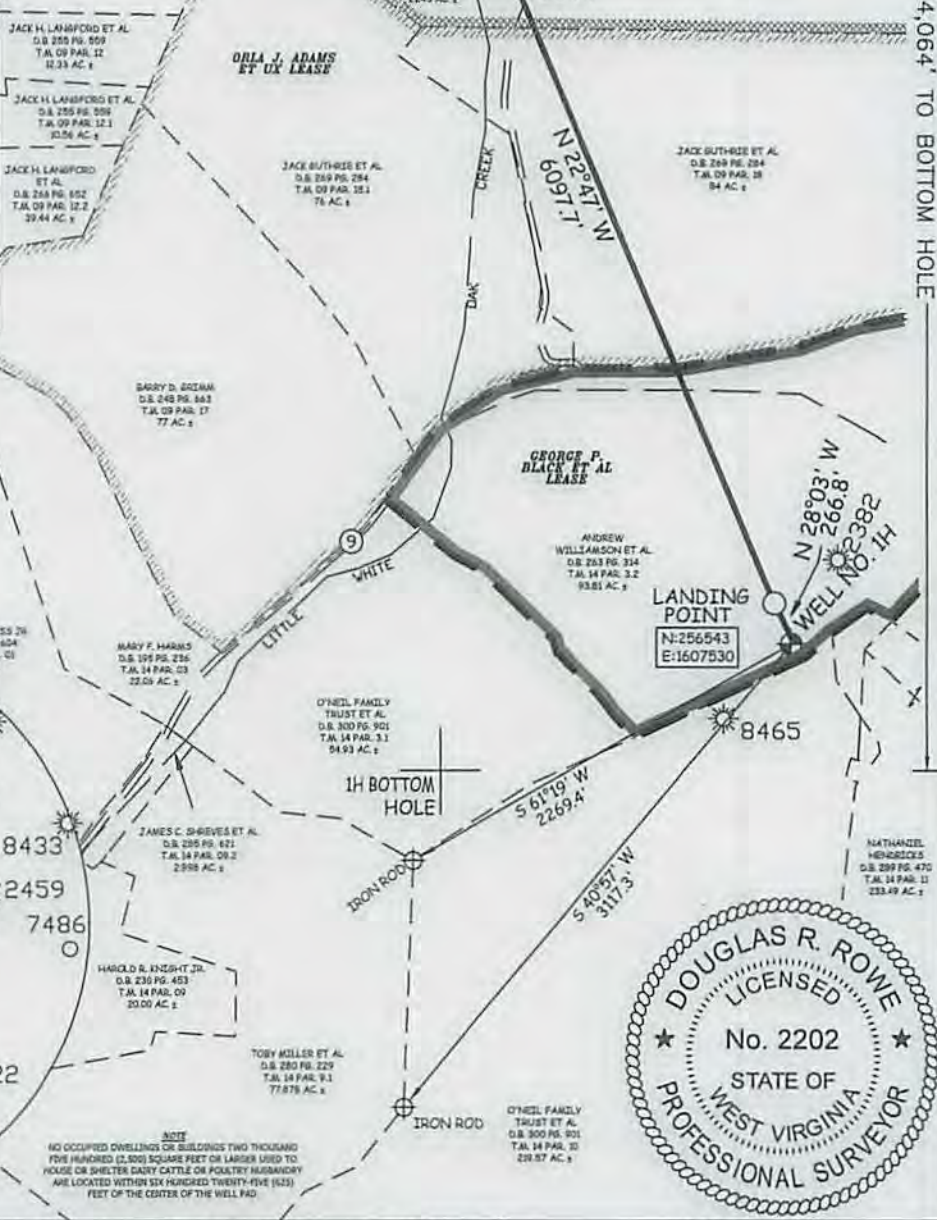
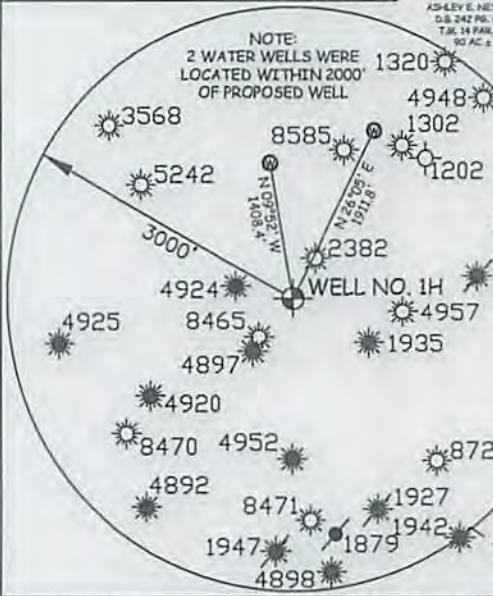
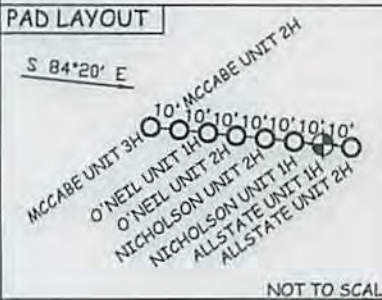
WV NORTH ZONE GRID NORTH

LONGITUDE 80°52'30"

4,705'

LONGITUDE 80°52'30"

14,064' TO BOTTOM HOLE



JOB # 12-110WA  
DRAWING # ALLSTATE1HR2  
SCALE 1" = 1000'

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.

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



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

DOUGLAS R. ROWE P.S. 2202  
DATE 08/11/15  
OPERATOR'S WELL# ALLSTATE UNIT#1H  
API WELL # 47 - 085 - 10248

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  
WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL  
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X

LOCATION: ELEVATION 1,153' ORIGINAL - 1,144' PROPOSED WATERSHED SOUTH FORK HUGHES RIVER  
QUADRANGLE PULLMAN 7.5' DISTRICT UNION COUNTY ROCKWELL

STATE COUNTY PERMIT  
10/02/2015

SURFACE OWNER ANDREW WILLIAMSON ET AL  
OIL & GAS ROYALTY OWNER GEORGE P. BLACK ET AL; ORLA J. ADAMS ET UX; E. MIRACLE ET AL; BROOKS F. MCCABE ET UX

