

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Monday, June 14, 2021 WELL WORK PERMIT Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET DENVER, CO 80202

Re: Permit approval for PEELER UNIT 2H 47-103-03410-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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) 926-0450...

James A Martin Chief

Operator's Well Number: PEELER UNIT 2H Farm Name: WILLIAM L. & DELORES J. U.S. WELL NUMBER: 47-103-03410-00-00 Horizontal 6A New Drill Date Issued: 6/14/2021

Promoting a healthy environment.

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. <u>Failure to adhere to the specified permit</u> 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. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. 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.
- 10. 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.

API Number:

PERMIT CONDITIONS

11. 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.

4710303410 API NO. 47-103 -

WW-6B (04/15)

i.

OPERATOR WELL NO. Peeler Unit 2H Well Pad Name: Gadd Pad

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

1) Well Operator: Antero Resour	ces Corpora	494507062	Wetzel	Green -	Porters Falls 7.5
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: Peele	r Unit 2H 🖊	Well Pa	d Name: G	add Pad <	
3) Farm Name/Surface Owner:	am L. & Delores	J. Gadd Public Roa	ad Access:	Eightmile Roa	d
4) Elevation, current ground: <u>122</u>	23.8' <u>/</u> El	evation, proposed	post-const	ruction: <u>~1223</u>	.8
5) Well Type (a) Gas X	Oil	Und	lerground S	torage	
Other					
(b)If Gas Shallow	w <u>X</u>	Deep			
Horizo	ntal X				
6) Existing Pad: Yes or No Yes			_		
7) Proposed Target Formation(s), D Marcellus Shale: 7500' TVD, Antic	• • • • •	•	*	• •	
8) Proposed Total Vertical Depth:	•			<u> </u>	
9) Formation at Total Vertical Depti.		/			
10) Proposed Total Measured Dept					
11) Proposed Horizontal Leg Lengt	h: <u>4006'</u>				
12) Approximate Fresh Water Strat	a Depths:	350' <			
13) Method to Determine Fresh Wa	ter Depths:	47-095-02266			
14) Approximate Saltwater Depths:	1887', 1917	" (
15) Approximate Coal Seam Depth	s: <u>656', 971'</u>	۲			
16) Approximate Depth to Possible	Void (coal m	ine, karst, other):	None Anti	cipated	
17) Does Proposed well location co directly overlying or adjacent to an		ms Yes		No X	RECEIVED
(a) If Yes, provide Mine Info: N	ame:				MAY 1 3 2021
D	epth:				AU/ Dorugen unt of
S	eam:			Env	W Department of ironmental Protection
0	wner:				

API NO. 47-103 _ 034/0

OPERATOR WELL NO. Peeler Unit 2H Well Pad Name: Gadd Pad

WW-6B (04/15)

18)

CASING AND TUBING PROGRAM

ТҮРЕ	<u>Size</u> (in)	<u>New</u> or Used	Grade	<u>Weight per ft.</u> (lb/ft)	<u>FOOTAGE: For</u> <u>Drilling (ft)</u>	INTERVALS: Left in Well (ft)	<u>CEMENT:</u> <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	80	80	CTS, 86 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	400 *see #19	400 *see #19	CTS, 556 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2500	2500	CTS, 1018 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	23#	13500	13500	3305 Cu. Ft
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

Biryen ban 5-19-21

ТҮРЕ	Size (in)	<u>Wellbore</u> Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Yield</u> (cu. ft./k)
Conductor	20"	24"	0.438"	1530	50	Class A	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	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"	0.415"	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		

Page 2 of 3

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

Drill a new horizontal shallow well into the Marcellus Shale.

*Antero will be air drilling the fresh water string which makes it difficult to determine when fresh water 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 ⁷ Anticipated Max Rate - 80 bpm

21) Total Area to be disturbed, including roads, stockpile area, pit	s, etc.	etc., (acres):	34.16 acres
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22) Area to be disturbed for well pad only, less	access road (acres): 17.00 acres
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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:

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WV Department of Environmental Protection

*Note: Attach additional sheets as needed.



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WW-9
(4/16)

