

# 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: #14-276 ~ Antero Resources ~  
Balli 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: 39.302220N/80.843744W**

**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**

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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

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Legal Advertisement:  
Doddridge County  
Floodplain Permit Application

Please take notice that on the 11<sup>th</sup> day of September, 2014

**Antero Resources**

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

**West Union District**

**39.302220N/80.843744W**

**Permit #14-276 Balli 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

#14-276



2014 SEP 11 PM 12:58

ANTERO RESOURCES  
COUNTY CLERK  
DODDRIDGE COUNTY, WV  
Antero Resources  
1615 Wynkoop Street  
Denver, CO 80202  
Office 303.357.7310  
Fax 303.357.7315

September 4, 2014

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 Balli Well Pad. Our project is located in Doddridge County, West Union District and per FIRM map #54017C0115C this location is not within the floodplain.

Attached you will find the following:

- Doddridge County Floodplain Permit Application
- Balli 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,

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 4, 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:** Navitus Energy Engineering  
**ADDRESS:** 151 Windy Hill Lane, Winchester, VA, 22602  
**TELEPHONE NUMBER:** (888)-662-4185

**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** \_\_\_\_\_

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): Randy Kloberdanz

SIGNATURE:  DATE: September 4, 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:

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**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:** \_\_\_\_\_

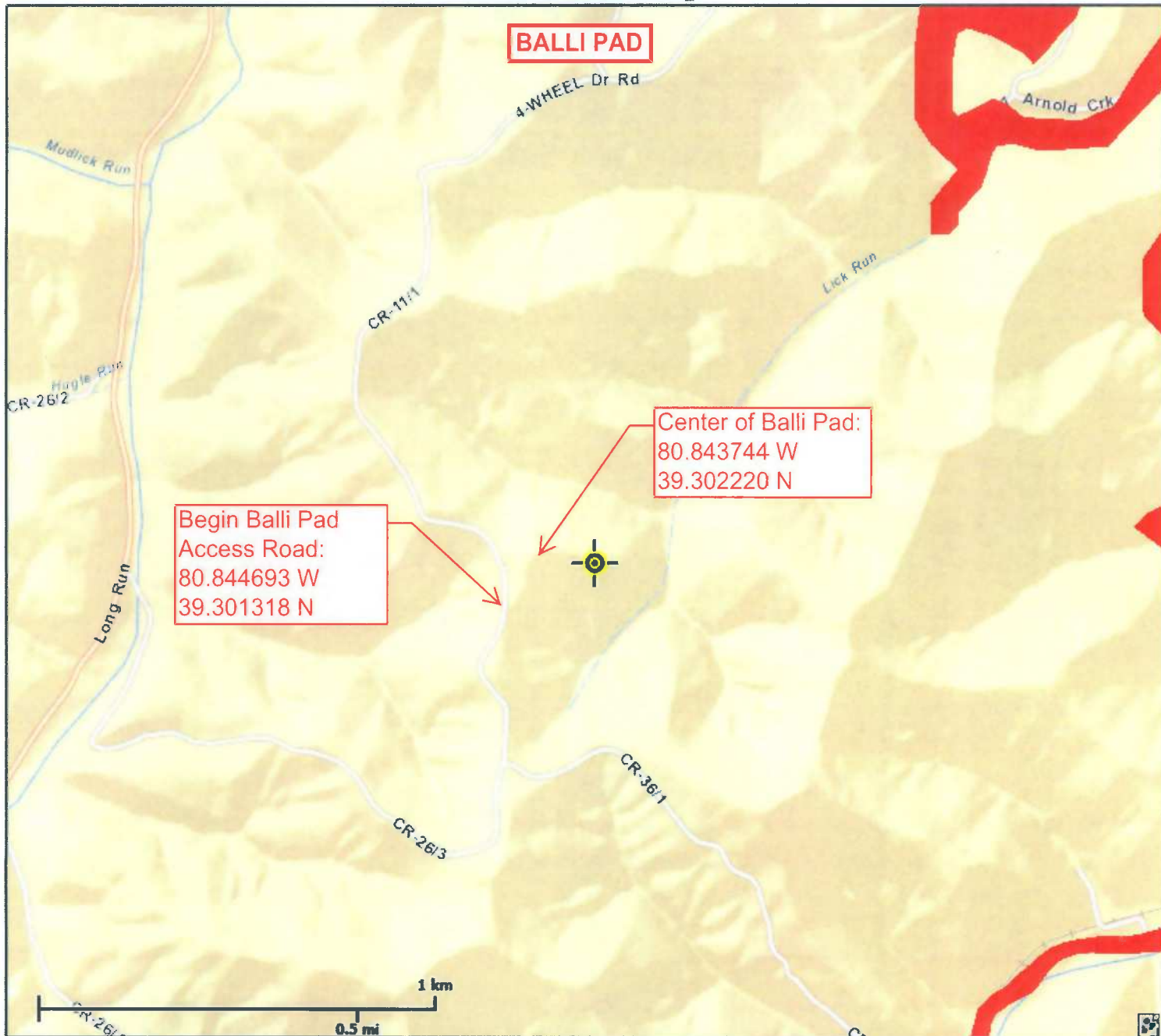
**OWNER'S ADDRESS:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**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 9/3/2014

