

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

January 14, 2016

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-9502326, 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.

Operator's Well No: OWENS UNIT 3H

Farm Name: WEIGLE, EDWIN C.

API Well Number: 47-9502326

Permit Type: Horizontal 6A Well

Date Issued: 01/14/2016

API Number: 95-02326

PERMIT CONDITIONS

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

CONDITIONS

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
- 9. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

WW-6B (04/15) OPERATOR WELL NO. Owens Unit 3H
Well Pad Name: Weigle East Pad

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

1) Well Opera	tor: Antero Re	esources Corpora	at 494488557	095 - Tyler	Ellsworth .	Shirley 7.5'
			Operator ID	County	District	Quadrangle
2) Operator's	Well Number:	Owens Unit 3H	Well Pa	d Name: Weig	le East Pad	19
3) Farm Name	e/Surface Owner	Edwin C. Weigl	e Public Ro	ad Access: CR	18/14	
4) Elevation, c	current ground:	817' E	levation, proposed	post-construction	on: 817'	
5) Well Type	(a) Gas X	Oil _	Und			
	Other					
	(b)If Gas SI	hallow X	Deep			
		orizontal X				DMH
	d: Yes or No Yo					12-2-15
7) Proposed Ta Marcellus Sh	arget Formation(nale: 6500' TVD,	(s), Depth(s), Antic Anticipated Thickne	cipated Thickness a ess- 55 feet, Associa	and Expected Pressure- 2	ressure(s); 800#	
8) Proposed To	otal Vertical Dep	oth: 6500' TVD				
9) Formation a	t Total Vertical	Depth: Marcellus	Shale			
10) Proposed T	otal Measured I	Depth: 15,500' N	MD			
11) Proposed H	Iorizontal Leg L	ength: 6804'				
12) Approxima	te Fresh Water	Strata Depths:	9', 194', 366'			
13) Method to	Determine Fresh	Water Depths:	Scardina Unit 1H	(API# 47-095-0)2169) on sa	ame pad.
14) Approxima	te Saltwater Dep	pths: 1931', 1136				-
15) Approxima	te Coal Seam D	epths: 1380', 146	1'			
6) Approxima	te Depth to Poss	sible Void (coal mi	ne, karst, other):	None Anticipate	ed	
		n contain coal sear				
lirectly overlying	ng or adjacent to	an active mine?	Yes	No	X	
(a) If Yes, pro	vide Mine Info:	Name:				
(-), p	THE TIME IIIO.	Depth:			BEC	EIVED
		Seam:			Office of	Oil and Gas
		Owner:				0 4 2015
					1411 DO	partment of ental Protection

Page 1 of 3

01/15/2016

Environments, en actor

API NO. 47-085 - 02326

OPERATOR WELL NO. Owens Unit 3H
Well Pad Name: Welgie East Pad

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	<u>Grade</u>	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#	60'	60'	CTS, 164 Cu. Ft.
Fresh Water	13-3/8°	New	J-55/H-40	54.5#/48#	440'	440'*see #19	CTS, 611 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2500'	2500'	CTS, 1018 Cu. Ft.
Intermediate						2000	010, 1010 04.11.
Production	5-1/2"	New	P-110	20#	15,500'	15,500'	CTS, 3855 Cu. Ft
Tubing	2-3/8"	New	N-80	4.7#		7100'	3.3, 3333 34.70
Liners							

Day 12-2-15

ТҮРЕ	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	
Fresh Water	13-3/8"	17-1/2"	0.38"/0.33"	2730/1730	1000	Class A	
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A	
Intermediate					1000	Oldos A	1.10
Production	5-1/2"	8-3/4" & 8-1/2"	0.361"	12,630	2500	Land-H/POZ & Te3 - H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners				,200			

PACKERS

Kind:	N/A	
Sizes:	N/A	Office of Oil and Gas
Depths Set:	N/A	DEC 0 4 2015

WV Department of Environmental Protection

02326 API NO. 47- 085

OPERATOR WELL NO. Owens Unit 3H Well Pad Name: Weigle East 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.

> DMH 12-2-15

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): 22.17 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 3.22 acres (*expanded LOD)

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 ib 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: Tall 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, circular the conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circular the conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circular the conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circular the conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circular the conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circular the conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circular the conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circular the conductor shoe, and the conductor shoe 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 to the analysis 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 of sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbis fresh water under the content of the content of the content of the curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbis fresh water under the content of the curve, pump high viscosity sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbis fresh water to be content of the curve, pump high viscosity sweep, trip to top of curve, pump high viscosity sweep, trip out, run casing, circulate 10 bbis fresh water to be curve. Environmental protection barite pill, pump 10 bbis fresh water followed by 48 bbis mud flush and 10 bbis water.

^{*}Note: Attach additional sheets as needed.

API Number 47	095	- (523	24	0
0	. *** 11 3 7				

Operator's Well No. Owens Unit 3H STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAN	MATION PLAN
Operator Name Antero Resources Corporation	OP Code 494488557
Watershed (HUC 10) Outlet Middle Island Creek Quadrangle	
Do you anticipate using more than 5,000 bbls of water to complete the proposed w Will a pit be used? Yes No V	
If so, please describe anticipated pit waste: No plt will be used at this site (Drilling and Flowbe	ack Fluids will be stored in tanks. Cuttings will be tanked and hauled off site.
Will a synthetic liner be used in the pit? Yes No If s	so, what ml.? N/A
Proposed Disposal Method For Treated Pit Wastes:	
Land Application Underground Injection (UIC Permit Number Reuse (at API Number Future permitted well locations when applied Off Site Disposal (Supply form WW-9 for disposal locations) Other (Explain	cable. API# will be provided on Form WR-34 ation)(Meadowfill Landfill Permit #SWF-1032-98)
Will closed loop system be used? If so, describe: Yes	Dny
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater	r, 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, lim	
-Landfill or offsite name/permit number? Meadowfill Landfill (Permit #SWF-1	
Permittee shall provide written notice to the Office of Oil and Gas of any load of dr. West Virginia solid waste facility. The notice shall be provided within 24 hours of r where it was properly disposed.	ill cuttings or associated waste rejected at any rejection and the permittee shall also disclose
I certify that I understand and agree to the terms and conditions of the GE on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of provisions of the permit are enforceable by law. Violations of any term or condit law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am application form and all attachments thereto and that, based on my inquiry of obtaining the information, I believe that the information is true, accurate, and copenalties for submitting false information, including the possibility of fine or impris	f Environmental Protection. I understand that the ion of the general permit and/or other applicable familiar with the information submitted on this f those individuals immediately responsible for complete. I am aware that there are significant
Company Official Signature	NATALIE KOMP RECEIVED GOS
Company Official (Typed Name) Cole Kilstrom	STATE OF COLORS TOO OF OIL and Gas
Company Official Title Environmental & Regulatory Manager	MY COMMISSION EXPIRES JULY 18, 2018
Subscribed and swom before me this 21sts day of DCtober My commission expires My 18, 2018	

