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

April 07, 2016

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-3305879, 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: LEE UNIT 2H
Farm Name: BLAND, HUBERT JR & LORENA
API Well Number: 47-3305879
Permit Type: Horizontal 6A Well
Date Issued: 04/07/2016

01/04

WW-6B
(04/15)

API NO. 47- 033 - 05879
OPERATOR WELL NO. Lee Unit 2H
Well Pad Name: Hubert Pad

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

1) Well Operator:	Antero Resources Corporat	494488557	033 - Harris	Tenmile	Salem
		Operator ID	County	District	Quadrangle

2) Operator's Well Number: Lee Unit 2H Well Pad Name: Hubert Pad

3) Farm Name/Surface Owner: Hubert Jr. & Lorena Bland Public Road Access: CR 50/6

4) Elevation, current ground: 1374' Elevation, proposed post-construction: 1374'

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

SDW
1/20/2016

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale: 7600' TVD, Anticipated Thickness- 50' feet, Associated Pressure- 3200#

8) Proposed Total Vertical Depth: 7600' TVD

9) Formation at Total Vertical Depth: Marcellus Shale

10) Proposed Total Measured Depth: 17,800' MD

11) Proposed Horizontal Leg Length: 9659'

12) Approximate Fresh Water Strata Depths: 391'

13) Method to Determine Fresh Water Depths: Norris Unit 1H (API# 47-033-05701) on same pad

14) Approximate Saltwater Depths: 1210', 1832'

15) Approximate Coal Seam Depths: 1737'

16) Approximate Depth to Possible Void (coal mine, karst, other): None Anticipated

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No X

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

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WW-6B
(04/15)

API NO. 47- 033 - 05879
OPERATOR WELL NO. Lee Unit 2H
Well Pad Name: Hubert 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#	445'	445'*see #19	CTS, 667 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2480'	2480'	CTS, 1012 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	20#	17,800'	17,800'	CTS, 4492 Cu. Ft
Tubing	2-3/8"	New	N-80	4.7#		7100'	
Liners							

SDW
1/20/2016

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	30"	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"	12,630	2500	Lead-H/POZ & Tail - H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners							

PACKERS

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

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WW-6B
(10/14)

API NO. 47- 033 - 05879
OPERATOR WELL NO. Lee Unit 2H
Well Pad Name: Hubert Pad

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill, perforate, fracture a new horizontal shallow well and complete Marcellus Shale.
*Antero will be air drilling the fresh water string which makes it difficult to determine when freshwater is encountered, therefore we have built in a buffer for the casing setting depth which helps to ensure that all fresh water zones are covered.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Antero plans to pump Slickwater into the Marcellus Shale formation in order to ready the well for production. The fluid will be comprised of approximately 99 percent water and sand, with less than 1 percent special-purpose additives as shown in the attached "List of Anticipated Additives Used for Fracturing or Stimulating Well."

Anticipated Max Pressure - 9300 lbs
Anticipated Max Rate - 80 bpm

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 20.73 existing acres

22) Area to be disturbed for well pad only, less access road (acres): 3.22 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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WW-9
(2/15)

API Number 47 - 033 - 05879
Operator's Well No. Lee Unit 2H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Antero Resources Corporation OP Code 494488557

Watershed (HUC 10) Tenmile Creek Quadrangle Salem

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 ☐ (*An associated frac pit will be used for flowback fluids)

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

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 _____

SDW
1/20/2016

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/Stiff 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 _____

Company Official (Typed Name) Cole Kilstrom

Company Official Title Environmental and Regulatory Manager

NATALIE KOMP
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID # 20144028170
MY COMMISSION EXPIRES JULY 18, 2018

Subscribed and sworn before me this 30th day of December, 20 15

_____ Notary Public

My commission expires July 18, 2018

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Form WW-9

Operator's Well No. Lee Unit 2H

Antero Resources Corporation

Proposed Revegetation Treatment: Acres Disturbed 20.73 existing acres Prevegetation pH _____

Lime 4 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

(Existing Pad 3.22 + Existing Main Access Road 5.6 + Existing Frac Pit Access Road 1.71+ Existing Frac Pit 3.52 + Existing Waste & Spoil Pads 6.68 = 20.73 Acres)

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	45	Tall Fescue	45
Perennial Rye Grass	20	Perennial Rye Grass	20
*or type of grass seed requested by surface owner		*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: S L DeWandt

Comments: Existing Pad

Title: OOG Inspector Date: 1/20/2016

Field Reviewed? (X) Yes ( ) No

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Form WW-9 Additives Attachment

SURFACE INTERVAL

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

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 Fluild Solvent – Aliphatic Hydrocarbon
14. Ligco
    Highly Oxidized Leonardite – Filteration 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
3528 Raccoon Run Road
Salem, WV 26426

Well Site Safety Plan
Antero Resources

Well Name: **April Unit 1H, April Unit 2H, Ford Unit 1H, Ford Unit 2H, Lee Unit 1H, Lee Unit 2H, Nellie Unit 1H, Nellie Unit 2H, Norris Unit 1H, Norris Unit 2H**

SDW
1/20/2016

Pad Location: **HUBERT PAD**
Harrison County/Tenmile District

GPS Coordinates: Lat 39°15'12.65"/Long -80°33'36.70" (NAD83)

Driving Directions:

From the intersection of I-50 and 1-79, go 14.7 miles towards the town of Salem. Once near the town of Salem, head south on County Rd 50/73 for 1.2 miles. Continue onto South St for 0.2 miles. Continue onto Patterson Road for 0.2 miles. Continue onto Co Route 29/Patterson Fork Rd for 0.2 miles. Continue onto Salem Country Club Rd for 0.4 miles. Salem Country Club Rd turns slightly right and becomes Co Route 29/Patterson Fork Rd for 0.9 miles. Turn left onto Co Route 29/2 for 1 mile. Take a sharp right onto Raccoon Run Rd for 0.2 miles. Lease road will be on your right.

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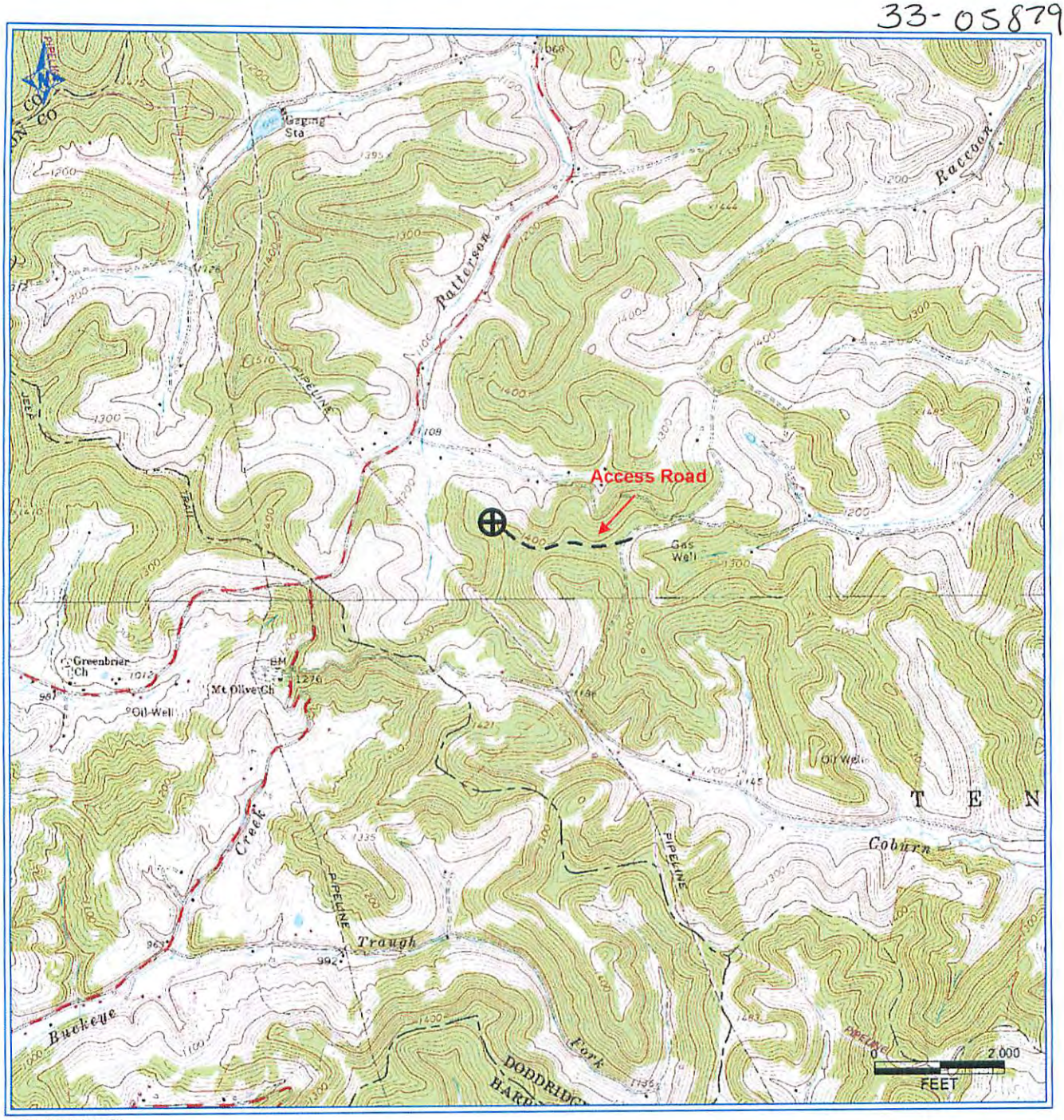
EMERGENCY (24 HOUR) CONTACT 1-800-878-1373

33-05879



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Antero Resources Corporation

APPALACHIAN BASIN

Lee Unit 2H

Doddridge County

0 2,000 4,000

FEET

REMARKS

QUADRANGLE: SALEM
WATERSHED: PATTERSON FORK
DISTRICT: TENMILE

Date: 9/18/2012

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Antero Resources
Well No. Lee Unit 2H
Antero Resources Corporation

(⊕) Denotes location of well on United States topographic maps

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.