WW-9
(4/16) API Number 47 - 103 -
Operator's Well No. <u>Peeler Unit 2H</u> 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 494507062
Watershed (HUC 10) Lower Fishing Creek Quadrangle Porters Falls 7.5'
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No
Will a pit be used? Yes No V
If so, please describe anticipated pit waste:
Will a synthetic liner be used in the pit? Yes No If so, what ml.? N/A
Proposed Disposal Method For Treated Pit Wastes:
 Land Application Underground Injection (UIC Permit Number_*UIC Permit # will be provided on Form WR-34) 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)(<u>Meadowfill Landfill Permit #SWF-1032-98</u>) Other (ExplainNorthwestern Landfill Permit #SWF-1025/
Will closed loop system be used? If so, describe: Yes, fluids stored in tanks, cuttings removed offsite and taken to landfill.
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.
-If oil based, what type? Synthetic, petroleum, etc. Synthetic
Additives to be used in drilling medium? Please See Attachment
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc Drill cuttings 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?
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.
Grotihon Kohlor
Company Official Signature
Company Official (Typed Name) Gretchen Kohler MAY 1 3 2021 Company Official Title Senior Environmental & Regulatory Manager
WV Department of
Subscribed and sworn before me this day of MTM, 20 21 Notary Public Notary Public STATE OF COLORADO
My commission expires AVE NOTARY ID 20184011666 MY COMMISSION EXPIRES MARGH 37 292

MY COMMISSION EXPIRES MARSH 3 2022

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Form WW-9

Operator's Well No. Peeler Unit 2H

Antero Resources Corporation Proposed Revegetation Treatment: Acres Disturbed 34.16 acres Prevegetation pH Lime 2-4 _____ 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 Access Road "A" (6.08 acres) + CO Route 46 (0.78 acres) + Well Pad (17.00 acres) + Excess/Topsoil Material Stockpile (10.30 acres)= 34.16 Acres Seed Mixtures Temporary Permanent Seed Type lbs/acre Seed Type lbs/acre Annual Ryegrass 40 Crownvetch 10-15 **Field Bromegrass** 40 **Tall Fescue** 30 See attached Table IV-3 for additional seed type (Gadd Pad Design) See attached Table IV-4A for additional seed type (Gadd Pad Design) *or type of grass seed requested by surface owner *or type of grass seed requested by surface owner

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions ($L \times W \times D$) of the pit, and dimensions ($L \times W$), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Dayn Hum
Comments:
itle: <u>Inspectoz</u> Date: <u>5-19-21</u>
ield Reviewed? () Yes (K) No

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

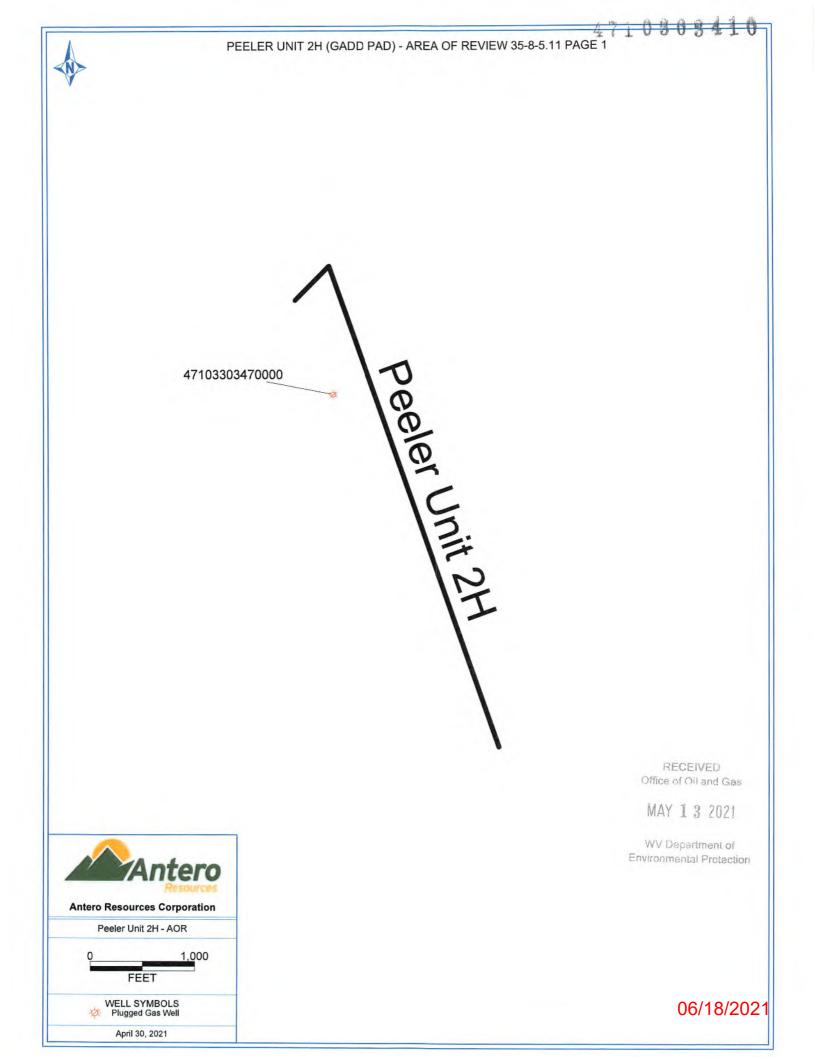
PRODUCTION INTERVAL

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)	RECEIVED
Sodium Carboxymethylcellulose – Filtration Control Agent	Office of Oil and Gas
8. New Drill	MAY 1 3 2021
Anionic Polyacrylamide Copolymer Emulsion – Shale Stabilizer	MAT 1 3 2021
9. Caustic Soda	WV Department of
Sodium Hydroxide – Alkalinity Control	Environmental Protection
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 RECEIVED 31. Milstarch Office of Oil and Gas Starch – Fluid Loss Reducer For Water Based Muds 32. Mil-Lube Drilling Fluid Lubricant

