

Commercial/Industrial Floodplain Development Permit

Doddridge County, WV Floodplain Management

This permit has been issued to **Antero Resources**, and is for the approved commercial and/or industrial development project associated with this permit that impacts the FEMA-designated floodplain and/or floodway of Doddridge County, WV, pursuant to the rules and regulations established by all applicable Federal, State and local laws and ordinances, including the Doddridge County Floodplain Ordinance. This permit must be posted at the site of work as to be clearly visible, and must remain posted during entirety of development.

Permit: #14-278 ~ Antero Resources ~ Hardwood Well Pad

Date Approved: 09/16/2014

Expires: N/A

Issued to: Antero Resources

**POC: Emily Kijowski
303-357-7310**

**Company Address: 1615 Wynkoop Street
Denver, CO 80202**

**Project Address: West Union District
Lat/Long: 39.249794N/80.659188W**

Purpose of development: Well Pad construction. *Project does not impact floodplain.*

Issued by: Edwin L. 'Bo' Wriston, Doddridge County FPM (or designee)

Date: 09/16/2014

For additional information regarding this permit, please contact
Doddridge County Floodplain Manager at 304.873.2631, or via email at
doddridgecountyfpm@gmail.com
118 East Court Street; West Union, WV 26456

Legal Advertisement:
Doddridge County
Floodplain Permit Application

Please take notice that on the 11th day of September, 2014

Antero Resources

filed an application for a Floodplain Permit to develop land located at or about:

West Union District

39.249794N/80.659188W

Permit #14-278 Hardwood Well Pad

(Note: This project is not within the floodplain)

The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. As this project is outside the FEMA identified floodplain of Doddridge County, Doddridge County Floodplain Management has no regulatory authority.

Any interested persons who desire to comment shall present the same in writing by **October 6, 2014**, delivered to:

Clerk of the County Court

118 E. Court Street, West Union, WV 26456

Beth A Rogers, Doddridge County Clerk

Edwin L. "Bo" Wriston, Doddridge County Flood Plain Manager

#14-278

FILED

2014 SEP 11 PM 12: 58



September 5, 2014

LETH A. ROGERS
COUNTY CLERK
DODDRIDGE COUNTY, WV

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

Doddridge County Commission
Attn: Bo Wriston, Doddridge County Floodplain Manager
118 East Court Street, Room 102
West Union, WV 26456

Mr. Wriston:

Antero Resources Appalachian Corporation (Antero) would like to submit a Doddridge County Floodplain permit application for our Hardwood Well Pad. Our project is located in Doddridge County, West Union District and per FIRM maps #54017C0145C and #54017C0235C this location is **not** within the floodplain.

Attached you will find the following:

- Doddridge County Floodplain Permit Application
- Hardwood Construction Plans
- FIRM Map
- WV Flood Tool Map

If you have any questions please feel free to contact me at (303) 357-7232.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Emily Kijowski".

Emily Kijowski
Permit Representative
Antero Resources Appalachian Corporation

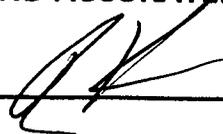
Enclosures

DODDRIDGE COUNTY FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

SECTION 1: GENERAL PROVISIONS (APPLICANT TO READ AND SIGN)

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state, and federal requirements.
7. Applicant hereby gives consent to the Floodplain Administrator/Manager or his/her representative to make inspections to verify compliance.
8. **I, THE APPLICANT CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.**

APPLICANT'S SIGNATURE _____



DATE September 5, 2014

SECTION 2: PROPOSE DEVELOPMENT (TO BE COMPLETED BY APPLICANT).

IF THE APPLICANT IS NOT A NATURAL PERSON, THE NAME, ADDRESS, AND TELEPHONE NUMBER OF A NATURAL PERSON WHO SHALL BE APPOINTED BY THE APPLICANT TO RECEIVE NOTICE PURSUANT TO ANY PROVISION OF THE CURRENT DODDRIDGE COUNTY FLOODPLAIN ORDINANCE.

APPLICANT'S NAME: Antero Midstream LLC - Randy Kloberdanz,

ADDRESS: 1615 Wynkoop Street, Denver, CO 80202

TELEPHONE NUMBER: Contact Emily Kijowski: (303)-357-7232

BUILDER'S NAME: Antero Midstream LLC
ADDRESS: 1615 Wynkoop Strett, Denver, CO 80202
TELEPHONE NUMBER: (303)-357-7310

ENGINEER'S NAME: Kelly Surveying
ADDRESS: P.O. Box 254, Dailey, WV 26259
TELEPHONE NUMBER: (304) 338-6985

PROJECT LOCATION:

NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Please see Surface Owner Table
ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Please see Surface Owner Table

DISTRICT: _____

DATE/FROM WHOM PROPERTY

PURCHASED: _____

LAND BOOK DESCRIPTION: Please see Surface Owner Table

DEED BOOK REFERENCE: Please see Surface Owner Table

TAX MAP REFERENCE: Please see Surface Owner Table

EXISTING BUILDINGS/USES OF PROPERTY: None

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY Please see Surface Owner Table

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY Please see Surface Owner Table

To avoid delay in processing the application, please provide enough information to easily identify the project location.

