

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

Friday, December 20, 2024 WELL WORK PERMIT Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET

DENVER, CO 80202

Permit approval for Graden Unit 1H Re:

47-103-03696-00-00

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

Operator's Well Number:

Graden Unit 1H

Farm Name:

Dallison Lumber Company

U.S. WELL NUMBER:

47-103-03696-00-00

Horizontal 6A New Drill

Date Issued: 12/20/2024

API Number: <u>4710303696</u>

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. 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. Also, 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.
- 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.

API NO. 47-103	
OPERATOR WELL NO	O. Graden Unit 1H
Well Pad Name: Cer	dar Pad

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

1) Well Operator: Antero Res	sources Corpor	par	52	Pine Grove 7.5'
		Operator ID	County	District Quadrangle
2) Operator's Well Number: G	raden Unit 1H	/ Well Pa	d Name: Cedar F	Pad
3) Farm Name/Surface Owner:	Dallison Lumber C	company Public Ro	ad Access: CR 52	2
4) Elevation, current ground:	As-Built - 1248'	Elevation, proposed	post-construction	ÇL.
5) Well Type (a) Gas X Other	Oil		erground Storage	
\$12.0	allow X	Deep		
	rizontal X			
6) Existing Pad: Yes or No Ye			-	
 Proposed Target Formation(s Marcellus Shale: 7600' TVD, A 	s), Depth(s), Anti Anticipated Thickn	cipated Thickness a ess- 55 feet, Associ	and Expected Pres ated Pressure- 285	ssure(s): 50#
8) Proposed Total Vertical Dep		1		
9) Formation at Total Vertical I		IS		
10) Proposed Total Measured D	Depth: 10800' N	MD /		
11) Proposed Horizontal Leg Le	ength: 500' *(Open to modificati	on at a later date	
12) Approximate Fresh Water S	trata Depths:	612'		
13) Method to Determine Fresh	Water Depths:	47103308970000 Offset we	Il records. Depths have bee	en adjusted according to surface elevations
14) Approximate Saltwater Dep	ths: 2193'			
15) Approximate Coal Seam De	epths: 1010'			
16) Approximate Depth to Poss	ible Void (coal m	nine, karst, other):	None Anticipated	
17) Does Proposed well location directly overlying or adjacent to		ams Yes	No X	
(a) If Yes, provide Mine Info:	Name:			Office of Oil and Gas
(a) if i es, provide ivince mio.	Depth:			NOV 9 7 2024
	Seam:			NOV 27 2024
				WV Department of
	Owner:			Environmental Protection

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12/20/2024

WW-6B (04/15) API NO. 47-103 OPERATOR WELL NO. Greden Unit 1H
Well Pad Name: Cedar Pad

18)

CASING AND TUBING PROGRAM

TYPE	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	J-55	94#	100'	100'	CTS, 96 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	662'	662' /	CTS, 690 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	3200'	3200'	CTS, 1303 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P110-ICY	23#	10800'	10800'	CTS, 1794 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

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	20"	24"	0.375"	2250	50	Class A/L	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	1000	Class A/L	~1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A/L	~1.18
Intermediate				27.27	7,000		1.10
Production	5-1/2"	8-3/4" & 8-1/2"	0.415"	14,360	2500	Class G/H	~1.8
Tubing	2-3/8"	4.778"	0.19"	11,200		Julio On I	1.0
Liners				,200			

PACKERS

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Kind:	N/A	NOV 27 2024
Sizes:	N/A	WV Department of Environmental Protection
Depths Set:	N/A	

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12/20/2024

WW-6B (10/14)

API NO. 47- 103 OPERATOR WELL NO. Graden Unit 1H
Well Pad Name: Cedar Pad

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 Anticipated Max Rate - 80 bpm

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 71.85 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 18.45 acres

23) Describe centralizer placement for each casing string:

Conductor: no centralizers

Surface Casing: one centralizer 10' above the float shoe, one on the insert float collar and one every 4th joint spaced up the hole to surface.

Intermediate Casing: one centralizer above float joint, one centralizer 5' above float collar and one every 4th collar to surface. Production Casing: one centralizer at shoe joint and one every 3 joints to top of cement in intermediate casing.

24) Describe all cement additives associated with each cement type:

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Conductor: no additives, Class A/L cement.

Surface: Class A/L cement with 2-3% calcium chloride and 1/4 lb of flake

Intermediate: Class A/L 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 G/H + 45 PPS Calcium Carbonate + 1.0% FL-160 + 0.2% ACGB-47 + 0.05% ACSA-51 + 0.2% ACR-20 Department of Environmental Protection

25) Proposed borehole conditioning procedures:

Conductor: blowhole clean with air, run casing, 10 bbls fresh water.

Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

Intermediate: blowhole clean with air, trip to surface casing shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate 40 bbls brine water followed by 10 bbls fresh water and 25 bbls bentonite mud, pump 10 bbls fresh water.

Production: circulate with 14 lb/gal NaCl mud, trip to middle of lateral, circulate, pump high viscosity sweep, trip to base of curve, pump high viscosity sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbls fresh water, pump 48 bbls barite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water.

*Note: Attach additional sheets as needed.