MAY 1 3 2021

WV Department of Environmental Protection



4710303410



911 Address 2946 Eight Mile Road Reader, WV 26167

B-0, H.

5-19-21

Well Site Safety Plan

Antero Resources

Well Name: Blake Unit 1H, Busch Unit 1H-3H, Charlotte Unit 1H-2H, Peeler Unit 1H-3H

Pad Location: GADD PAD

Wetzel County/Green District

GPS Coordinates:

Entrance - Lat 39°32'48.30"/Long -80°45'08.74" (NAD83) Pad Center - Lat 39°32'59.94"/Long -80°45'20.17" (NAD83)

Driving Directions:

From Reader Fire Department: Head north on WV-20 N. toward Spice Lane for 0.5 miles. Turn left onto CO Rd/40/2 for 0.4 miles. Continue onto Eight Mile Road for 2.4 miles. Access road will be on your right.

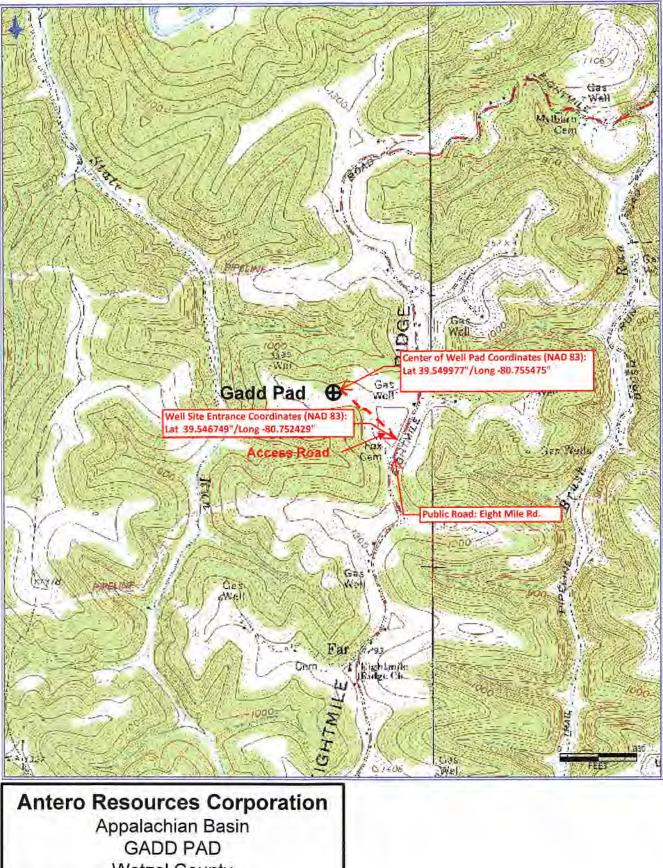
Alternate Route:

From Middlebourne Post Office: Turn left onto WV-18 N/Main Street for 3.8 miles. Turn right toward Elk Fork for 302 feet. Continue onto Elk Fork Road for 0.4 miles. Turn right onto Elk Fork Road for 9.6 miles. Turn left onto Wetzel Tyler Ridge Road for 0.6 miles. Continue onto Eight Mile Road for 1.7 miles. Access road will be on the left.