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

ACTIVITY

STRUCTURAL TYPE

- | | | | |
|-------------------------------------|-------------------------|--------------------------|----------------------------------|
| <input checked="" type="checkbox"/> | New Structure | <input type="checkbox"/> | Residential (1 – 4 Family) |
| <input type="checkbox"/> | Addition | <input type="checkbox"/> | Residential (more than 4 Family) |
| <input type="checkbox"/> | Alteration | <input type="checkbox"/> | Non-residential (floodproofing) |
| <input type="checkbox"/> | Relocation | <input type="checkbox"/> | Combined Use (res. & com.) |
| <input type="checkbox"/> | Demolition | <input type="checkbox"/> | Replacement |
| <input type="checkbox"/> | Manufactured/Mobil Home | | |

B. OTHER DEVELOPMENT ACTIVITIES:

- | | | | | | | | |
|--------------------------|------|--------------------------|--------|--------------------------|----------|--------------------------|------------|
| <input type="checkbox"/> | Fill | <input type="checkbox"/> | Mining | <input type="checkbox"/> | Drilling | <input type="checkbox"/> | Pipelining |
|--------------------------|------|--------------------------|--------|--------------------------|----------|--------------------------|------------|
- Grading
- Excavation (except for STRUCTURAL DEVELOPMENT checked above)
- Watercourse Altercation (including dredging and channel modification)
- Drainage Improvements (including culvert work)
- Road, Street, or Bridge Construction
- Subdivision (including new expansion)
- Individual Water or Sewer System
- Other (please specify)
-

C. STANDARD SITE PLAN OR SKETCH

1. SUBMIT ALL STANDARD SITE PLANS, IF ANY HAVE BEEN PREPARED.
2. IF STANDARD SITE PLANS HAVE NOT BEEN PREPARED:
SKETCH ON A SEPARATE 8 ½ X 11 INCH SHEET OF PAPER THE SHAPE AND LOCATION OF THE LOT. SHOW THE LOCATION OF THE INTENDED CONSTRUCTION OR LAND USE INDICATING BUILDING SETBACKS, SIZE & HEIGHT. IDENTIFY EXISTING BUILDINGS, STRUCTURES OR LAND USES ON THE PROPERTY.
3. SIGN AND DATE THE SKETCH.

ACTUAL TOTAL CONSTRUCTION COSTS OF THE COMPLETE DEVELOPMENT IRRESPECTIVE OF WHETHER ALL OR ANY PART OF THE SUBJECT PROPOSED CONSTRUCTION PROJECT IS WITHIN THE FLOODPLAIN \$ N/A - Location is not within the floodplain

D. ADJACENT AND/OR AFFECTED LANDOWNERS:

1. NAME AND ADDRESS OF ALL OWNERS OF SURFACE TRACTS ADJACENT TO THE AREA OF THE SURFACE TRACT (UP & DOWN STREAM) UPON WHICH THE PROPOSED ACTIVITY WILL OCCUR AND ALL OTHER SURFACE OWNERS UP & DOWN STREAM) WHO OWN PROPERTY THAT MAY BE AFFECTED BY FLOODING AS IS DEMONSTRATED BY A FLOODPLAIN STUDY OR SURVEY (IF ONE HAS BEEN COMPLETED).

NAME: N/A-No properties sharing an
ADDRESS: immediate and common boundary
up or down stream due to the
location not being in floodplain

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

1. NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON ANY ADJACENT PROPERTY AT THE TIME THE FLOODPLAIN PERMIT APPLICATION IS FILED AND THE NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN ANY HOME ON ANY PROPERTY THAT MAY BE AFFECTED BY FLOODING AS IS DEMONSTRATED BY A FLOODPLAIN STUDY OR SURVEY.

NAME: N/A-No properties sharing an
ADDRESS: immediate and common boundary
up or down stream due to the
location not being in floodplain

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

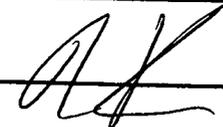
E. CONFIRMATION FORM

THE APPLICANT ACKNOWLEDGES, AGREES, AND CONFIRMS THAT HE/IT WILL PAY WITHIN 30 DAYS OF RECEIPT OF INVOICE BY THE COUNTY FOR ALL EXPENSES RELATIVE TO THE PERMIT APPLICATION PROCESS GREATER THAN THE REQUIRED DEPOSIT FOR EXPENSES INCLUDING:

- (A) PERSONAL SERVICE OF PROCESS BY THE DODDRIDGE COUNTY SHERIFF AT THE RATES PERMITTED BY LAW FOR SUCH SERVICE.
- (B) SERVICE BY CERTIFIED MAIL RETURN RECEIPT REQUESTED.
- (C) PUBLICATION.

- (D) COURT REPORTING SERVICES AT ANY HEARINGS REQUESTED BY THE APPLICANT.
- (E) CONSULTANTS AND/OR HEARING EXPERTS UTILIZED BY DODDRIDGE COUNTY FLOODPLAIN ADMINISTRATOR/MANAGER OR FLOODPLAIN APPEALS BOARD FOR REVIEW OF MATERIALS AND/OR TESTIMONY REGARDING THE EFFICACY OF GRANTING OR DENYING THE APPLICANT'S FLOODPLAIN PERMIT.

NAME (PRINT): _____

SIGNATURE:  _____ DATE: September 5, 2014

After completing SECTION 2, APPLICANT should submit form to Floodplain Administrator/Manager or his/her representative for review.

SECTION 3: FLOODPLAIN DETERMINATION (to be completed by Floodplain Administrator/Manager or his/her representative)

THE PROPOSED DEVELOPMENT:

THE PROPOSED DEVELOPMENT IS LOCATED ON:

FIRM Panel: _____

Dated: _____

Is **NOT** located in a Specific Flood Hazard Area (Notify applicant that the application review is complete and **NO FLOODPLAIN DEVELOPMENT PERMIT IS REQUIRED**).

Is located in Special Flood Hazard Area.
 FIRM zone designation _____
 100-Year flood elevation is: _____ NGVD (MSL)

Unavailable

The proposed development is located in a floodway.
 FBFM Panel No. _____ Dated _____

See section 4 for additional instructions.