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November 19, 2024

West Virginia Office of Oil and Gas Attn: Taylor Brewer 601 57th St SE Charleston, WV 25304

RE: Request for Variance – Class L Cement
Duke Unit 1H-2H, Graden Unit 1H-2H, and Graden Unit 1H-2H
Wetzel County, WV

Mr. Brewer:

Pursuant to 35CSR8 Section 9.2.h.8, Antero Resources Corporation ("Antero") would like to implement the variance to allow Class L Cement in place of Class A cement relating to the construction of the following horizontal wells (Duke Unit 1H-2H, Graden Unit 1H-2H, and Graden Unit 1H-2H) on the Cedar pad.

Antero only plans to use this method if Class A cement is not available to be use due to supply issues. Please see Order No 2022-14 attached.

If you have any questions or need further information, please feel free to contact Mallory Turco, Permitting Manager, at (303) 357-7182 or email at mturco@anteroresources.com.

Sincerely,

Stefan Gaspar Permitting Agent

Antero Resources Corporation

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WV Department of Environmental Protection

API Number	47 -	103	

Operator's Well No. Graden Unit 1H

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) Fishing Creek	Quadrangle Pine Grove 7.5'
Do you anticipate using more than 5,000 bbls of water to com	
Will a pit be used? Yes No V	**************************************
If so, please describe anticipated pit waste: No pit will be	e used at this site (Drilling and Flowback 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 so, what ml.? N/A
Proposed Disposal Method For Treated Pit Wastes:	
Reuse (at API Number Future permit	nit Number_*UIC Permit # will be provided on Form WR-34) Itted well locations when applicable. API# will be provided on Form WR-34) W-9 for disposal location) (Meadowfill Landfill Permit #SWF-1032-98) Northwestern Landfill Permit #SWF-1025/ WV0109410
Will closed loop system be used? If so, describe: Yes, fluids	Wetzel County Landfill (Permit #SWF-1021) stored in tanks, cuttings removed offsite and taken to landfill.
Drilling medium anticipated for this well (vertical and horizon	
-If oil based, what type? Synthetic, petroleum, etc. 8	
Additives to be used in drilling medium? Please See Attachme	
	d 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	
	andfill (Permit #SWF-1032-98), Northwestern Landfill (Permit # SWF-1025/WV0109410)
Wetzel Co	ounty Landfill (Permit #SWF-1021)
Permittee shall provide written notice to the Office of Oil and West Virginia solid waste facility. The notice shall be provided where it was properly disposed.	Gas of any load of drill cuttings or associated waste rejected at any d within 24 hours of rejection and the permittee shall also disclose
provisions of the permit are enforceable by law. Violations of law or regulation can lead to enforcement action. I certify under penalty of law that I have personally application form and all attachments thereto and that, base obtaining the information, I believe that the information is penalties for submitting false information, including the possib	RECEIVED
Company Official Signature <u>Gretchen Kohler</u>	Office of Oil and Gas
Company Official (Typed Name) Gretchen Kohler	NOV 20 2024
Company Official Title Director Environmental & Regulatory Co	4.
1261	→ Jepartment of Environmental Protection
Subscribed and sworn before me this day of	Vovember 2024
Stefan Gaspar	Notary Public
Stefan Gaspar My commission expires November 15	STEFAN GASPAR NOTARY PUBLIC STATE OF THE PROPERTY OF THE PROPE

Operator's Well No. Graden Unit 1H

	= 1,02			
Proposed Revegetation Treatmer	nt: Acres Disturbed 71.85 acr	res Prevegetation p	Н	
Lime 2-4	Tons/acre or to correct to pH			
Fertilizer type Hay or st	raw or Wood Fiber (will be used w	here needed)		
Fertilizer amount 500	Ibs	/acre		
Mulch 2-3	Tons/ac			
Access Road (30.	35 acres) + Valve Pad Access Road (0.65 acre + Spoil 3 (3.28 acres) + Spoil 4 (2.22 acres) -	es) + Well Pad (18.45 acres) + Valve Pad (1.45 a + Topsoil/Stripping 1 (1.37 acres) + Topsoil/Strip (6.21 acres) = 71.85 acres	cres) + Spoil 1 (1.24 acres) + cring 2 (2.04 acres) + Topsoil/	
Tempo	orary	Perma	anent	
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 s	seed type Cedar Pad Design)	See attached Table IV-4A for addition	al seed type Cedar Pad Design	
*or type of grass seed requested by surface owner				
Attach: Maps(s) of road, location, pit and rovided). If water from the pit w creage, of the land application an	proposed area for land applicat ill be land applied, include dime rea.	ion (unless engineered plans inclueensions (L x W x D) of the pit, and	ding this into have have	
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Attach: Maps(s) of road, location, pit and provided). If water from the pit watereage, of the land application and Photocopied section of involved Plan Approved by:	proposed area for land applicat ill be land applied, include dime rea.	ion (unless engineered plans includes	ding this info have been a dimensions (L x W), and the dimensions (L x W).	
Attach: Maps(s) of road, location, pit and	proposed area for land applicat ill be land applied, include dime rea.	ion (unless engineered plans includes	dimensions (L x W), and	