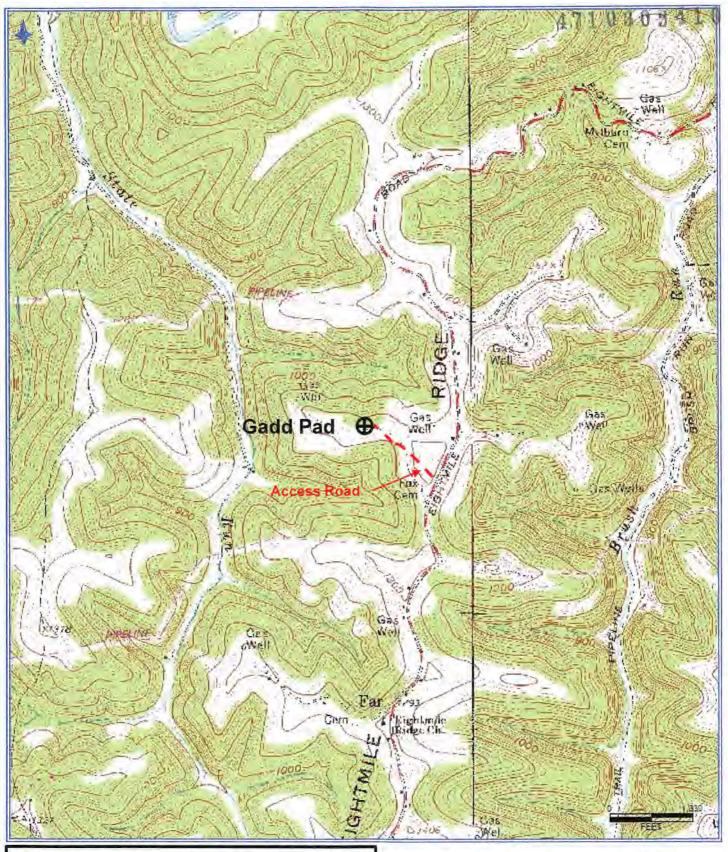
EMERGENCY (24 HOUR) CONTACT 1-800-878-1373

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SSP Page 1



Wetzel County Quadrangle: Porters Falls Watershed: Fishing Creek District: Green Date: 5-3-2021

