

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, October 30, 2023 WELL WORK PERMIT Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit approval for Starkey Unit 5V 47-095-02872-00-00

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.

artin

Operator's Well Number: Starkey Unit 5V Farm Name: Robert F & Rita K Scardina U.S. WELL NUMBER: 47-095-02872-00-00 Horizontal 6A New Drill Date Issued: 10/30/2023

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 conditions may result in enforcement action.</u>

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.

WW-6B (04/15)

4	7	0	9	5	0	2	8	7	2

API NO. 47- 095 -

OPERATOR WELL NO. Starkey Unit 5V Well Pad Name: Starke

1

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION
1) Well Operator: Antero Resources Corporat 494507062 095 - Tyler Lincoln Paden City 7.5'
2) Operator's Well Number: Starkey Unit 5V / Well Pad Name: Starkey Pad
2) Operator's Well Number: Starkey Unit 5V / Well Pad Name: Starkey Pad
3) Farm Name/Surface Owner: Robert F. & Rita K. Scardina Public Road Access: Hamilton Drive
4) Elevation, current ground: 1107 Elevation, proposed post-construction: 1091
5) Well Type (a) Gas X Oil Underground Storage
Other g
(b)If Gas Shallow X Deep
Horizontal X
6) Existing Pad: Yes or No No
 Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s): Marcellus Shale: 6700' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2800#
8) Proposed Total Vertical Depth: 6700' TVD /
9) Formation at Total Vertical Depth: Marcellus
10) Proposed Total Measured Depth: 6700' MD
11) Proposed Horizontal Leg Length: 0'
12) Approximate Fresh Water Strata Depths: 464' /
 13) Method to Determine Fresh Water Depths: 47-095-00275 & 47-095-30236 14) Approximate Saltwater Depths: 1522'
15) Approximate Coal Seam Depths: N/A
16) Approximate Depth to Possible Void (coal mine, karst, other): None Anticipated
17) Does Proposed well location contain coal seams
(a) If Yes, provide Mine Info: Name: WV Department of Environmental Protection
Seam:
Owner:

Page 1 of 3 1 Mig 10-5-23

4709502872 API NO. 47- 095

OPERATOR WELL NO. Starkey Unit 5V Well Pad Name: Starkey Pad

18)

CASING AND TUBING PROGRAM

TYPE	<u>Size</u> (in)	<u>New</u> <u>or</u> <u>Used</u>	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	<u>CEMENT:</u> <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	100	100 /	CTS, 96 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	514	514	CTS, 483 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2500	2500 1	CTS, 1018 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	23#	6700	6700 /	761 Cu. Ft
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

ТҮРЕ			Wall		A	1	
	Size (in)	<u>Wellbore</u> <u>Diameter (in)</u>	<u>Thickness</u> (in)	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/L	1
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	1000	Class A/L	
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A/L	~1.18
Intermediate							1.10
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	Office of Oil and Gas
Sizes:	N/A	OCT 11 2023
Depths Set:	N/A	WV Department of Environmental Protection

Page 2 of 3 May/2 10-593

4709502872 API Number 47 - 095

	Operator's Well No. Starkey Unit 5V
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) Outlet Middle Island Creek	Quadrangle Paden City 7.5'
Do you anticipate using more than 5,000 bbls of water to complete	ete the proposed well work? Yes No
Will a pit be used? Yes No 🗸	
If so, please describe anticipated pit waste:No pit will be use	ed 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:	
Land Application	
	Number*UIC Permit # will be provided on Form WR-34)
	well locations when applicable. API# will be provided on Form WR-34
Off Site Disposal (Supply form WW	-9 for disposal locatior(<u>Meadowfill Landfill Permit #SWF-1032-98)</u> Northwestern Landfill Permit #SWF-1025/
Other (Explain	<u>WV0109410</u>
	Wetzel Co Landfill Permit #SWF-1021
Will closed loop system be used? If so, describe: Yes, fluids sto	red in tanks, cuttings removed offsite and taken to landfill.
Drilling medium anticipated for this well (vertical and horizonta	
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	sthetic SEP 2 8 2022
Additives to be used in drilling medium? Please See Attachment	Environmental Processor
Drill cuttings disposal method? Leave in pit, landfill, removed of	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 u	ised? (cement, lime, sawdust)_N/A
-Landfill or offsite name/permit number?	fill (Permit #SWF-1032-98), Northwestern Landfill (Permit # SWF-1025/WV0109410)
	fill (Permit #SWF-1021)
West Virginia solid waste facility. The notice shall be provided where it was properly disposed.	as of any load of drill cuttings or associated waste rejected at any within 24 hours of rejection and the permittee shall also disclose
I certify that I understand and agree to the terms and co	onditions of the GENERAL WATER POLLUTION PERMIT issued
on August 1, 2005, by the Office of Oil and Gas of the West Vir	ginia 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.	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 tr	ue, accurate, and complete. I am aware that there are significant
penalties for submitting false information, including the possibil	ity of fine or imprisonment.
Company Official Signature Gretchen Kohler	
Company Official (Typed Name) Gretchen Kohler	
Company Official Title Director of Environmental & Regulatory Company of Company Official Title	ompliance
Subscribed and sworn before me this 2.7 day of (Firtember 20 72
CARIAL RAILOR MANY MAIN	if with the second seco
In a zin	Notary Public
My commission expires $10-9-10$	Notary Public State of Colorado
	Notary ID # 20224038743 My Commission Expires 10-05-2026