ACREAGE 93.81 ACRES +/-  
LEASE ACREAGE 93 ACRES+; 314 ACRES+; 116 ACRES+; 63 ACRES+

DATE 08/11/15  
OPERATOR'S WELL# ALLSTATE UNIT#1H  
API WELL # 47 - 085 - 10248

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

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,900' TVD 13,500' MD

DIANNA STAMPER  
CT CORPORATION SYSTEM  
5400 D BIG TYLER ROAD  
CHARLESTON, WV 25313

WELL OPERATOR ANTERO RESOURCES CORP  
ADDRESS 1615 WYNKOOP STREET  
DENVER, CO 80202

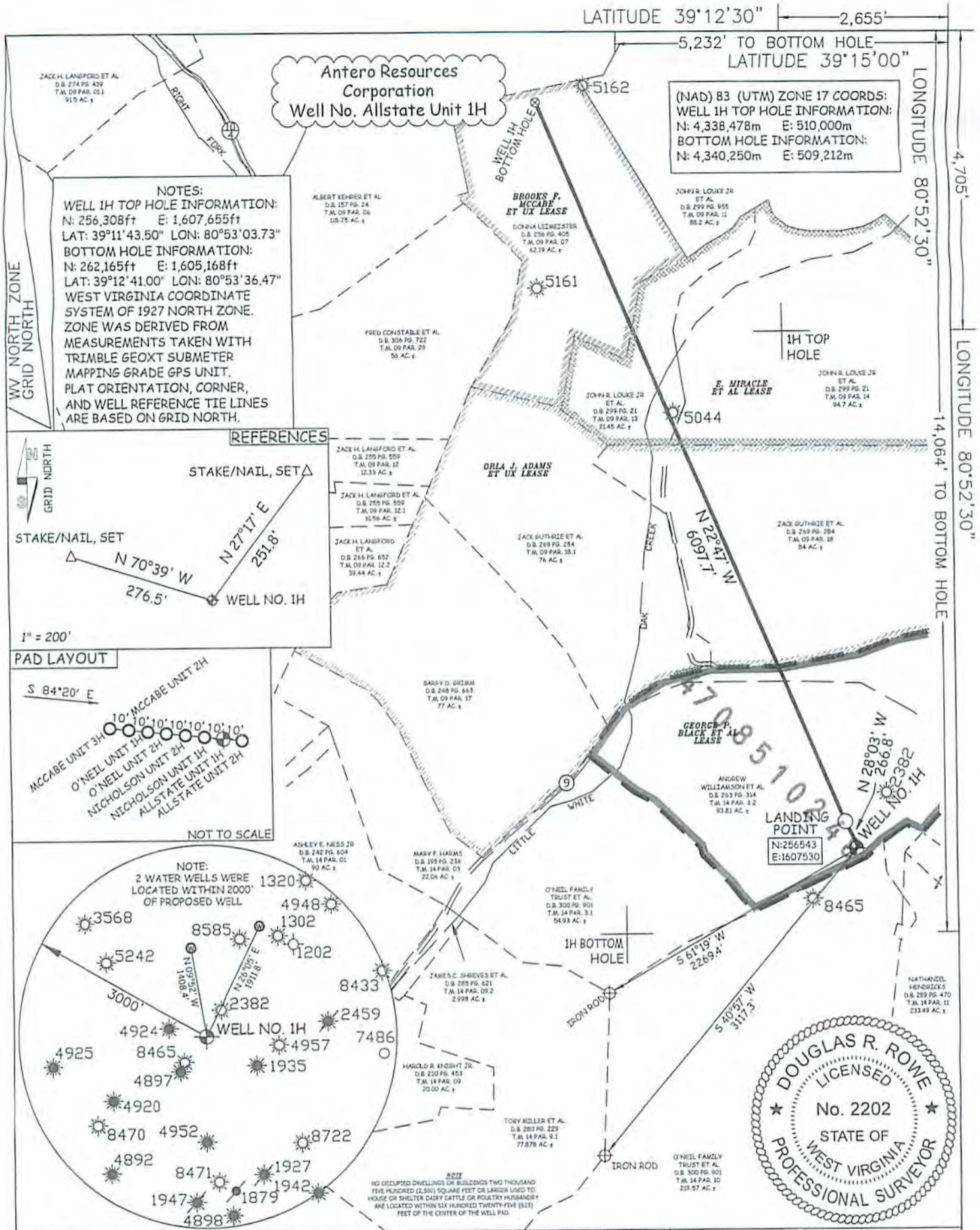
DESIGNATED AGENT ADDRESS 5400 D BIG TYLER ROAD  
CHARLESTON, WV 25313

PERMIT

FORM WW-6

DENVER, CO 80202

CHARLESTON, WV 25313



JOB # 12-110WA  
 DRAWING # ALLSTATE1HR2  
 SCALE 1" = 1000'  
 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  
 WELL TYPE: OIL GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1,153' ORIGINAL - 1,144' PROPOSED WATERSHED SOUTH FORK HUGHES RIVER  
 QUADRANGLE PULLMAN 7.5' DISTRICT UNION Edgemoor

SURFACE OWNER ANDREW WILLIAMSON ET AL ACREAGE 93.81 ACRES +/-  
 OIL & GAS ROYALTY OWNER GEORGE P. BLACK ET AL; ORLA J. ADAMS ET UX; E. MIRACLE ET AL; BROOKS F. MCCABE ET UX LEASE ACREAGE 93 ACRES+; 314 ACRES+; 116 ACRES+; 63 ACRES+

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  PLUG & ABANDON  CLEAN OUT & REPLUG   
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,900' TVD 13,500' MD

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

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.

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.

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

DOUGLAS R. ROWE  
 LICENSED PROFESSIONAL SURVEYOR  
 No. 2202  
 STATE OF WEST VIRGINIA

DATE 08/11/15  
 OPERATOR'S WELL # ALLSTATE UNIT #1H  
 API WELL # 47-0851024-085

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 COUNTY Putnam PERMIT NAME 10249  
 DATE 10/02/2015

**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
<b><u>George P. Black, et al Lease</u></b>			
George P. Black	Dale Wolfe	1/8	0133/0185
Dale Wolfe	Allstate Energy Corporation	Assignment	0133/0197
Allstate Energy Corporation	Alton Skinner	Agreement	0137/0120
Alton Skinner	Crystal G. Skinner & Desari S. Garrett	Assignment	0216/0391
Crystal G. Skinner & Desari S. Garrett	DC Petroleum, Inc.	Assignment & Bill of Sale	0247/0245
DC Petroleum, Inc.	Antero Resources Appalachian Corporation	*Partial Assignment of Oil & Gas Leases	0254/0133
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<b><u>Orla J. Adams, et ux Lease</u></b>			
Orla J. Adams, et ux	L. W. Prunty	1/8	0088/0161
L.W. Prunty	Charles Allen, d/b/a Allen Oil Company	Assignment	0114/0767
Charles Allen, d/b/a Allen Oil Company	Commerce Energy Resources	Assignment	0115/0446
Commerce Energy Resources	Key Oil Company	Assignment	0224/0446
Key Oil Company	Antero Resources Appalachian Corporation	*Partial Assignment of Oil & Gas Leases	0258/0505
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<b><u>E. Miracle, et al Lease</u></b>			
Eloise Miracle, et al	Alton Skinner	1/8	0132/0717
Alton Skinner	Crystal G. Skinner & Desari S. Garrett	Assignment	0216/0391
Crystal G. Skinner & Desari S. Garrett	DC Petroleum, Inc.	Assignment & Bill of Sale	0247/0245
DC Petroleum, Inc.	Antero Resources Appalachian Corporation	*Partial Assignment of Oil & Gas Leases	0254/0133
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1

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WV Department of  
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.



**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>Brooks F. McCabe, et ux Lease</u>	Brooks F. McCabe, et ux	Alton Skinner	1/8	0133/0299
	Alton Skinner	Crystal G. Skinner & Desari S. Garrett	Assignment	0216/0391
	Crystal G. Skinner & Desari S. Garrett	DC Petroleum	Assignment & Bill of Sale	0247/0245
	DC Petroleum	Antero Resources Appalachian Corp.	*Partial Assignment of Oil & Gas Leases	0254/0133
	Antero Resources Appalachian Corp.	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: Ward McNeilly  
 Its: VP, Reserves Planning & Midstream

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 AUG 24 2015  
 Department of Environmental Protection

FORM WW-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



Penny Barker, Manager  
IN THE OFFICE OF  
SECRETARY OF STATE Corporations Division  
Tel: (304)558-8000  
Fax: (304)558-8381  
Website: [www.wvgsos.com](http://www.wvgsos.com)  
E-mail: [business@wvgsos.com](mailto:business@wvgsos.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:

4700510

- 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) 367-7310  
Contact Name Phone Number
- 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:** Per West Virginia Code 5311-1-129. 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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Office of Oil and Gas  
AUG 24 2015  
WV Department of  
Environmental Protection



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

August 21, 2015

West Virginia Department of Environmental Protection  
Chief, Office of Oil and Gas  
Attn: Mr. James Martin  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

4708510

RE: Allstate Unit 1H  
Quadrangle: Pullman 7.5'  
Ritchie County/Union District, West Virginia

Mr. Martin:

Antero Resources Corporation (Antero) is submitting the following application for a new well work permit for the Allstate Unit 1H horizontal shallow well. As an authorized representative, I certify that Antero has the right to extract, produce or market the oil or gas for all leases through which the Allstate Unit 1H horizontal lateral will drill through including any and all roads crossed under as identified on the attached survey plat.

Sincerely,

A handwritten signature in blue ink, appearing to read "Haley West", is written over the word "Sincerely,".