911 Address 1934 McKimmie Ridge Rd. Reader, WV 26167

Well Site Safety Plan Antero Resources

Well Name: CEDAR UNIT 5V, MIDAS UNIT 1H, WILMA UNIT 1H, GOWLAND UNIT 1H, JIFFY UNIT 1H, GUNTO UNIT 1H-2H, DUKE UNIT 1H-2H, GRADEN UNIT 1H-2H, MARMA UNIT 1H-2H

Pad Location: CEDAR PAD

Wetzel County/Green District

GPS Coordinates:

Entrance - Lat 39.585290/Long -80.706670 (NAD83)

Pad Center - Lat 39.567788/Long -80.713115 (NAD83)

Driving Directions:

- · From WV-20, turn east onto North Fork Road
- Immediately turn left onto CO-15/17 (N Fork Rd) and travel for 2.2 miles
- Turn left onto WV-17 (Barker Run Rd) and continue for 2.3 miles
- Turn left onto CO 17/1 (Morgan-Ashland Ridge Rd) and continue for 2.7 miles
- Turn left onto CO 52 (McKimmie Ridge Rd) and travel for 1.6 miles
- · The Cedar Lease Road will be on the left

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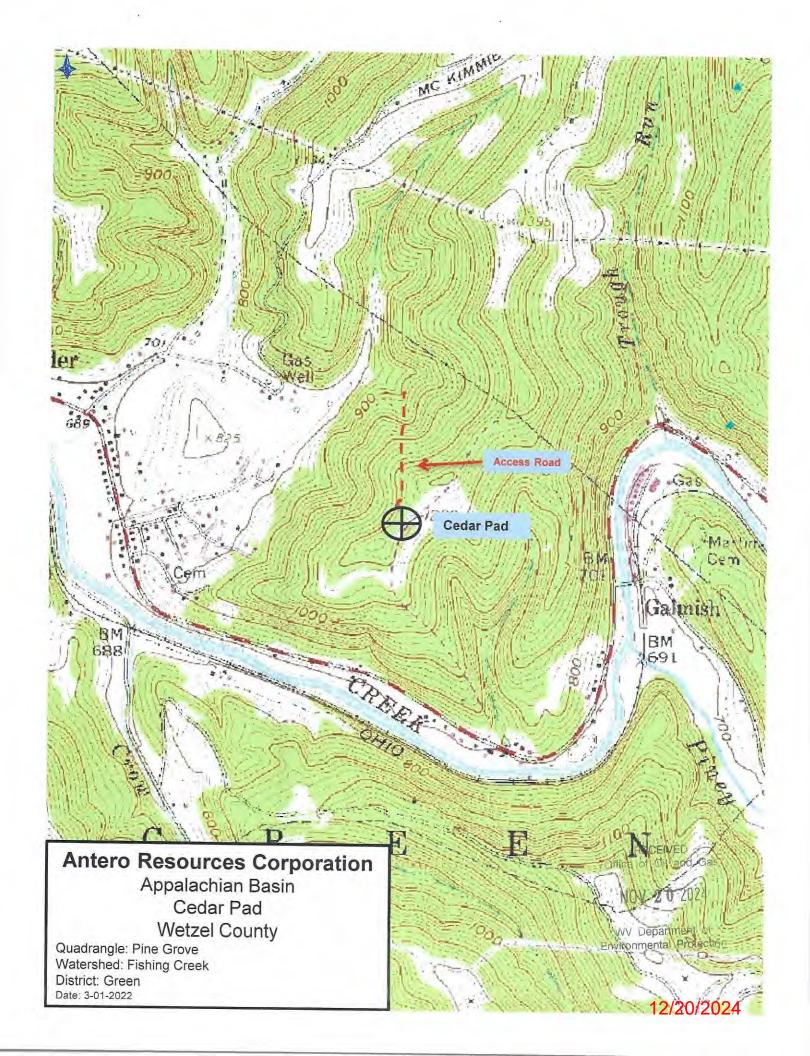
NOV 27 2024