11/03/2023

WW-9 (4/16)

Operator's Well No. Starkey Unit 5V

See attached Table IV-4A for additional seed type (Starkey Pad Design)

*or type of grass seed requested by surface owner

Form WW-9

Antero Resources Corporation

Proposed Revegetation Treatme	ent: Acres Disturbed 3	5.27 acres Prevegetation	pH
Lime 2-4 Fertilizer type Hay or s	Tons/acre or to correct straw or Wood Fiber (will b		
Fertilizer amount 500		lbs/acre	
Mulch2-3	and the second	Tons/acre	
Access Road "A" (10	.27 acres) + Access Road "B" (1.61 Material	<u>acres) + Well Pad (14.87 acres) + Water Containment P</u> Stockpiles (3.95 acres) = 35.27 Acres	ad (4.57 acres) + Excess/Topsoil
Temp	oorary	Per	manent
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 (Starkey Pad Design)

*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: Comments: Keclein To DEP standards	
Title: <u>WV Oil Gras Fasfettor</u> Date: 10-5-23 Field Reviewed? (X) Yes () No	RECEIVED Office of Oil and Ges OCT 11 2020 WV Department of Environmental Protection



911 Address 426 Hamilton Drive Sistersville, WV 26175

Well Site Safety Plan

Antero Resources

Well Name: Starkey Unit 5V

Pad Location: STARKEY PAD Tyler County/Lincoln District

GPS Coordinates:

Entrance - Lat 39.563039/Long -80.932606 (NAD83) Pad Center - Lat 39.568236/Long -80.929963 (NAD83)

Driving Directions:

From WV-180, turn southwest onto CO. 1 (Buck Run) and travel for 0.6 miles. Turn left onto CO. 18/2 (Willow Fork/Badger Run Rd) and travel for 1.7 miles. Continue straight onto CO. 1/3 and travel for 0.5 miles. The entrance to the lease road will be on the right.