Antero Resources	Corporation	Operator	r's Well No. Owens Unit 3H
	ent: Acres Disturbed 22.17 a	cres Prevegetatio	n pH
Lime 2-3	Tons/acre or to correct to pl		•
	straw or Wood Fiber (will be used	· · · · · · · · · · · · · · · · · · ·	
Fertilizer amount 500)	bs/acre	
Mulch 2-3	Tons/		
		3.38) + Topsoil Stockpile (1.67) + Additional	Clearing (10.54) - 22.17 Acres
		d Mixtures	
Tem	porary	Pei	rmanent
Seed Type	lbs/acre	Seed Type	lbs/асте
See attached Table 2, 3 & 4 for additional seed	lypo (Welgio East Pad Design Page D5)	••	eed type (Weigle East Pad Design Page D5)
*or type of grass seed reque Attach: Drawing(s) of road, location, pi provided)		*or type of grass seed re	quested by surface owner
Photocopied section of involved			
.omnents.			
			RECEIVE Office of Oil at
itle: Dil + Csr Inm	a chia	Date: 12-7-15	Office of Oil of
eld Reviewed?	Yes (Date: 10 0 13	BEC 0 4
C. C) NO	W Depart
			Environments

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

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5. Clay-Trol

6. Xan-Plex

Amine Acid Complex - Shale Stabilizer

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

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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Office of Oil & Gas

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911 Address

A: 441 Lemasters Road Middlebourne, WV 26149 B: 312 Jug Run Road Alma, WV 26320

Well Site Safety Plan **Antero Resources**

Well Name: Hawkeye Unit 1H, Hawkeye Unit 2H, Hawkeye

Unit 3H, Scardina Unit 1H, Scardina Unit 2H,

Scardina Unit 3H, Scardina Unit 4H, Dean Unit 1H, Dean Unit 2H, Goodfellow Unit 1H, Goodfellow Unit 2H, Owens Unit 1H, Owens Unit 2H, Owens

Unit 3H

Pad Location: WEIGLE EAST PAD

12-2-15

Tyler County/Ellsworth District

GPS Coordinates: Lat 39°27′58.60"/Long -80°51′09.51" (NAD83)

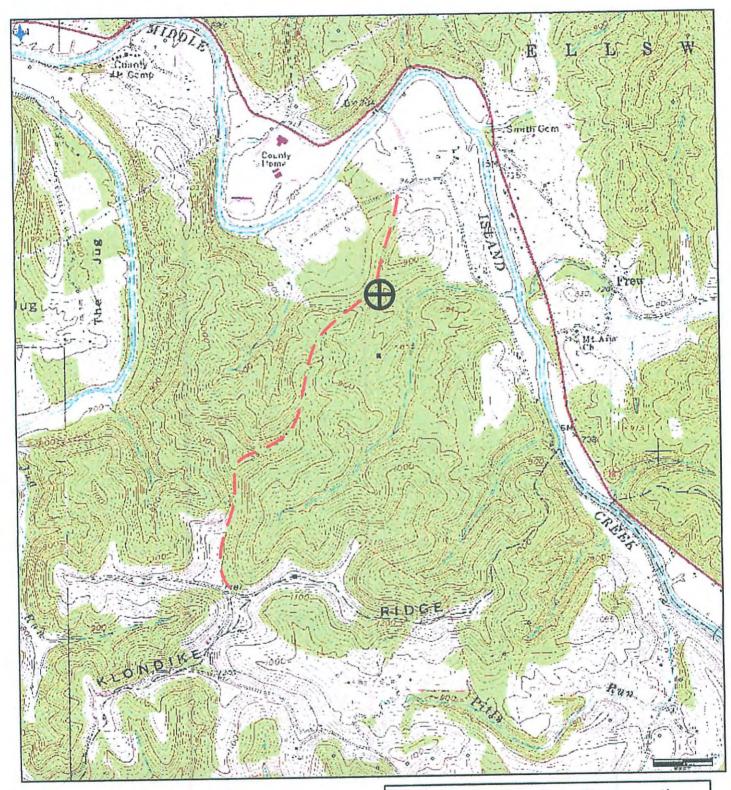
Driving Directions:

Main Access:

From US Route 50, turn onto WV Route 18 (towards West Union). Follow WV Route 18 North for 22.8 miles. Turn Left onto County Route 18/7 (Lemasters Bridge Road). Follow County Route 18/7 for .3 miles. Turn Right onto County Route 18/4. Follow County Route 18/4 for .1 miles. The site entrance will be on the left (South) side of the road.

From US Route 50, turn onto WV Route 18 North (towards West Union). Follow WV Route 18 in and North for 17.8 miles. Turn Left onto County Parks 46 (iii) North for 17.8 miles. Turn Left onto County Route 46 (Klondike Ridge). Follow County Route 46 for 2 miles. Turn Right onto County Route 46/1. for 2 miles. Turn Right onto County Route 46/1. Follow County Route 46/1 for .3 miles. The county Route 46/1 for .3 miles are considered for the considered for the county Route 46/1 for .3 miles are considered for the consid MAI Department of Pierpoint Site Entrance).