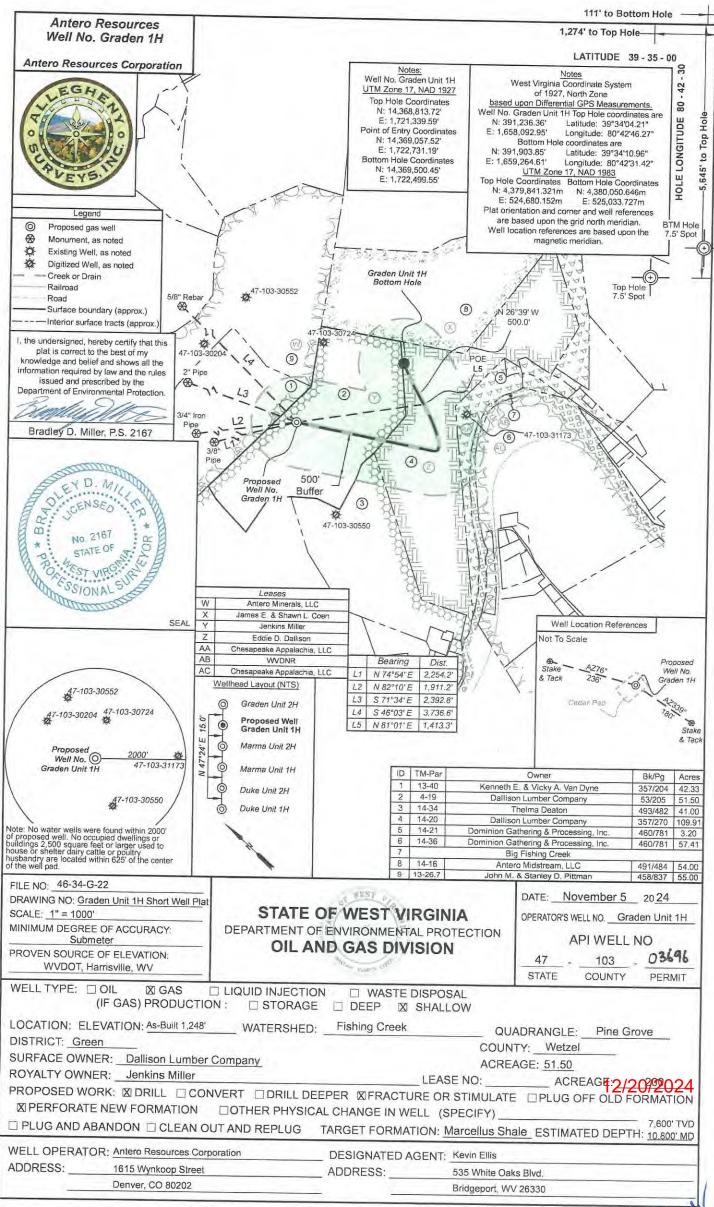
WV Department of Environmental Protection

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

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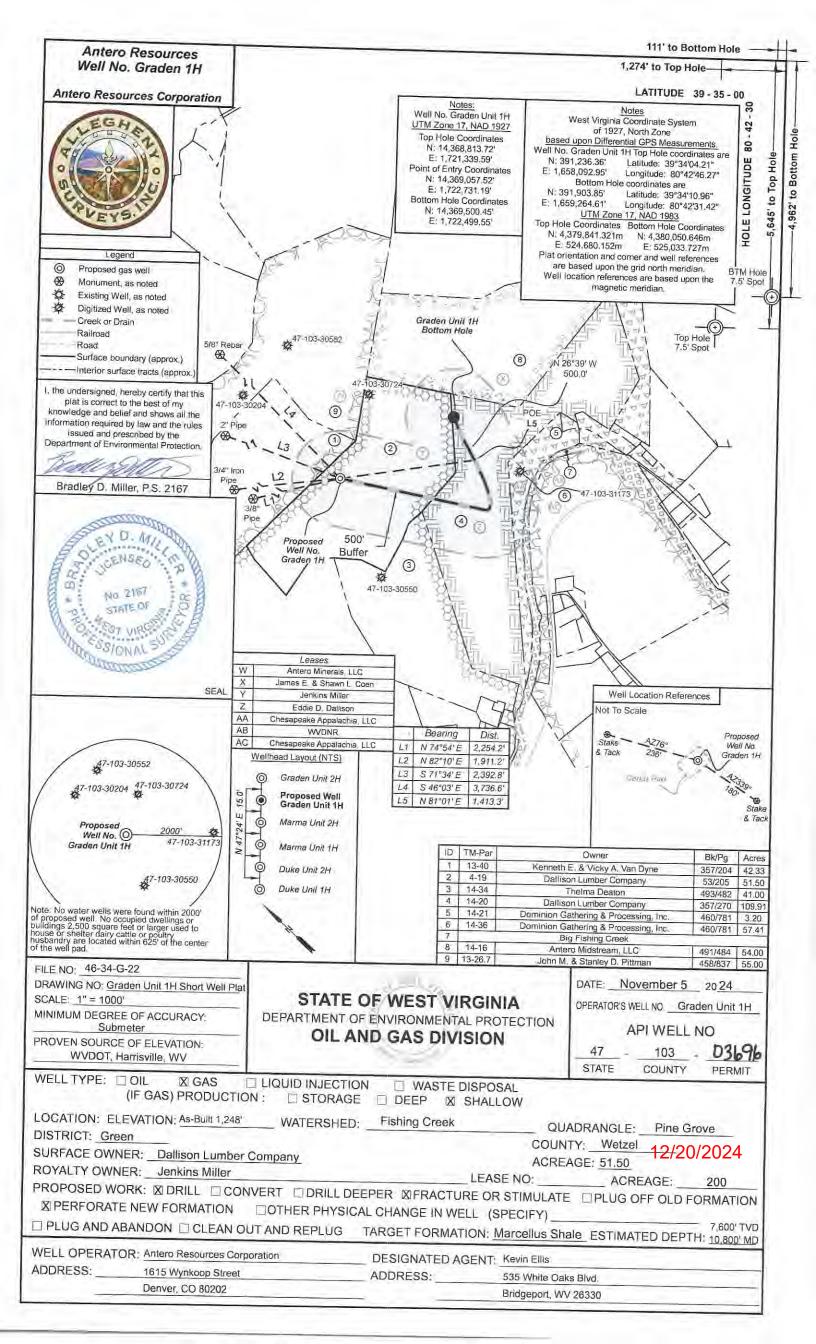