Kenneth J. Plum, P.S. 2216

Notes:

West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.

Well No. Lee Unit 2H Top Hole coordinates are
N: 276,144.06 Latitude: 39°15'11.93"
E: 1,699,766.82 Longitude: 80°33'36.79"
Bottom Hole coordinates are
N: 284,781.70 Latitude: 39°16'36.90"
E: 1,696,317.54 Longitude: 80°34'21.94"

UTM Zone 17, NAD 1983

Top Hole Coordinates:	Bottom Hole Coordinates:
N: 4,344,989.782m	N: 4,347,603.741m
E: 537,960.932m	E: 536,866.256m

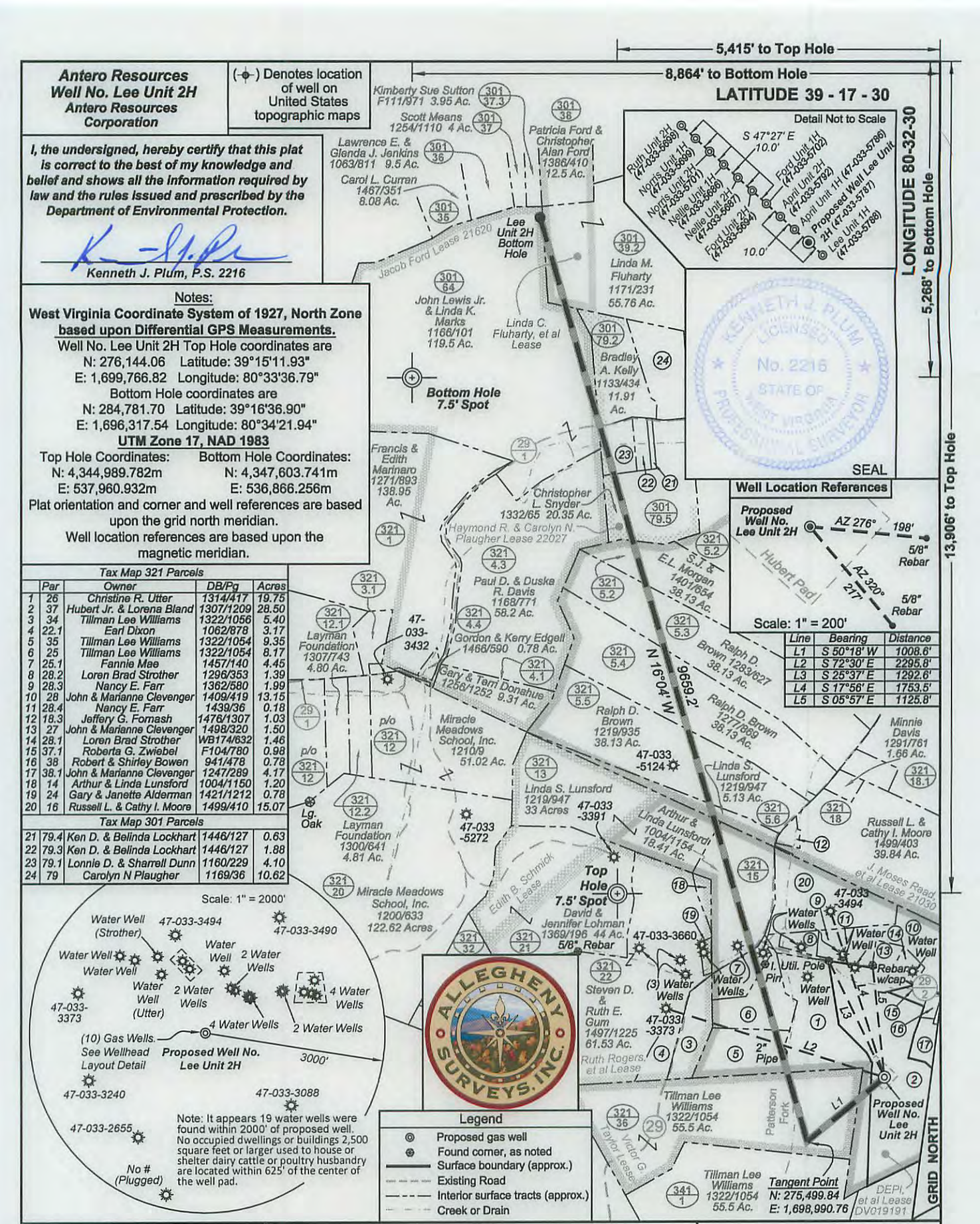
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Tax Map 321 Parcels

	Par	Owner	DB/Pg	Acres
1	26	Christine R. Utter	1314/417	19.75
2	37	Hubert Jr. & Lorena Bland	1307/1209	28.50
3	34	Tillman Lee Williams	1322/1056	5.40
4	22.1	Earl Dixon	1062/878	3.17
5	35	Tillman Lee Williams	1322/1054	9.35
6	25	Tillman Lee Williams	1322/1054	8.17
7	25.1	Fannie Mae	1457/140	4.45
8	28.2	Loren Brad Strother	1296/353	1.39
9	28.3	Nancy E. Farr	1362/580	1.99
10	28	John & Marianne Clevenger	1409/419	13.15
11	28.4	Nancy E. Farr	1439/36	0.18
12	18.3	Jeffery G. Fornash	1476/1307	1.03
13	27	John & Marianne Clevenger	1498/320	1.50
14	28.1	Loren Brad Strother	WB174/632	1.46
15	37.1	Roberta G. Zwiebel	F104/780	0.98
16	38	Robert & Shirley Bowen	941/478	0.78
17	38.1	John & Marianne Clevenger	1247/289	4.17
18	14	Arthur & Linda Lunsford	1004/1150	1.20
19	24	Gary & Janette Alderman	1421/1212	0.78
20	16	Russell L. & Cathy I. Moore	1499/410	15.07

Tax Map 301 Parcels

21	79.4	Ken D. & Belinda Lockhart	1446/127	0.63
22	79.3	Ken D. & Belinda Lockhart	1446/127	1.88
23	79.1	Lonnie D. & Sharrell Dunn	1160/229	4.10
24	79	Carolyn N Plaugher	1169/36	10.62



Legend
- Proposed gas well
- Found corner, as noted
- Surface boundary (approx.)
- Existing Road
- Interior surface tracts (approx.)
- Creek or Drain

FILE NO: 10-30-G-13
DRAWING NO: Lee 2H Well Plat_Rev 2
SCALE: 1" = 1200'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Bridgeport, WV

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

DATE: December 28 2015
OPERATOR'S WELL NO. Lee Unit 2H
API WELL NO:
47 - 033 - 05879H6A
STATE COUNTY PERMIT

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION : ☐ STORAGE ☐ DEEP ☒ SHALLOW
LOCATION: ELEVATION: Original Grade: 1394' Existing Grade: 1374' WATERSHED: Tenmile Creek QUADRANGLE: Salem
DISTRICT: Tenmile COUNTY: Harrison
SURFACE OWNER: Hubert Jr. & Lorena Bland; Linda C. Fluharty Lease; J. Moses Raad, et al; Jacob Ford ACREAGE: 28.5
ROYALTY OWNER: DEPI, et al; Victor G. Taylor; Haymond R. & Carolyn N. Plaugher LEASE NO: 22027; DV019191; 21030; 21620 ACREAGE: 234.342; 29; 283; 55.5; 447; 50
PROPOSED WORK: ☒ DRILL ☐ CONVERT ☐ DRILL DEEPER ☒ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION
☒ PERFORATE NEW FORMATION ☐ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: TVD 7,600' MD 17,800'

WELL OPERATOR: Antero Resources Corporation
ADDRESS: 1615 Wynkoop Street, Denver, CO 80202
DESIGNATED AGENT: Dianna Stamper - CT Corporation System
ADDRESS: 5400 D Big Tyler Road, Charleston, WV 25313

Antero Resources
Well No. Lee Unit 2H
Antero Resources Corporation

(-⊕-) Denotes location of well on United States topographic maps

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.