 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](http://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 1098 feet  
Location (long, lat): 80.842026 W, 39.302095 N  
Location (UTM 17N): (513621, 4350313)  
FEMA Issued Flood Map: 54017C0115C  
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*  
*# 14-276*

was published in said paper for *2*

successive weeks beginning with the issue

of *September 16<sup>th</sup>* 2014 and

ending with the issue of

*September 23<sup>rd</sup>* 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

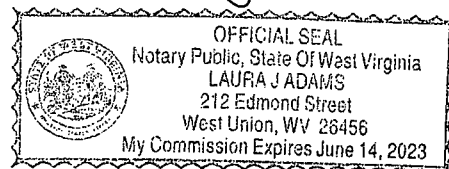
BEFORE ME THIS THE *25<sup>th</sup>* DAY

OF *September* 2014

NOTARY PUBLIC

*Laura J Adams*

**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, 302220N/80, 843744W, Permit #14-  
276; Ball Well Pads (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



**BALLI PAD SURFACE  
OWNER INFORMATION**

**BALLI JOSEPH S, THOMAS J &  
Acres 84.43259322 District 1 Map  
3 PID 16.2 Book 245 Page 534**

HIRAM	
FID	91
DIST	1
MAP	3
PID	16.2
GIS_Link	1-3-16.2
TAXDIST	1
TAXYR	2008
PARID	01
	3001600020000
PAR_MAP	3
PAR_MAP1	16
PAR_MAP2	2
OWNTYPE1	
OWNTYPE2	
OWN1	BALLI JOSEPH S, THOMAS J &
OWN2	ROBERT H (SURV)
ADDR1	BOB BALLI
ADDR2	5796 ALLYN RD
ADDR3	HIRAM OH 44234
CITYNAME	HIRAM
STATECODE	OH
ZIP1	44234
BOOK	245
PAGE	534
LEGAL1	90 AC ARNOLDS CK
LEGAL2	
GISJOIN	1-3-16.2
MAPPED_AC	84.432593

**GAGNON SUSAN C Acres  
84.32633709 District 1 Map 6  
PID 9 Book 0181 Page 0455**

WEST UNION	
FID	109
DIST	1
MAP	6
PID	9
GIS_Link	1-6-9
TAXDIST	1
TAXYR	2008
PARID	01
	6000900000000
PAR_MAP	6
PAR_MAP1	9
PAR_MAP2	0
OWNTYPE1	
OWNTYPE2	
OWN1	GAGNON SUSAN C
OWN2	
ADDR1	
ADDR2	RT 1 BOX 312
ADDR3	WEST UNION WV 26456
CITYNAME	WEST UNION
STATECODE	WV
ZIP1	26456
BOOK	0181
PAGE	0455
LEGAL1	ARNOLDS CK
LEGAL2	81 AC
GISJOIN	1-6-9
MAPPED_AC	84.326337