Supply 34

,962' to Bottom



Operator's Well Number

Graden Unit 1H

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 –

- 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
Y: Jenkins Miller Lease Jenkins Miller Hope Natural Gas Company Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation Eastern States Oil & Gas Inc Blazer Energy Corp Eastern States Oil & Gas Inc Equitable Production- Eastern States INC Appalachian Natural Gas Trust EQT Production Company	Hope Natural Gas Company Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation Eastern States Oil & Gas Inc Blazer Energy Corp Eastern States Oil & Gas Inc Equitable Production- Eastern States INC Appalachian Natural Gas Trust EQT Production Company Antero Resources Corporation	1/8 Assignment Assignment Assignment Merger Name Change Name Change Assignment Merger Assignment Assignment	0107/0056 0233/0387 066A/0069 076A/0232 0012/0253 0012/0259 WVSOS 079A/0244 0096/0505 230A/0801

**Pooling/Unitization – Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool certain owners in this tract.

Office of Oil same

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WV Departmer in Environmental Protection

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

^{*}Co-tenancy utilization – Antero is utilizing the Co-tenancy Modernization and Majority Protection Act to proceed with development of certain royalty owners' interests in this tract.

W	W-6A1	
(5)	(13)	

Operator's Well No.	Graden Unit 1H	
Operator 5 Well IVO.		

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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- (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
Z: Eddie D. Dallison Lease			ato j unoj	Doolo1 age
	Eddie D. Dallison	Antero Resources Corporation	1/8+	307A/0447

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.

Well Operator:	Antero Resources Corporation
By:	Tim Rady
Its:	Senior Vice President of Land

Page Lof 1

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^{**}Pooling/Unitization -- Antero has filed a horizontal well unitization application with the West Virginia Oil and Gas Conservation Commission that seeks to pool pertain numers in this tract



Antero Resources 1615 Wynkoop Street Denver, CO 80202 Office 303.357.7310 Fax 303.357 7315

November 13, 2024

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

RE:

Graden Unit 1H

Quadrangle: Pine Grove 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 Garden Unit 1H 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 Garden Unit 1H horizontal lateral will drill through including any and all roads crossed under as identified on the attached survey plat.

Sincerely,

Thomas Kuhn Staff Landman

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> > NOV 2 0 2024

vvv Department of Environmental Protection

Horizontal Natural Gas Well Work Permit Application Notice By Publication

Notice is hereby given:

Pursuant to West Virginia Code 22-6A-10(e) prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

Paper: Wetzel Chronicle				
Public Notice Date: 11/6/2024-11/13/2024				
The following applicant intends to apply for a surface excluding pipelines, gathering lines are any thirty day period.	a horizontal na nd roads or util	tural well wor izes more than	k permit which dis n two hundred ten	sturbs three acres or more o thousand gallons of water in
Applicant: Antero Resources Corporation		Well Nun	nber: Graden Uni	t 1H
Address: 1615 Wynkoop St. Denver, CO 802	202			
Business Conducted: Natural gas production Location —	n.			
Location –				
State: West Virginia		County:	Wetzel	
District: Green		Quadrangle:	Pine Grove 7.6'	DEDEIVER
UTM Coordinate NAD83 Northing:	4379841.321m			Office of Cil and Gay
UTM coordinate NAD83 Easting:	524680.151m			
Watershed: Fishing Creek	1			NOV 2 0 2024
Coordinate Conversion:	ename o	4.625		WV Department of

To convert the coordinates above into longitude and latitude, visit: http://tagis.dep.wv.gov/convert/llutm conus.php

Electronic notification:

To receive an email when applications have been received or issued by the Office of Oil and Gas, visit http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx to sign up.

Reviewing Applications:

Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15, whether mailed or obtained at DEP headquarters. Copies may be requested by calling the office or by sending an email to <u>DEP.comments@wv.gov</u>.

Submitting Comments:

Comments may be submitted online at https://apps.dep.wv.gov/oog/comments/comments.cfm, or by letter to Permit Review, Office of Oil and Gas, 601 57th Street, SE Charleston, WV 25304. Please reference the county, well number, and operator when using this option.

Regardless of format for comment submissions, they must be received no later than thirty days after the permit application is received by the Office of Oil and Gas.

For information related to horizontal drilling visit: www.dep.wv.gov/oil-and-gas/pages/default.aspx