Haley West  
Landman

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AUG 24 2015

WV Department of  
Environmental Protection

10/02/2015

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**VOLUNTARY STATEMENT OF NO OBJECTION**

**Instructions to Persons Named on Page WW-6A**

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

**Comment and Waiver Provisions**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

**VOLUNTARY STATEMENT OF NO OBJECTION**

I, \_\_\_\_\_, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through \_\_\_\_\_, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>510000m</u>
County: <u>Ritchie</u>	UTM NAD 83 Northing: <u>4338478m</u>
District: <u>Union</u>	Public Road Access: <u>CR 9</u>
Quadrangle: <u>Pullman 7.5'</u>	Generally used farm name: <u>Williamson, Andrew, et al</u>
Watershed: <u>South Fork Hughes River</u>	

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

\*Please check the box that applies

SURFACE OWNER

SURFACE OWNER (Road and/or Other Disturbance)

SURFACE OWNER (Impoundments/Pits)

COAL OWNER OR LESSEE

COAL OPERATOR

WATER PURVEYOR

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

**FOR EXECUTION BY A NATURAL PERSON**

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

**FOR EXECUTION BY A CORPORATION, ETC.**

Company: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**RECEIVED**  
Office of Oil and Gas  
AUG 24 2015

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

10/02/2015

**WW-6A Notice of Application Attachment (YOLANDA PAD):**

**List of Surface Owner(s) with Proposed Disturbance associated with Yolanda Well Pad:**

**WELL PAD – All owners were notified of all well work permit applications, and have executed signed Surface Use Agreements with Antero Resources Corporation.**

**TM 14 PCL 3.2**

**Owner:** Yolanda & Andrew Williamson  
**Address:** 731 Four Mile Creek  
Branchland, WV 25506

**Owner:** Romarlo, LLC  
**Address:** 757 SE 17<sup>th</sup> Street  
Fort Lauderdale, FL 33316

**Owner:** Yolanda & Andrew Williamson  
(2<sup>nd</sup> Address)  
**Address:** 7834 Four Mile Creek  
Branchland, WV 25506

**Owner:** Romarlo, LLC (2<sup>nd</sup> Address)  
**Address:** 93 Monroe Dr. NE  
A102-12  
Atlanta, GA 30308

**TM 14 PCL 10 – O’Neill Family Trust**

**Owner:** Nancy Louise Antill  
**Address:** 114 Melinda Dr.  
Wintersville, OH 43953

**Owner:** Sharon S. (O’Neill) Stainken  
**Address:** 696 San Ramon Valley Blvd, #510  
Danville, CA 94526

**Owner:** Mary Frances Harms  
**Address:** 4368 Steuben Woods Dr.  
Steubenville, OH 43953

**Owner:** Sharon S. (O’Neill) Stainken  
(2<sup>nd</sup> Address)  
**Address:** 1013 McCauley Rd #55  
Danville, CA 94526

**Owner:** Kathleen R. Hooven  
**Address:** 4 Amador  
Newport Beach, CA 92657

**Owner:** Nathaniel Hendricks  
**Address:** P. O. Box 100  
Cragsmoor, NY 12420

**Owner:** Karah Leigh Loftin  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Nathaniel Hendricks (2<sup>nd</sup> Address)  
**Address:** P.O. Box 738  
Putney, VT 05346

**Owner:** Kelcie Janeen Loftin  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Betty O’Neill Newsom  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** Daniel J. O’Neill  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** O’Neill Family Trust, Betty Jane  
O’Neill, & Daniel J. O’Neill, Trustees  
**Address:** 696 San Ramon Valley Blvd.  
Danville, CA 94526

**Owner:** Sean T. O’Neill  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** Timothy R. O’Neill  
**Address:** 15025 Iona Lakes Dr.  
Fort Myers Beach, FL 33908

**ROAD AND/OR OTHER DISTURBANCE – Both owners have executed signed Agreements with Antero Resources Corporation. However, they were only notified if their tracts were overlying the oil and gas leasehold being developed by the proposed well work as outlined in WV Code 22-6A-10(b)(2).**

**TM 14 PCL 3.3**

**Owner:** Tracey C. & Stephanie C. Knight  
**Address:** P.O. Box 138  
Pullman, WV 26421

**TM 14 PCL 11.4 and 11.5 and 11.6**

**Owner:** Nathaniel Hendricks  
**Address:** P.O. Box 100  
Cragmoor, NY 12420

**TM 9 PCL 21**

**Owner:** Tracey C. & Stephanie C. Knight  
**Address:** P.O. Box 138  
Pullman, WV 26421

**Owner:** Nathaniel Hendricks (2<sup>nd</sup> Address)  
**Address:** P.O. Box 738  
Putney, VT 05346

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE CERTIFICATION**

Date of Notice Certification: 08/20/2015

API No. 47- 085 - \_\_\_\_\_  
Operator's Well No. Allstate Unit 1H  
Well Pad Name: Yolanda

**Notice has been given:**

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>510000m</u>
County: <u>Ritchie</u>	Northing: <u>4338478m</u>
District: <u>Union</u>	Public Road Access: <u>CR 9</u>
Quadrangle: <u>Pullman 7.5'</u>	Generally used farm name: <u>Williamson, Andrew, et al</u>
Watershed: <u>South Fork Hughes River</u>	

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 40px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p style="text-align: center;"><b>OOG OFFICE USE ONLY</b></p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p style="text-align: center;">Office of Oil and Gas AUG 24 2015</p>
--	--

**Required Attachments:**

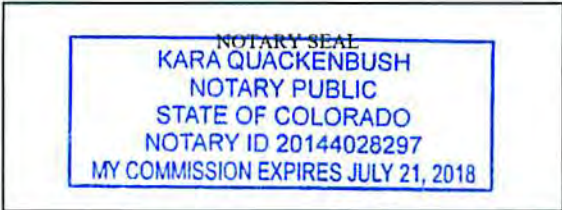
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

WV Department of  
Environmental Protection

**Certification of Notice is hereby given:**

THEREFORE, I Ward McNeilly, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:	<u>Antero Resources Corporation</u>	Address:	<u>1615 Wynkoop Street</u>
By:	<u>Ward McNeilly</u> <i>W. McNeilly</i>		<u>Denver, CO 80202</u>
Its:	<u>VP, Reserves Planning &amp; Midstream</u>	Facsimile:	<u>303-357-7315</u>
Telephone:	<u>303-357-7310</u>	Email:	<u>asteele@anteroresources.com</u>



Subscribed and sworn before me this 20 day of August 2015  
*Kara Quackenbush* Notary Public  
 My Commission Expires July 21, 2018

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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 Office of Oil and Gas  
 AUG 24 2015  
 WV Department of  
 Environmental Protection



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 8/21/2015 Date Permit Application Filed: 8/21/2015

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

4708510248

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

SURFACE OWNER(s)

Name: PLEASE SEE ATTACHMENT

Address: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)

\*PLEASE NOTE THE ADDITIONAL SURFACE TRACTS WITH DISTURBANCE SHOWN ON PAD DESIGN ARE **NOT** OVERLYING THE OIL & GAS LEASEHOLD BEING DEVELOPED BY THE PROPOSED WELL; THEREFORE, ARE NOT REQUIRED TO BE NOTIFIED PER WV CODE 22-6A-10. ANTERO HAS SECURED A SIGNED AGREEMENT WITH THE RELATED PARTIES

SURFACE OWNER(s) (Impoundments or Pits)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

COAL OWNER OR LESSEE

Name: NO DECLARATIONS ON RECORD WITH COUNTY

Address: \_\_\_\_\_

COAL OPERATOR

Name: NO DECLARATIONS ON RECORD WITH COUNTY

Address: \_\_\_\_\_

WATER PURVEYOR(s)/OWNER(s) OF WATER WELL, SPRING OR OTHER WATER SUPPLY SOURCE

Name: Yolanda & Andrew Williamson (2nd Address)

Address: 731 Four Mile Creek 7834 Four Mile Creek

Branchland, WV 25506 Branchland, WV 25506 location

\* 1 additional water well was identified but is located greater than 1500' from subject pad location

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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Office of Oil and Gas

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## WW-6A Notice of Application Attachment:

### Surface Owners:

**Owner:** Yolanda & Andrew Williamson ✓  
**Address:** 731 Four Mile Creek  
Branchland, WV 25506

**Owner:** Yolanda & Andrew Williamson ✓  
(2<sup>nd</sup> Address)  
**Address:** 7834 Four Mile Creek  
Branchland, WV 25506

**Owner:** Nancy Louise Antill ✓  
**Address:** 114 Melinda Dr.  
Wintersville, OH 43953

**Owner:** Mary Frances Harms ✓  
**Address:** 4368 Steuben Woods Dr.  
Steubenville, OH 43953

**Owner:** Kathleen R. Hooven ✓  
**Address:** 4 Amador  
Newport Beach, CA 92657

**Owner:** Karah Leigh Loftin ✓  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Kelcie Janeen Loftin ✓  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Daniel J. O'Neill ✓  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** Sean T. O'Neill ✓  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** Timothy R. O'Neill ✓  
**Address:** 15025 Iona Lakes Dr.  
Fort Myers Beach, FL 33908