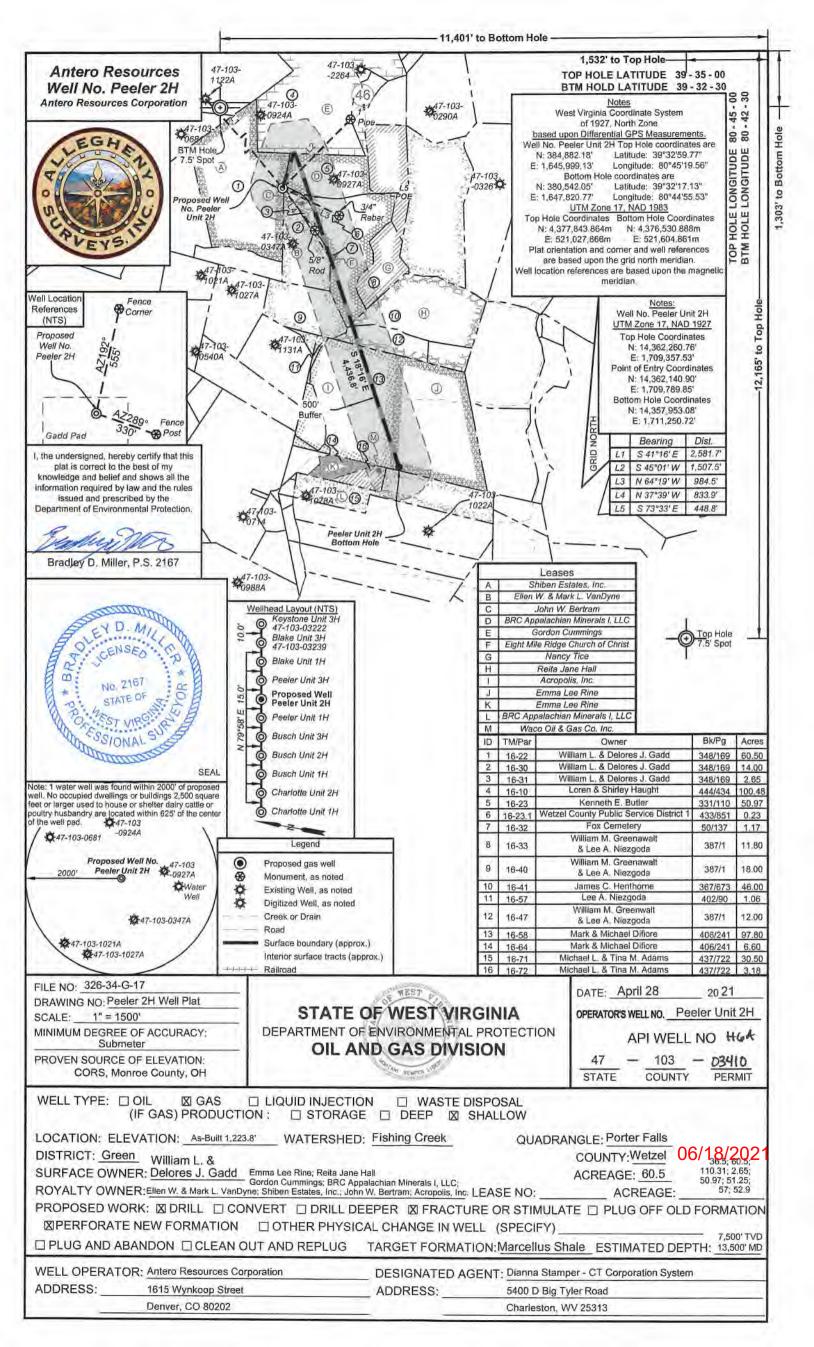


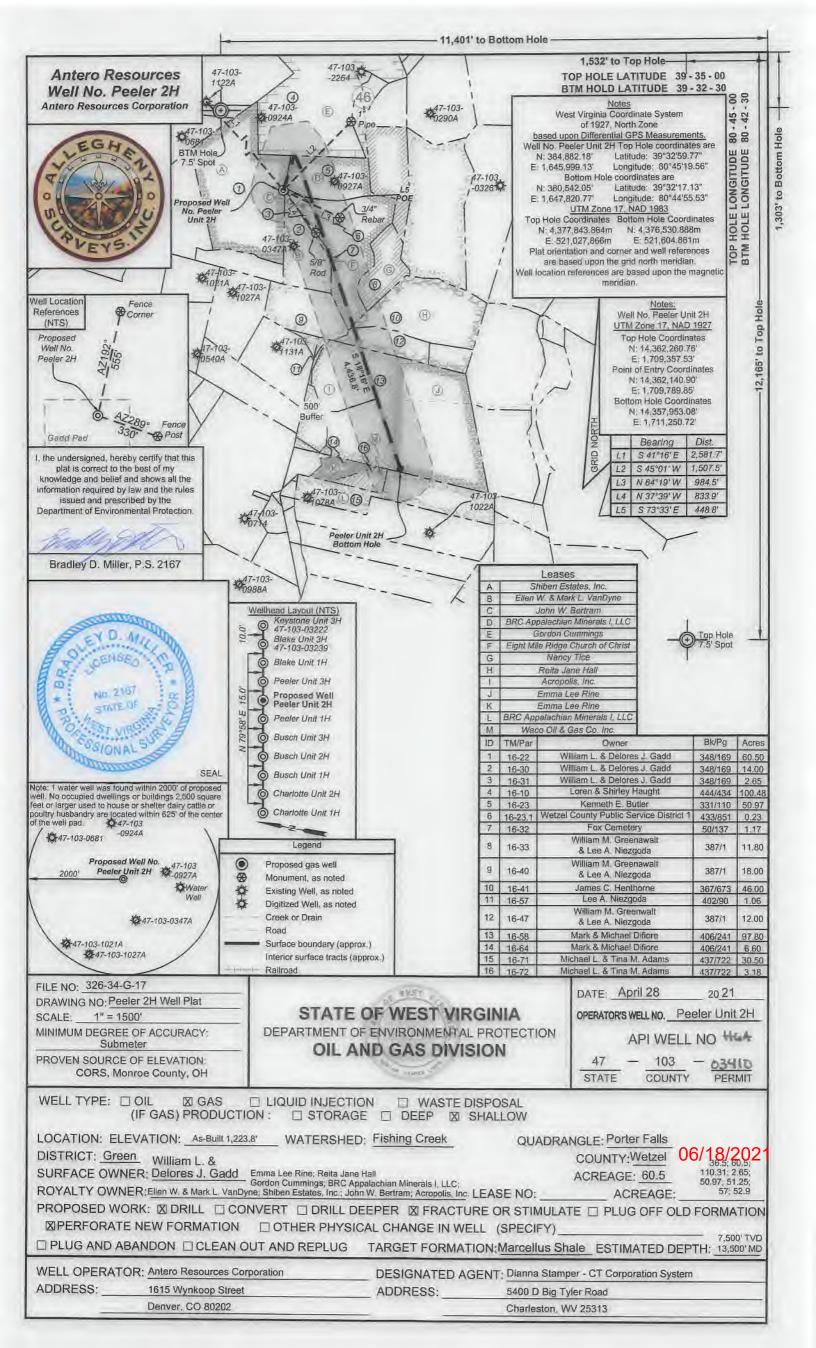
Antero Resources Corporation Appalachian Basin GADD PAD Wetzel County Quadrangle: Porters Falls Watershed: Fishing Creek