4710303696

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

Date of Noti	ce Certification: 11/18/2024	API N	o. 47- 103 -	
		Opera	tor's Well No. Gra	den Unit 1H
NT		Well P	ad Name: Cedar	Pad
Notice has	been given:			
below for the	ne provisions in West Virginia Code tract of land as follows:	§ 22-6A, the Operator has provided th	e required parties	with the Notice Forms listed
State:	West Virginia			
County:	Wetzel	UTM NAD 83 Easting		
District:	Green	Northi		
Quadrangle:	Pine Grove 7.5'	Public Road Access:	CR 52	
Watershed:	Fishing Creek	Generally used farm nan	ne: Dallison Lumber	r Company
it has provide information re of giving the requirements Virginia Code	ed the owners of the surface descrequired by subsections (b) and (c), s surface owner notice of entry to s of subsection (b), section sixteen	every permit application filed under shall contain the following information ibed in subdivisions (1), (2) and (4), ection sixteen of this article; (ii) that the urvey pursuant to subsection (a), sect of this article were waived in writing tender proof of and certify to the secre- int.	n: (14) A certificat subsection (b), se he requirement was ion ten of this art	ion from the operator that (in action ten of this article, the sedeemed satisfied as a result icle six-a; or (iii) the notice
that the Ope	West Virginia Code § 22-6A, the O rator has properly served the requireCK ALL THAT APPLY	perator has attached proof to this Noticed parties with the following:	ce Certification	OOG OFFICE USE
□ 1. NOT				ONLY
□ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BE SEISMIC ACTIVITY WAS COND	CAUSE NO UCTED	RECEIVED/ NOT REQUIRED
☐ 2. NOT	TICE OF ENTRY FOR PLAT SUR	VEY or 🔳 NO PLAT SURVEY WA	S CONDUCTED	RECEIVED
■ 3. NOT	FICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRED BE NOTICE OF ENTRY FOR PLAT S' WAS CONDUCTED or		RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY SUR (PLEASE ATTACH)	FACE OWNER	
■ 4. NOT	TICE OF PLANNED OPERATION	ner	EIVED	☐ RECEIVED
5. PUB	LIC NOTICE	Office of	Oil and Gaz	☐ RECEIVED
■ 6. NOT	TICE OF APPLICATION			☐ RECEIVED
6. NOT		NON	2 0 2024 Spartment of ental 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.

Telephone:

Certification of Notice is hereby given:

303-357-7310

THEREFORE, I Jon McEvers , 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: By: Jon McEvers Its: SVP of Operations

1615 Wynkoop Street Denver, CO 80202

Facsimile:

Email:

303-357-7315 mturco@anteroresources.com

STEFAN GASPAR NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20224043669 MY COMMISSION EXPIRES NOVEMBER 15, 2026 Subscribed and sworn before me this 19 day of November, 2024

5 festan Gaspar Notary Public

My Commission Expires November 15, 2026

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

> > NOV 2 0 2024

WV Department of Environmental Protection WW-6A (9-13)

4710303696

API NO. 47- 103

OPERATOR WELL NO. Graden Unit 1H

Well Pad Name: Cedar Pad

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL 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: 11/19 Notice of:	Date Permit Applica	ation Filed: 11/19/2024
PERMIT FOR WELL WORK		ICATE OF APPROVAL FOR THE RUCTION OF AN IMPOUNDMENT OR PIT
Delivery method pu	rsuant to West Virginia C	ode § 22-6A-10(b)
☐ PERSONAL	REGISTERED	
SERVICE	MAIL	✓ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
oil and gas leasehold be described in the erosio operator or lessee, in the more coal seams; (4) The well work, if the surfaction impoundment or pit as have a water well, spriprovide water for consumption of this spriprovision of the sheriff reprovision of this article Code R. § 35-8-5.7.a. It water purveyor or surface.	being developed by the propour and sediment control plans the event the tract of land on where the control plans of the owners of record of the succe tract is to be used for the propour described in section nine of any or water supply source locumption by humans or domestivity is to take place. (c)(1) I section hold interests in the late equired to be maintained pursue to the contrary, notice to a life requires, in part, that the operance owner subject to notice and	this article, and the well plat to each of the following persons: (1) The owners of record of posed to be located; (2) The owners of record of the surface tract or tracts overlying the sed well work, if the surface tract is to be used for roads or other land disturbance as submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, which the well proposed to be drilled is located [sic] is known to be underlain by one or urface tract or tracts overlying the oil and gas leasehold being developed by the proposed lacement, construction, enlargement, alteration, repair, removal or abandonment of any this article; (5) Any surface owner or water purveyor who is known to the applicant to eated within one thousand five hundred feet of the center of the well pad which is used to stic animals; and (6) The operator of any natural gas storage field within which the f more than three tenants in common or other co-owners of interests described in ends, the applicant may serve the documents required upon the person described in the suant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any ten holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. attor shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any and water testing as provided in section 15 of this rule.
		S Plan Notice Well Plat Notice is hereby provided to:
SURFACE OWNE		☐ COAL OWNER OR LESSEE
Name: Dallison Lumber Co Address: P.O. Box 159	ompany	Name: NO DECLARATIONS ON RECORD WITH COUNTY
Jacksonburg, WV 26377		Address:
Name: Kenneth E. & Vicky	A VanDyne	- COAL OPENATION
Address: P.O. Box 311	74. Tulibylic	COAL OPERATOR
Reader, WV 26167		Name: NO DECLARATIONS ON RECORD WITH COUNTY RECEIVED
SURFACE OWNER	R(s) (Road and/or Other Dis	Address: Office of Oil and Ga
Name: SEE ATTACHMENT	Г	
Address:		AND/OR WATER PURVEYOR(s)
		Name: NONE WITHIN 1500'
Address:		Name: None WITHIN 1500' Address:WV Department of Environmental Protection
SURFACE OWNER	R(s) (Impoundments or Pits)	OPERATOR OF ANY NATURAL GAS STORAGE FIELD Name:
Name:		Address:
iduress.		
		*Please attach additional forms if necessary