**Owner:** Romarlo, LLC ✓  
**Address:** 757 SE 17<sup>th</sup> Street  
Fort Lauderdale, FL 33316

**Owner:** Romarlo, LLC (2<sup>nd</sup> Address) ✓  
**Address:** 93 Monroe Dr. NE  
A102-12  
Atlanta, GA 30308

**Owner:** Sharon S. (O'Neill) Stainken ✓  
**Address:** 696 San Ramon Valley Blvd, #510  
Danville, CA 94526

**Owner:** Sharon S. (O'Neill) Stainken ✓  
(2<sup>nd</sup> Address)  
**Address:** 1013 McCauley Rd #55  
Danville, CA 94526

**Owner:** Nathaniel Hendricks ✓  
**Address:** P. O. Box 100  
Cragmoor, NY 12420

**Owner:** Nathaniel Hendricks (2<sup>nd</sup> Address) ✓  
**Address:** P.O. Box 738  
Putney, VT 05346

**Owner:** Betty O'Neill Newsom ✓  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** O'Neill Family Trust, Betty Jane O'Neill ✓  
Trustee; Daniel J. O'Neill, Trustee  
**Address:** 696 San Ramon Valley Blvd.  
Danville, CA 94526

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WV Department of  
Environmental Protection

10/02/2015

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

**This Notice Shall Include:**

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wellhead, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

10/02/2015

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

**Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

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**Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

**Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

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Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

**Time Limits and Methods for Filing Comments.**

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

**Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

**Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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WW-6A  
(8-13)

API NO. 47-085 -  
OPERATOR WELL NO. Allstate Unit 1H  
Well Pad Name: Yolanda

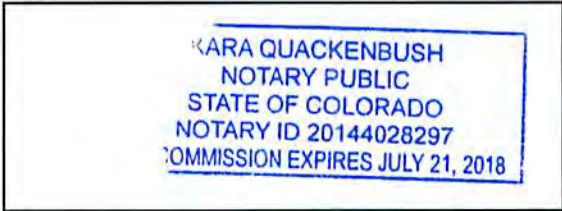
**Notice is hereby given by:**

Well Operator: Antero Resources Corporation  
Telephone: (303) 357-7310  
Email: [asteele@anteroresources.com](mailto:asteele@anteroresources.com)

Address: 1615 Wynkoop Street  
Denver, CO 80202  
Facsimile: 303-357-7315

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

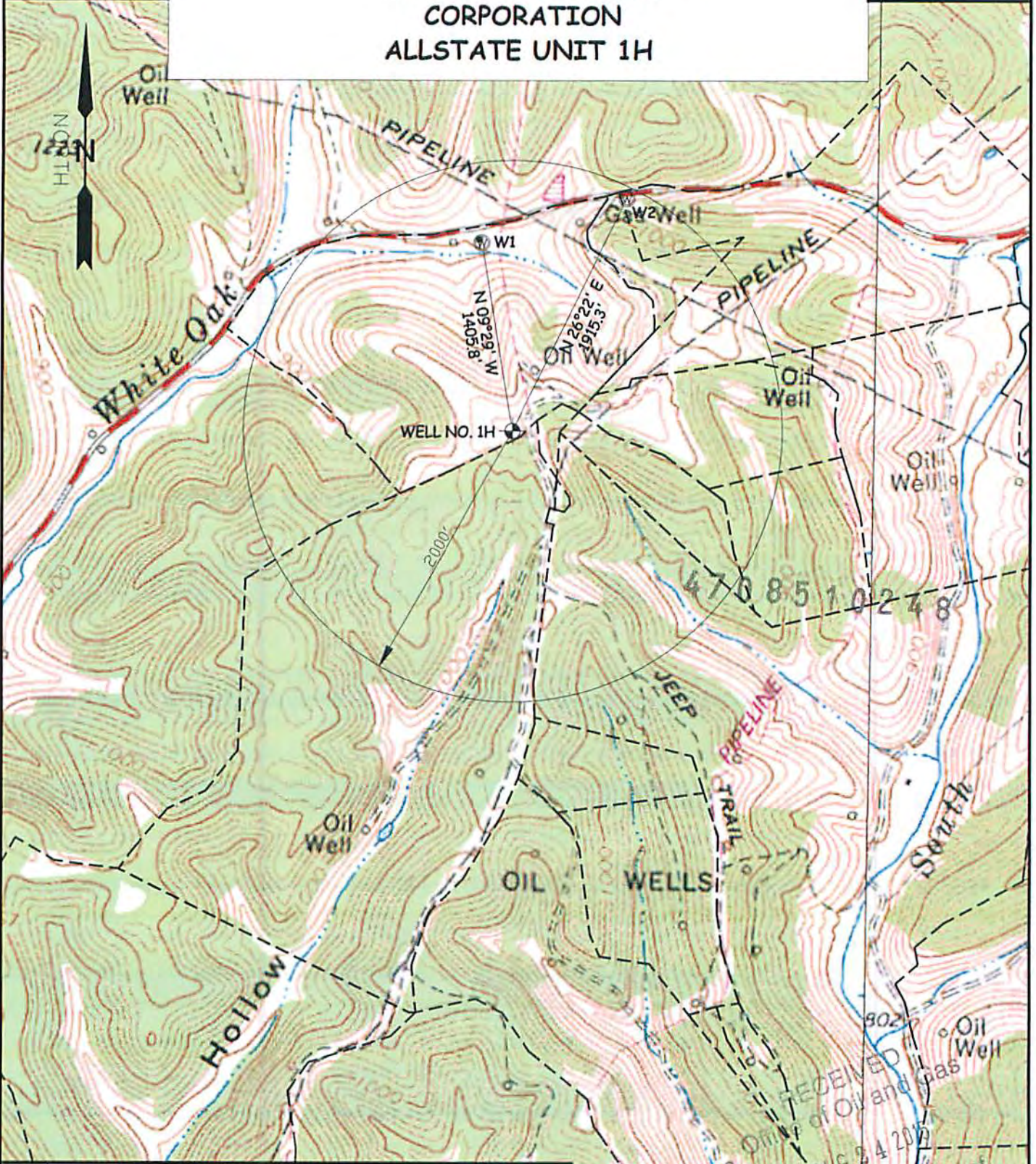


Subscribed and sworn before me this 21 day of AUGUST 2015  
Kara Quackenbush Notary Public  
My Commission Expires July 21, 2018

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WV Department of  
Environmental Protection

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# ANTERO RESOURCES CORPORATION ALLSTATE UNIT 1H



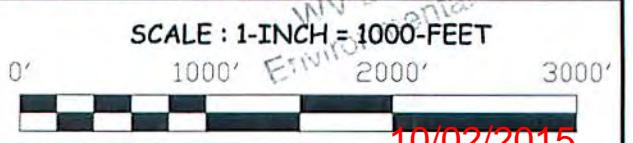
WELL	SURFACE OWNER	ADDRESS
W1	YOLANDA & ANDREW WILLIAMSON	731 FOUR MILE CREEK, BRANCHLAND, WV 25506
W2	TRACY KNIGHT	P.O. BOX 138, PULLMAN, WV 26421

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

TOPO SECTION(S) OF :  
  
 PULLMAN 7.5' QUAD  
 OXFORD 7.5' QUAD

DATE: 02/15/11

DRAWN BY: DRR



10/02/2015

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF INTENT TO DRILL**

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

**Notice Time Requirement:** Notice shall be provided at least TEN (10) days prior to filing a permit application.  
**Date of Notice:** 08/12/2015      **Date Permit Application Filed:** 08/21/2015

**Delivery method pursuant to West Virginia Code § 22-6A-16(b)**

HAND DELIVERY       CERTIFIED MAIL RETURN RECEIPT REQUESTED

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Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

**Notice is hereby provided to the SURFACE OWNER(s):**

Name: SEE ATTACHED LIST      Name: \_\_\_\_\_  
Address: \_\_\_\_\_      Address: \_\_\_\_\_

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>510000m</u>
County: <u>Ritchie</u>		Northing: <u>4338478m</u>
District: <u>Union</u>	Public Road Access: <u>CR 9</u>	
Quadrangle: <u>Pullman 7.5'</u>	Generally used farm name: <u>Williamson, Andrew, et al</u>	
Watershed: <u>South Fork Hughes River</u>		

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: Antero Resources Appalachian Corporation  
Address: 1615 Wynkoop Street  
Denver, CO 80202  
Telephone: 303-357-7310  
Email: asteele@anteroresources.com  
Facsimile: 303-357-7315

Authorized Representative: Ashlie Steele  
Address: 1615 Wynkoop Street  
Denver, CO 80202  
Telephone: 303-357-7310  
Email: asteele@anteroresources.com  
Facsimile: 303-357-7315