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UTM Zone 17, NAD 1983

Top Hole Coordinates:	Bottom Hole Coordinates:
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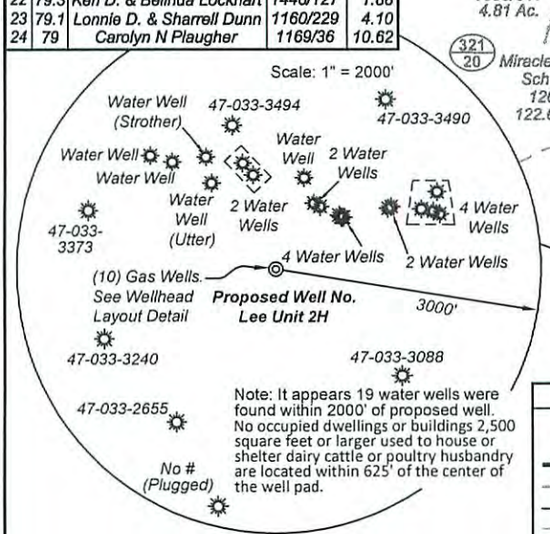
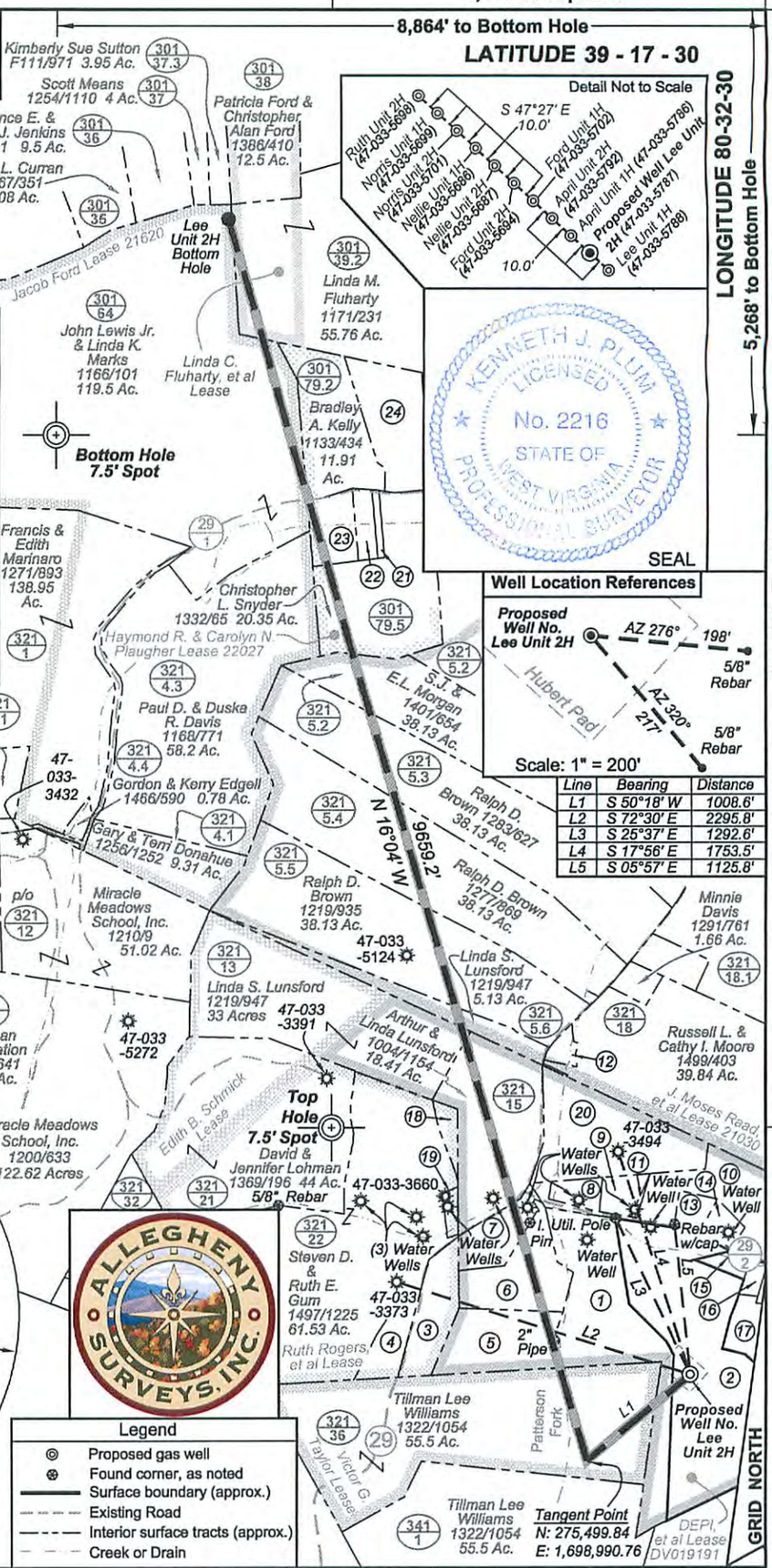
23	79.1	Lonnie D. & Sharrell Dunn	1160/229	4.10
24	79	Carolyn N Plaugher	1169/36	10.62





Legend
- Proposed gas well
- Found corner, as noted
- Surface boundary (approx.)
- Existing Road
- Interior surface tracts (approx.)
- Creek or Drain

FILE NO: 10-30-G-13
DRAWING NO: Lee 2H Well Plat_Rev 2
SCALE: 1" = 1200'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Bridgeport, WV

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

DATE: December 28 2015
OPERATOR'S WELL NO. Lee Unit 2H
API WELL NO:
47 - 033 - 05879HOA
STATE COUNTY PERMIT

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION : ☐ STORAGE ☐ DEEP ☒ SHALLOW
LOCATION: ELEVATION: Original Grade: 1394' Existing Grade: 1374' WATERSHED: Tenmile Creek QUADRANGLE: Salem
DISTRICT: Tenmile COUNTY: Harrison
SURFACE OWNER: Hubert Jr. & Lorena Bland Linda C. Fluharty Lease J. Moses Raad, et al; Jacob Ford ACREAGE: 28.5
ROYALTY OWNER: DEPI, et al; Victor G. Taylor; Haymond R. & Carolyn N. Plaugher LEASE NO: 22027 DV019191; 21030; 21620 ACREAGE: 234.342; 29 283; 55.5; 447; 50
PROPOSED WORK: ☒ DRILL ☐ CONVERT ☐ DRILL DEEPER ☒ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION
☒ PERFORATE NEW FORMATION ☐ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ TVD 7,600'
☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: MD 17,800'

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System
ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
Denver, CO 80202 Charleston, WV 25313

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Office of Oil and Gas
JAN 04 2016
WV Department of Environmental Protection

33-05879

WW-6A1

Operator's Well Number Lee Unit 2H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

(1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

(2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
DEPI, et al Lease DV019191			
Minnie S. Lee	Consolidated Gas Supply Corporation	1/8	1060/0644
Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation	Assignment	1136/0250
Consolidated Gas Transmission Corporation	CNG Development Company	Assignment	1143/0921
CNG Development Company	CNG Producing Company	Certificate of Incorporation	Exhibit 2
CNG Producing Company	Dominion Exploration & Production, Inc.	Amended Certificate of Authority	AOI 0058/0366
Dominion Exploration & Production, Inc.	Antero Resources Appalachian Corporation	Assignment	1423/1068
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
Victor G. Taylor Lease			
Victor Gaines Taylor	Clarence W. Mutschelknaus	1/8	1436/0958
Clarence W. Mutschelknaus	Bluestone Energy Partners	Assignment	1473/0453
Bluestone Energy Partners	Antero Resources Bluestone, LLC, a wholly owned subsidiary of Antero Resources Appalachian Corporation	Affidavit Regarding Merger	AOI 0035/1236
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
J. Moses Raad, et al Lease 21030			
J. Moses Raad, et ux	Garner and Gawthrop, Inc.	1/8	1120/0056
Garner and Gawthrop, Inc.	Bluestone Energy Partners	Assignment	1459/0310
Bluestone Energy Partners	Antero Resources Bluestone, LLC, a wholly owned subsidiary of Antero Resources Appalachian Corporation	Affidavit Regarding Merger	AOI 0035/1236
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**
Haymond R. & Carolyn N. Plaugher Lease 22027			
Haymond R. Plaugher, et ux	Alton L. Skinner	1/8	1105/0098
Alton Skinner, II, et ux as the co-administrator of the Estate of Alton L. Skinner, deceased	Crystal G. Skinner	Assignment	AOI 0035/1081
Crystal G. Skinner	DC Petroleum, Inc.	Assignment	AOI 0035/1088
DC Petroleum, Inc.	Bluestone Energy Partners	*Partial Assignment	1461/1034
Bluestone Energy Partners	Antero Resources Bluestone, LLC, a wholly owned subsidiary of Antero Resources Appalachian Corporation	Affidavit Regarding Merger	AOI 0035/1236
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.**

****CONTINUED ON NEXT PAGE****

33-05879

WW-6A1

Operator's Well Number Lee Unit 2H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

(1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

(2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
Jacob Ford Lease 21620			
Jacob Ford	Antero Resources Appalachian Corporation	1/8+	1466/0535
Antero Resources Appalachian Corporation	**Antero Resources Corporation**	**Name Change**	**Exhibit 1**

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***Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.**

****CONTINUED ON NEXT PAGE****

33-05879

WW-6A1
(5/13)

Operator's Well No. Lee Unit 2H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

(1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

(2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Linda C. Fluharty, et al Lease				
	Linda Fluharty	Antero Resources Appalachian Corp.	1/8+	1512/0775
	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.