SIGNED _____

DATE _____

**SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by
Floodplain Administrator/Manager or his/her representative)**

The applicant must submit the documents checked below before the application can be processed.

- A plan showing the location of all existing structures, water bodies, adjacent roads, lot dimensions and proposed development.

- Development plans, drawn to scale, and specifications, including where applicable: details for anchoring structures, storage tanks, proposed elevation of lowest floor, (including basement or crawl space), types of water resistant materials used below the first floor, details of flood proffing of utilities located below the first floor and details of enclosures below the first floor. Also _____

- Subdivision or other development plans (If the subdivision or development exceeds 50 lots or 5 acres, whichever is the lesser, the applicant must provide 100-year flood elevations if they are not otherwise available).

- Plans showing the extent of watercourse relocation and/or landform alterations.

- Top of new fill elevation _____ Ft. NGVD (MSL).
For floodproofing structures applicant must attach certification from registered engineer or architect.

- Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood. A copy of all data and calculations supporting this finding must also be submitted.

- Manufactured homes located in a floodplain area must have a West Virginia Contractor's License and a Manufactured Home Installation License as required by the Federal Emergency Management Agency (FEMA).

Other:

SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Administrator/Manager or his/her representative)

I have determined that the proposed activity **(type is or is not)** in conformance with provisions of the Floodplain Ordinance adopted by the County Commission of Doddridge County on May 21, 2013. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED _____ DATE _____

If the Floodplain Administrator/Manager found that the above was not in conformance with the provisions of the Doddridge County Floodplain Ordinance and/or denied that application, the applicant may complete an appealing process below.

APPEALS: Appealed to the County Commission of Doddridge County? Yes No

Hearing Date: _____

County Commission Decision - Approved Yes No

CONDITIONS: _____

SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Compliance is issued).

The following information must be provided for project structures. This section must be completed by a registered professional engineer or a licensed land surveyor (or attach a certification to this application).

COMPLETE 1 OR 2 BELOW:

- 1 Actual (As-Built) Elevation of the top of the lowest floor (including basement or crawl space is _____ FT. NGVD (MSL)
- 2 Actual (As Built) elevation of floodproofing is _____ FT. NGVD (MSL)

Note: Any work performed prior to submittal of the above information is at risk of the applicant.

SECTION 7: COMPLIANCE ACTION (To be completed by the Floodplain Administrator/Manager or his/her representative).

The Floodplain Administrator/Manager or his/her representative will complete this section as applicable based on inspection of the project to ensure compliance with the Doddridge County Floodplain Ordinance.

INSPECTIONS:

DATE: _____ BY: _____
DEFICIENCIES ? Y/N

COMMENTS _____

SECTION 8: CERTIFICATE OF COMPLIANCE (To be completed by Floodplain Administrator/Manager or his/her representative).