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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WV Department of  
Environmental Protection

10/02/2015



## WW-6A4 Notice of Intent to Drill Attachment:

### Surface Owners:

**Owner:** Yolanda & Andrew Williamson  
**Address:** 731 Four Mile Creek  
Branchland, WV 25506

**Owner:** Nancy Louise Antill  
**Address:** 114 Melinda Dr.  
Wintersville, OH 43953

**Owner:** Mary Frances Harms  
**Address:** 4368 Steuben Woods Dr.  
Steubenville, OH 43953

**Owner:** Kathleen R. Hooven  
**Address:** 4 Amador  
Newport Beach, CA 92657

**Owner:** Karah Leigh Loftin  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Kelcie Janeen Loftin  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Daniel J. O'Neill  
**Address:** 30640 Rapids Hollow Rd.  
Gravois Mills, MO 65037

**Owner:** Sean T. O'Neill  
**Address:** 30640 Rapids Hollow Rd.  
Gravois Mills, MO 65037

**Owner:** Timothy R. O'Neill  
**Address:** 15025 Iona Lakes Drive  
Fort Myers, FL 33908

**Owner:** Romarlo, LLC  
**Address:** 757 SE 17<sup>th</sup> Street  
Fort Lauderdale, FL 33316

**Owner:** Sharon S. O'Neill  
**Address:** 696 San Ramon Valley Blvd, #510  
Danville, CA 94526

**Owner:** Betty O'Neill Newsom  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** Sharon S. O'Neill (second address)  
**Address:** 1013 McCauley Rd  
Danville, CA 94526

**Owner:** O'Neill Family Trust, Betty Jane O'Neill  
Trustee; Daniel J. O'Neill, Trustee  
**Address:** 696 San Ramon Valley Blvd.  
Danville, CA 94526

**Owner:** Nathaniel Hendricks  
**Address:** PO Box 100  
Cragmoor, NY 12420

**Owner:** Nathaniel Hendricks (second address)  
**Address:** PO Box 738  
Putney, VT 05346

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**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF PLANNED OPERATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**  
**Date of Notice:** 08/21/2015      **Date Permit Application Filed:** 08/21/2015

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL                                       HAND  
RETURN RECEIPT REQUESTED                                      DELIVERY

4708510248

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

**Notice is hereby provided to the SURFACE OWNER(s)**  
(at the address listed in the records of the sheriff at the time of notice):

Name: PLEASE SEE ATTACHMENT                                      Name: \_\_\_\_\_  
Address: \_\_\_\_\_    Address: \_\_\_\_\_

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Eastings:	<u>510000m</u>
County:	<u>Ritchie</u>		Northing:	<u>4338478m</u>
District:	<u>Union</u>	Public Road Access:		<u>CR 9</u>
Quadrangle:	<u>Pullman 7.5'</u>	Generally used farm name:		<u>Williamson, Andrew, et al</u>
Watershed:	<u>South Fork Hughes River</u>			

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator:	<u>Antero Resources Corporation</u>	Address:	<u>1615 Wynkoop Street</u>
Telephone:	<u>(303) 357-7310</u>		<u>Denver, CO 80202</u>
Email:	<u>asteele@anteroresources.com</u>	Facsimile:	<u>303-357-7315</u>

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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Office of Oil and Gas

AUG 24 2015

WV Department of  
Environmental Protection

10/02/2015

# WW-6A5 Notice of Planned Operation Attachment:

## Surface Owners:

**Owner:** Yolanda & Andrew Williamson ✓  
**Address:** 731 Four Mile Creek  
Branchland, WV 25506

**Owner:** Yolanda & Andrew Williamson ✓  
(2<sup>nd</sup> Address)  
**Address:** 7834 Four Mile Creek  
Branchland, WV 25506

**Owner:** Nancy Louise Antill ✓  
**Address:** 114 Melinda Dr.  
Wintersville, OH 43953

**Owner:** Mary Frances Harms ✓  
**Address:** 4368 Steuben Woods Dr.  
Steubenville, OH 43953

**Owner:** Kathleen R. Hooven ✓  
**Address:** 4 Amador  
Newport Beach, CA 92657

**Owner:** Karah Leigh Loftin ✓  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Kelcie Janeen Loftin ✓  
**Address:** 226 Surrey Ct.  
O Fallon, MO 63366

**Owner:** Daniel J. O'Neill ✓  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** Sean T. O'Neill ✓  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** Timothy R. O'Neill ✓  
**Address:** 15025 Iona Lakes Dr.  
Fort Myers Beach, FL 33908

**Owner:** Romarlo, LLC ✓  
**Address:** 757 SE 17<sup>th</sup> Street  
Fort Lauderdale, FL 33316

**Owner:** Romarlo, LLC (2<sup>nd</sup> Address) ✓  
**Address:** 93 Monroe Dr. NE  
A102-12  
Atlanta, GA 30308

**Owner:** Sharon S. (O'Neill) Stainken ✓  
**Address:** 696 San Ramon Valley Blvd, #510  
Danville, CA 94526

**Owner:** Sharon S. (O'Neill) Stainken ✓  
(2<sup>nd</sup> Address)  
**Address:** 1013 McCauley Rd #55  
Danville, CA 94526

**Owner:** Nathaniel Hendricks ✓  
**Address:** P. O. Box 100  
Cragmoor, NY 12420

**Owner:** Nathaniel Hendricks (2<sup>nd</sup> Address) ✓  
**Address:** P.O. Box 738  
Putney, VT 05346

**Owner:** Betty O'Neill Newsom ✓  
**Address:** 30640 Rapids Hollow  
Gravois Mills, MO 65037

**Owner:** O'Neill Family Trust, Betty Jane O'Neill ✓  
Trustee; Daniel J. O'Neill, Trustee  
**Address:** 696 San Ramon Valley Blvd.  
Danville, CA 94526

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WV Department of  
Environmental Protection

10/02/2015



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways**

1900 Kanawha Boulevard East • Building Five • Room 110  
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin  
Governor

Paul A. Mattox, Jr., P. E.  
Secretary of Transportation/  
Commissioner of Highways

August 12, 2015

James A. Martin, Chief  
Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

Subject: DOH Permit for the Yolanda Pad, Ritchie County  
Allstate Unit 1H Well Site

4708510248

Dear Mr. Martin,

This well site will be accessed from a DOH permit #03-2012-0240 which has been issued to Antero Resources Corporation for access to the State Road for a well site located off of Ritchie County Route 7 SLS.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.  
Regional Maintenance Engineer  
Central Office O&G Coordinator

Cc: Ashlie Steele  
Antero Resources Corporation  
CH, OM, D-3  
File

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Environmental Protection  
10/02/2015

## List of Anticipated Additives Used for Fracturing or Stimulating Well

Additives	Chemical Abstract Service Number (CAS #)
Fresh Water	7732-18-5
2 Phosphobutane 1,2,4 tricarboxylic acid	37971-36-1
Ammonium Persulfate	7727-54-0
Anionic copolymer	proprietary
Anionic polymer	proprietary
BTEX Free Hydrotreated Heavy Naphtha	64742-48-9
Cellulase enzyme	(Proprietary)
Demulsifier Base	(Proprietary)
Ethoxylated alcohol blend	Mixture
Ethoxylated Nonylphenol	68412-54-4
Ethoxylated oleylamine	26635-93-8
Ethylene Glycol	107-21-1
Glycol Ethers	111-76-2
guar gum	9000-30-0
Hydrogen Chloride	7647-01-0
Hydrotreated light distillates, non-aromatic, BTEX free	64742-47-8
Isopropyl alcohol	67-63-0
liquid, 2,2-dibromo-3-nitropropionamide	10222-01-2
Microparticle	proprietary
Petroleum Distillates (BTEX Below Detect)	64742-47-8
Polyacrylamide	57-55-6
Propargyl Alcohol	107-19-7
Propylene Glycol	57-55-6
Quartz	14808-60-7
Silica, crystalline quartz	7631-86-9
Sodium Chloride	7647-14-5
Sodium Hydroxide	1310-73-2
Sugar	57-50-1
Surfactant	68439-51-0
Suspending agent (solid)	14808-60-7
Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7

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AUG 24 2015  
WV Department of  
Environmental Protection  
10/02/2015