**BALLI JOSEPH S, THOMAS J &  
Acres 88.09957021 District 1 Map  
7 PID 7.1 Book 232 Page 344**

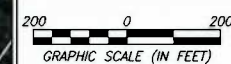
HIRAM	
FID	102
DIST	1
MAP	7
PID	7.1
GIS_Link	1-7-7.1
TAXDIST	1
TAXYR	2008
PARID	01
	7000700010000
PAR_MAP	7
PAR_MAP1	7
PAR_MAP2	1
OWNTYPE1	
OWNTYPE2	
OWN1	BALLI JOSEPH S, THOMAS J &
OWN2	ROBERT H
ADDR1	BOB BALLI
ADDR2	5796 ALLYN RD
ADDR3	HIRAM OH 44234
CITYNAME	HIRAM
STATECODE	OH
ZIP1	44234
BOOK	232
PAGE	344
LEGAL1	LICK RUN
LEGAL2	81A 21P 81.13 AC
GISJOIN	1-7-7.1
MAPPED_AC	88.09957

# FIRM EXHIBIT



## LANDOWNER TABULATION

<b>A</b>	TM 6-8 THELMA B. JAMES, THELMA B. JAMES, TRUSTEE OF THE LAWRENCE L. JAMES LIVING TRUST & LEOMA HICKMAN WB 033 PG 266 94 ACRES P.O. BOX 33 EAST CLARIDON, OH 44033	<b>D</b>	TM 6-20 DONNA K. SPELLMAN DB 244 PG 628 13.5 ACRES ROUTE 1 BOX 761 GREENWOOD, WV 26415	<b>G</b>	TM 3-16.2 STEPHEN G. & SHERRY L. BUSH DB 274 PG 571 90 ACRES 320 N. PRAGUE AVENUE EGG HARBOR CITY, NJ 08215	<b>J</b>	TM 4-26 KELLY E. JR. & MAUDENNA L. SMITH DB 266 PG 74 48.6 ACRES P.O. BOX 419 ACCOVILLE, WV 25606
<b>B</b>	TM 6-4 DONNA K. SPELLMAN DB 244 PG 628 32.25 ACRES ROUTE 1 BOX 761 GREENWOOD, WV 26415	<b>E</b>	TM 6-9 SUSAN C. GAGNON DB 181 PG 455 81 ACRES ROUTE 1 BOX 312 WEST UNION, WV 26456	<b>H</b>	TM 7-7.1 JEFFREY K. SR. & CHARLENE H. JONES DB 277 PG 100 77.32 ACRES 888 RAMSEYS RIDGE ROAD WEST UNION, WV 26456		
<b>C</b>	TM 6-19 DONNA K. SPELLMAN DB 244 PG 628 42.5 ACRES ROUTE 1 BOX 761 GREENWOOD, WV 26415	<b>F</b>	TM 6-46 LEWIS L. HURST DB 239 PG 154 2.76 ACRES 7966 BUCKTHORN DRIVE MENTOR, OH 44060	<b>I</b>	TM 7-93 SAMULE C., SHERRI L. & ROBERT E. HAMMETT DB 251 PG 284 48.1 ACRES 955 BULL CREEK ROAD WAVERLY, WV 26184		



NFIP  
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0115C

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

PANEL 115 OF 325  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DODDRIDGE COUNTY	54024	0115	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**  
54017C0115C  
**MAP REVISED**  
OCTOBER 4, 2011  
Federal Emergency Management Agency

**FLOODPLAIN NOTE**  
THE PROPOSED SITE IS LOCATED IN  
FLOOD ZONE "X" PER FEMA FLOOD MAP  
#54017C0115C



DATE	REVISION	REVISED PER	CLIENT REQUEST
07/09/2014			

**Antero**  
THIS DOCUMENT  
WAS PREPARED FOR:  
ANTERO RESOURCES  
CORPORATION

FIRM EXHIBIT  
**BALLI**  
WELL PAD & WATER CONTAINMENT PAD  
CENTRAL DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA



DATE: 06/18/2014  
SCALE: 1" = 200'  
SHEET 20 OF 20



**LOCATION COORDINATES**

ACCESS ROAD ENTRANCE  
 LATITUDE: 39.301318 LONGITUDE: -80.844693 (NAD 83)  
 N 4350226.53 E 513391.05 (UTM ZONE 17 METERS)

CENTER OF WATER CONTAINMENT TANK  
 LATITUDE: 39.301860 LONGITUDE: -80.844044 (NAD 83)  
 N 4350286.80 E 513446.93 (UTM ZONE 17 METERS)

CENTROID OF WELL PAD  
 LATITUDE: 39.302220 LONGITUDE: -80.843744 (NAD 83)  
 N 4350326.81 E 513472.78 (UTM ZONE 17 METERS)

**GENERAL DESCRIPTION**

THE ACCESS ROAD(S), WATER CONTAINMENT TANK, AND WELL PAD ARE BEING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS.