District: Green Date: 5-3-2021 RECEIVED Office of Outenn Gas

MAY 1 3 2021

WV Departments) C. Environmental Protocola





WW-6A1

Operator's Well Number

Peeler 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
Shiben Estates Inc. Lease			
Shiben Estates Inc.	Antero Resources Corporation	1/8+	0176/0467
Gordon Cummings Lease			
Gordon Cummings	Antero Resources Corporation	1/8+	0193/0001
BRC Appalachian Minerals LLC Lease			
BRC Appalachian Minerals LLC	SWN Production Company	1/8	0157/0540
SWN Production Company	Antero Exchange Properties LLC	Assignment	0177/0533
Antero Exchange Properties LLC	Antero Resources Corporation	Merger	0013/0311
John W. Bertram Lease			
John W. Bertram	Antero Resources Corporation	1/8+	0191/0288
BRC Appalachian Minerals LLC Lease			
BRC Appalachian Minerals LLC	SWN Production Company	1/8	0157/0540
SWN Production Company	Antero Exchange Properties LLC	Assignment	0177/0533
Antero Exchange Properties LLC	Antero Resources Corporation	Merger	0013/0311
Ellen W. & Mark VanDyne Lease			
Ellen W. & Mark VanDyne	Antero Resources Corporation	1/8+	0184/0660
Eight Mile Ridge Church of Christ Lease			
Eight Mile Ridge Church of Christ	Antero Resources Corporation	1/8+	0125/0014
Reita Jane Hall Lease			
Reita Jane Hall	Antero Resources Corporation	1/8+	0111/0123
Acropolis Inc. Lease			
Acropolis Inc.	Antero Resources Corporation	1/8+	0179/0361

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MAY 1 3 2021

WV Department of Environmental Protection

Operator's Well No.

WW-6A1 (5/13)

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
Emma Lee Rine Lease	Emma Lee Rine	Antero Resources Corporation	1/8+	0249/0738

*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

Majority Protection Act

County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or CEIVED nullifies the need for other permits/approvals that may be necessary and further affirms that all needed for and Gas permits/approvals should be acquired from the appropriate authority before the affected activity is initiated MAY 1.3 2021

*Co-tenancy utilization - At least	Well Operator:		- Y 1	WY Department of
7 mineral owners in tract At	By:	Tim Rady	In led	Environmental Protection
least 75% of the royalty owners have executed a lease on the	Its:	VP of Land	1	
tract. The interests of the remaining co-tenants were				
acquired pursuant to the Co- tenancy Modernization and			Pag	e 1 of <u>1</u>

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

RE: Peeler Unit 2H Quadrangle: Porters Falls 7.5' Wetzel County/Green District, West Virginia

Mr. Martin:

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

Sincerely,

Tom Kuhn Senior Landman

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MAY 1 3 2021

WV Department of Environmental Protection

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE CERTIFICATION</u>

Date of Notice Certification: 5621

API No. 47- 103	-
Operator's Well No.	Peeler Unit 2H
Well Pad Name: Ga	add 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:	521027.866m
County:	Wetzel	Northing:	4377843.864m
District:	Green (Public Road Access:	Eightmile Road
Quadrangle:	Porter Falls 7.5'	Generally used farm name:	William L. & Delores J. Gadd 📈
Watershed:	Lower Fishing 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	
3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	RECEIVED/ NOT REQUIRED
WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
4. NOTICE OF PLANNED OPERATION Office of Oil and Gas	
■ 5. PUBLIC NOTICE MAY 1 3 2021	
6. NOTICE OF APPLICATION WV Department of Environmental Protection	

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.

Certification of Notice is hereby given:

THEREFORE, I Diana Hoff ________, 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:	Tim Rady Diana O. Hop	K	Denver, CO 80202
Its:	VP of Land U	Facsimile:	303-357-7315
Telephone:	303-357-7310	Email:	mgriffith@anteroresources.com
MY COL	MEGANICR SEATE NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20184011666 MMISSION EXPIRES MARCH 13, 2022	Subscribed and swo My Commission E	Notary Public

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

MAY 1 3 2021

WV Department or Environmental Protection

06/18/2021

API NO. 47-

WW-6A		API NO. 47
(9-13)		OPERATOR WELL NO. Peeler Unit 2H
(> 12)		Well Pad Name: Gadd Pad
		STATE OF WEST VIRGINIA
DE	PARTMENT OF ENVI	RONMENTAL PROTECTION, OFFICE OF OIL AND GAS
		NOTICE OF APPLICATION
Notice Time Requir	rement: notice shall be prov	ided no later than the filing date of permit application.
Date of Notice.5	17 bate Permit Applic	ation Filed 5 1 2
Notice of:		
PERMIT FOR	ANY CERTIF	ICATE OF APPROVAL FOR THE
WELL WORK	CONST	RUCTION OF AN IMPOUNDMENT OR PIT
Delivery method pu	ursuant to West Virginia C	ode § 22-6A-10(b)
D 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.