# ANTERO RESOURCES YOLANDA SITE AS-BUILT

UNION DISTRICT, RITCHIE COUNTY, WEST VIRGINIA  
FULLMAN 7.5 MINUTE QUAD MAP

**WVDEP OOG  
ACCEPTED AS-BUILT**  
*Hoff* 9/29/2015



**Kelly S**urveying  
P.O. Box 354  
Daleys, WV 26239  
304.338.4983

**GENERAL DESCRIPTION**  
AS-BUILT OF THE YOLANDA SITE

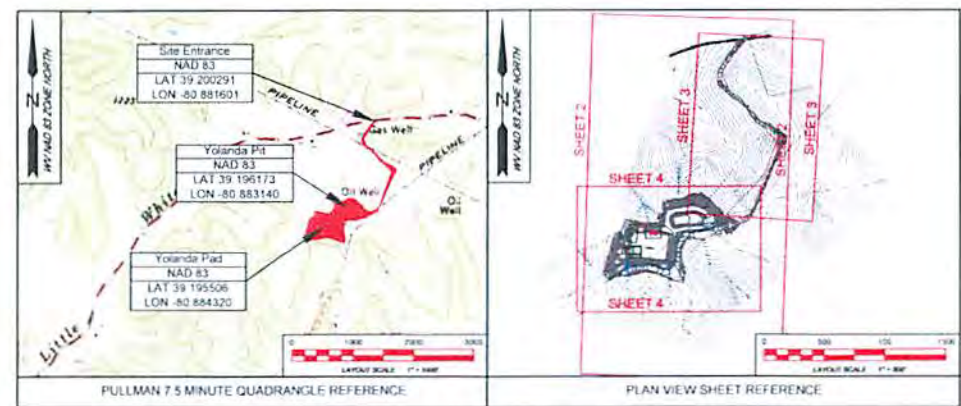
**PROJECT CONTACTS**

**OPERATOR**  
ANTERO RESOURCES CORPORATION  
535 WHITE OAKS BLVD  
BRIDGEPORT WV 26330  
PHONE: (304) 842-4100  
FAX: (304) 842-4102  
www.anteroresources.com

**PROJECT COORDINATOR**  
ROBERT WINKS  
535 WHITE OAKS BLVD  
BRIDGEPORT WV 26330  
PHONE: (304) 842-4100  
CELL: (304) 627-7425  
FAX: (304) 842-4102  
EMAIL: rtwink@anteroresources.com

**CONSTRUCTION COORDINATOR**  
SHAWN BEENE ET  
535 WHITE OAKS BLVD  
BRIDGEPORT WV 26330  
PHONE: (304) 842-4100  
CELL: (304) 641-0071  
FAX: (304) 842-4102  
EMAIL: sbeene@anteroresources.com

API# 8509960  
API# 8509961  
API# 8509964  
API# 8509966  
API# 8509967  
API# 8510017  
API# 8510019  
API# 8510248



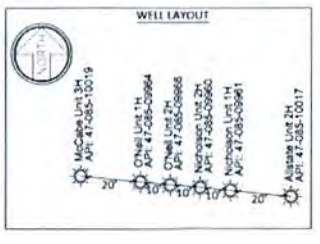
**ENGINEER / SURVEYOR**  
KELLY SURVEYING PLLC  
P.O. BOX 354  
DALEYS, WV 26239  
PHONE: (304) 338-6985  
FAX: (304) 304-338-6981

**PROJECT MANAGER**  
JOHN P. SEE PE 6051  
KENNETH KELLY P.S.S. 973  
JACK SUMMERFIELD EIT

**ENVIRONMENTAL**  
WETLAND DELINEATIONS AS PROVIDED BY PETER STA DATED MAY 30, 2012

**TOPOGRAPHIC INFORMATION**  
THE TOPOGRAPHIC INFORMATION SHOWN HEREIN IS BASED ON AERIAL PHOTOGRAPHY BY BLUE MOUNTAIN AERIAL MAPPING, BURTON, WV

McCabe East III	O'Neil East I II	O'Neil East III
WW N NAD 83 N: 256347.33	WW N NAD 83 N: 256340.57	WW N NAD 83 N: 256344.99
WW N NAD 83 E: 1576154.83	WW N NAD 83 E: 1576174.45	WW N NAD 83 E: 1576184.46
WW N NAD 27 N: 256312.75	WW N NAD 27 N: 256311.99	WW N NAD 27 N: 256310.41
WW N NAD 27 E: 1607599.78	WW N NAD 27 E: 1607615.79	WW N NAD 27 E: 1607625.50
Lgt: NAD 83: 29 195511	Lgt: NAD 83: 39 195059	Lgt: NAD 83: 39 195055
Lgt: NAD 27: 80 884408	Lgt: NAD 83: 80 884303	Lgt: NAD 27: 39 195422
Lgt: NAD 27: 39 195427	Lgt: NAD 27: 39 195426	Lgt: NAD 27: 80 884474
Lgt: NAD 27: 80 884439	Lgt: NAD 27: 80 884959	Lgt: NAD 83: 80 884303
UTM 17 NAD 83 N: 4338479.32	UTM 17 NAD 83 N: 4338479.19	UTM 17 NAD 83 N: 4338476.70
UTM 17 NAD 83 E: 509991.75	UTM 17 NAD 83 E: 509991.73	UTM 17 NAD 83 E: 509990.81
Elevation: 1141.69	Elevation: 1142.14	Elevation: 1142.14
Nicholson East III	Nicholson East III	Albatraz East III
WW N NAD 83 N: 256184.21	WW N NAD 83 N: 256182.01	WW N NAD 83 N: 256340.99
WW N NAD 83 E: 1576194.21	WW N NAD 83 E: 1576204.11	WW N NAD 83 E: 1576224.82
WW N NAD 27 N: 256310.12	WW N NAD 27 N: 256308.03	WW N NAD 27 N: 256306.11
WW N NAD 27 E: 1607635.15	WW N NAD 27 E: 1607645.05	WW N NAD 27 E: 1607655.06
Lgt: NAD 83: 39 195425	Lgt: NAD 83: 39 195420	Lgt: NAD 83: 39 195425
Lgt: NAD 83: 80 884409	Lgt: NAD 83: 80 884233	Lgt: NAD 83: 80 884451
Lgt: NAD 27: 39 195422	Lgt: NAD 27: 39 195416	Lgt: NAD 27: 39 195412
Lgt: NAD 27: 80 884440	Lgt: NAD 27: 80 884409	Lgt: NAD 27: 80 884332
UTM 17 NAD 83 N: 4338478.12	UTM 17 NAD 83 N: 4338478.14	UTM 17 NAD 83 N: 4338477.96
UTM 17 NAD 83 E: 509993.74	UTM 17 NAD 83 E: 509993.78	UTM 17 NAD 83 E: 510003.07
Elevation: 1141.92	Elevation: 1142.13	Elevation: 1142.54



NO	INDEX TO SHEETS
1	COVER
2	OVERALL PLAN VIEW
3	ACCESS ROAD PLAN VIEW
4	WELL PAD AND PIT PLAN VIEW
5	WELL PAD CROSS SECTIONS
6	TRUCK PIT CROSS SECTIONS
7	ACCESS ROAD CROSS SECTIONS
8	ACCESS ROAD PROFILES
9-10	WELL PAD PRODUCTION AS-BUILT DISTURBED AREA
11	DECLARATION PLAN
12	

Floodplain Conditions	
Do site construction activities take place in a floodplain	NO
Permit needed from county floodplain coordinator	NO
Flood Hazard Zone	X
H.E.C. HAS Study completed	N/A
Floodplain shown on drawings	N/A
FIRM Map Number(s) for site	54045C022C
Acres of construction in Floodplain	N/A

As-Built Certification

This as-built survey is an accurate representation of the topography and site features based on a field survey conducted on site with a Topcon GIP-3 Survey Grade GPS. This certification does not certify the methods or materials to reach the configuration as depicted.

Kenneth Kelly P.S. 973  
Kelly Surveying PLLC

Date: 9/23/15

MADE IN FULLY BY WEST VIRGINIA 1.800.241.4444

**811**  
Know what's below. Call before you dig.

REVISIONS

NO.	DATE	DESCRIPTION

**Antero**

THIS DRAWING PREPARED FOR ANTERO RESOURCES CORPORATION.