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Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

Well Operator: Antero Resources Corporation
By: Ward McNeilly
Its: VP of Reserves, Planning & Midstream

33-05879

FORM WW-6A1
EXHIBIT 1

FILED
JUN 10 2013
IN THE OFFICE OF SECRETARY OF STATE

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

Penney Barker, Manager
Corporations Division
Tel: (304)558-8000
Fax: (304)558-8381
Website: www.wvsos.com
E-mail: business@wvsos.com
Office Hours: Monday – Friday
8:30 a.m. – 5:00 p.m. ET

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

APPLICATION FOR AMENDED CERTIFICATE OF AUTHORITY

**** In accordance with the provisions of the West Virginia Code, the undersigned corporation hereby **** applies for an Amended Certificate of Authority and submits the following statement:

1. Name under which the corporation was authorized to transact business in WV: Antero Resources Appalachian Corporation

2. Date Certificate of Authority was issued in West Virginia: 6/25/2008

3. Corporate name has been changed to: Antero Resources Corporation
(Attach one Certified Copy of Name Change as filed in home State of incorporation.)

4. Name the corporation elects to use in WV: Antero Resources Corporation
(due to home state name not being available)

5. Other amendments:
(attach additional pages if necessary)

6. Name and phone number of contact person. (This is optional, however, if there is a problem with the filing, listing a contact person and phone number may avoid having to return or reject the document.)

Alvyn A. Schopp — (303) 357-7310
Contact Name — Phone Number

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

Print Name of Signer: Alvyn A. Schopp — Title/Capacity: Authorized Person

Signature: [signature] — Date: June 10, 2013

*Important Legal Notice Regarding Signature: Per West Virginia Code §31D-1-129, Penalty for signing false document. Any person who signs a document he or she knows is false in any material respect and knows that the document is to be delivered to the secretary of state for filing is guilty of a misdemeanor and, upon conviction thereof, shall be fined not more than one thousand dollars or confined in the county or regional jail not more than one year, or both.

RECEIVED
Office of Oil and Gas
JAN 04 2016
WV Department of Environmental Protection

FORM WW-6A1
EXHIBIT 2

33-05879

State of West Virginia

CERTIFICATE

I, Ken Hechler, Secretary of State of the State of West Virginia, hereby certify that

originals of a Notice of Intention to Withdraw with the application of

CNG DEVELOPMENT COMPANY

for a Certificate of Withdrawal from West Virginia, signed and verified, as required by the provisions of Chapter 31, Article 1, Section 60 of the West Virginia Code are filed in my office and conform to law. Therefore, I issue this

CERTIFICATE OF WITHDRAWAL

and I attach to this certificate a duplicate original of the application.

Given under my hand and the Great Seal of the State of West Virginia, on this

TENTH day of

JULY 19 91

Ken Hechler

Secretary of State.

FORM WW-6A1
EXHIBIT 2, PAGE 1

33-05879

State of West Virginia

CERTIFICATE

I, Ken Hechler, Secretary of State of the State of West Virginia, hereby certify that

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for a Certificate of Withdrawal from West Virginia, signed and verified, as required by the provisions of Chapter 31, Article 1, Section 60 of the West Virginia Code are filed in my office and conform to law. Therefore, I issue this

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and I attach to this certificate a duplicate original of the application.

Given under my hand and the Great Seal of the State of West Virginia, on this

TENTH day of

JULY 19 91

Ken Hechler

Secretary of State.

RECEIVED
Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

FORM WW-6A1
EXHIBIT 2, PAGE 2

33-05879

KEN HECHLER
FEE $5.00

TO BE FILED IN DUPLICATE
ORIGINALS

FILED
JUL 10 1991
OFFICE OF
SECRETARY OF STATE
WEST VIRGINIA

APPLICATION FOR CERTIFICATE OF WITHDRAWAL OF

CNG Development Company

In accordance with Chapter 31, Article 1, Section 60 of the Code of West Virginia, the undersigned corporation hereby applies for a certificate of withdrawal from West Virginia, and submits the following statement:

The name of the corporation is: CNG Development Company

It is incorporated under the laws of Delaware

IT IS NOT TRANSACTING BUSINESS IN WEST VIRGINIA.

It hereby surrenders its authority to transact business in West Virginia. It revokes the authority of its registered agent in West Virginia to accept service of process, and consents that service of process in any action, suit or proceeding based upon any course of action arising in West Virginia during the time the corporation was authorized to transact business in West Virginia may thereafter be made on the corporation by service thereof on the Secretary of State of West Virginia.

The post-office address to which the Secretary of State may mail a copy of any process against the corporation is CNG Producing Company, CNG Tower, 1450 Poydras Street, New Orleans, LA 70112-6000 Attn: Corporate Secretary

The aggregate number of shares which it has authority to issue, itemized by classes, par value of shares, shares without par, and series, if any, within a class, as of this date is

NUMBER OF SHARES	CLASS	SERIES	PAR VALUE/NO PAR
1,400,000	Common		$100

The aggregate number of its issued shares, itemized by classes, par value of shares, shares without par, and series, if any, within a class, as of this date is

NUMBER OF SHARES	CLASS	SERIES	PAR VALUE/NO PAR
1,168,410	Common		$100

The amount of its state capital as of this date is $28,[illegible]

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Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

FORM WW-6A1
EXHIBIT 2, PAGE 3

33-05879

CNG Development Company (Through CNG Producing Company)

corporate name

President/Vice President

Secretary

State of Louisiana

Parish Orleans

I James E. Wright, Jr. a Notary Public, do

hereby certify that D. Malcolm Johns, Jr.

the Secretary

office

of CNG Producing Company

corporate name

office

appeared before me and they signed the foregoing as the act and deed of the corporation.

Notary Public

(notary seal)

My commission expires at death

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Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

33-05879

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

December 30, 2015

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

RE: Lee Unit 2H
Quadrangle: Salem
Harrison County/Tenmile District, West Virginia

Mr. Martin:

Antero Resources Corporation (Antero) is submitting the following application for a new well work permit for the Lee Unit 2H 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 Lee Unit 2H horizontal lateral will drill through including any and all roads crossed under as identified on the attached survey plat.

Sincerely,

Tim Rady
Director, Land Operations - Marcellus

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Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

WW-6AC
(1/12)

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

Date of Notice Certification: 12/30/2015

API No. 47- 033 - 05879
Operator's Well No. Lee Unit 1H
Well Pad Name: Hubert Pad

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:	West Virginia	UTM NAD 83	Easting:	537,963.211m
County:	Harrison		Northing:	4,344,987.760m
District:	Tenmile	Public Road Access:		CR 50/6
Quadrangle:	Salem	Generally used farm name:		Hubert Jr. & Lorena Bland
Watershed:	Tenmile Creek			

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.

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: *PLEASE CHECK ALL THAT APPLY	OOG OFFICE USE ONLY
☐ 1. NOTICE OF SEISMIC ACTIVITY or ☒ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	☐ RECEIVED/ NOT REQUIRED
☒ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ☐ NO PLAT SURVEY WAS CONDUCTED	☐ RECEIVED
☐ 3. NOTICE OF INTENT TO DRILL or ☒ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or ☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	☐ RECEIVED/ NOT REQUIRED
☒ 4. NOTICE OF PLANNED OPERATION	☐ RECEIVED
☒ 5. PUBLIC NOTICE	☐ RECEIVED
☒ 6. NOTICE OF APPLICATION	☐ RECEIVED

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 Proof of 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.

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Office of Oil & Gas
JAN 04 2016
WV Department of
Environmental Protection
WV Department of
Environmental Protection

33-05879

WW-6AC
(1/12)

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:	Antero Resources Corporation	Address:	1615 Wynkoop Street
By:	Ward McNeilly		Denver, CO 80202
Its:	VP of Reserves, Planning & Midstream	Facsimile:	303-357-7315
Telephone:	(303) 357-7310	Email:	asteele@anteroresources.com

NOTARY SEAL
NATALIE KOMP
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID # 20144028170
MY COMMISSION EXPIRES JULY 18, 2018

Subscribed and sworn before me this 30th day of December 2015

Natalie K Notary Public

My Commission Expires July 18, 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.

RECEIVED
Office of Oil and Gas

JAN 04 2016

WV Department of
Environmental Protection

WW-6A
(9-13)

API NO. 47- 033 - 05879
OPERATOR WELL NO. Lee Unit 2H
Well Pad Name: Hubert Pad

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: 12/30/2015 **Date Permit Application Filed:** 12/30/2015

Notice of:

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

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)
Name: PLEASE SEE ATTACHMENT
Address:

Name:
Address:

☐ SURFACE OWNER(s) (Impoundments or Pits)
Name: PLEASE SEE ATTACHMENT
Address:

☑ COAL OWNER OR LESSEE
Name: Consolidation Coal Company, CONSOL Energy, Inc. CNX Center, Engineering & Operations Support - Coal, ATTN: Analyst
Address: 1000 Consol Energy Dr.
Canonsburg, PA 15317

☐ 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: PLEASE SEE ATTACHMENT
Address:

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name:
Address:

*Please attach additional forms if necessary

RECEIVED
Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

RECEIVED
Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

WW-6A
(8-13)

API NO. 47- 033 - 05879
OPERATOR WELL NO. Lee Unit 2H
Well Pad Name: Hubert Pad

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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting 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 wetland, 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

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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.

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 57th 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.**

WW-6A
(8-13)

API NO. 47- 033 - 05879
OPERATOR WELL NO. Lee Unit 2H
Well Pad Name: Hubert Pad

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- 033 - 05879
OPERATOR WELL NO. Lee Unit 2H
Well Pad Name: Hubert Pad

Notice is hereby given by:

Well Operator: Antero Resources Corporation
Telephone: (303) 357-7310
Email: 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.