Certificate of Compliance issued: DATE: _____ BY: _____

**CERTIFICATE OF COMPLIANCE
FOR DEVELOPMENT IN SPECIAL FLOOD HAZARD AREA
(OWNER MUST RETAIN)**

PERMIT NUMBER: _____

PERMIT DATE: _____

PURPOSE –

CONSTRUCTION LOCATION: _____

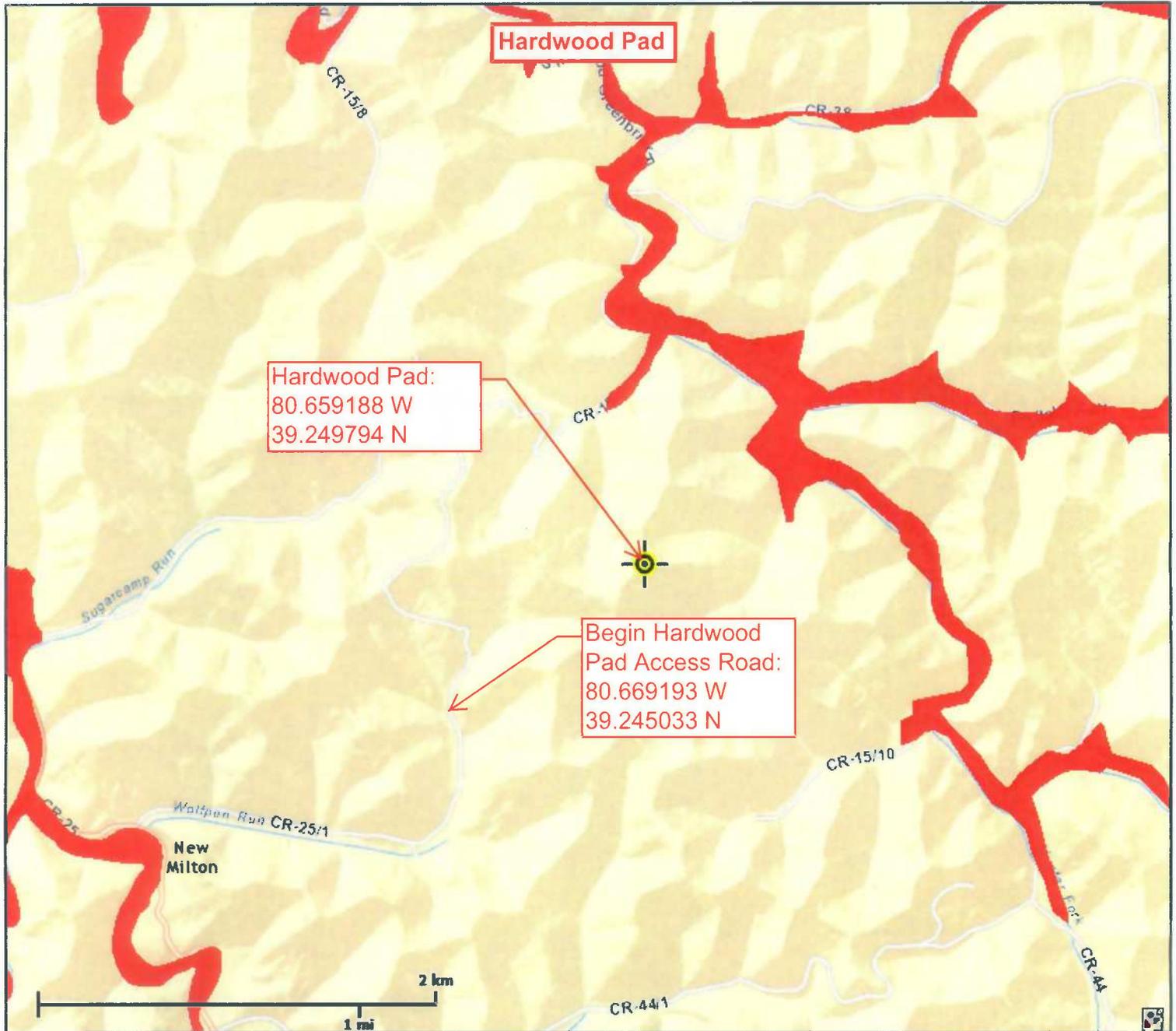
OWNER'S ADDRESS: _____

**THE FOLLOWING MUST BE COMPLETED BY THE FLOODPLAIN
ADMINISTRATOR/MANAGER OR HIS/HER AGENT.**

**COMPLIANCE IS HEREBY CERTIFIED WITH THE REQUIREMENT OF THE
FLOODPLAIN ORDINANCE ADOPTED BY THE COUNTY COMMISSION OF
DODDRIDGE COUNTY ON MAY 21, 2013.**

SIGNED _____ **DATE** _____

WV Flood Map



This map is not the official regulatory FIRM or DFIRM. Its purpose is to assist with determining potential flood risk for the selected location.

Map Created on 9/5/2014

 Location of the mouse click

 Flood Hazard Zone
(1% annual chance floodplain)

User Notes:

Disclaimer:
The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. To obtain more detailed information in areas where Base Flood Elevations have been determined, users are encouraged to consult the latest Flood Profile data contained in the official flood insurance study. These studies are available online at www.msc.fema.gov.

WV Flood Tool is supported by FEMA, WV NFIP Office, and WV GIS Technical Center
(<http://www.MapWV.gov/flood>)

Flood Hazard Area:
Elevation: About 1371 feet
Location (long, lat): 80.657744 W, 39.251038 N
Location (UTM 17N): (529532, 4344691)
FEMA Issued Flood Map: 54017C0145C
Contacts: Doddridge County
CRS Information: N/A
Parcel Number:

STATE OF WEST VIRGINIA,
COUNTY OF DODDRIDGE, TO WIT

I, Virginia Nicholson, Editor of THE
HERALD RECORD, a weekly newspaper
published regularly, in Doddridge County,
West Virginia, Do Hereby Certify
That the Accompanying Legal Notice
Entitled:

Floodplain Permit
14-278

was published in said paper for *2*
successive weeks beginning with the issue
of *September 16th* 2014 and
ending with the issue of

September 23rd 2014 and

that said notice contains *189*

WORD SPACE at *115* cents a word

amounts to the sum of \$ *21.74*

FOR FIRST PUBLICATION, SECOND
PUBLICATION IS 75% OF THE FIRST
PUBLICATION

\$ *16.31*

and each publication thereafter

\$ *38.05* TOTAL

EDITOR

Virginia Nicholson

SWORN TO AND SUBSCRIBED

BEFORE ME THIS THE *25th* DAY

OF *September* 2014

NOTARY PUBLIC

Laura J. Adams



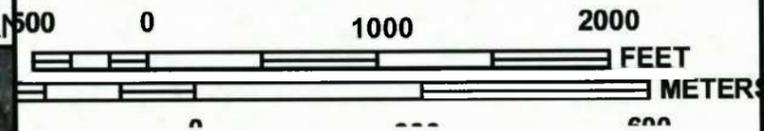
Legal Advertisement

LEGAL ADVERTISEMENT
Doddridge County
Floodplain Permit Application
Please take notice that on the 11th day of September,
2014 Antero Resources filed an application for
Floodplain Permit to develop land located at or about:
West Union District 19 249794N/80 659188W Permit #14-
278 Hardwood Well Pad (Note: This project is not within
the floodplain) The Application is on file with the Clerk
of the County Court and may be inspected or copied
during regular business hours. As this project is outside
the FEMA identified floodplain of Doddridge County,
Doddridge County Floodplain Management has no
regulatory authority. Any interested persons who desire
to comment shall present the same in writing by October
6, 2014.
Delivered to the
Clerk of the County Court
118 E. Court Street, West Union, WV 26456
Beth A. Rogers, Doddridge County Clerk
Edwin L. "Bo" Wriston, Doddridge County Flood Plain
Manager
9-16-2xb



MAP SCALE 1" = 1000'

JOINS PANEL 500



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0235C

FIRM

FLOOD INSURANCE RATE MAP
DODDRIDGE COUNTY,
WEST VIRGINIA
AND INCORPORATED AREAS

PANEL 235 OF 325
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DODDRIDGE COUNTY	540024	0235	C

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
54017C0235C
MAP REVISED
OCTOBER 4, 2011

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



DODDRIDGE
UNINCORPORATED
54002

ZONE A

15

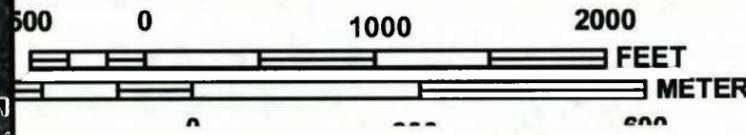
15/1

JOINS PANEL 0235

1640000 FT



MAP SCALE 1" = 1000'