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

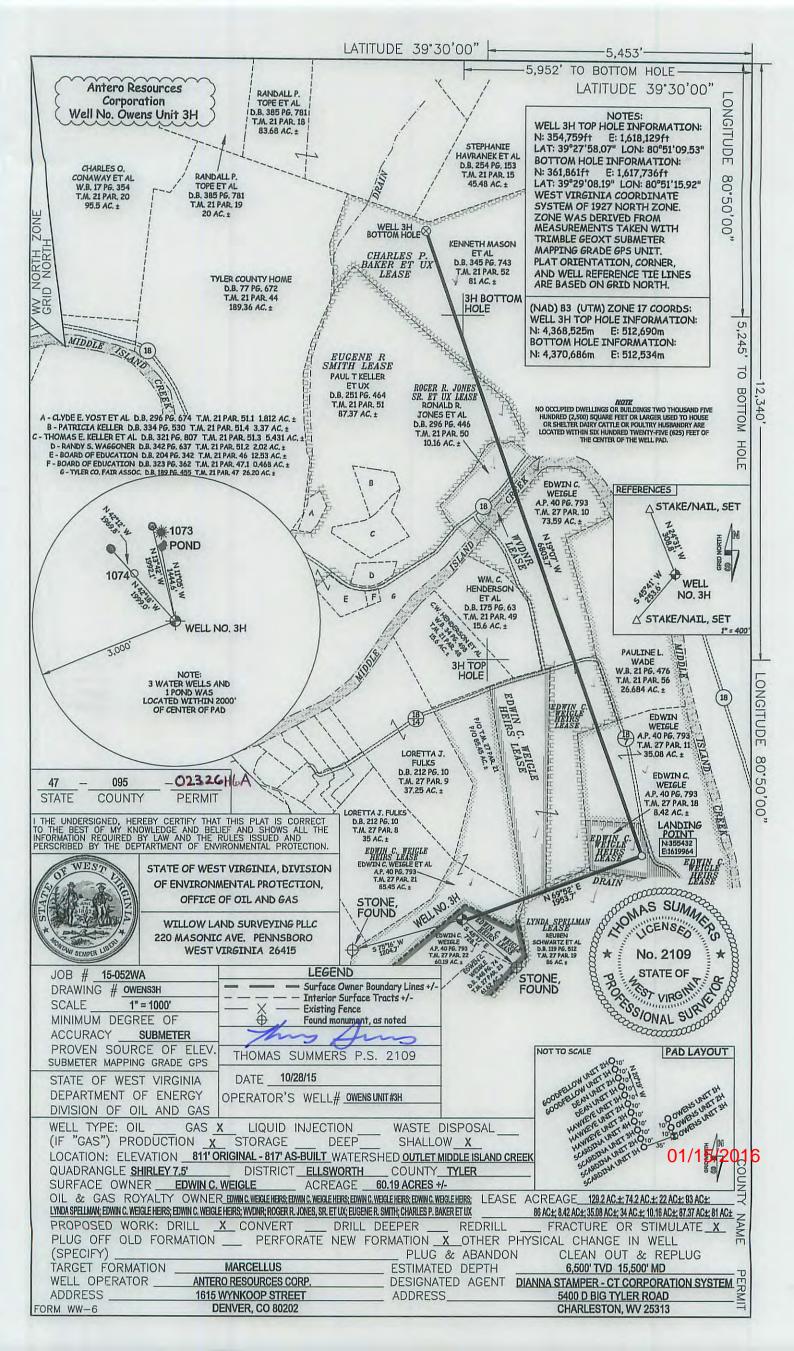


Antero Resources Corporation

Appalachian Basin Goodfellow Unit 2H Tyler County

Quadrangle: Smithburg Watershed: Gorrell Run Run – Middle Island Creek

District: Ellsworth Date: 02/21/2014



Operator's Well Number

Owens Unit 3H

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
Edwin C. Weigle Heirs Lease (TM 27-22)			
Kathy Ann Seago, as a beneficiary of the Estate of Edwin C. Weigle, deceased	Antero Resources Appalachian Corporation	1/8+	0402/0448
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
Edwin C. Weigle Heirs Lease (TM 27-21)			
Richard L. Seago	Antero Resources Appalachian Corporation	1/8+	0403/0733
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
Edwin C. Welgle Heirs Lease (TM 27-10)			
Brian M. Weigle	Antero Resources Appalachian Corporation	1/8+	0402/0450
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Lynda Spellman Lease</u> Lynda Spellman	Antero Resources Appalachian Corporation	1/8+	0433/0269
•	Antero Resources Corporation	Name Change	Exhibit 1
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	EXHIBIT
Edwin C. Weigle Heirs Lease (TM 27-18)			0.000/0.000
Brian M. Weigle	Antero Resources Appalachian Corporation	1/8+	0402/0450
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
Edwin C. Weigle Heirs Lease (TM 27-11)			
Brian M. Weigle	Antero Resources Appalachian Corporation	1/8+	0402/0450
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
WVDNR Lease (Middle Island Creek)			
West Virginia Division of Natural Resources	Antero Resources Corporation	1/8+	0483/0269
Roger R. Jones Sr., et ux Lease			
Ronald Ray Jones, Sr., et ux	Antero Resources Appalachian Corporation	1/8+	0417/0447
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
Eugene R. Smith Lease		_	_
Eugene R. Smith	Antero Resources Corporation	1/8+	0449/0828
		Received	
		Office of Oil & Gas	

NOV 06 2015

^{*}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.

Owens Unit 3H
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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)

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- (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
Charles P. Baker, et ux Leas	e ,/			
	Charles Paul Baker, et ux	Antero Resources Corporation	1/8+	0444/0154
	ero Resources Corporation include 100% rig as from the Marcellus and any other formation			

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.

		Antero Resources Corporation
Received	By:	Kevin Kilstrom
Office of Oil & Gas	Its:	VP of Production
NOV 06 2015		

FORM WW-6A1 EXHIBIT 1

FILED JUN 1 0 2013

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

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



Penney Barker, Manager
IN THE OFFICE OF Corporations Division
ECRETARY OF STATE Paix: (304)558-8381

Website: www.wvsos.com
E-mail: business@wvsos.com

APPLICATION FOR

AMENDED CERTIFICATE

Office Hours: Monday - Friday
8:30 c.m. - 5:00 p.m. ET

**** In accordance with the provisions of the West Virginia Code, the undersigned corporation hereby ***

applies for an Amended Cortificate of Authority and submits the following statement:

1.	Name under which the corporation was authorized to transact business in WV:	Antero Resources Appalachian Corporation
2	Date Certificate of Authority was issued in West Virginia:	6/25/2008
3.	Corporate name has been changed to: (Attach one <u>Cartified Conv of Name Change</u> as filed in home State of incorporation.)	Antero Resources Corporation
١.	Name the corporation elects to use in WV: (due to home state name not being available)	Antero Resources Corporation
i.	Other amendments: (attach additional pages if necessary)	
		1. (V
	1	
	Name and phone number of contact person. (the filing, listing a contact person and phone num document.)	This is optional, however, if there is a problem with aber may avoid having to return or reject the
	Alvyn A. Schopp	(303) 367-7310
	Contact Name	Phone Number
	Signature information (See below * <i>Important I</i>	and the second s
	Print Name of Signer: Alyn A. Schopp	Title/Capacity: Authorized Person
	Signature: As Hackstop	Date: June 10, 2013
	/	
y I	ariant Lead Notice Regaritus Standurg: For West Virgin person who signs a document he or she knows is take in any secretary of state for filing is guilty of a misdemeasor and, and dollars or confined in the county or regional jail not mor	
m C		of the Secretary of Sister. Office of City
	P-4 Listed by the Office	of the Secretary of State - Revised 4/15 NOV 0 6 70

W\613 - 64/16/2013 Walters Kluner Ordine



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

October 20, 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: Owens Unit 3H

Quadrangle: Shirley 7.5'

Tyler County/Ellsworth District, West Virginia

Mr. Martin:

Antero Resources Corporation (Antero) is submitting the following application for a new well work permit for the Owens Unit 3H 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 Owens Unit 3H horizontal lateral will drill through including any and all roads crossed under as identified on the attached survey plat.