NATALIE KOMP
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID # 20144028170
MY COMMISSION EXPIRES JULY 18, 2018

Subscribed and sworn before me this 30th day of December 2015

Notary Public

My Commission Expires July 18, 2018

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33-05879

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

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

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

TM 321 PCLS 37
Owner: Hubert Jr. & Lorena Bland
Address: 3912 Halls Run Rd.
Salem, WV 26426

TM 321 PCLS 26
Owner: Christine R. Utter
Address: RR 1 Box 304A
Salem, WV 26426

Owner: Christine R. Utter (2nd Address)
Address: 3988 Halls Run Rd.
Salem, WV 26426

TM 321 PCLS 36
Owner: Tillman Lee Williams
Address: 1545 Flinderation Rd.
Salem, WV 26426

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

TM 321 PCL 39
Owner: John D. Clevenger, et ux
Address: RR 1 Box 308A
Salem, WV 26426

TM 341 PCL 3
Owner: Arnet Thompson
Address: 10736 Arnez Rd.
Jacksonville, FL 32218

SURFACE OWNER(s) IMPOUNDMENTS OR PITS

TM 341 PCL 3
Owner: Arnet Thompson
Address: 10736 Arnez Rd.
Jacksonville, FL 32218

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WATER SOURCE OWNERS: These owners of water sources, within 1500' of the well pad, were notified of all well work permit applications.

TM 321/26
TM 321/26 – 1 Water Well: 1227' (D)
Owner: Christine R. Utter
Address: RR 1 Box 304A
Salem, WV 26426

Owner: Christine R. Utter (2nd Address)
Address: 3988 Halls Run Rd.
Salem, WV 26426

TM 321/28.4
TM 321/28.4 – 1 Water Well: 1265' (E)
Owner: Nancy E. Farr
Address: 3952 Halls Run Rd.
Salem, WV 26426

TM 321/37
TM 321/37 – 1 Water Well: 1104' (F)
Owner: Hubert Jr. & Lorena Bland
Address: 3912 Halls Run Rd.
Salem, WV 26426

TM 321/28.1
TM 321/28.1 – 1 Water Well: 1080' (K)
Owner: Loren Bradley Strother
Address: 4011 Halls Run Rd.
Salem, WV 26426

TM 321/37.1
TM 321/37.1 – 1 Water Well: 860' (I)
Owner: Roberta G. Zwiebel
Address: 3766 Halls Run Rd.
Salem, WV 26426

TM 321/38
TM 321/38 – 1 Water Well: 863' (J)
Owner: Robert N. & Shirley M. Bowen
Address: 3738 Halls Run Rd.
Salem, WV 26426

TM 321/29
TM 321/38 – 2 Water Wells: 1484' (L), 1442' (M)
Owner: Paul Peter Keppeler
Address: PO Box 4158
Clarksburg, WV 26302

TM 321/38.1 & 321/38.2
TM 321/38.1 – 3 Water Wells: 944', 947' & 960'
TM 321/38.2 – 1 Water Well: 940'
Owner: John D. Clevenger, et ux
Address: RR 1 Box 308A
Salem, WV 26426

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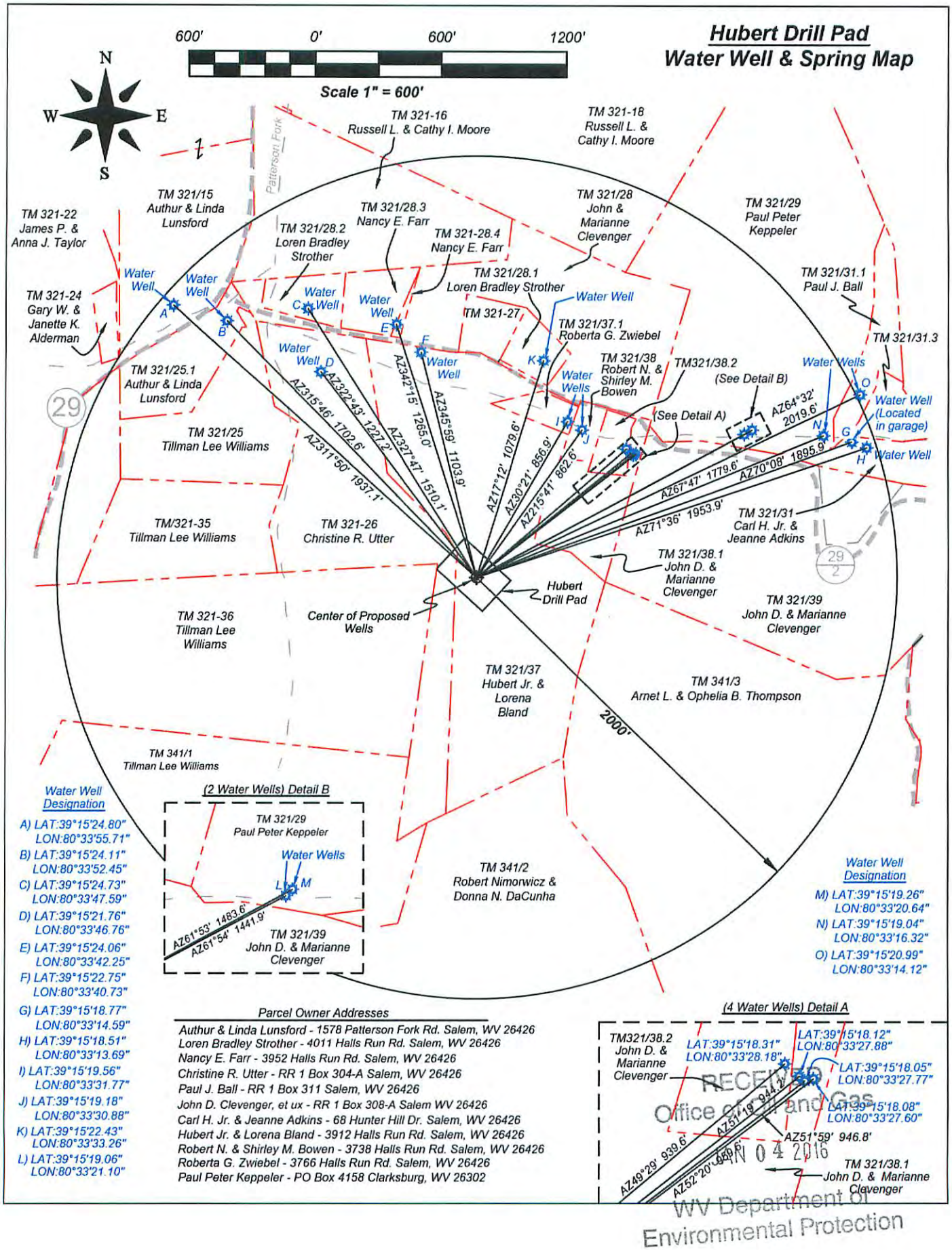
WATER SOURCE OWNERS: Greater than 1500'

***NOTE: On attached water well map, 7 water wells were identified, but they are located greater than 1500' from the subject well pad location.**

33-05879



Water Well Designation

A) LAT:39°15'24.80" LON:80°33'55.71"
B) LAT:39°15'24.11" LON:80°33'52.45"
C) LAT:39°15'24.73" LON:80°33'47.59"
D) LAT:39°15'21.76" LON:80°33'46.76"
E) LAT:39°15'24.06" LON:80°33'42.25"
F) LAT:39°15'22.75" LON:80°33'40.73"
G) LAT:39°15'18.77" LON:80°33'14.59"
H) LAT:39°15'18.51" LON:80°33'13.69"
I) LAT:39°15'19.56" LON:80°33'31.77"
J) LAT:39°15'19.18" LON:80°33'30.88"
K) LAT:39°15'22.43" LON:80°33'33.26"
L) LAT:39°15'19.06" LON:80°33'21.10"

Water Well Designation

M) LAT:39°15'19.26" LON:80°33'20.64"
N) LAT:39°15'19.04" LON:80°33'16.32"
O) LAT:39°15'20.99" LON:80°33'14.12"

Parcel Owner Addresses

Authur & Linda Lunsford - 1578 Patterson Fork Rd. Salem, WV 26426
Loren Bradley Strother - 4011 Halls Run Rd. Salem, WV 26426
Nancy E. Farr - 3952 Halls Run Rd. Salem, WV 26426
Christine R. Utter - RR 1 Box 304-A Salem, WV 26426
Paul J. Ball - RR 1 Box 311 Salem, WV 26426
John D. Clevenger, et ux - RR 1 Box 308-A Salem WV 26426
Carl H. Jr. & Jeanne Adkins - 68 Hunter Hill Dr. Salem, WV 26426
Hubert Jr. & Lorena Bland - 3912 Halls Run Rd. Salem, WV 26426
Robert N. & Shirley M. Bowen - 3738 Halls Run Rd. Salem, WV 26426
Roberta G. Zwiebel - 3766 Halls Run Rd. Salem, WV 26426
Paul Peter Keppeler - PO Box 4158 Clarksburg, WV 26302

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33-05879

WW-6A4
(1/12)

Operator Well No. Lee Unit 1H
Multiple Wells on Hubert Pad

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: 09/03/2015 **Date Permit Application Filed:** 12/30/2015

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

☐ HAND DELIVERY ☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED

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: PLEASE SEE ATTACHMENT
Address:

Name:
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:	West Virginia	UTM NAD 83 Easting:	537947.33m (Approximate Pad Center)
County:	Harrison	Northing:	4345002.06m (Approximate Pad Center)
District:	Tenmile	Public Road Access:	CR 50/6
Quadrangle:	Salem 7.5'	Generally used farm name:	Bland, Hubert, Jr., et ux
Watershed:	Tenmile Creek		

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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator:	Antero Resources Appalachian Corporation	Authorized Representative:	Ashlie Steele
Address:	1615 Wynkoop St.	Address:	1615 Wynkoop St.
	Denver, CO 80202		Denver, CO 80202
Telephone:	303-357-7323	Telephone:	303-357-7323
Email:	asteele@anteroresources.com	Email:	asteele@anteroresources.com
Facsimile:	303-357-7315	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.