N F I P
 NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0145C

FIRM
 FLOOD INSURANCE RATE MAP
 DODDRIDGE COUNTY,
 WEST VIRGINIA
 AND INCORPORATED AREAS

PANEL 145 OF 325
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DODDRIDGE COUNTY	540024	0145	C

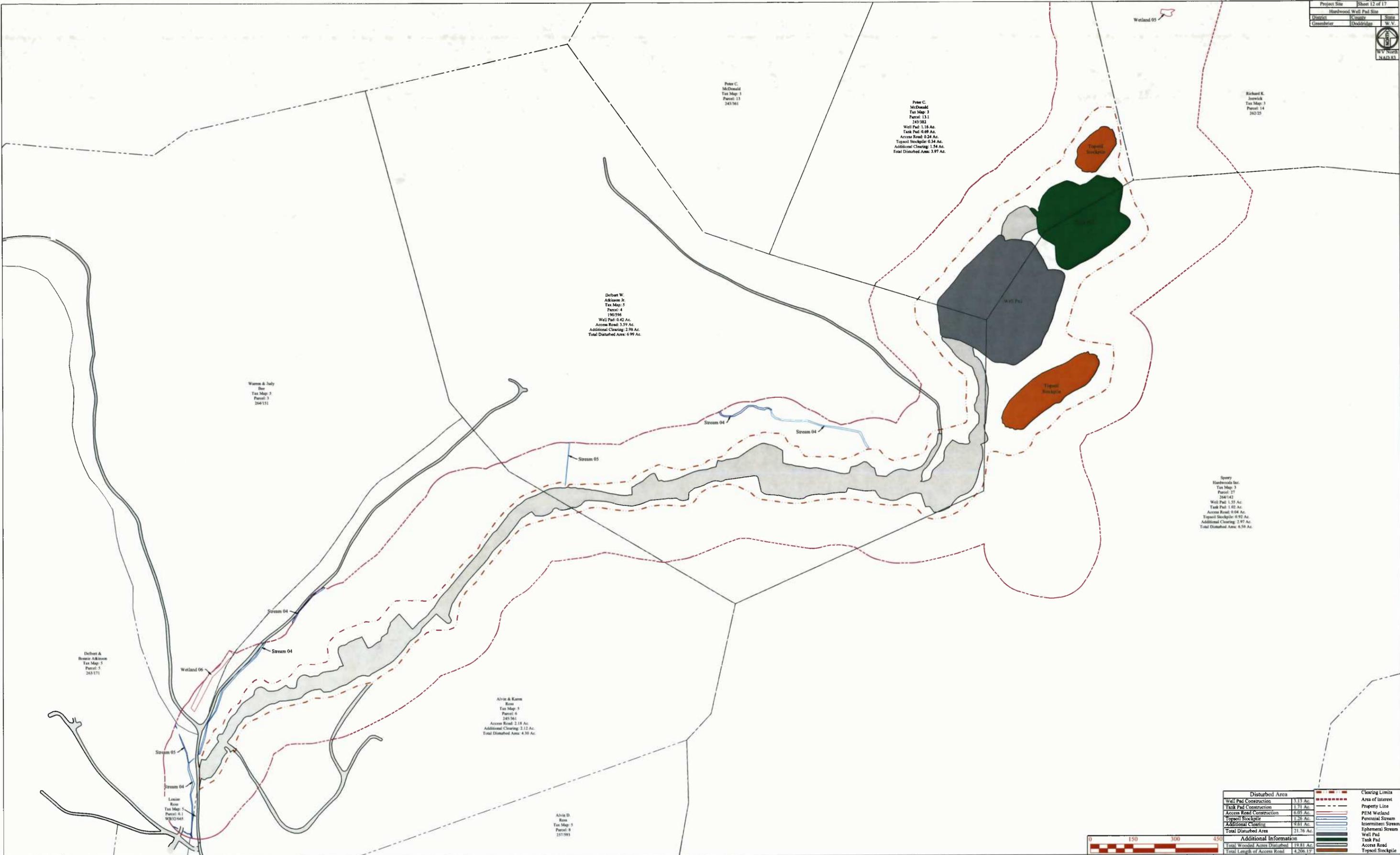
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 54017C0145C
MAP REVISED
 OCTOBER 4, 2011

Federal Emergency Management Agency

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Peter C. McDonald
 Tax Map: 3
 Parcel: 13
 243761

Peter C. McDonald
 Tax Map: 3
 Parcel: 13.1
 243782
 Well Pad: 1.16 Ac.
 Tank Pad: 0.69 Ac.
 Access Road: 0.24 Ac.
 Topsoil Stockpile: 0.34 Ac.
 Additional Clearing: 1.54 Ac.
 Total Disturbed Area: 3.97 Ac.

Richard E. Jewick
 Tax Map: 3
 Parcel: 14
 262725

DeBart W. Addison Jr.
 Tax Map: 5
 Parcel: 4
 190596
 Well Pad: 0.42 Ac.
 Access Road: 3.59 Ac.
 Additional Clearing: 2.98 Ac.
 Total Disturbed Area: 6.99 Ac.

Warren & Judy
 Tax Map: 3
 Parcel: 3
 264131

Sperry
 Hardwoods Inc.
 Tax Map: 3
 Parcel: 27
 264142
 Well Pad: 1.55 Ac.
 Tank Pad: 1.02 Ac.
 Access Road: 0.04 Ac.
 Topsoil Stockpile: 0.92 Ac.
 Additional Clearing: 2.97 Ac.
 Total Disturbed Area: 6.50 Ac.