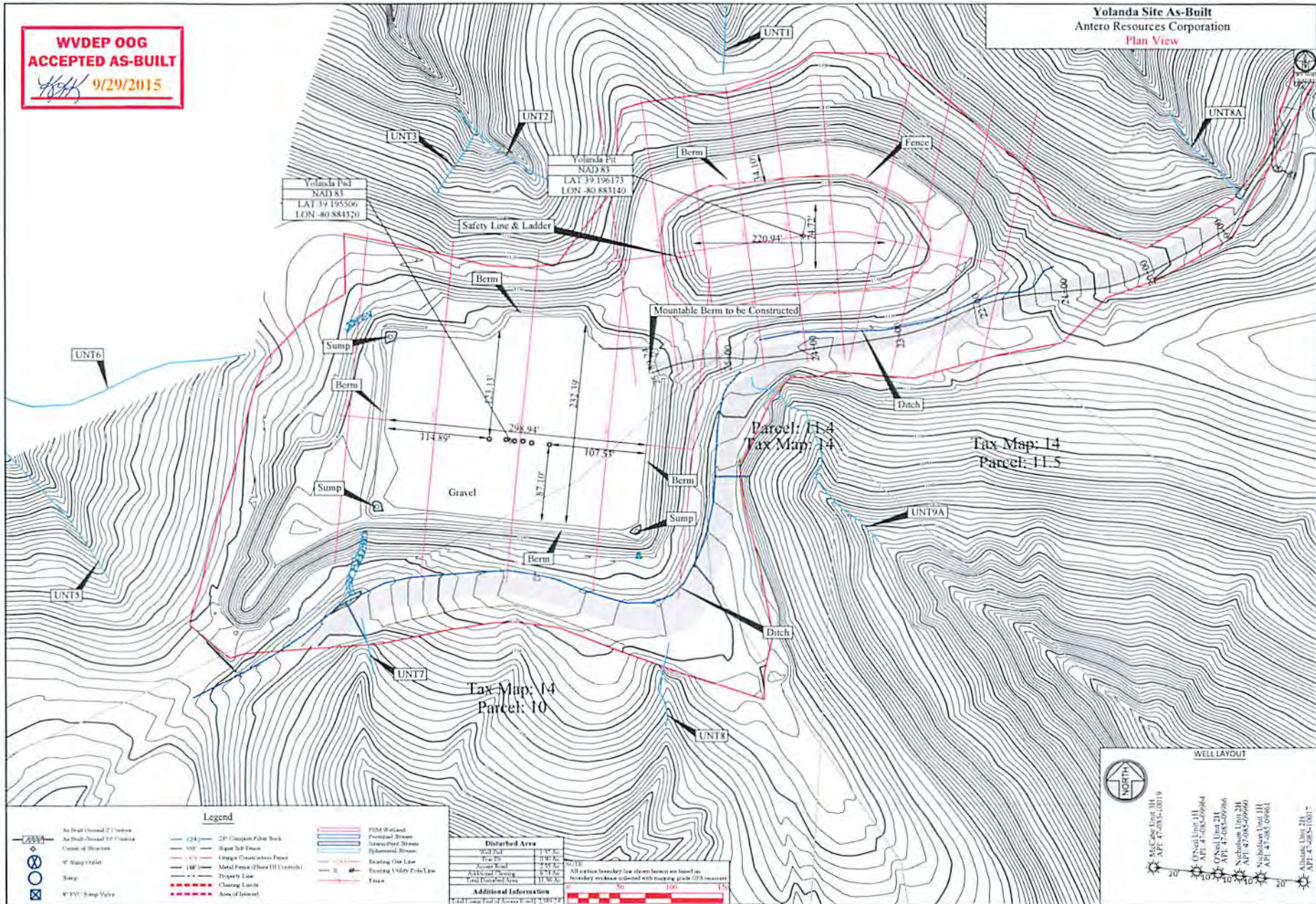
COVER SHEET  
YOLANDA IMPOUNDMENT AS-BUILT  
UNION DISTRICT, RITCHIE COUNTY, WEST VIRGINIA

Date: 09/22/2015  
Scale: AS NOTED  
Drawn by: J.S.  
Checked by:  
Title: 1 of 1

**WVDEP OOG  
ACCEPTED AS-BUILT**

*WJK*  
9/29/2015

**Yolanda Site As-Built**  
Antero Resources Corporation  
Plan View



Yolanda Pad  
NAJ81  
LAT 39.195506  
LON -80.884120

Yolanda Pit  
NAJ81  
LAT 39.196173  
LON -80.881140

Tax Map: 14  
Parcel: 10

Parcel: 11.4  
Tax Map: 14

Tax Map: 14  
Parcel: 11.5

**Legend**

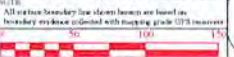
- |  |                           |  |                                 |  |                           |
|--|---------------------------|--|---------------------------------|--|---------------------------|
|  | 48 inch diameter 2' pipe  |  | 24 inch 20' compact filter back |  | PDM Wellhead              |
|  | 36 inch diameter 10' pipe |  | 30 inch 20' compact filter back |  | Potential Stream          |
|  | 30 inch diameter 10' pipe |  | 24 inch 20' compact filter back |  | Intermittent Stream       |
|  | 24 inch diameter 10' pipe |  | Orange Construction Fence       |  | Fluvial Stream            |
|  | 18 inch diameter 10' pipe |  | Metal Fence (Three (3) strands) |  | Boundary Line             |
|  | Sump                      |  | Property Line                   |  | Existing Utility Pole-10' |
|  | Sump Valve                |  | Clearing Limits                 |  | Fence                     |
|  | 12 inch diameter 10' pipe |  | Area of Impact                  |  |                           |

**Disturbed Area**

W2 Well	1.0' x 1.0'
Pit	1.0' x 1.0'
Access Road	2.0' x 1.0'
24 inch 20' Compact Filter Back	6.0' x 1.0'
30 inch 20' Compact Filter Back	12.0' x 1.0'
36 inch 20' Compact Filter Back	18.0' x 1.0'
48 inch 20' Compact Filter Back	24.0' x 1.0'

**Additional Information**

1:42.1 Scale of Area Only 1:1000 Scale



**WELL LAYOUT**

Map Scale: As Shown  
 APT: 4-2015-0019

UNT1 Unit 1H  
 APT: 4-2015-09964  
 UNT2 Unit 2H  
 APT: 4-2015-09966  
 UNT3 Unit 3H  
 APT: 4-2015-09966  
 UNT6 Unit 6H  
 APT: 4-2015-09966  
 UNT7 Unit 7H  
 APT: 4-2015-09966  
 UNT8 Unit 8H  
 APT: 4-2015-09966  
 UNT9A Unit 9A  
 APT: 4-2015-11017