Sincerely,

Jared Hurst Senior Landman

> Received Office of OH & Case NOV 0 6 2015

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

Date of Notic	ee Certification: 11/02/2015	Al	PI No. 47	- 095 -	02326
	 	OI	erator's	Well No. Owe	ns Unit 3H
		w	ell Pad N	ame: Existing	Weigle East Pad
Notice has b					
	e provisions in West Virginia Code	§ 22-6A, the Operator has provide	ed the requ	uired parties v	with the Notice Forms listed
State:	tract of land as follows: West Virginia	T-		512,690m	
	Tyler		sting: orthing:	4,368,525m	
County: District:	Ellsworth	Public Road Access:	•	CR 18/14	-
Quadrangle:	Shirtey 7.5'	Generally used farm		Edwin C. Weigle	
Watershed:	Outlet Middle Island Creek	Generally used failth	manne.	Luttin O. ttolgio	
prescribed by it has provide information re of giving the requirements Virginia Code of this article Pursuant to that the Operation of the PLEASE CHE	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and sed the owners of the surface described and the owners of the surface described and the control of the surface owner notice of entry to surface owner of entry to surface owner owner owner owner. West Virginia Code § 22-6A, the Operator has properly served the require except of except of entry to surface owner owner.	chall contain the following inform bed in subdivisions (1), (2) and ection sixteen of this article; (ii) the arrey pursuant to subsection (a), of this article were waived in writender proof of and certify to the state. The errator has attached proof to this articles with the following:	ation: (14 (4), subset nat the req section to iting by the secretary to Notice Ce	A certification (b), se uirement was en of this article surface of the surface of the the notice entification	on from the operator that (i) ction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice vner; and Pursuant to West
		SEISMIC ACTIVITY WAS C			NOT REQUIRED
_	TICE OF ENTRY FOR PLAT SURVICE OF INTENT TO DRILL OF	NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLAWAS CONDUCTED or	D BECAU AT SURV	SE EY	☐ RECEIVED/ □ RECEIVED/ NØT REQUIRED
5. PUB	TICE OF PLANNED OPERATION BLIC NOTICE TICE OF APPLICATION	WRITTEN WAIVER BY (PLEASE ATTACH) Rece Office of	eived Oil & (☐ RECEIVED ☐ RECEIVED ☐ RECEIVED
0, 1401					

Required Attachments:

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

WW-6AC (1/12)

By:

Its:

Certification of Notice is hereby given:

THEREFORE, I Kevin Kilstrom , 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

Kevin Kilstrom

VP of Production

Telephone: 303-357-7310

Address: 1615 Wynkoop Street

Denver, CO 80202

Facsimile: 303-357-7315

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

Notary Public

My Commission Expires

Email:

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 deprivacyofficer@wv.gov.

Received
Office of Oil & Gas
NOV 0 6 2015

WW-6A (9-13) API NO. 47-095 - 02324

OPERATOR WELL NO. Owens Unit 3H

Well Pad Name: Existing Weigle East 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: 11/3/2015 Date Permit Application Filed: 11/3/2015 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ PERSONAL ☐ REGISTERED ✓ METHOD OF DELIVERY THAT REQUIRES A **SERVICE** MAIL. 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) COAL OWNER OR LESSEE Name: PLEASE SEE ATTACHMENT Name: NO DECLARATIONS ON RECORD WITH COUNTY Address: Address: COAL OPERATOR Name: Name: NO DECLARATIONS ON RECORD WITH COUNTY Address: Address: SURFACE OWNER(s) (Road and/or Other Disturban Received Office of Chistring Rother water supply source Name: PLEASE SEE ATTACHMENT Address: * 3 water wells are NOV 0 6 Name: Loretta Fulks (1 pond)
Address: 633 Lemasters Road - identified but are Name: _ located greater than Middlebourne, WV 26149 1500' □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Name: _____Address: _____ Address: *Please attach additional forms if necessary

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

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

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

Located on TM 27/PCL 21 & 22 - Heirs of Edwin C. Weigle

Owner:

Kathy Ann Seago & Richard L. Seago

Address:

1018 Frew Circle

Middlebourne, WV 26149

Owner: Address: Steven C. Weigle, II 6473 Middle Island Road

Middlebourne, WV 26149

Owner:

Brian M. Weigle

Address:

4789 Middle Island Road Middlebourne, WV 26149

Owner: Address: Michelle S. Forester 970 McElroy Creek Rd.

Alma, WV 26320

Received Office of Oil & Gas

NOV 06 2015

Located on TM 27/PCL 8

Owner:

Loretta J. Fulks

Address:

633 Lemasters Road

Middlebourne, WV 26149

ROAD AND/OR OTHER DISTURBANCE -Owners have executed signed Surface Use and/or Road Agreements with Antero Resources Corporation. However, they were only notified if their tracts were overlying the oil and gas leasehold being developed by the proposed well work.

Located on TM 27/PCL 10 &22 - Heirs of Edwin C. Weigle

Owner:

Kathy Ann Seago & Richard L. Seago

Address:

1018 Frew Circle

Middlebourne, WV 26149

Owner:

Steven C. Weigle, II 6473 Middle Island Road

Address:

Middlebourne, WV 26149

Owner:

Brian M. Weigle

Address:

4789 Middle Island Road

Middlebourne, WV 26149

Owner: Michelle S. Forester

Address: 970 McElroy Creek Rd.

Alma, WV 26320

Located on TM 27/PCL 9

Owner:

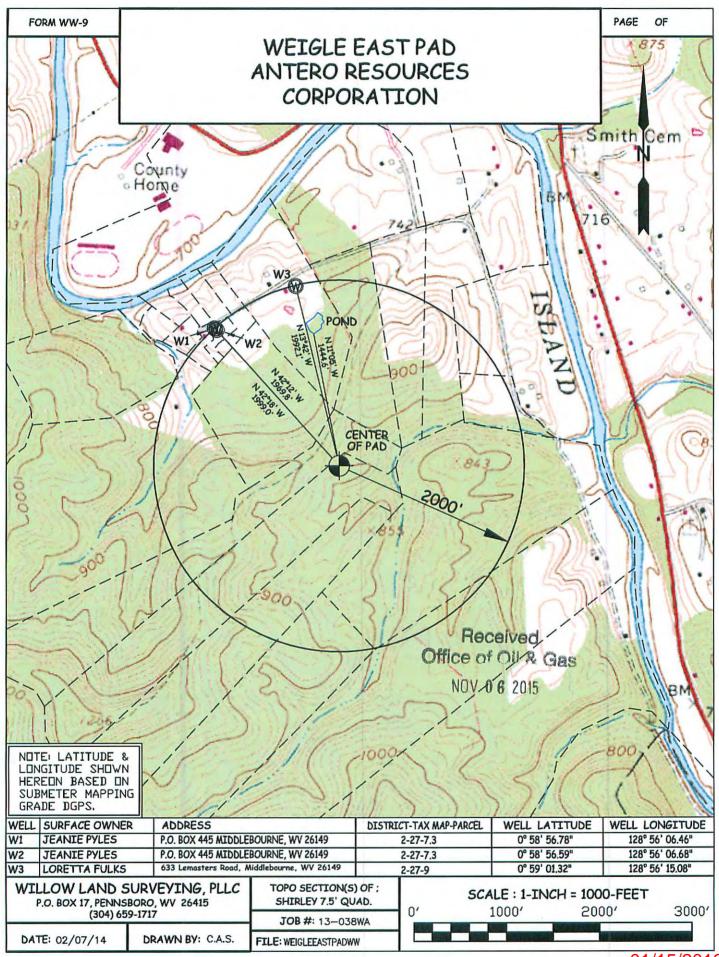
Loretta J. Fulks

Address:

633 Lemasters Road

Middlebourne, WV 26149

Received
Office of Oil & Gas
NOV 0 6 2015



API NO. 47-095 - 0 2 3 2 4
OPERATOR WELL NO. Owens Unit 3H
Well Pad Name: Existing Weigle East 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 property ariance 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 grained, 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

API NO. 47-095 - 02326
OPERATOR WELL NO. Owens Unit 3H
Well Pad Name: Existing Weigle East Pad

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

Office of Oil & Gas

NOV 06 2015

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. 47-095 - <u>O2326</u>
OPERATOR WELL NO. Owens Unit 3H
Well Pad Name: Existing Welgle East 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.