Alvin & Kame
 Tax Map: 3
 Parcel: 8
 245361
 Access Road: 2.18 Ac.
 Additional Clearing: 2.12 Ac.
 Total Disturbed Area: 4.30 Ac.

Alvin D.
 Tax Map: 3
 Parcel: 8
 257383

DeBart & Renee Addison
 Tax Map: 5
 Parcel: 5
 263171

Disturbed Area		Clearing Limits
Well Pad Construction	3.13 Ac.	
Tank Pad Construction	1.31 Ac.	
Access Road Construction	0.03 Ac.	
Topsoil Stockpile	1.26 Ac.	
Additional Clearing	9.61 Ac.	
Total Disturbed Area	21.76 Ac.	
Additional Information		Area of Interest
Total Wooded Acres Disturbed	19.81 Ac.	
Total Length of Access Road	4,206.17'	



Date	Revisions
11-19-2013	Site Design



Hardwood Well Pad Site

Site Design, Construction Plan, & Erosion and Sediment Control Plans

Antero Resources Corporation

Doddridge County

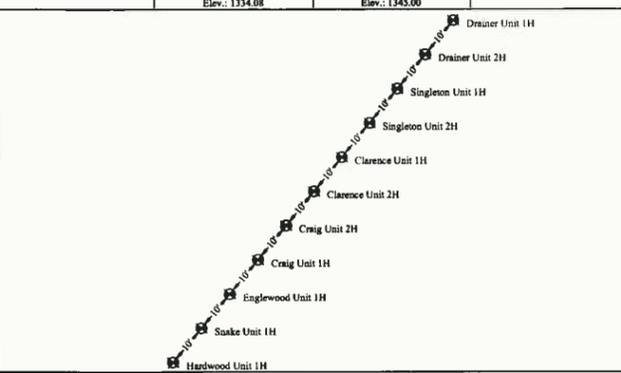
Greenbrier District

Latitude 39.249794°
 Longitude -80.659188°

WEST VIRGINIA COUNTY MAP



Site Entrance	Center of Well Pad	Center of Well Pad
WV-N NAD 83 N: 275116.31 WV-N NAD 83 E: 1637378.26 WV-N NAD 27 N: 273480.20 WV-N NAD 27 E: 1668819.26 Lat. NAD 83: 39.249794 Lon. NAD 83: -80.669193 UTM 17 NAD 83 N: 4344020.88 UTM 17 NAD 83 E: 528546.13	WV-N NAD 83 N: 275113.48 WV-N NAD 83 E: 1640234.04 WV-N NAD 27 N: 275177.31 WV-N NAD 27 E: 1671675.03 Lat. NAD 83: 39.249794 Lon. NAD 83: -80.659188 UTM 17 NAD 83 N: 4344532.43 UTM 17 NAD 83 E: 529407.52 Elev.: 1334.00	WV-N NAD 83 N: 275091.05 WV-N NAD 83 E: 1640501.59 WV-N NAD 27 N: 275454.87 WV-N NAD 27 E: 1671942.58 Lat. NAD 83: 39.249794 Lon. NAD 83: -80.659188 UTM 17 NAD 83 N: 4344638.35 UTM 17 NAD 83 E: 529487.62 Elev.: 1345.00



Drainer Unit 1H	Singleton Unit 1H	Singleton Unit 2H	Clarence Unit 1H
WV-N NAD 83 N: 275116.31 WV-N NAD 83 E: 1640268.47 WV-N NAD 27 N: 275179.32 WV-N NAD 27 E: 1671709.47 Lat. NAD 83: 39.249794 Lon. NAD 83: -80.659066 UTM 17 NAD 83 N: 4344533.21 UTM 17 NAD 83 E: 529418.00	WV-N NAD 83 N: 275107.77 WV-N NAD 83 E: 1640262.11 WV-N NAD 27 N: 275171.60 WV-N NAD 27 E: 1671703.11 Lat. NAD 83: 39.249794 Lon. NAD 83: -80.659088 UTM 17 NAD 83 N: 4344530.83 UTM 17 NAD 83 E: 529416.10	WV-N NAD 83 N: 275100.06 WV-N NAD 83 E: 1640255.75 WV-N NAD 27 N: 275163.89 WV-N NAD 27 E: 1671696.74 Lat. NAD 83: 39.249794 Lon. NAD 83: -80.659110 UTM 17 NAD 83 N: 4344548.45 UTM 17 NAD 83 E: 529412.20	WV-N NAD 83 N: 275184.63 WV-N NAD 83 E: 1640243.02 WV-N NAD 27 N: 275148.46 WV-N NAD 27 E: 1671684.01 Lat. NAD 83: 39.249794 Lon. NAD 83: -80.659155 UTM 17 NAD 83 N: 4344543.69 UTM 17 NAD 83 E: 529410.41



West Virginia State Plane Coordinate System
 North Zone, NAD 83
 Elevations Based on NAV88
 Established By Survey Grade GPS and OPUS Post-Processing

Disturbed Area	
Well Pad Construction	3.13 Ac.
Tank Pad Construction	1.71 Ac.
Access Road Construction	6.05 Ac.
Topsoil Stockpile	1.26 Ac.
Additional Clearing	9.81 Ac.
Total Disturbed Area	21.76 Ac.