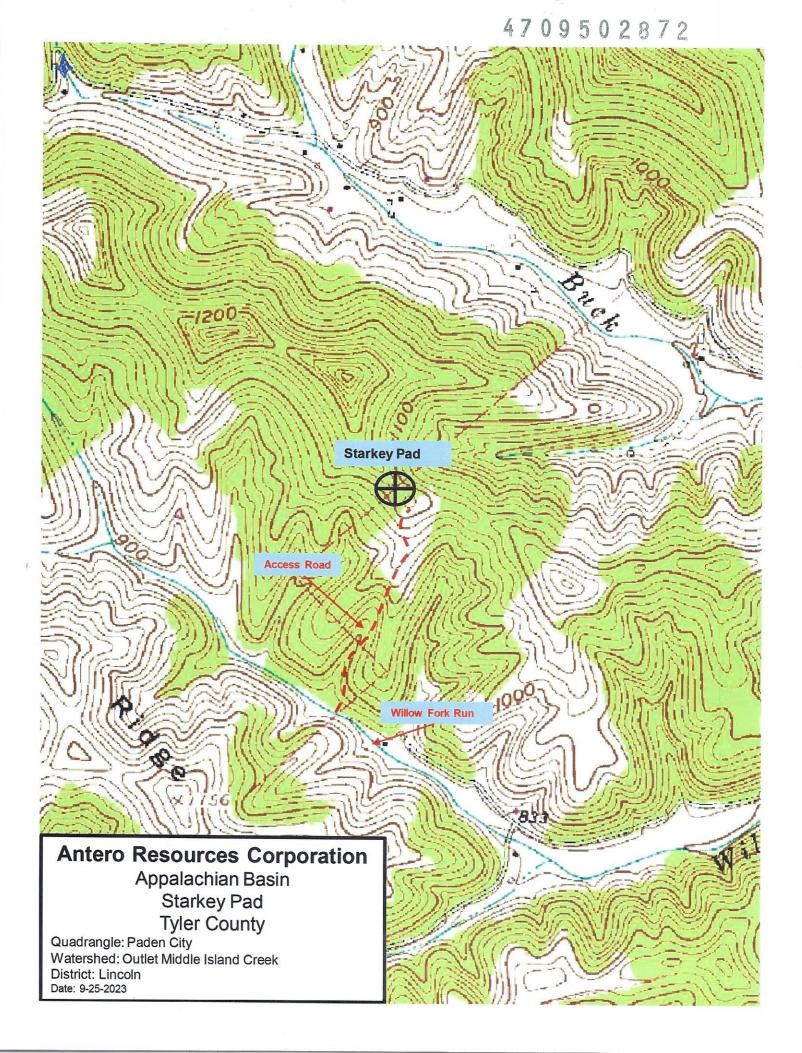
RECEIVED Office of Oil and Gas

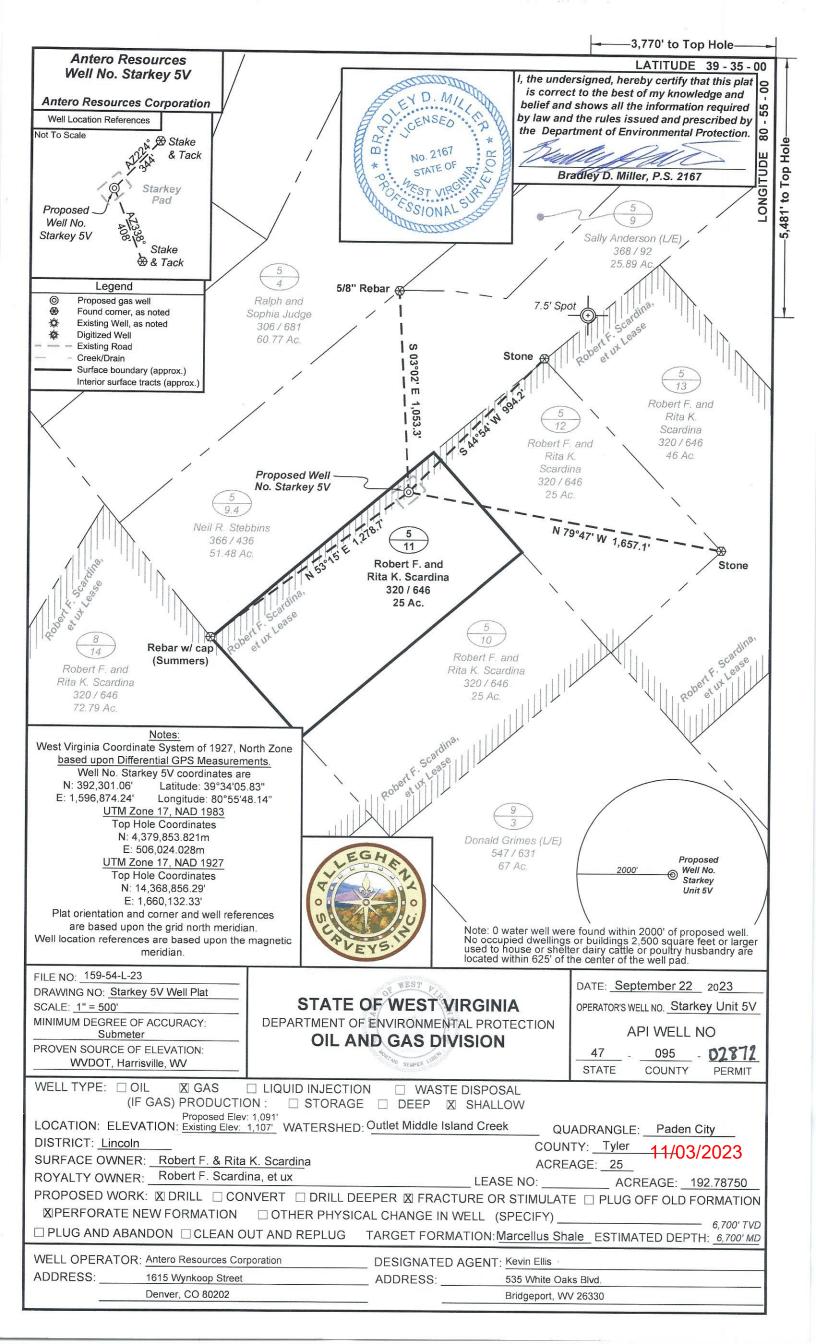
OCT 1 1 2023

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

1

DA E 10-5-23





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

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

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Robert F. Scardina, et ux Lease:				<u> </u>
	Robert F. Scardina, et ux	Antero Resources Corporation	1/8+	235/654