Received
Office of Oil & Gas
NOV 0 6 2015

WW-6A (8-13) API NO. 47-095 - 02320

OPERATOR WELL NO. Owens Unit 3H

Well Pad Name: Existing Weigle East 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 3

Notary Public

My Commission Expires

Received
Office of Oil & Gas
NOV 0 6 2015

WW-6A3 (1/12) Operator Well No. Owens Unit 3H

Multiple Wells on the Weigle East Pad

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

	Requirement:	Notice shall be provi	ided at least SI	EVEN (7) da	ys but no more tha	n FORTY-FIVE (45) days prior to
entry Date of Notice	e: 10/20/2013	Date of Plan	ned Entry: 10	/27/2013		
Delivery meti	hod pursuant t	o West Virginia Co	de § 22-6A-10)a		
☐ PERSON	NAL 🗆	REGISTERED	■ METH	OD OF DEL	IVERY THAT RE	QUIRES A
SERVIC	E	MAIL	RECE	PT OR SIGN	NATURE CONFIR	MATION
on to the surfa but no more th beneath such t owner of mine and Sediment Secretary, whi	ce tract to cond an forty-five de ract that has file rals underlying Control Manua ch statement sh	luct any plat surveys ays prior to such ent ed a declaration purs such tract in the cou l and the statutes and	required pursi ry to: (1) The s quant to section anty tax record d rules related information, in	nant to this are surface owners thirty-six, and so the notice to oil and gas	ticle. Such notice s r of such tract; (2) the rticle six, chapter to e shall include a state s exploration and p	shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any attement that copies of the state Erosion roduction may be obtained from the age on the Secretary's web site, to
Notice is here	by provided to):				
SURFAC	E OWNER(s)			☐ COA	L OWNER OR LE	SSEE
	SEE ATTACHMENT			Name: NO	DECLARATIONS ON REC	CORD WITH COUNTY
Address:				Address:		
Name:						
Address:				■ MINE	ERAL OWNER(s)	
				Name: PLE	ASE SEE ATTACHMENT	
Name:						
Address:			-	*please attac	h additional forms if ne	cessary
Notice is her Pursuant to We a plat survey o State:		de § 22-6A-10(a), no and as follows:			e undersigned well ude & Longitude:	operator is planning entry to conduct
County:	Tyler			ublic Road A		CR 18/14
District:	Ellsworth			Vatershed:	100000.	Gorrell Run - Middle Island Creek
Quadrangle:	Shirley 7.5'			enerally use	d farm name:	Brien Weigle, Kathy Ann Seage, Michelle S. Forester, Richard L. Seege, and Stoven C. 1
may be obtaine Charleston, W	ed from the Sec V 25304 (304-	retary, at the WV D	epartment of E of such docum	nvironmenta ents or additi	l Protection headquonal information re	il and gas exploration and production parters, located at 601 57 th Street, SE, elated to horizontal drilling may be
						Received
	eby given by:					Office of Oil & Gas
Well Operator:		s Corporation		Address:	1615 Wynkoop Street	
Telephone: Email:	(303) 357- 7310		 .	T?!!	Denver, CO 80202	NOV 0 6 2015
CINAII:	asteele@anterore	sources.com		Facsimile:	(303) 357-7315	

Oil and Gas Privacy Notice:

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

WW-6A3 Notice of Entry For Plat Survey Attachment:

Surface Owners – Heirs of Edwin C. Weigle

Owner: Richard L. Seago Address: 1018 Frew Circle

Middlebourne, WV 26149

Owner: Brian M. Weigle Address: HC 69 Box 40B

Owner:

Middlebourne, WV 26149

Michelle S. Forester

Owner: Steven C. Weigle II

Address: HC 69 Box 63

Middlebourne, WV 26149

Address: 970 McElroy Road Alma, WV 26320

Owner: Kathy Ann Seago Address: 1018 Frew Circle

Middlebourne, WV 26149

Owner: Kathy Ann Seago Address: HC 69 Box 53AA

Middlebourne, WV 26149

Mineral Owners:

Owner: Richard L. Seago Address: HC 69 Box 53AA

Middlebourne, WV 26149

Owner: Richard L. Seago 1018 Frew Circle Address:

Middlebourne, WV 26149

Owner: Brian M. Weigle Address: HC 69 Box 40B

Middlebourne, WV 26149

Owner: Steven C. Weigle II HC 69 Box 63 Address:

Middlebourne, WV 26149

Steven C. Weigle II Owner: Address:

HC 69 Box 53AA

Middlebourne, WV 26149

Owner: Loretta J. Fulks Address: 633 Lemasters Road

Middlebourne, WV 26149

Owner: Loretta J. Fulks HC 69 Box 37 Address:

Middlebourne, WV 26149

Owner: Michelle S. Forester 970 McElroy Road Address: Alma, WV 26320

Owner: Kathy Ann Seago Address: 1018 Frew Circle

Middlebourne, WV 26149

Owner: Kathy Ann Seago Address: HC 69 Box 53AA

Middlebourne, WV 26149

Owner: James H. Dean

Address: 1671 Bay View Drive

Sarasota, FL 34241

Owner: Stephanie McGowan 4675 Redbay Way Address:

Sarasota, FL 34241

Owner: Robert C. Dean

Address: 6701 South Gator Boulevard

Sarasota, FL 34241

Received Office of Oil & Gas

NOV 06 2015

WW-6A5 (1/12)

Date of Notice: 11/03/2015

95-0232 Operator Well No. Owens Unit 3H

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 Permit Application Filed: 11/03/2015

Deliv	very metl	nod pursuant to West Virginia Coo	le § 2	22-6A-16(c)		
		IED MAIL N RECEIPT REQUESTED		HAND DELIVERY		
return the prequi drilli dama	n receipt of the lanned of the lanned to be and the land	requested or hand delivery, give the peration. The notice required by the provided by subsection (b), section orizontal well; and (3) A proposed a surface affected by oil and gas open	surfanis su ten of surfa ratior	ace owner whose land absection shall inclu- f this article to a surf- ace use and compens as to the extent the da	I will be used for de: (1) A copy ace owner whost sation agreement smages are comp	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information we land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter. Sted in the records of the sheriff at the time
(at th Name	e: PLEASE S	by provided to the SURFACE OV listed in the records of the sheriff at SEE ATTACHMENT		time of notice): Name:	»:	
Pursu opera State Coun Distr Quad	uant to Weation on t : ity: ict: lrangle:	by given: est Virginia Code § 22-6A-16(c), no he surface owner's land for the purp West Virginia Tyler Ellsworth Shirley 7.5' Outlet Middle Island Creek	ose o	of drilling a horizonta UTM NAD 8 Public Road	I well on the tra Easting: Northing:	well operator has developed a planned ct of land as follows: 512,690m 4,368,525m CR 18/14 Edwin C. Weigle
Pursu to be horiz surfa infor heade	uant to We provided contal well ce affecte mation re	I by W. Va. Code § 22-6A-10(b) the stand (3) A proposed surface use and by oil and gas operations to the soluted to horizontal drilling may be located at 601 57th Street, SE,	o a s id co exten obta	surface owner whose mpensation agreeme at the damages are co- ined from the Secret	land will be unt containing an ompensable und ary, at the WV	code section; (2) The information required used in conjunction with the drilling of a confer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection or by visiting