**FLOODPLAIN NOTE**

THE PROPOSED SITE IS LOCATED IN FLOOD ZONE "X" PER FEMA MAP #54017C0115C.

**MISS UTILITY STATEMENT**

ANTERO RESOURCES CORPORATION WILL NOTIFY MISS UTILITY OF WEST VIRGINIA FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN. TICKET #1413226892. IN ADDITION, MISS UTILITY WILL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT.

**ENTRANCE PERMIT**

ANTERO RESOURCES CORPORATION WILL OBTAIN AN ENCROACHMENT PERMIT (FORM MM-109) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

**ENVIRONMENTAL NOTES**

WETLAND DELINEATIONS WERE PERFORMED IN AUGUST & OCTOBER 2013 BY ALLSTAR ECOLOGY, LLC TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP). THE OCTOBER 9, 2013 STREAM AND WETLAND EXHIBIT WAS PREPARED BY ALLSTAR ECOLOGY, LLC AND SUMMARIZES THE RESULTS OF THE FIELD DELINEATION. THE EXHIBIT DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE OR THE WVDEP. IT IS STRONGLY RECOMMENDED THAT THE AFOREMENTIONED AGENCIES BE CONSULTED IN AN EFFORT TO GAIN WRITTEN CONFIRMATION OF THE DELINEATION SHOWN ON THIS EXHIBIT PRIOR TO ENGAGING CONSTRUCTION ON THE PROPERTY DESCRIBED HEREIN. THE DEVELOPER SHALL OBTAIN THE APPROPRIATE PERMITS FROM THE FEDERAL AND/OR STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S., INCLUDING WETLAND FILLS AND STREAM CROSSINGS.

**GEOTECHNICAL NOTE**

A SUBSURFACE INVESTIGATION OF THE PROPOSED SITE WAS PERFORMED BY PENNSYLVANIA SOIL & ROCK, INC. ON MAY 15, 16, 19 & 20, 2014. THE REPORT PREPARED BY PENNSYLVANIA SOIL & ROCK, INC. DATED JUNE 10, 2014, REFLECTS THE RESULTS OF THE SUBSURFACE INVESTIGATION. THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS REPORT WAS USED IN THE PREPARATION OF THESE PLANS. PLEASE REFER TO THE SUBSURFACE INVESTIGATION REPORT BY PENNSYLVANIA SOIL & ROCK, INC. FOR ADDITIONAL INFORMATION, AS NEEDED.

**PROJECT CONTACTS**

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

ELI WAGONER - ENVIRONMENTAL ENGINEER  
 OFFICE: (304) 842-4068 CELL: (304) 476-9770

JOHN KAWCAK - OPERATIONS SUPERINTENDENT  
 CELL: (917) 368-1553

AARON KUNZLER - CONSTRUCTION SUPERVISOR  
 CELL: (405) 227-8344

ANTHONY SMITH - FIELD ENGINEER  
 OFFICE: (304) 842-4208 CELL: (304) 873-8196

CHARLES E. COMPTON, III - SURVEYING COORDINATOR  
 CELL: (304) 719-6449

DAVID PATSY - LAND AGENT  
 CELL: (304) 476-8090

**ENGINEER/SURVEYOR:**  
 NAVITUS ENGINEERING, INC.  
 CYRUS S. KUMP, PE - PROJECT MANAGER/ENGINEER  
 OFFICE: (888) 682-4185 CELL: (540) 688-8747

**ENVIRONMENTAL:**  
 ALLSTAR ECOLOGY, LLC  
 RYAN L. WARD - ENVIRONMENTAL SCIENTIST  
 OFFICE: (866) 213-2666 CELL: (304) 692-7477

**GEOTECHNICAL:**  
 PENNSYLVANIA SOIL & ROCK, INC.  
 CHRISTOPHER W. SAMIOS-PROJECT ENGINEER  
 OFFICE: (412) 372-4000 CELL: (412) 589-0662