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TM 321 PCL 26
TM 321 PCL 36
TM 321 PCL 37

33-05879

WW-6A4 Notice of Intent to Drill Attachment:

Surface Owners:
Tax Parcel ID: 321-23

Owner: Christine R. Utter
Address: RR 1 Box 304A
Salem, WV 26426

Owner: Christine R. Utter (2nd Address)
Address: 3988 Halls Run Rd.
Salem, WV 26426

Surface Owners:
Tax Parcel ID: 321-36

Owner: Tillman Lee Williams
Address: 1545 Flinderation Rd.
Salem, WV 26426

Surface Owners:
Tax Parcel ID: 321-37

Owner: Hubert Bland, Jr., et ux
Address: 3912 Halls Run Rd.
Salem, WV 26426

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33-5875

WW-6A5
(1/12)

Operator Well No. Lee Unit 2H

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: 12/30/2015 **Date Permit Application Filed:** 12/30/2015

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

☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND DELIVERY

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
Address:

Name:
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:	West Virginia	UTM NAD 83 Easting:	537,960.932m
County:	Harrison	Northing:	4,344,989.782m
District:	Tenmile	Public Road Access:	CR 50/6
Quadrangle:	Salem	Generally used farm name:	Hubert Jr. & Lorena Bland
Watershed:	Tenmile Creek		

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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator:	Antero Resources Corporation	Address:	1615 Wynkoop Street
Telephone:	(303) 357-7310		Denver, CO 80202
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 its 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.

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33-05879

WW-6A5 Notice of Planned Operations Attachment:

Surface Owners:

Owner:	Hubert Jr. & Lorena Bland
Address:	3912 Halls Run Rd. Salem WV 26426
Owner:	Christine R. Utter
Address:	RR 1 Box 304A Salem, WV 26426
Owner:	Christine R. Utter (2nd Address)
Address:	3988 Halls Run Rd. Salem, WV 26426
Owner:	Tillman Lee Williams
Address:	1545 Flinderation Rd. Salem, WV 26426

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33-05879

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

Reissued December 23, 2015

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

Subject: DOH Permit for the Hubert Pad, Harrison County
Lee Unit 2H Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2012-0815 which has been issued to Antero Resources Corporation for access to the State Road for a well site located off of Harrison County Route 50/6 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

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

Cc: Natalie Komp
Antero Resources Corporation
CH, OM, D-4
File

RECEIVED
Office of Oil and Gas
JAN 04 2016
WV Department of
Environmental Protection

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-nitrilopropionamide	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
Sillica, 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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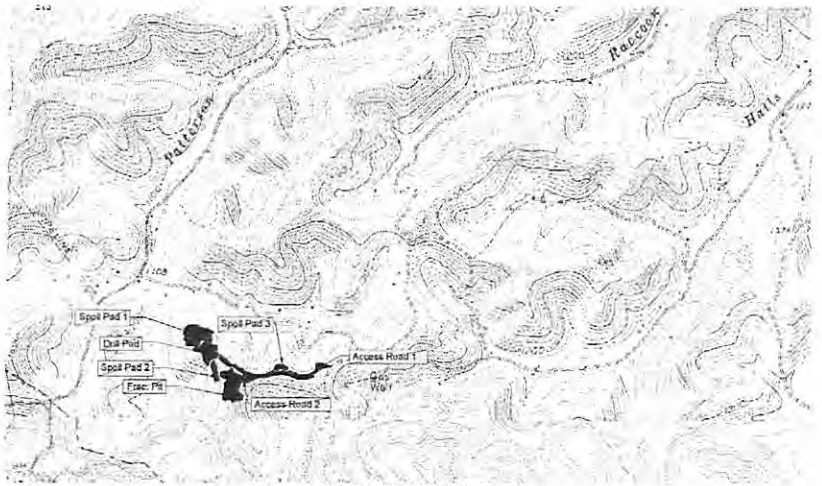
Environmental Protection

WVDEP OOG
ACCEPTED AS-BUILT
4/7/2016

HUBERT PAD AS-BUILT PLANS
ANTERO RESOURCES CORPORATION

West Virginia Coordinate System of 1983
State Plane Grid North
Elevations NAVD88
Established By Survey Grade GPS



SALEM & BIG ISAAC QUADS

0 1000 2000 3000

SITE LOCATIONS
STATE PLANE NAD 83 (WV NORTH ZONE)

	LATITUDE	LONGITUDE
Center of Pad	39°15'12.65" N	80°33'36.70" W
Begin Access Road	39°15'10.37" N	80°33'59.28" W
Center of Pad (UTM 83-17 M)	N=4345001.9130	E=537247.2560

AFFECTED TAX PARCELS: 321/26, 321/ 37, 321/36, 321/39 & 341/3
TENMILE DISTRICT

TM 321 - Pcl. 26
Christine R. Utter
DB 1314/417
20 Acres
(Affected area from Proposed Drill Pad = 0.41 Acres)
(Affected area from Proposed Spoil Piles = 1.33 Acres)

TM 321 - Pcl. 36
Tillman Lee Williams
DB 1322/1054
55.5 Acres
(Affected area from Proposed Drill Pad = 0.06 Acres)

TM 321 - Pcl. 37
Hubert Bland Jr., et ux
DB 1307/1209
28.5 Acres
(Affected area from Proposed Access Road = 470 feet, 0.97 Acres)
(Affected area from Proposed Drill Pad = 2.75 Acres)
(Affected area from Proposed Frac Pit Access Road = 154 feet, 1.01 Acres)
(Affected area from Proposed Frac Pit= 1.97 Acres)
(Affected area from Proposed Spoil Piles = 4.60 Acres)

TM 321 - Pcl. 39
John D. Clevenger, et ux
DB 1247/289
33.35 Acres
(Affected area from Proposed Access Road = 690 feet, 1.71 Acres)
(Affected area from Proposed Spoil Piles = 0.54 Acres)

TM 341 - Pcl. 3
Arrell L. Thompson
DB 1315/960
73 Acres by Deed - 71.41 Acres Assessed
(Affected 40' R/W area from Proposed Access Road = 1,259 feet, 2.92 Acres)
(Affected area from Proposed Frac Pit Access Road = 382 feet, 0.70 Acres)
(Affected area from Proposed Frac Pit= 1.55 Acres)
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Well Location Restrictions:

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* 250' from an existing well or developed spring used for human or domestic animals.
* 625' occupied dwelling or barn greater 2500 SF used for poultry or dairy measured from the center of the pad.
* 100' from edge of disturbance to wetlands, perennial streams, natural or artificial lake, pond or reservoir.
* 300' from edge of disturbance to naturally reproducing trout streams
* 1000' of surface or ground water intake to a public water supply.

Project Contacts

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Tom Wince - Construction
304-869-3405 Off. 304-483-0933 Cell

Ryan Ward, Environmental Engineer (ALLSTAR)
866-213-2666 ext 311 Off. 304-692-7477 Cell

John Kawcak, Engineer
817-368-1553

Dusty Woods
817-771-1436

Aaron Kunzler, Construction Manager
405-227-8344

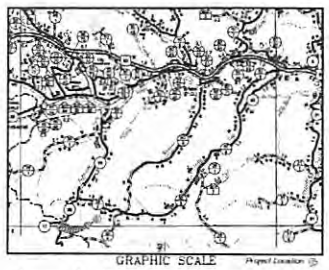
Surveyor & Engineer

Bill Yetzer, PS, El. - Allegheny Surveys Inc
304-848-5035 Off. 304-619-4937 Cell

Tom Carothers, PE, PS - Homer Brothers Engineers
304-624-6445 Office

FLOODPLAIN CONDITIONS

DO SITE CONSTRUCTION ACTIVITIES TAKE PLACE IN FLOODPLAIN:	NO
PERMIT NEEDED FROM COUNTY FLOODPLAIN COORDINATOR:	NO
HEC-RAS STUDY COMPLETED:	N/A
FLOODPLAIN SHOWN ON DRAWINGS:	N/A
FIRM MAP NUMBER(S) FOR SITE:	5400530075B
ACREAGES OF CONSTRUCTION IN FLOODPLAIN:	N/A