Access Road			
Surface Owner	Tax Map Parcel	Road Length	Type
Alvin & Karen Ross	S-6	1,640.93'	Well Pad Access Road
Alvin & Karen Ross	S-6	63.01'	Existing Gas Well Road (Lower)
Delbert W. Atkinson Jr.	S-4	2,078.00'	Well Pad Access Road
Delbert W. Atkinson Jr.	S-4	243.23'	Existing Gas Well Road (Upper)
Peter C. McDonald	S-13.1	178.98'	Tank Pad Access Road

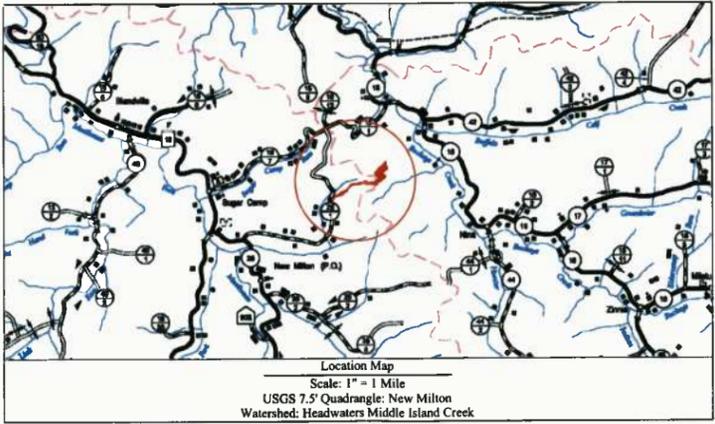
Site Disturbance Table						
Surface Owner	Well Pad (Ac.)	Tank Pad (Ac.)	Access Road (Ac.)	Topsoil (Ac.)	Add. Clearing (Ac.)	Total (Ac.)
Alvin & Karen Ross	0.00	0.00	2.18	0.00	2.18	4.30
Delbert W. Atkinson Jr.	0.42	0.00	3.59	0.00	2.98	6.99
Peter C. McDonald	1.16	0.69	0.24	0.34	1.54	3.97
Sperry	1.55	1.02	0.04	0.92	2.97	6.50
Site Total	3.13	1.71	6.05	1.26	9.81	21.76

Floodplain Conditions	
Do site construction activities take place in a floodplain:	NO
Permit needed from county floodplain coordinator:	NO
Flood Hazard Zone:	X
MFC-RAS Study completed:	N/A
Floodplain shown on drawings:	N/A
FIRM Map Number(s) for site:	18071C 013C & 54071C 013C
Acres of construction in floodplain:	N/A

Well Location Restrictions	
All Pad and Fracture Pit construction complies with the following restrictions.	
*250' from an existing well or developed spring used for human or domestic animals.	
*625' from an occupied dwelling or barn greater than 2,500 SF used for poultry or dairy measured from the center of the pad.	
*100' from the edge of disturbance to wetlands, perennial streams, natural or artificial lake, pool or reservoir.	
*300' from the edge of disturbance to a naturally reproducing trout stream.	
*1,000' of a surface or ground water intake to a public water supply.	

Approach Routes:

From US Rt 50, turn onto Co Rt 18 (Snowbird Road). Follow Co Rt 18 for 1.8 mi. Turn Left onto WV Rt 18 South. Follow WV Rt 18 South for 3.1 mi. Turn Left onto Co Rt 25 (Menthouse Fork). Follow Co Rt 25 for 0.4 mi. Turn Left onto Wolf Pen Rd. Follow Co Rt 25 for 1.4 mi. The site entrance will be on the Right (East) side of the road.



Sheet	Description
1	Cover
2	Schedule of Quantities
3	Construction and E&S Control General Notes
4	Pre-Construction Site Conditions
5	Overall Plan View
6-8	Erosion and Sediment Control Plan View
9-11	Plan View
12	Disturbed Area
13	Cross Sections - Well Pad
14	Cross Sections - Tank Pad
15-16	Cross Sections - Well Pad Access Road
17	Cross Sections - Tank Pad Access Road
D1-D2	Erosion and Sediment Control Plans
R1	Site Reclamation

Environmental:

Wetland Delineations as provided by Allstar Ecology dated September 10, 2013

Topographic Information:

The topographic information shown herein is based on aerial photography by Blue Mountain Aerial Mapping, Burton, WV

Note:

Antero Resources Corporation will obtain an Erosion Control Permit (Form MM-109) from the West Virginia Department of Transportation, Division of Highways, prior to the commencement of construction activities.



Antero Resources Contact Information			
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Kelly Surveying Contact Information			
Kenneth Kelly Work: (304) 338-6985 Mobile: (304) 642-7863 Email: kksurveying@gmail.com	John See Work: (304) 442-0220 Mobile: (304) 419-4296 Email: john.see.0651@gmail.com	Zack Summerfield Work: (304) 338-6985 Email: ksurveying@gmail.com	

Hardwood Well Pad Site
 Coversheet

Date	Revisions
11-19-2013	Site Design



Professional Engineer Seal: JOHN P. SEE, REG. NO. 008051, STATE OF WEST VIRGINIA, PROFESSIONAL ENGINEER.

Design Certification: The drawings, construction notes and reference diagrams attached herein have been prepared in accordance with the West Virginia Code of State Rules, Division of Environmental Protection, Office of Oil and Gas 33CSR08.