**RESTRICTIONS NOTES:**

1. THERE ARE NO PERENNIAL STREAMS, WETLANDS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE WELL PAD AND LOD.
2. THERE ARE NO NATURALLY PRODUCING TROUT STREAMS WITHIN 300 FEET OF THE WELL PAD AND LOD.
3. THERE ARE NO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY FACILITIES WITHIN 1000 FEET OF THE WELL PAD AND LOD.
4. THERE ARE NO APPARENT EXISTING WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF THE WELL(S) BEING DRILLED.
5. THERE ARE NO OCCUPIED DWELLING STRUCTURES WITHIN 625 FEET OF THE CENTER OF THE WELL PAD.
6. THERE ARE NO AGRICULTURAL BUILDINGS LARGER THAN 2,500 SQUARE FEET WITHIN 625 FEET OF THE CENTER OF THE WELL PAD.

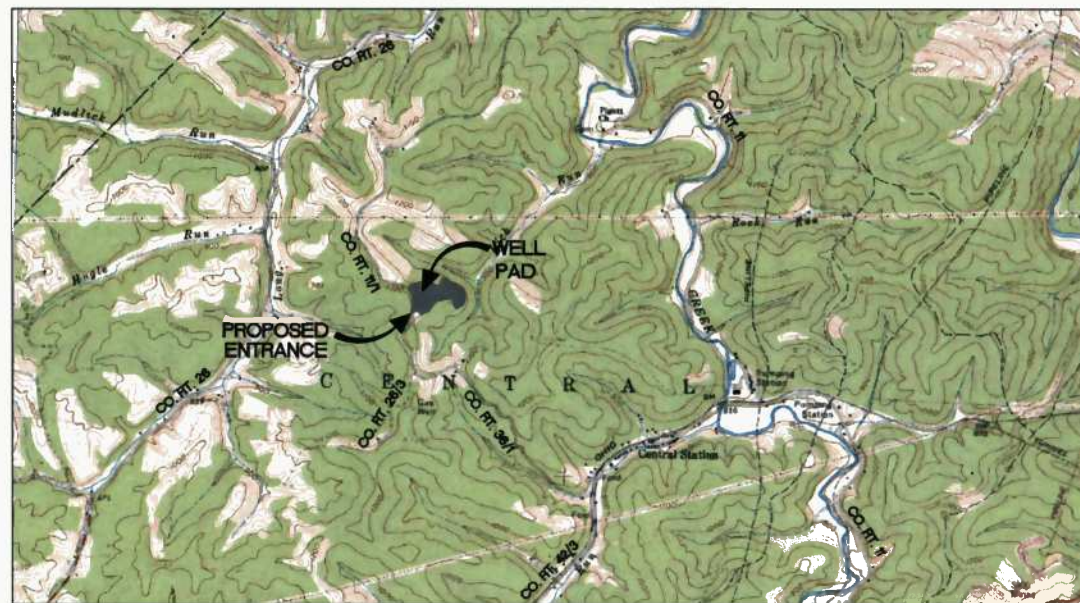
# BALLI

## WELL PAD & WATER CONTAINMENT PAD

### SITE DESIGN & CONSTRUCTION PLAN, EROSION & SEDIMENT CONTROL PLANS

CENTRAL DISTRICT, DODDRIDGE COUNTY, WEST VIRGINIA  
 ARNOLD CREEK & LONG RUN WATERSHEDS

USGS 7.5 WEST UNION QUAD MAP



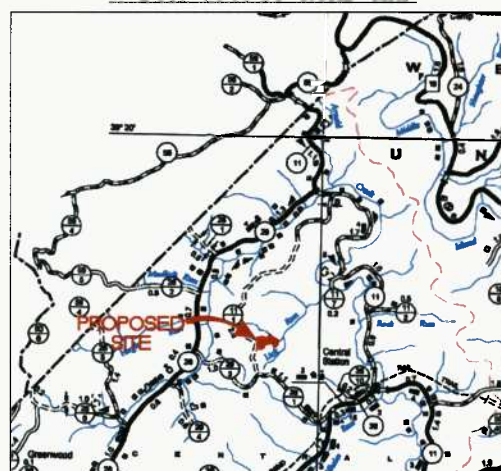
2000 0 2000  
 SCALE: 1" = 2000'

WEST VIRGINIA COUNTY MAP



(NOT TO SCALE)

WVDOH COUNTY ROAD MAP



5000 0 5000  
 SCALE: 1" = 5000'

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!!