Well Table

Prop. Well Lee Unit 1H WV-N NAD83 N: 278174.16 WV-N NAD83 E: 1662333.48 LAT NAD83: 39°15'18.18" LON NAD83: 80°33'38.03"	Prop. Well Lee Unit 2H WV-N NAD83 N: 278180.83 WV-N NAD83 E: 1662326.13 LAT NAD83: 39°15'12.25" LON NAD83: 80°33'38.14"	Prop. Well Kent Unit 1H WV-N NAD83 N: 278142.19 WV-N NAD83 E: 1662219.79 LAT NAD83: 39°15'12.22" LON NAD83: 80°33'39.23"	Prop. Well Kent Unit 2H WV-N NAD83 N: 278199.45 WV-N NAD83 E: 1662211.42 LAT NAD83: 39°15'12.78" LON NAD83: 80°33'39.33"	As Built Well Reed Unit 1H API # 47-033-05702-0000 WV-N NAD83 N: 278281.21 WV-N NAD83 E: 1662304.62 LAT NAD83: 39°15'13.42" LON NAD83: 80°33'38.42"	As Built Well Reed Unit 2H API # 47-033-05704-0000 WV-N NAD83 N: 278261.81 WV-N NAD83 E: 1662299.65 LAT NAD83: 39°15'13.21" LON NAD83: 80°33'38.51"
As Built Well Snake Unit 2H API # 47-033-05691-0000 WV-N NAD83 N: 278214.79 WV-N NAD83 E: 1662299.29 LAT NAD83: 39°15'12.96" LON NAD83: 80°33'38.65"	As Built Well Snake Unit 1H API # 47-033-05695-0000 WV-N NAD83 N: 278221.48 WV-N NAD83 E: 1662281.93 LAT NAD83: 39°15'13.45" LON NAD83: 80°33'38.80"	As Built Well North Unit 2H API # 47-033-05701-0000 WV-N NAD83 N: 278205.06 WV-N NAD83 E: 1662274.56 LAT NAD83: 39°15'13.71" LON NAD83: 80°33'38.80"	As Built Well North Unit 1H API # 47-033-05699-0000 WV-N NAD83 N: 278233.03 WV-N NAD83 E: 1662267.19 LAT NAD83: 39°15'12.78" LON NAD83: 80°33'38.68"	As Built Well Ford Unit 2H API # 47-033-05694-0000 WV-N NAD83 N: 278190.74 WV-N NAD83 E: 1662258.82 LAT NAD83: 39°15'13.64" LON NAD83: 80°33'38.93"	

SHEET INDEX

COVER SHEET / LOCATION MAP 1
AS-BUILT SITE PLANS 2-4
AS-BUILT ACCESS ROAD PROFILE 5

DATE	REVISIONS
6-18-13	Updated Well Configuration
7-29-2013	ADDED ROAD PROFILE WITH CULVERTS
12-29-2015	UPDATED AS BUILT TO SHOW DRILLED WELLS, WELL Nos., METERS, CONTAINMENT AREAS & BERM DETAIL

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!!

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

Design Certification

The drawings, construction notes, and reference diagrams attached hereto have been prepared in accordance with the West Virginia Code of State Rules, Division of Environmental Protection, Office of Oil and Gas §35-4-21. The information reflects a temporary frac pit pond. The computed above grade storage volume is less than 15 acre feet, filling method pumped, frac. pond is lined.

As-Built Certification:

These drawings have been prepared from actual field surveys and reflect the locations and as-built conditions known to exist following construction of this site, to the best of my knowledge.

Allegheny Surveys, Inc
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035

Homer
Since 1902
Bros. Engineers
Civil, Mining, Environmental and Consulting Engineering

ANTERO RESOURCES

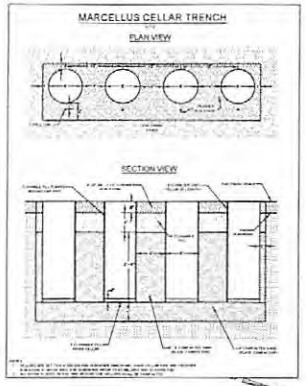
THIS DOCUMENT PREPARED FOR ANTERO RESOURCES CORPORATION

COVER SHEET / LOCATION MAP
HUBERT
DRILL PAD SITE
TENMILE DISTRICT
HARRISON COUNTY, WV

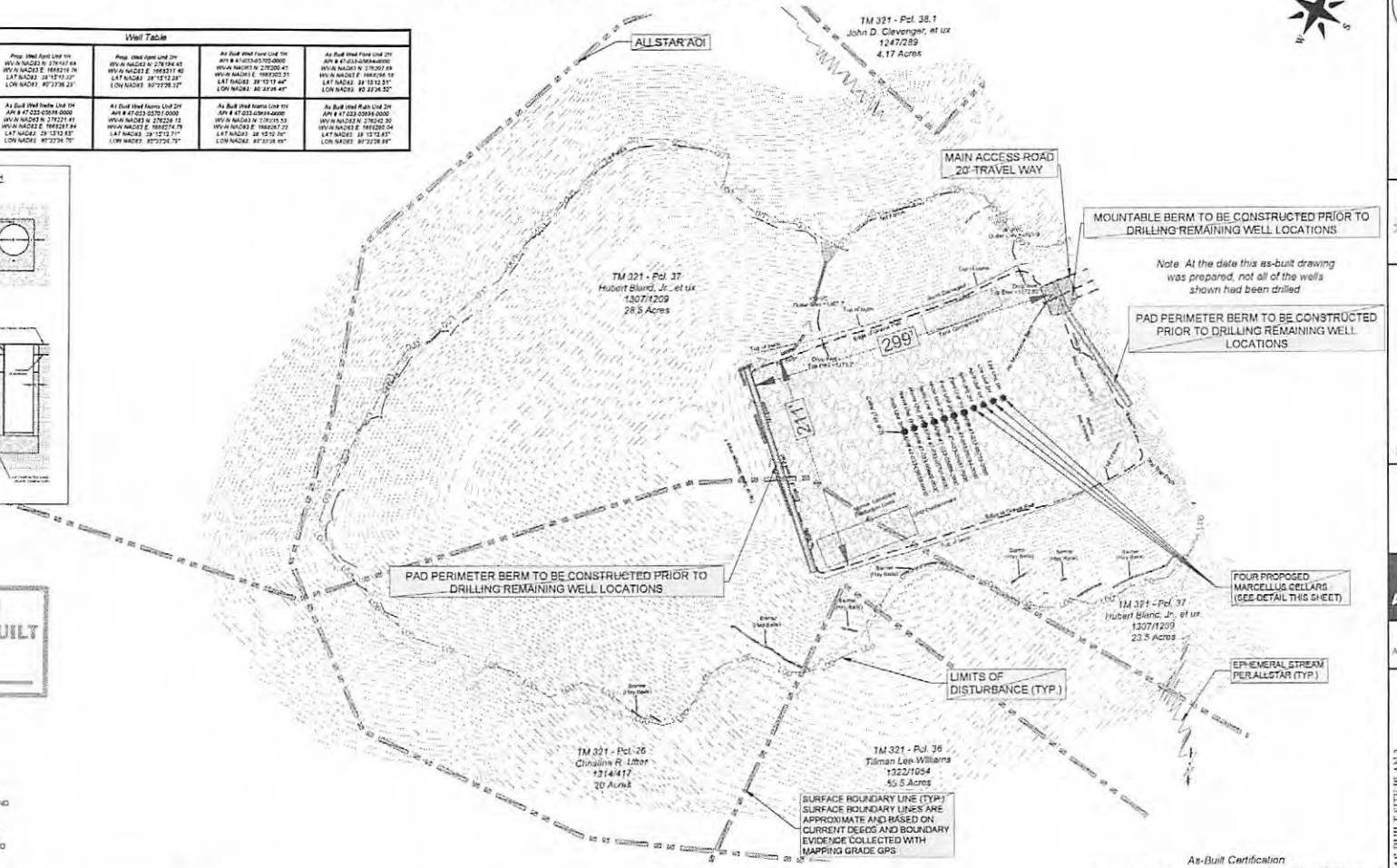
Date: 6-28-2013
Scale: AS SHOWN
Designed By: TWC & JDR
File No.
Page 1 of 5

AS-BUILT SITE PLAN 3

Well Table					
Prop. Well Lee Unit 1H WV-N NAD83 N: 279174.16 WV-N NAD83 E: 1668333.56 LAT NAD83: 39°15'13.18" LON NAD83: 80°33'39.02"	Prop. Well Lee Unit 2H WV-N NAD83 N: 279180.83 WV-N NAD83 E: 1668338.13 LAT NAD83: 39°15'13.23" LON NAD83: 80°33'39.14"	Prop. Well Kent Unit 1H WV-N NAD83 N: 279197.69 WV-N NAD83 E: 1668218.74 LAT NAD83: 39°15'13.32" LON NAD83: 80°33'39.23"	Prop. Well Kent Unit 2H WV-N NAD83 N: 279194.45 WV-N NAD83 E: 1668211.40 LAT NAD83: 39°15'13.28" LON NAD83: 80°33'39.32"	As Built Well Ford Unit 1H API # 47-033-05705-0000 WV-N NAD83 N: 279200.41 WV-N NAD83 E: 1668303.31 LAT NAD83: 39°15'13.44" LON NAD83: 80°33'38.49"	As Built Well Ford Unit 2H API # 47-033-05694-0000 WV-N NAD83 N: 279207.68 WV-N NAD83 E: 1668296.19 LAT NAD83: 39°15'13.51" LON NAD83: 80°33'38.52"
	As Built Well Nellie Unit 2H API # 47-033-05677-0000 WV-N NAD83 N: 279214.15 WV-N NAD83 E: 1668289.72 LAT NAD83: 39°15'13.34" LON NAD83: 80°33'39.60"	As Built Well Nellie Unit 1H API # 47-033-05678-0000 WV-N NAD83 N: 279221.41 WV-N NAD83 E: 1668281.84 LAT NAD83: 39°15'13.63" LON NAD83: 80°33'39.70"	As Built Well Nancy Unit 2H API # 47-033-05707-0000 WV-N NAD83 N: 279228.13 WV-N NAD83 E: 1668274.79 LAT NAD83: 39°15'13.71" LON NAD83: 80°33'39.79"	As Built Well Hanna Unit 1H API # 47-033-05693-0000 WV-N NAD83 N: 279215.53 WV-N NAD83 E: 1668267.23 LAT NAD83: 39°15'13.76" LON NAD83: 80°33'39.69"	As Built Well Ruth Unit 2H API # 47-033-05696-0000 WV-N NAD83 N: 279242.50 WV-N NAD83 E: 1668289.04 LAT NAD83: 39°15'13.85" LON NAD83: 80°33'39.99"