WW-6A (8-13) API NO. 47- 103 0 3 0 3 6 9 6 OPERATOR WELL NO. Graden Unit 1H

Well Pad Name: Gedar 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.defp.wf.gov/6ffd (304-926-0450) or by visiting www.defp.wf.gov/6ffd (304-926-0450) or by visiting www.de

Well Location Restrictions

NOV 2 0 2024

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally/from-anytexisting water well or developed spring used for human or domestic animal consumption. The center of well pads may not be ilocated twitthin six in 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

API NO. 47- 103

OPERATOR WELL NO. Graden Unit 1H

Well Pad Name: Cedar 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. 4710303696

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: RECEIVED

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450

Office of Oil and Gas

NOV 2 0 2024

www pepartment of

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- 103

OPERATOR WELL NO. Graden Unit 1H

Well Pad Name: Cedar Pad

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have THIRTY (30) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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Office of Oil and Gas

NOV 2 0 2024

vvv Department of Environmental Protection WW-6A (8-13)

API NO. 47- 103

OPERATOR WELL NO. Graden Unit 1H

4710303696

Well Pad Name: Cedar Pad

Notice is hereby given by:

Well Operator: Antero Resources Corporation

Telephone: (303) 357-7310

mturco@anteroresources.com Email:

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.

STEFAN GASPAR NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20224043669 MY COMMISSION EXPIRES NOVEMBER 15, 2026 Subscribed and sworn before me this 19 day of Navember, 2026

Stefan G25Par Notary Public

My Commission Expires November 15, 2026

RECEIVED Office of Oil and Gas

NOV 20 2024

yvv 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.

2.000	Notice: 10/30/2	2024		e provided at l Date Pern	it Application	File	d: 11/19/2024	a perim	т аррисан	on.	
Delivery	method pur	suant to	West Virgi	inia Code § 22	-6A-16(b)						
□ на					24.3 24.25K						
			ERTIFIED								
DEI	LIVERY	R	ETURN RI	ECEIPT REQU	JESTED						
drilling a of this su subsection and if ava	horizontal was on may be wa ailable, facsir	vell: Prove of the date ived in we mile numb	vided, That the notice writing by the per and elect	t least ten days e surface owne notice given p was provided to e surface owne tronic mail add	ursuant to subsorthe surface or r. The notice, dress of the ope	ntent section wner:	to enter upon n (a), section Provided, ho	the surfiten of the wever, '	ace owner is article That the n	's land for satisfies of the required to the requirement of the requir	or the purpo the requiren uirements of
Name:	Dallison Lumber	Company	o the SUR	FACE OWN		201	Konnoth E 9 1/	istor A Mari	D		
Address:	PO Box 159				Nar Ada	_	FO Box 311	icky A. var	Dyne		
	Jacksonburg, W\	/ 26377-0159			Auc	11055.	Reader, WV 2616	37-0311			
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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 Action Completes. 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.

NOV 2 0 2024

WW-6A5 (1/12)

Operator Well No. Graden Unit 1H 7 1 0 3 0 3 6 9 6

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

Notice Ti Date of N	me Requirement: notice shall be provi lotice: 11/19/2024 Date Peru	ded no later than the filin mit Application Filed: 1	g date of permi	t application.
Delivery	method pursuant to West Virginia Co			
	RTIFIED MAIL	☐ HAND		
	TURN RECEIPT REQUESTED	DELIVERY		
the planne required to drilling of damages to	ed operation. The notice required by to be provided by subsection (b), section a horizontal well; and (3) A proposed to the surface affected by oil and gas one	this subsection shall include ten of this article to a surface use and competerations to the extent the	nd will be used to ude: (1) A copy face owner who isation agreeme	ication, an operator shall, by certified mail for the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the not containing an offer of compensation for opensable under article six-b of this chapter, sted in the records of the sheriff at the time
(at the add	nereby provided to the SURFACE OV ress listed in the records of the sheriff a son Lumber Company	t the time of notice):	Kenneth E. & Vicky A	VanDune
Address: F			SS; P.O. Box 311	. varibyne
Jacksonburg,	WV 26377		WV 26167	
Pursuant to operation State: County:	nereby given: O West Virginia Code § 22-6A-16(c), no on the surface owner's land for the purp West Virginia Wetzel	otice is hereby given that pose of drilling a horizont UTM NAD	al well on the tra	well operator has developed a planned act of land as follows: 524680.152m 4379841.321m
District:	Green	Public Road		CR 52
Quadrangle Watershed		Generally us	ed farm name:	Dallison Lumber Company
This Notice Pursuant to to be provided in formation headquarter gas/pages/d	e Shall Include: o West Virginia Code § 22-6A-16(c), the ided by W. Va. Code § 22-6A-10(b) to well; and (3) A proposed surface use an ected by oil and gas operations to the enterest of the interest of the interest of the enterest of the	of a surface owner whose and compensation agreement extent the damages are contained from the Secre-	e land will be unt containing arompensable und tary, at the WV	code section; (2) The information required used in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-page-2016/chi.org/WECEIVED
Well Opera		Address:	1615 Wynkoop Stree	Jilice of Oil
Telephone:			Denver, CO 80202	
Email:	mturco@anteroresources.com	Facsimile:	303-357-7315	NOV 2 0 2024
Oil and Ca	Defense N. 4			iAn