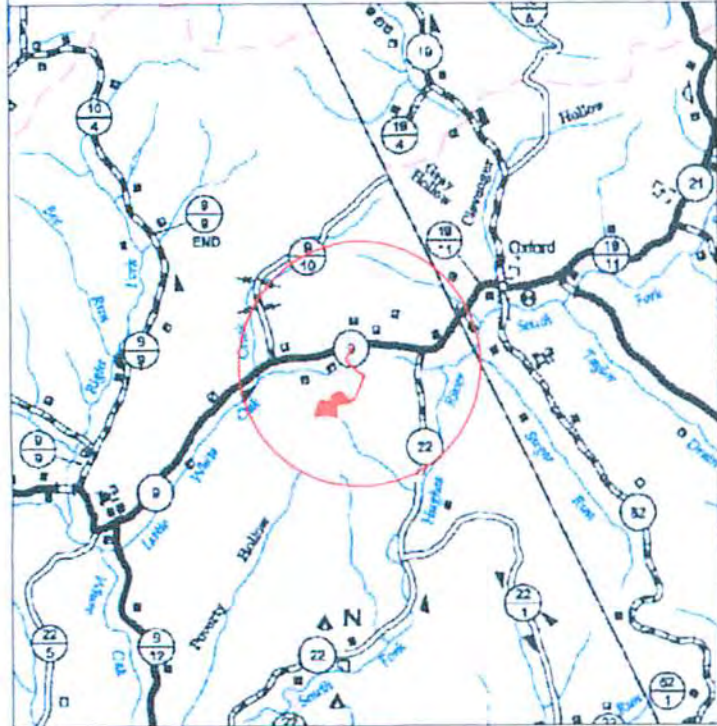
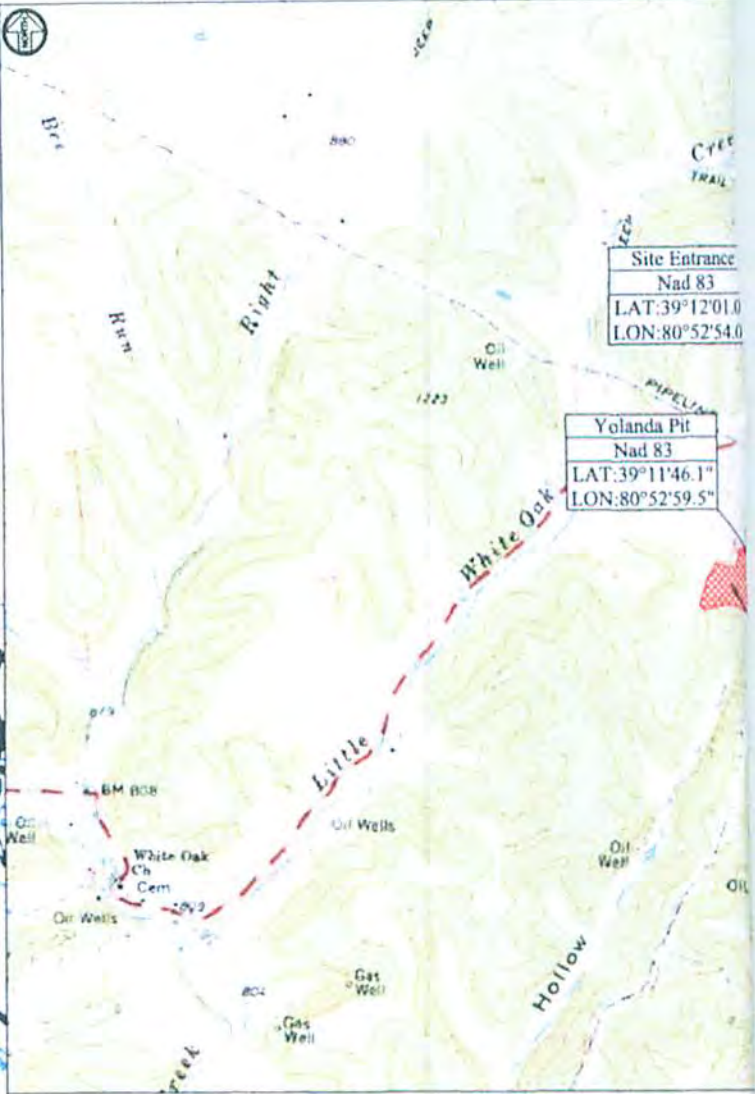
Date: 09/29/2015  
 Title: As Shown  
 Created by: JJK  
 Scale: 1"=50'  
 Sheet 1 of 11



THIS DOCUMENT  
PREPARED FOR  
ANTERO RESOURCES  
CORPORATION



**Yolanda Site As-Built**  
Upper District,  
Randall County, WV



Location Map  
Scale: 1" = 1 Mile  
USGS 7.5' Quadrangle: Pullman  
Watershed: South Fork Hughes River

**Yolanda Pad Site A**  
**Construction Plan**  
**Erosion and Sediment C**  
**Ritchie Count**  
**Union Distric**  
**Latitude 39°11'**  
**Longitude 80°53'**



**MISS UTILITY OF WEST VIRGINIA**  
 1-800-245-4848  
 West Virginia State Law  
 (Section XIV Chapter 24-C requires that you call two business days before you dig in the state of West Virginia)  
**IT'S THE LAW**

**Kelly Surveying**  
 P.O. Box 254  
 Dalley, WV 26259  
 (304)338-6985

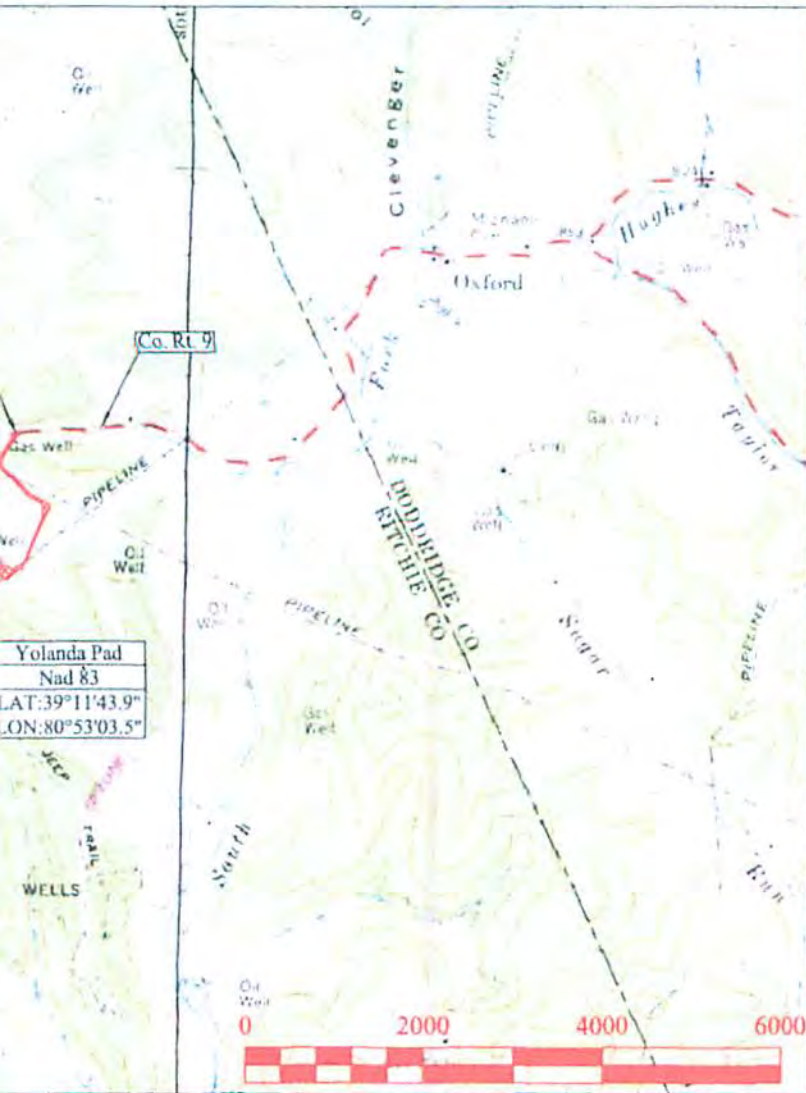
District: Union  
 County: Ritchie  
 State: West Virginia

John Kawcak  
 Mobile: (817) 368-1553  
 Email: jkawcak@anteroresources.com

Dusty Woods  
 Mobile: (817) 368-1553

10/02/2015





Project Site	Sheet 1 of 20	
Yolanda Pad Site As-Built		
District	County	State
Union	Ritchie	W.V.

WV Lands Inquiry Approval Date: 10/13/11  
 WV State Historic Preservation Office Approval Date: 10/27/11  
 This Pad is not in a flood zone as scaled from  
 FIRM Insurance Rate Map  
 Community Panel No.: 54085C 0225C

Gas Wells
McCabe Unit 3H
McCabe Unit 2H
O'Neil Unit 1H
O'Neil Unit 2H
Nicholson Unit 2H
Nicholson Unit 1H
Allstate Unit 1H
Allstate Unit 2H

Sheet	Description
1	Cover
2-3	Specifications
4-5	Erosion and Sediment Control
6-7	Plan View
8-9	E & S Plan View
10-11	Pad Cross Sections & Profile
12-14	Pit Cross Sections & Profile
15-16	Access Road Cross Sections
17-18	Access Road Profile
19-20	Disturbed Area

Date:	Note:
Aug. 10, 2012	As-Built
Oct. 29, 2012	As-Built (Well Update)

# As-Built and Erosion and Sediment Control Plan

4708510248



As-Built Certification  
 This as-built survey is an accurate representation of the topography and site features based on a field survey conducted on site with a Topcon GR-3 Survey Grade GPS. This certification does not certify the methods or materials to reach the configuration as depicted.  
 Kenneth Kelly P.S. 973  
 Kelly Surveying PLLC  
 Date: 11/16/12

**Antero Resources Contact Information**

Eli Wagoner  
 771-1436  
 Work: (304) 622-3842  
 Mobile: (304) 476-9770  
 Email: ewagoner@anteroresources.com

Tom Winice  
 Work: (304) 869-3405  
 Mobile: (304) 483-0933  
 Email: twince@anteroresources.com

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 Office of Oil and Gas



Environmental Dept  
 10/02/2015  
 8-26-15