**DESIGN CERTIFICATION**

THE DRAWINGS, CONSTRUCTION NOTES, AND REFERENCE DIAGRAM ATTACHED HERETO HAVE BEEN PREPARED IN ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULES, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS CRS 35-8.

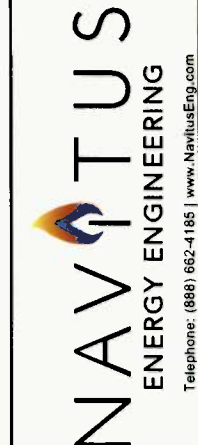
WEST VIRGINIA STATE PLANE COORDINATE SYSTEM  
 NORTH ZONE, NAD 83, NAVD83  
 ELEVATION BASED ON SURVEY GRADE GPS & OPUS  
 POST-PROCESSING

**SHEET INDEX**

- 1 - COVER SHEET
  - 2 - CONSTRUCTION AND E&S CONTROL NOTES
  - 3 - MATERIAL QUANTITIES
  - 4 - STORM DRAINAGE COMPUTATIONS
  - 5 - EXISTING CONDITIONS
  - 6 - OVERALL PLAN SHEET INDEX & VOLUMES
  - 7 - WELL PAD & WATER CONTAINMENT PAD PLAN
  - 8 - WELL PAD GRADING PLAN
  - 9 - ACCESS ROAD/CULVERT PROFILES & SECTIONS
  - 10-13 - WELL PAD SECTIONS
  - 14-18 - CONSTRUCTION DETAILS
  - 19 - WELL PAD & WATER CONTAINMENT PAD RECLAMATION PLAN
  - 20 - FIRM EXHIBIT
- GE500-GE506 - GEOTECHNICAL DETAILS

BALLI LIMITS OF DISTURBANCE AREA (AC)	
Total Site	
Access Road "A" (304')	1.14
Well Pad	8.83
Excess/Topsoil Material Stockpiles	4.59
<b>Total Affected Area</b>	<b>14.56</b>
Total Wooded Acres Disturbed	
	12.94
Impacts to Susan C. Gagnon TM 6-9	
Access Road "A" (23')	0.33
Well Pad	0.12
<b>Total Affected Area</b>	<b>0.45</b>
Total Wooded Acres Disturbed	
	0.27
Impacts to Jeffrey K. Sr & Charlene H. Jones TM 7-7.1	
Access Road "A" (281')	0.81
Well Pad	5.10
Excess/Topsoil Material Stockpiles	2.33
<b>Total Affected Area</b>	<b>8.24</b>
Total Wooded Acres Disturbed	
	8.23
Impacts to Stephen G. & Sherry L. Bush TM 3-16.2	
Well Pad	3.61
Excess/Topsoil Material Stockpiles	2.26
<b>Total Affected Area</b>	<b>5.87</b>
Total Wooded Acres Disturbed	
	4.44