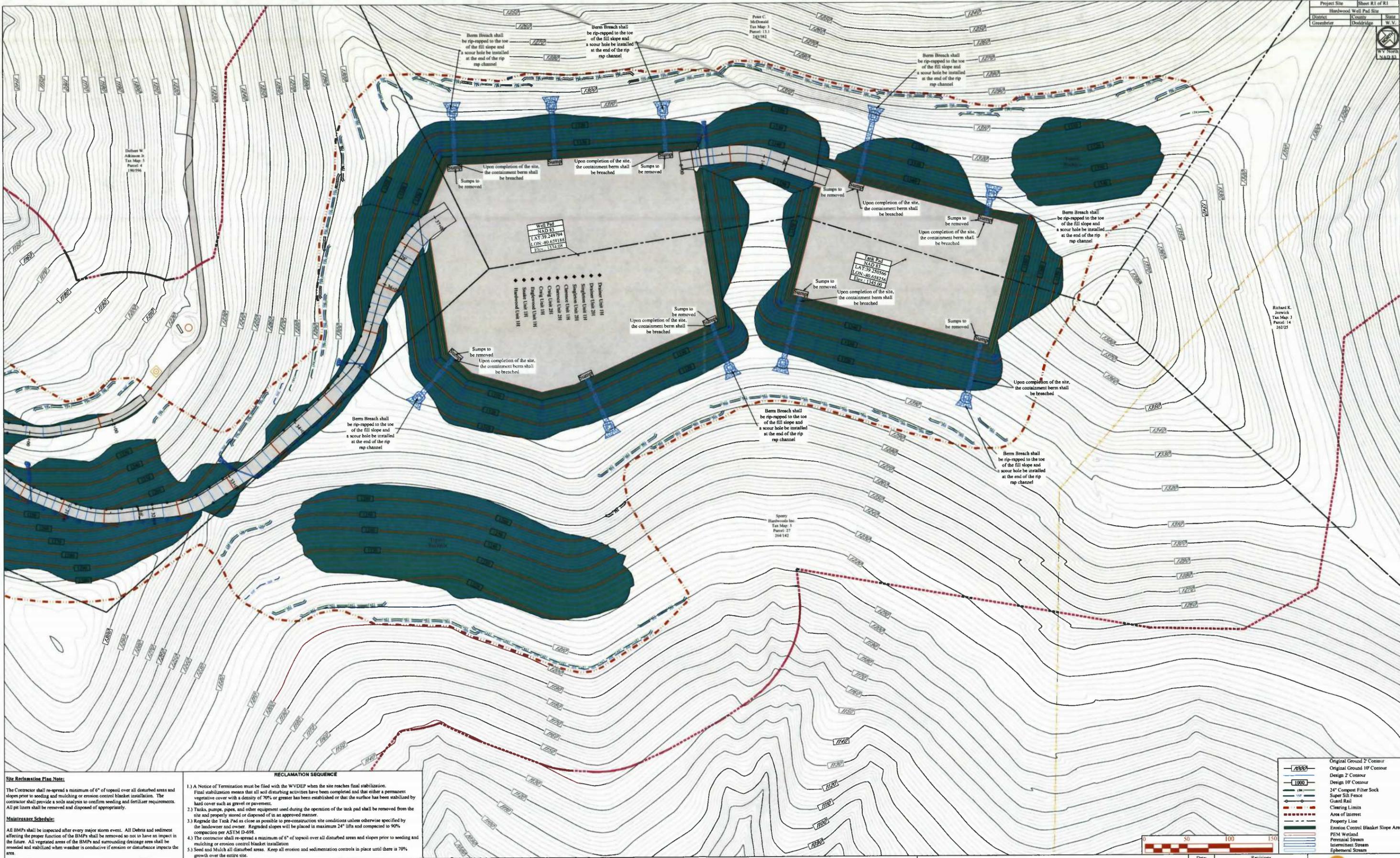
All Plans, Sheets, and/or Reference Diagrams included in this design constitute a complete set of plans. A complete set of plans is necessary to construct the site in accordance with the design.

John P. See RPE 0051
 Kelly Surveying P.L.L.C.
 COA: 004232-30

Date: 8/1/2014

As Built Certification: The as-built certification certifies that the gas well drilling pad was constructed in reasonable close conformance with the design drawings. It is recommended that the gas well drilling pad is included in the existing comprehensive maintenance and inspection program for gas well drilling pads or that a comprehensive maintenance and inspection program be developed to monitor the pads condition to insure the continued safe operation.

John P. See RPE 0051
 Date: _____



Site Reclamation Plan Note:
 The Contractor shall re-apply a minimum of 6" of topsoil over all disturbed areas and slopes prior to seeding and mulching or erosion control blanket installation. The contractor shall provide a soils analysis to confirm seeding and fertilizer requirements. All pe liners shall be removed and disposed of appropriately.

Maintenance Schedule:
 All BMPs shall be inspected after every major storm event. All Debris and sediment affecting the proper function of the BMPs shall be removed so not to have an impact in the future. All vegetated areas of the BMPs and surrounding drainage areas shall be reseeded and stabilized when weather is conducive if erosion or disturbance impacts the area.

- RECLAMATION SEQUENCE**
- 1.) A Notice of Termination must be filed with the WVDEP when the site reaches final stabilization. Final stabilization means that all soil disturbing activities have been completed and that either a permanent vegetative cover with a density of 70% or greater has been established or that the surface has been stabilized by hard cover such as gravel or pavement.
 - 2.) Tanks, pumps, pipes, and other equipment used during the operation of the tank pad shall be removed from the site and properly stored or disposed of in an approved manner.
 - 3.) Regrade the Tank Pad as close as possible to pre-construction site conditions unless otherwise specified by the landowner and owner. Regraded slopes will be placed in maximum 24" lifts and compacted to 90% compaction per ASTM D-698.
 - 4.) The contractor shall re-apply a minimum of 6" of topsoil over all disturbed areas and slopes prior to seeding and mulching or erosion control blanket installation.
 - 5.) Seed and Mulch all disturbed areas. Keep all erosion and sedimentation controls in place until there is 70% growth over the entire site.

Legend:

- Original Ground 2' Contour
- Original Ground 10' Contour
- Design 2' Contour
- Design 10' Contour
- 24" Compust Filter Sock
- Super Silt Fence
- Guard Rail
- Clearing Limits
- Area of Interest
- Property Line
- Erosion Control Blanket Slope Area
- PEM Wetland
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream

Scale: 0 50 100 150