WW-6A5 Notice of Planned Operations Attachment (WEIGLE EAST PAD):

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

Located on TM 27/PCL 21 & 22 - Heirs of Edwin C. Weigle

Owner: Kathy Ann Seago & Richard L. Seago

Address: 1018 Frew Circle

Middlebourne, WV 26149

Owner: Steven C. Weigle, II

Address: 6473 Middle Island Road

Middlebourne, WV 26149

Owner: Brian M. Weigle

Address: 4789 Middle Island Road

Middlebourne, WV 26149

Owner: Michelle S. Forester

Address: 970 McElroy Creek Rd.

Alma, WV 26320

Located on TM 27/PCL 8

Owner: Loretta J. Fulks

Address: 633 Lemasters Road

Middlebourne, WV 26149

Received Office of Oil & Gas NOV 0 6 2015



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin Charleston, West Virginia 25305-0430 • (304) 558-3505

Governor

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

August 12, 2015

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

Subject: DOH Permit for the Weigle East Pad, Tyler County
Owens Unit 3H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2014-0052 which has been applied for by Antero Resources Corporation for access to the State Road for a well site located off of Tyler County Route 18/14 SLS.

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

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer

Central Office O&G Coordinator

Received Office of Oil & Gas

NOV 06 2015

Cc: Megan Darling

Antero Resources Corporation

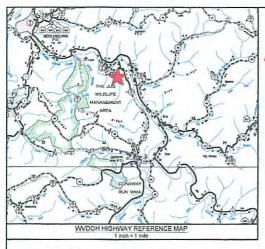
CH, OM, D-6

File

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 cleylamine	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

Received
Office of Oil & Gas
NOV 0 6 2015



FINAL DESIGN: ISSUE FOR PERMITTING

ANTERO RESOURCES WEIGLE EAST SITE PAD MODIFICATION

ELLSWORTH DISTRICT, TYLER COUNTY, WEST VIRGINIA SHIRLEY 7.5 MINUTE QUAD MAP

APPROVED WVDEP OOG Way Modification 11/30/2015



REVISIONS

urveying

WV COUNTY REFERENCE MAP

GENERAL DESCRIPTION

WEIGLE EAST PAD MODIFICATION

PROJECT CONTACTS

OPERATOR:

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

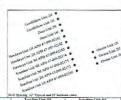
PROJECT COORDINATOR

ROBERT WIRKS DESIGN MANAGER PHONE: (304) 842-4100 CELL: (304) 627-7405 FAX: (304) 842-4102 EMAIL: rwirks@anterpresources.com

CONSTRUCTION COORDINATOR :

FILWAGNER ENVIRONMENTAL ENGINEER PHONE: (304) 842-4068 CELL: (304) 476-9770 FAX: (304) 842-4102 EMAIL: ewagner@anter

JOHN KAWCAK OPERATIONS SUPERINTENDENT CELL:(817) 368-1553 FAX: (304) 842-4102 EMAIL: jkawcak@anteroresources.com



SHEETS 2 & 3 SHIRLEY 7.5 MINUTE QUADRANGLE REFERENCE WELL LOCATION RESTRICTIONS ALL PAD AND FRACTURE PIT CONSTRUCTION COMPLIES WITH THE FOLLOWING RESTRICTIONS. *250' FROM AN EXISTING WELL OR DEVELOPED SPRING USED FOR HUMAN OR DOMESTIC ANIMALS. *825 FROM AN COCUPIED DWELLING OR BARN GREATER THAN 2,500 SF USED FOR POULTRY OR DAM'S MEASURED FROM THE CENTER OF THE PAD. *100 FROM THE EDGE OF DISTURBANCE TO WETLANDS, PERENNIAL STREAMS, NATURAL OR ARTIFICIAL LAKE, POND OR RESERVOIR. 1300 FROM THE EDGE OF DISTURBANCE TO A NATURALLY REPRODUCING TROUT STREAM

1,000 OF A SURFACE OR GROUND WATER INTAKE TO A PUBLIC WATER SUPPLY.

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	WV-N NAD 83 E 1546652 83	WV-N NAD 83 ft 1546648 54	WV-N NAD 83 E. 1366645 67	WV-N NAD 83 E 1586641 40	WV-N NAD 83 E 1386038 13	WV-N NAD BY N. 354838 51
	WV-N NAD 27 N 354756 78	WW-N NAD 27 N 354764 88	WV-N NAD 27 N 354715 46	WV-N NAD 27 N 35478483	WV-NNAD27N MENA 21	WV-N NAD 21 N 254605 N
	WV-N NAD 17 E: 1618991:14	WV-N NAD 17 E 1618989 67	WV-N NAD 27 E 1618786 20	WV-N NAD 27 E. 1618082 71	WV-N NAD 21 E- 1618079 25	WV-N NAD 27 E 161807578
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	WV-N NAD 27 E 1418568 84	WV-N MAD IT E 151806124	WV-N NAD-27 E 1414061 89	WV-N NAD 27 E 1418122.49	WV-N NAD 37 E. 1418125.56	TVV-N NAD 21 E: 1618129.43
	LW NAD 83: 59 406980	Lat. NAD 83 39.465405	Lat NAD \$3: 39.466-451	Lat. NAD 83, 39 406261	Lat. NAD 83: 31 446215	Lat. NAD 83 39.466210
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	Len NAD 27 -60.832863	Les. NAD 27: 40.852877	Len. NAD 27: 40/832899	Lee NAD 17 -80.833673	Lou. NATI 27 -80 852659	Let. NAD 17: 480 851647
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	CUTSE 17 MAD #1 (m) E: C12671 44					

PLAN V	TEW SHEET LAYOUT
NO.	INDEX TO SHEETS
COVER	COVER
N1	GENERAL NOTES
N2	EROSION & SEDIMENT CONTROL NOTES
N3	GENERAL CONSTRUCTION NOTES
D1	EROSION & SEDIMENT CONTROL DETAILS
D2	EROSION & SEDIMENT CONTROL DETAILS
D3	TYPICAL DETAILS
D4	TYPICAL DETAILS
D5	REVEGETATION CHARTS
1	EXISTING SITE PLAN OVERVIEW
2	EXISTING SITE PLAN VIEW
3	PAD MODIFICATION DESIGN PLAN VIEW
4	SECTIONS SHEET
5	SCHEDULE OF QUANTITIES AND VOLUMES
6	WELL OFFSET DIMENSIONS
7	SITE RECLAMATION