Proposed Well Name	WV North NAD 27	WV North NAD 83	UTM (METERS) Zone 17	NAD 83 Lat & Long
Rock Unit 2H	N 295051.30 E 1619620.47	N 295085.15 E 1588179.32	N 4350342.16 E 513448.06	LAT 39-18-08.4928 LONG -80-50-38.5077
Rock Unit 1H	N 295051.36 E 1619630.47	N 295086.22 E 1588180.32	N 4350342.23 E 513451.10	LAT 39-18-08.4940 LONG -80-50-38.3806
Spellman Unit 2H	N 295051.42 E 1619640.47	N 295086.28 E 1588199.32	N 4350342.30 E 513454.15	LAT 39-18-08.4970 LONG -80-50-38.2534
Spellman Unit 1H	N 295051.48 E 1619650.47	N 295086.34 E 1588209.32	N 4350342.37 E 513457.19	LAT 39-18-08.4991 LONG -80-50-38.1262
Ridge Unit 2H	N 295051.54 E 1619660.47	N 295086.40 E 1588219.32	N 4350342.44 E 513460.24	LAT 39-18-08.5012 LONG -80-50-37.9990
Ridge Unit 1H	N 295051.61 E 1619670.47	N 295086.47 E 1588229.32	N 4350342.51 E 513463.29	LAT 39-18-08.5033 LONG -80-50-37.8718
Boulder Unit 1H	N 295051.67 E 1619680.47	N 295086.53 E 1588239.32	N 4350342.58 E 513466.33	LAT 39-18-08.5054 LONG -80-50-37.7446
Boulder Unit 2H	N 295051.73 E 1619690.47	N 295086.59 E 1588249.32	N 4350342.65 E 513469.38	LAT 39-18-08.5075 LONG -80-50-37.6174
California Unit 1H	N 295051.79 E 1619700.47	N 295086.65 E 1588259.32	N 4350342.72 E 513472.43	LAT 39-18-08.5096 LONG -80-50-37.4902
California Unit 2H	N 295051.86 E 1619710.47	N 295086.72 E 1588269.32	N 4350342.79 E 513475.47	LAT 39-18-08.5117 LONG -80-50-37.3630
Hawk Unit 1H	N 295051.92 E 1619720.47	N 295086.78 E 1588279.32	N 4350342.86 E 513478.52	LAT 39-18-08.5138 LONG -80-50-37.2358
Hawk Unit 2H	N 295051.98 E 1619730.47	N 295086.84 E 1588289.32	N 4350342.93 E 513481.56	LAT 39-18-08.5159 LONG -80-50-37.1087
Well Pad Elevation			1,135.0	