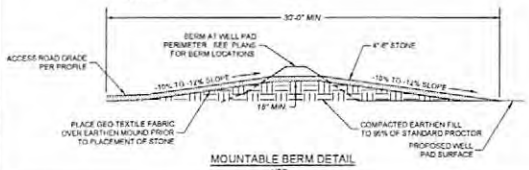
WVDEP OOG
ACCEPTED AS-BUILT
4/7/2016



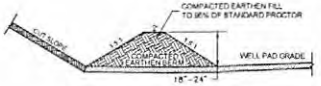
GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

MOUNTABLE BERM NOTES

1. USE MINIMUM OF 16' WIDTH TO MAINTAIN VEHICULAR PASSAGE.
2. PLACE 4"-6" STONE OVER LENGTH AND WIDTH OF MOUNTABLE BERM.
3. MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE REPAIRS AS CONDITIONS DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS.



MOUNTABLE BERM DETAIL
NTS



PAD PERIMETER BERM DETAIL
NTS

Legend

- As-Built Road Area
- As-Built Drill Pad Area
- As-Built 2' Contour
- As-Built 10' Contour
- As-Built Tree Line
- As-Built Silt Fence

As-Built Certification

These drawings have been prepared from actual field surveys and reflect the locations and as-built conditions known to exist following construction of this site, to the best of my knowledge.

DATE	REVISIONS
7-29-2013	ADDED ROAD PROFILE WITH CULVERTS
12-26-2013	UPDATED AS BUILT TO SHOW DRILLED WELLS, WELL Nos., METES, CONTAINMENT AREAS & BERM DETAIL
01-16-2015	ADDED 5 WELL CELLARS
01-22-2015	ADDED 4 PROPOSED WELL CELLARS AND MARCELLUS CELLAR DETAIL

Allegheny Surveys, Inc
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035

Hornor Bros. Engineers
Civil, Mining, Environmental and Consulting Engineering

ANTERO RESOURCES

THIS DOCUMENT PREPARED FOR ANTERO RESOURCES CORPORATION

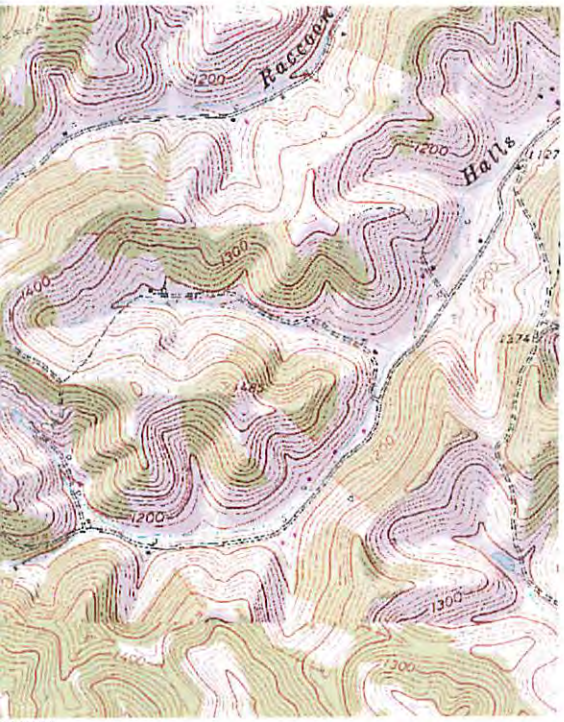
AS-BUILT SITE PLAN 3
HUBERT
DRILL PAD SITE
TESMILE DISTRICT
HARRISON COUNTY, WV

Date: 6-27-2013
Scale: 1"=50'
Designed By: JSW & THC
File No.
Page 1 of 1

33-05879

S-BUILT PLANS
S CORPORATION

West Virginia Coordinate System of 1983
State Plane Grid North
Elevations NAVD88
Established By Survey Grade GPS



C QUADS

000 3000

NS NORTH ZONE)	
	LONGITUDE
N	80°33'36.70" W
N	80°33'09.28" W
30	E=537947.2590

SDW
1/20/2016

ILE

es, and reference
been prepared in
nia Code of State Rules,
ction, Office of Oil and Gas §35-4-21.
crary frac pit pond. The computed
less than 15 acre feet,
nd is lined.

AFFECTED TAX PARCELS: 321/26, 321/37, 321/36, 321/39 & 341/3
TENMILE DISTRICT

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Christine R. Utter
DB 1314/417
20 Acres
(Affected area from Proposed Drill Pad = 0.41 Acres)
(Affected area from Proposed Spoil Piles = 1.33 Acres)

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DB 1322/1054
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SHEET INDEX

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(304) 848-5035

6/27/2013

Hornor Bros. Engineers
Since 1908
Civil, Mining, Environmental and Consulting Engineering
140 South Third Street, Post Office Box 388, Cornsburg, West Virginia, 26301 (304) 624-6445

ANTERO RESOURCES

THIS DOCUMENT PREPARED FOR ANTERO RESOURCES CORPORATION

COVER SHEET / LOCATION MAP

HUBERT DRILL PAD SITE

TENMILE DISTRICT
HARRISON COUNTY, WV

Date: 6-28-2013
Scale: AS SHOWN
Designed By: TBC & JDR
File No. CSD-2012-263-01-COVER.dwg
Page 1 of 5

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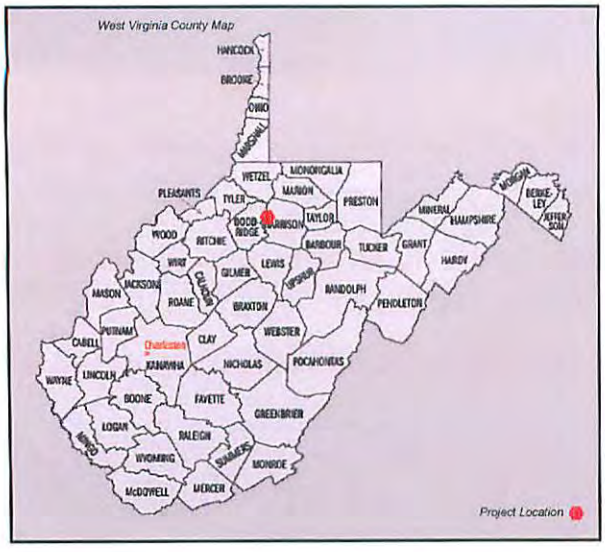
Office of Oil & Gas
JAN 25 2016
WV Department of Environmental Protection

HUBERT PAD AS

ANTERO RESOURCE



SITE LOCAT	
STATE PLANE NAD 83 (	
	LATITU
Center of Pad	39°1512
Begin Access Road	39°1510
Center of Pad (UTM 83-17 M)	N=434500

Project Contacts

Antero Resources

Tom Wince - Construction
304-869-3405 Off. 304-483-0933 Cell

Ryan Ward, Environmental Engineer (ALLSTAR)
866-213-2666, ext 311 Off. 304-692-7477 Cell

John Kawcak, Engineer
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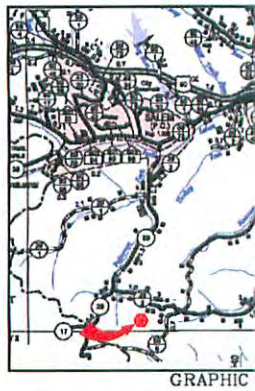
Surveyor & Engineer

Bill Yetzer, PS, EI, - Allegheny Surveys Inc.
304-848-5035 Off. 304-619-4937 Cell

Tom Corathers, PE, PS - Hornor Brothers Engineers
304-624-6445 Office

FLOODPLAIN CONDITIONS		
DO SITE CONSTRUCTON ACTIVITIES TAKE PLACE IN FLOODPLAIN:		NO
PERMIT NEEDED FROM COUNTY FLOODPLAIN COORDINATOR:		NO
HEC-RAS STUDY COMPLETED:		N/A
FLOODPLAIN SHOWN ON DRAWINGS:		N/A
FIRM MAP NUMBER(S) FOR SITE:	5400530075B	
ACREAGES OF CONSTRUCTION IN FLOODPLAIN:	N/A	



GRAPHIC

1 INCH =

Design Certification

The drawings, construction n
diagrams attached hereto ha
accordance with the West Vi
Division of Environmental Pr
The information reflects a te
above grade storage volume
filling method pumped, frac.

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.
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Know what's below.
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