ENGINEER / SURVEYOR

P.O.BOX 254 DAILEY, WV 26258 PHONE: (304) 338-6985 FAX: (304) 304-338-6081

JOHN P. SEE PE 6051 KENNETH KELLY PSSU 973 KIRK WAGNER EIT

GEOTECHNICAL:

GEOTECHNICAL INVESTIGATION AS PROVIDED BY KLEINFELDER

ENVIRONMENTAL

WETLAND DELINEATIONS AS PROVIDED BY ALLSTAR ECOLOGY

TOPOGRAPHIC INFORMATION:

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

Floodplain Conditions	
Do site construction activities take place in a	floodplain: NO
Permit needed from county floodplain coords	netor: NO
Flood Hazard Zone	NO
HEC-RAS Study completed:	N/A
Floodplain shown on drawings:	N/A
FIRM Map Number(s) for site:	54095C01750
Acreages of construction in floodplain:	N/A



MISS UTILITY OF WEST VIRGINIA 1-800-245-4646 IT'S THE LAW



Date: 18/16/2015

Scale: AS NOTED esigned By EW

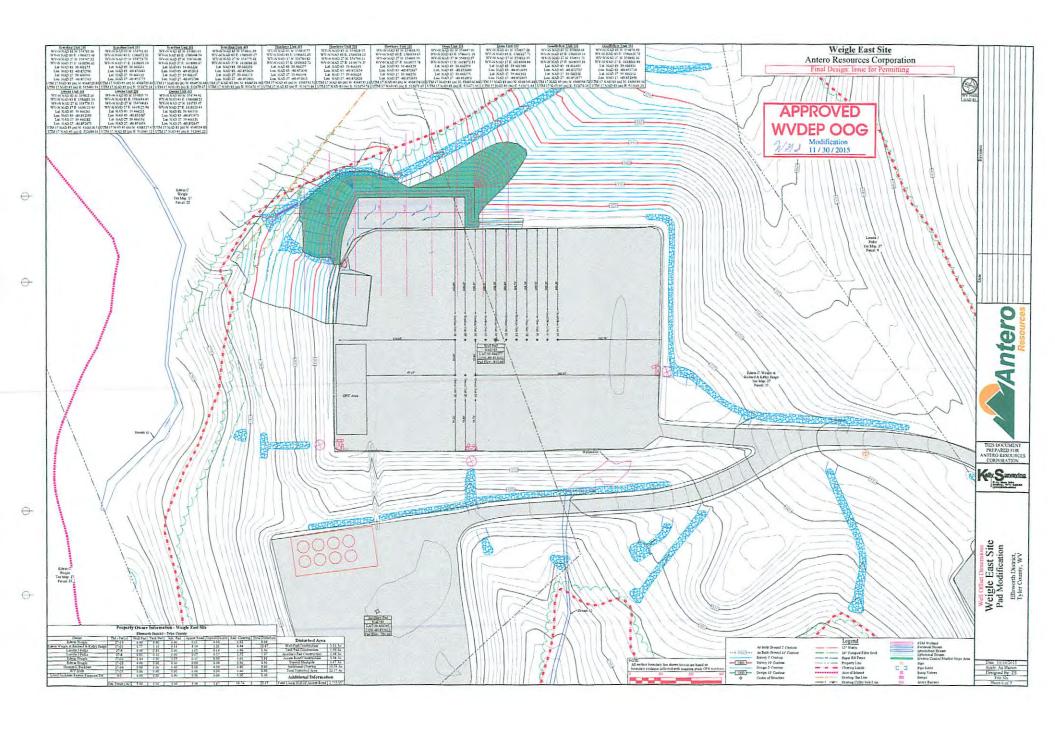
KELLY SURVEYING PLLC

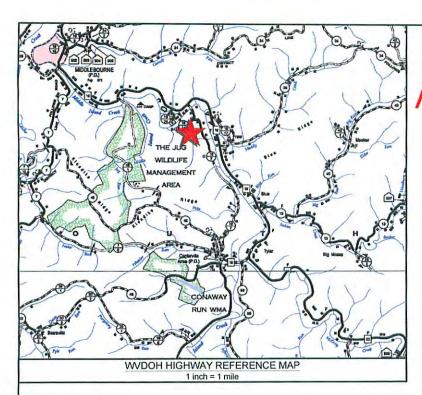
PROJECT MANAGER



THUS DOCUMENT NTERO RESOURCES CORPORATION

WEIGLE EAST SITE
PAD MODIFICATION
ELLSWORTH DISTRICT
TYLER COUNT, WEST VIEGONA





FINAL DESIGN: ISSUE ANTERO RES WEIGLE EA PAD MODIF

ELLSWORTH DISTRICT, TYLER
SHIRLEY 7.5 MINUTE

GENERAL DESCRIPTION

WEIGLE EAST PAD MODIFICATION

PROJECT CONTACTS

OPERATOR:

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0

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

PROJECT COORDINATOR:

ROBERT WIRKS
DESIGN MANAGER
PHONE: (304) 842-4100
CELL: (304) 847-7405
FAX: (304) 842-4102
EMAIL: nvirks@anteroresources.com

CONSTRUCTION COORDINATOR:

ELI WAGNER ENVIRONMENTAL ENGINEER PHONE: (304) 842-4068 CELL:(304) 476-9770 FAX: (304) 842-4102 EMAIL: ewagner@anteroresources.com

JOHN KAWCAK OPERATIONS SUPERINTENDENT CELL:(817) 368-1553

CELL:(817) 368-1553 FAX: (304) 842-4102

EMAIL: jkawcak@anteroresources.com

Condicion Unit III

Condicion Unit III

Condicion Unit III

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| No. 10 | N

WELL LOCATION RESTRICTIONS

ALL PAD AND FRACTURE PIT CONSTRUCTION COMPLIES WITH THE FOLLOWING RESTRICTIONS.

*250' FROM AN EXISTING WELL OR DEVELOPED SPRING USED FOR HUMAN OR DOMESTIC ANIMALS.

'625' FROM AN OCCUPIED DWELLING OR BARN GREATER THAN 2,500 SF USED FOR POULTRY OR DAIRY MEASURED FROM THE CENTER OF THE PAD.

100' FROM THE EDGE OF DISTURBANCE TO WETLANDS, PERENNIAL STREAMS, NATURAL OR ARTIFICIAL LAK POND OR RESERVOIR.

*300' FROM THE EDGE OF DISTURBANCE TO A NATURALLY REPRODUCING TROUT STREAM.

*1,000 OF A SURFACE OR GROUND WATER INTAKE TO A PUBLIC WATER SUPPLY.