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

D SURFA	ACE OWNER(s)	
The second second second	lilliam L. Gadd	
Address:	151 Loretta Avenue	
F	Follansbee, WV 26037	
Name: Ke	enneth Eric Butter	
Address:	1078 Bethany Pike	
W	Vellsburg, WV 26070	
	ACE OWNER(s) (Road and/or Other Distri Illiam L. Gadd	urbance)
Address:	151 Loretta Avenue	
1.1.1.1.1.1	Follansbee, WV 26037	
Name: Ke	enneth Eric Butler	
Address:	1078 Bethany Pike	
	Wellsburg, WV 26070	
SURFA	ACE OWNER(s) (Impoundments or Pits)	
Address:		

COAL OWNER OR LESSEE	i onlice of
Name: NO DECLARATIONS ON RECORD WITH COUNTY Address:	MAY 1
COAL OPERATOR	Vev Dop Environment
Address:	
WATER PURVEYOR(s)/OWNER(s) OF WATER WELL, SPRING OR OTHER WATER SUPPLY SOURCE	
Name: NONE IDENTIFIED WITHIN 1500	
Address:	
OPERATOR OF ANY NATURAL GAS STORA Name:	GE FIELD

*Please attach additional forms if necessary

Address:

RECEIVED Ollining Gam

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MAY	4	4	202	ł.

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API NO. 47-OPERATOR WELL NO. Peeler Unit 2H Well Pad Name: Gadd 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.ww.gov/oil_______202/

Well Location Restrictions

WV Department of

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing action 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



WW-6A (8-13)

Well Pad Name: Gadd 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 RECEIVED 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

MAY 1 3 2021

WV Department of Environmental Protection

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-_____ OPERATOR WELL NO. Peeler Unit 2H Well Pad Name: Gadd 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-

<u>Permits/Pages/default.aspx</u> 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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MAY 1 3 2021

WV Concentration

WW-6A (8-13)

API NO. 47	-	
OPERATOR WE	ELL NO.	Peeler Unit 2H
Well Pad Name:	Gadd Pad	1

Notice is hereby given by:

Telephone:	(303) 357-7310	Diana O.	Holl	_
	ith@anteroresourc		0	

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 <u>depprivacyofficer@wv.gov</u>.

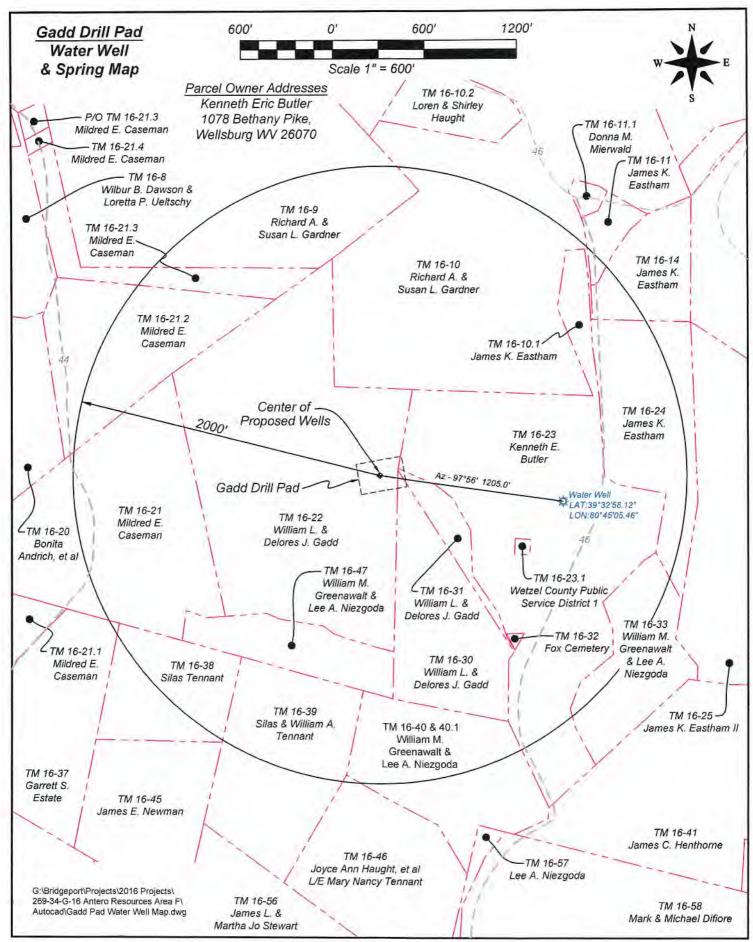
MEGAN GRIFFITH	
NOTARY PUBLIC	
STATE OF COLORADO	
NOTARY ID 20184011666	
MY COMMISSION EXPIRES MARCH	13, 2022

Subscribed and sworn before me this day of	Mab 2021
CANPEST	Notary Public
My Commission Expires 2	13/2022

RECEIVED Office of Oil and Gas

MAY 1 3 2021

WV Department of Environmental Protection



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: 03/10/2021 Date Permit Application Filed: 05/07/2021

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

HAND	CERTIFIED MAIL
DELIVERY	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:	William L. Gadd	Name:	Kenneth Eric Butler	1
Address:	151 Loretta Avenue	Address:	1078 Bethany Pike	
	Follansbee, WV 26037		Wellsburg, WV 26070	