REVISION	DATE	REVISION PER CLIENT REQUEST
	07/09/2014	

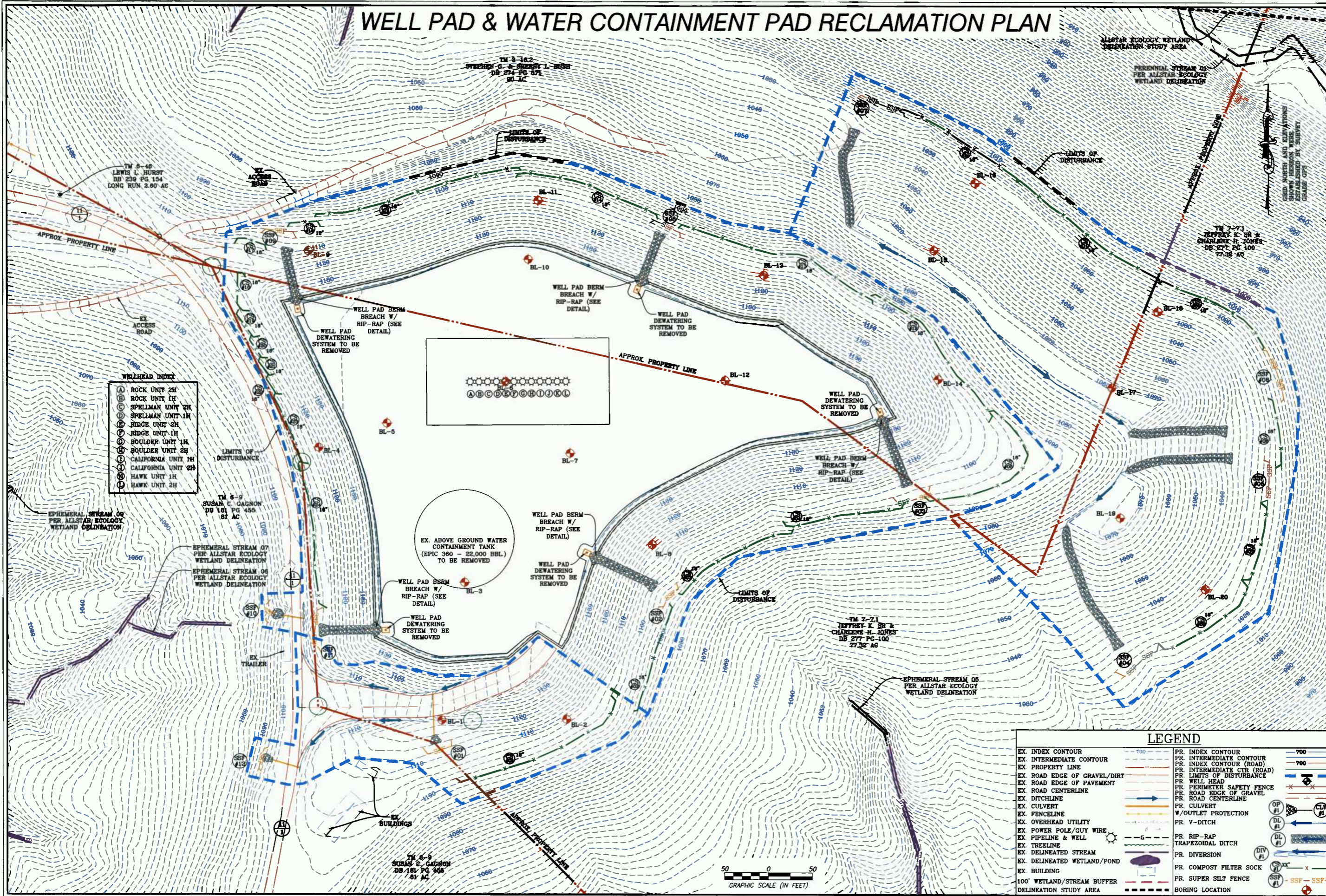


**BALLI**  
 WELL PAD & WATER CONTAINMENT PAD  
 CENTRAL DISTRICT  
 DODDRIDGE COUNTY, WEST VIRGINIA



DATE: 06/18/2014  
 SCALE: AS SHOWN  
 SHEET 1 OF 20

# WELL PAD & WATER CONTAINMENT PAD RECLAMATION PLAN



- WELLHEAD INDEX**
- (A) ROCK UNIT 2H
  - (B) ROCK UNIT 1H
  - (C) SPELLMAN UNIT 2H
  - (D) SPELLMAN UNIT 1H
  - (E) RIDGE UNIT 2H
  - (F) RIDGE UNIT 1H
  - (G) BOULDER UNIT 1H
  - (H) BOULDER UNIT 2H
  - (I) CALIFORNIA UNIT 1H
  - (J) CALIFORNIA UNIT 2H
  - (K) HAWK UNIT 1H
  - (L) HAWK UNIT 2H



**LEGEND**

EX INDEX CONTOUR	PR. INDEX CONTOUR	700
EX INTERMEDIATE CONTOUR	PR. INTERMEDIATE CONTOUR	700
EX PROPERTY LINE	PR. PROPERTY LINE	
EX ROAD EDGE OF GRAVEL/DIRT	PR. INTERMEDIATE CTR (ROAD)	
EX ROAD EDGE OF PAVEMENT	PR. LIMITS OF DISTURBANCE	
EX DITCHLINE	PR. WELL HEAD	
EX CULVERT	PR. PERIMETER SAFETY FENCE	
EX FENCELINE	PR. ROAD EDGE OF GRAVEL	
EX OVERHEAD UTILITY	PR. ROAD CENTERLINE	
EX POWER POLE/GUY WIRE	PR. CULVERT	
EX PIPELINE & WELL	W/OUTLET PROTECTION	
EX TRENCH	PR. V-DITCH	
EX DELINEATED STREAM	PR. RIP-RAP	
EX BUILDING	TRAPEZOIDAL DITCH	
100' WETLAND/STREAM BUFFER	PR. DIVERSION	
DELINEATION STUDY AREA	PR. COMPOST FILTER SOCK	
	PR. SUPER SILT FENCE	
	BORING LOCATION	

**NAVITUS**  
ENERGY ENGINEERING

Telephone: (888) 682-4185 | www.NavitusEng.com

DATE	REVISION	REVISED PER	CLIENT REQUEST
07/09/2014			

**Antero**  
RESOURCES

THIS DOCUMENT WAS PREPARED FOR ANTERO RESOURCES CORPORATION

**BALLI**  
WELL PAD & WATER CONTAINMENT PAD  
CENTRAL DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA



DATE: 06/18/2014  
SCALE: 1" = 50'  
SHEET 19 OF 20