Oil and Gas Privacy Notice:

VVI Department of 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@wy.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Office of the District Engineer/Manager District Four

Post Office Box 4220 · Clarksburg, West Virginia 26302 · (304) 842-1500

Alanna J. Keller, P.E. Deputy Secretary of Transportation Deputy Commissioner of Highways

Jimmy Wriston, P. E. Secretary of Transportation Commissioner of Highways

November 8, 2024

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 Cedar Well Pad, Wetzel County Marma Unit 1H Well Site Marma Unit 2H Well Site Duke Unit 1H Well Site Duke Unit 2H Well Site Graden Unit 1H Well Site Graden Unit 2H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2021-0526 which has been issued to Antero Resources Corporation for access to the State Road for a well site located off Wetzel County Route 52 SLS MP 1.72.

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 March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Central Office O&G Coordinator

RECEIVED Office of Oil and Gr.

NOV 2 0 2024

WV Department of Environmental Protection

Cc: Stefan Gaspar

Antero Resources Corporation

OM, D-6

File

Subdivision 3.3.e A listing of the anticipated additives that may be used in the water used for fracturing or stimulating the well. (A listing of the additives that were actually used in the fracturing or stimulating of the well shall be submitted as part of the completion report required by W. Va. Code 22-6-22.)

FRACTURING/STIMULATING INTERVAL

	Additive	Chemical Abstract Service Number (CA	C #/
1.	Fresh Water	7732-18-5	3 # /
2.	2 Phosphobutane 1,2,4 tricarboxylic acid	37971-36-1	
3.	Ammonium Persulfate	7727-54-0	
4.	Anionic copolymer	Proprietary	
5.	Anionic polymer	Proprietary	
6.	BTEX Free Hydrotreated Heavy Naphtha	64742-48-9	
7.	Cellulase enzyme	(Proprietary)	
8.	Demulsifier Base	(Proprietary)	
9.	Ethoxylated alcohol blend	Mixture	
	Ethoxylated Nonylphenol	68412-54-4	
11.	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	
16.	Hydrotreated light distillates, non-aromatic, BTEX free	64742-47-8	
17.	Isopropyl alcohol	67-63-0	
	Liquid, 2,2-dibromo-3- nitrilopropionamide	10222-01-2	
	Microparticle	Proprietary	
20.	Petroleum Distillates (BTEX Below Detect)	64742-47-8	
21.	Polyacrylamide	57-55-6	
22.	Propargyl Alcohol	107-19-7	
23.	Propylene Glycol	57-55-6	
24.	Quartz	14808-60-7	
25.	Sillica crystalline quartz	7631-86-9	
26.	Sodium Chloride	7647-14-5	
27.	Sodium Hydroxide	1310-73-2	
28.	Sugar	57-50-1	
29.	Surfactant	68439-51-0	
30.	Suspending agent (solid)	14808-60-7	
31.	Tar bases, quinolone derivs, benzyl chloride-quarternized	72480-70-7	
32.	Solvent Naptha, petroleum, heavy aliph	64742-96-7	
33.	Soybean Oil, Me ester	67784-80-9	
	Copolymer of Maleic and Acrylic Acid	52255-49-9	
35.	DETA Phosphonate	15827-60-8	
	Hexamythylene Triamine Penta	34690-00-1	
37.	Phosphino Carboxylic acid polymer	71050-62-9	
38.	Hexamethylene diamine penta	23605-74-5	
	2-Propenoic acid, polymer with 2 propenamide	9003-06-9	
40. 1	Hexamethylene diamine penta (methylene phosphonic ac	32605.74.5	
41. 1	Diethylene Glycol		RECEIVED
	Methenamine	111-40-0	of Oil and Ga
	Polyethylene polyamine	100-37-0	
	Coco amine	68603-67-8 61701-14-8	OV 20 2024
	2-Propyn-1-olcompound with methyloxirane	01/31-14-0	
	with methyloxilane	38172-91-7 WV Enviro	Department of numerical Protection

OPERATOR: Antero Resources Corporation	WELL NO: Graden Unit 1H
PAD NAME: Cedar Pad	
REVIEWED BY: Stefan Gaspar	SIGNATURE: Sqym
	- 0/

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

Well Rest	rictions	
	At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to Perennial Stream, Lake, Pond, Reservoir or Wetland; OR	any
100	DEP Waiver and Permit Conditions	
\checkmark	At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to Naturally Producing Trout Stream; OR	any
	DEP Waiver and Permit Conditions	
\checkmark	At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to Groundwater Intake or Public Water Supply; OR	any
	DEP Waiver and Permit Conditions	
\checkmark	At Least 250 Feet from an Existing Water Well or Developed Spring to Well B Drilled; OR	eing
	Surface Owner Waiver and Recorded with County Clerk, OR	
	DEP Variance and Permit Conditions	
\checkmark	At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; C Surface Owner Waiver and Recorded with County Clerk, OR	R RECEIVED Office of Oil and Gas
	DEP Variance and Permit Conditions	NOV 2 0 2024
\checkmark	At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to of the Pad; OR	WV Department of inches the Center Protection
	Surface Owner Waiver and Recorded with County Clerk, OR	
	DEP Variance and Permit Conditions	