Notice is hereby given:

RECEIVED 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 ov	wher's land for the purpose of drilling	a horizontal well on the tract of lan	d as fo	ollows:		X# #310
State:	West Virginia	UTM NAD 83	ıg:	521027.866m	-	MAY 1 3 2021
County:	Wetzel	UTMINAD 83 North	ing:	4377843.864m	r	
District:	Green	Public Road Access:	÷.	Eightmile Road	<	WY Department by
Quadrangle:	Porter Falls 7.5'	Generally used farm na	me:	William L. & Delores	s J. Gadd	wronmenm: omtertiku
Watershed:	Lower Fishing 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 Corporation	Authorized Representative:	Megan Griffith
Address:	1615 Wynkoop Street	Address:	1615 Wynkoop St.
Denver, CO 80202			Denver, CO 80202
Telephone:	303-357-7310	Telephone:	303-357-7323
Email:	mgriffith@anteroresources.com	Email;	mgriffith@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.

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: 05/07/2021 Date of Notice: 05/07/2021

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

CERTIFIED MAIL	HAND
RETURN RECEIPT REQUESTED	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)

Name: William L. Gadd	V	Name: Kenneth Eric Butler	 v
Address: 151 Loretta Avenue		Address: 1078 Bethany Pike	
Follansbee, WV 26307		Wellsburg, WV 26070	
and a second second			RECEIVE

Notice is hereby given:

utilise accilland Gas 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: MAY

State:	vvest virginia	LITMANAD OD East	ing:	521027.800m
County:	Wetzel	UTM NAD 83 Nort	hing:	4377843.864m
District:	Green	Public Road Access:		Eightmile Road
Quadrangle:	Porter Falls 7.5	Generally used farm na	ame:	William L. & Delores J. Gadd
Watershed:	Lower Fishing Creek	() A		

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-andgas/pages/default.aspx.

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

Oil and Gas Privacy Notice:

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

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Adhla

Environmantal Protection

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

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION

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

State:	West Virginia
County:	Wetzel
District:	Green
Quadrangle:	Porter Falls 7.5'
Watershed:	Lower Fishing Creek

UTM NAD 83 Easting: Northing:

Generally used farm name:

Public Road Access:

4377843.864m

Eightmile Road William L. & Delores J. Gadd

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

*Please check the box that applies	FOR EXECUTION BY A NATURAL PERSON	
□ SURFACE OWNER	Signature: MAY 1 3 2021	
□ SURFACE OWNER (Road and/or Other Disturbance)	Print Name:	
□ SURFACE OWNER (Impoundments/Pits)	Environmental Protection FOR EXECUTION BY A CORPORATION, ETC.	
COAL OWNER OR LESSEE	Company:	
COAL OPERATOR	By:	
□ WATER PURVEYOR	Signature:	
□ OPERATOR OF ANY NATURAL GAS STORAGE FIELD	Date:	

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.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways 1900 Kanawha Boulevard East • Building Five • Room 110

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

Byrd E. White, III Secretary of Transportation/ Commissioner of Highways Jimmy Wriston, P. E. Deputy Secretary/ Deputy Commissioner

April 29, 2021

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 Gadd Pad, Wetzel County Peeler Unit 2H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0045 which has been issued to Antero Resources for access to the State Road for a well site located off Wetzel County Route 46 SLS MP 2.55.

This operator is in compliance with §22-6A-20 of the WV Code. 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 October 1, 2018. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Jary K. Clayton

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

Cc: Megan Griffith Antero Resources 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	1
Ammonium Persulfate	7727-54-0	
Anionic copolymer	Proprietary	1
Anionic polymer	Proprietary	1
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 Office	ECEIVED
Polyacrylamide	57-55-6	ice of Oil and Gas
Propargyl Alcohol	107-19-7 MA	1 3 2021
Propylene Glycol	57-55-6	
Quartz	14808-60-7 WV [epartment of
Sillica, crystalline quartz	7631-86-9	rental Protection
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	
Solvent Naphtha, petroleum, heavy aliph	64742-96-7	
Soybean Oil, Me ester	67784-80-9	
Copolymer of Maleic and Acrylic Acid	52255-49-9	
DETA phosphonate	15827-60-8	
Hexamthylene Triamine Penta	34690-00-1	
Phosphino Carboxylic acid polymer	71050-62-9	
Hexamethylene Diamine Tetra	23605-75-5	4
2-Propenoic acid, polymer with 2 propenamide	9003-06-9	4
Hexamethylene diamine penta (methylene phosphonic acid)	23605-74-5	4
Diethylene Glycol	111-46-6	4
Methenamine	100-97-0	
Polyethylene polyamine	68603-67-8	
Coco amine	61791-14-8	4
2-Propyn-1-olcompound with methyloxirane	38172-91-7	J