(WELL LOCATION RESTRICTIONS OF WV CODE 22-6A-12)

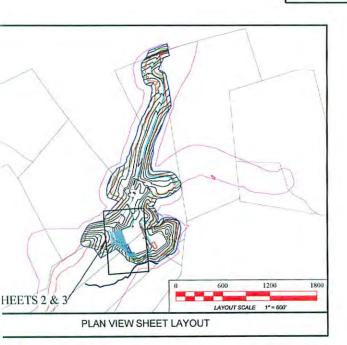
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WV-N NAD 83 N: 354782 26	WV-N NAD 83 N: 354791.63	WV-N NAD 83 N: 354801.01	WV-N NAD 83 N: 354810.39	WV-N NAD 83 N: 354819.77			
WV-N NAD 83 E: 1586655.48	WV-N NAD 83 E: 1586652.01	WV-N NAD 83 E: 1586648.54	WV-N NAD 83 E: 1586645.07	WV-N NAD 83 E: 1586641.60	WV-N NAD 83 E: 1586638.12	WV-N NAD 83 E: 1586634.65	
WV-N NAD 27 N: 354747.32	WV-N NAD 27 N: 354756.70	WV-N NAD 27 N: 354766.08	WV-N NAD 27 N: 354775.46	WV-N NAD 27 N: 354784.83	WV-N NAD 27 N: 354794.21	WV-N NAD 27 N: 354803.59	
WV-N NAD 27 E: 1618096.61	WV-N NAD 27 E: 1618093.14	WV-N NAD 27 E: 1618089.67	WV-N NAD 27 E: 1618086-20	WV-N NAD 27 E: 1618082.72	WV-N NAD 27 E: 1618079.25	WV-N NAD 27 E: 1618075.78	
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Lon. NAD 83: -80.852590		Lat. NAD 27: 39.466147	Lat. NAD 27: 39.466173	Lat. NAD 27: 39.466198	Lat. NAD 27: 39,466224	Lat. NAD 27: 39.466250	
Lat, NAD 27; 39.466096	Lat. NAD 27: 39.466122		Lon. NAD 27: -80.852801	Lon. NAD 27: -80 852813	Lon. NAD 27: -80 852826	Lon. NAD 27: -80.852839	
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UTM 17 NAD 83 (m) E: 512680.29	JTM 17 NAD 83 (m) E: 512679.18	UTM 17 NAD 83 (m) E: 512678.07	UTM 17 NAD 83 (m) E: 512676.97	UTM 17 NAD 83 (m) E: 512675.86	UTM 17 NAD 83 (m) E: 312674.76	Owens Unit 3H	
Dean Unit 1H	Dean Unit 2H	Goodfellow Unit 111	Goodfellow Unit 2H	Owens Unit 1H	Owens Unit 2H		
WV-N NAD 83 N: 354847.90	WV-N NAD 83 N: 354857.28	WV-N NAD 83 N: 354866.66	WV-N NAD 83 N: 354876.03	WV-N NAD 83 N: 354813.16	WV-N NAD 83 N: 354803.79	WV-N NAD 83 N: 354794.41	
WV-N NAD 83 E: 1586631.18	WV-N NAD 83 E: 1586627.71	WV-N NAD 83 E: 1586624.24	WV-N NAD 83 E: 1586620.76	WV-N NAD 83 E: 158668136	WV-N NAD 83 E: 1586684.83	WV-N NAD 83 E: 1586688.31	
WV-N NAD 27 N: 354812.97	WV-N NAD 27 N: 354822.35	WV-N NAD 27 N: 354831.73	WV-N NAD 27 N: 354841.10	WV-N NAD 27 N: 354778.23	WV-N NAD 27 N: 354768.85	WV-N NAD 27 N: 354759.47	
WV-N NAD 27 E: 1618072.31	WV-N NAD 27 E: 1618068.84	WV-N NAD 27 E: 1618065.36	WV-N NAD 27 E: 1618061 89	WV-N NAD 27 E: 1618122.49	WV-N NAD 27 E: 1618125.96	WV-N NAD 27 E: 1618129.43	
		Lat. NAD 83: 39.466405	Lat. NAD 83; 39.466431	Lat. NAD 83; 39,466261	Lat. NAD 83: 39.466235	Lat. NAD 83: 39.466210	
Lat. NAD 83: 39.466354	Lat. NAD 83: 39,466380		Lon. NAD 83: -80.852718	Lon. NAD 83: -80.852500	Lon. NAD 83: -80 852487	Lon. NAD 83: -80.852475	
Lon. NAD 83: -80.852680	Lon. NAD 83: -80.852693	Lon. NAD 83: -80.852705		Lat. NAD 27: 39.466182	Lat. NAD 27: 39.466156	Lat. NAD 27: 39.466131	
Lat. NAD 27: 39.466275	Lat. NAD 27: 39.466301	Lat. NAD 27: 39.466326	Lat. NAD 27: 39.466352		Lon NAD 27: -80 852659	Lon. NAD 27: -\$0.852647	
Lon. NAD 27: -80.852852	Lon. NAD 27: -80.852865	Lon. NAD 27: -80.852877	Lon, NAD 27: -80.852890	Lon. NAD 27: -80.852672			
UTM 17 NAD 83 (m) N: 4368540.84 L	JTM 17 NAD 83 (m) N: 4368543.68	UTM 17 NAD 83 (m) N: 4368546.52	UTM 17 NAD 83 (m) N: 4368549.36	JTM 17 NAD 83 (m) N: 4368530.51	LIM 17 NAD 83 (m) N: 4368527.67	DIM 17 NAD 83 (m) N: 4308324.6	11/1 <i>5/</i> 2016
UTM 17 NAD 83 (m) N: 4388340.841							

P.O. Box 254 Dailey, WV 26259 (304)338-6985

FOR PERMITTING OURCES STSITE CATION

OUNTY, WEST VIRGINIA UAD MAP





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ENGINEER / SURVEYOR

KELLY SURVEYING PLLC. P.O.BOX 254 **DAILEY, WV 26259** PHONE: (304) 338-6985 FAX: (304) 304-338-6081

PROJECT MANAGER

JOHN P. SEE PE 6051 KENNETH KELLY PSSU 973 KIRK WAGNER EIT

GEOTECHNICAL:

GEOTECHNICAL INVESTIGATION AS PROVIDED BY KLEINFELDER DATED OCTOBER 4, 2013

ENVIRONMENTAL:

WETLAND DELINEATIONS AS PROVIDED BY ALLSTAR ECOLOGY **DATED MAY 24, 2013**

TOPOGRAPHIC INFORMATION:

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

Floodplain Conditio	ons			
Do site construction activities take place in a floodplain:				
Permit needed from county floodplain co	oordinator.	NO		
Flood Hazard Zone				
HEC-RAS Study completed:				
Floodplain shown on drawings:				
FIRM Map Number(s) for site:	54095	C0175C		
Acreages of construction in floodplain:	N/A			

MISS UTILITY OF WEST VIRGINIA 1-800-245-4848 Wast Virginis State Law Bestion XIV: Chapter 24-6 requires that you sail law business days before you do in the season was a virginia IT'S THE LAW





THIS DOCUMENT PREPARED FOR ANTERO RESOURCES CORPORATION

WEDGE EAST SITE

PAR MEDIFICATION

RESPONSE WEST VIRGINIA

SERVICE STATES OF THE STATE

Department of

Date: 10/16/2015 Scale: AS NOTED Designed By: KW

File No. Coverday



110.



John P. See RPE 6051 Kelly Surveying PLLO COA: CO4232-00