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 1 of 1

4709502872

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

September 21, 2023

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

RE: Starkey Unit 5V Quadrangle: Paden City 7.5' Tyler County/Lincoln District, West Virginia

Mr. Martin:

Antero Resources Corporation (Antero) is submitting the following application for a new well work permit for the Starkey Unit 5V 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 Starkey Unit 5V horizontal lateral will drill through including any and all roads crossed under as identified on the attached survey plat.

Sincerely,

Tyler Adams Senior Landman RECEIVED Office of Oil and Gas

SEP 2 8 2023

WV 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:	Tyler Star	News	
--------	------------	------	--

Public Notice Date: 7/26/2023 & 8/2/2023

The following applicant intends to apply for a horizontal natural well work permit which disturbs three acres or more of surface excluding pipelines, gathering lines and roads **or** utilizes more than two hundred ten thousand gallons of water in any thirty day period.

Applicant: Antero Resources Corporation Well Number Stark

Well Number: Starkey Unit 5V

Address: 1615 Wynkoop St. Denver, CO 80202

Business Conducted: Natural gas production.

Location -

State:	West Virginia	1		County:	Tyler	1	
District:	Lincoln	/		Quadrangle:	Paden Ci	ty	
UTM Coordinate NAD83 Northing:		4379854m	1				
UTM coordinate NAD83 Easting:		506024m	6		**		
Watershed	Outlet Middle Island Creek	1					

Coordinate Conversion:

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 <u>http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx</u> 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 <u>https://apps.dep.wv.gov/oog/comments/comments.cfm</u>, 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

4709502872 Office of Oil and Gas

SEP 2 8 2023

STATE OF WEST VINCENTA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS and of NOTICE CEPTIFICATION STATE OF WEST VIRGINIA **NOTICE CERTIFICATION**

Date of Notice Certification: 09/26/2023

API No. 47- 095	-
Operator's Well No.	Starkey Unit 5V
Well Pad Name: Sta	arkey 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:	506024.03m	
County:	Tyler	UTMINAD 83 North	hing:	4379853.82m	
District:	Lincoln	Public Road Access:	-	Hamilton Drive	
Quadrangle:	Paden City 7.5'	Generally used farm na	ame:	Robert F. & Rita K. Scardina	
Watershed:	Outlet Middle Island 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:	OOG OFFICE USE
*PLEASE CHECK ALL THAT APPLY	ONLY
□ 1. NOTICE OF SEISMIC ACTIVITY or ■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	RECEIVED/ NOT REQUIRED
□ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ■ NO PLAT SURVEY WAS CONDUCTED	□ RECEIVED
3. NOTICE OF INTENT TO DRILL OF NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OF	RECEIVED/ NOT REQUIRED
WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
4. NOTICE OF PLANNED OPERATION	RECEIVED
5. PUBLIC NOTICE	□ RECEIVED
■ 6. NOTICE OF APPLICATION	RECEIVED

Required Attachments:

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

WW-6AC (1/12)

4709502872

Certification of Notice is hereby given:

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:	1615 Wynkoop Street	
By:	Jon McEvers AMMZ	reit	Denver, CO 80202	
Its:	Senior VP of Operations	Facsimile:	303-357-7373	
Telephone:	303-357-6799	Email:	cmarvel@anteroresources.com	
Not	NOTARY SEAL RLY RAYNE MARVEL Notary Public State of Colorado cary ID # 20224038743 mission Expires 10-05-2026	Subscribed and swo CABLY My Commission Ex	rn before me this <u>25</u> day of <u>Septemper</u> <u>2011 MARVEL</u> Notary Public pires <u>10-5-210</u>	23

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>.

> RECEIVED Office of Oil and Gas

> > SEP 2 8 2023

WV Department of Environmental Protection

WW-6A
(9-13)

API NO. 47-095 OPERATOR WELL NO. Starkey Unit 5V Well Pad Name: Starkey Pad

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

	e of Notice: <u>9/27/2023</u> ice of:	Date Permit Applicat	ion Filed: <u>9/27/2023</u>		
~	PERMIT FOR AN WELL WORK		CATE OF APPROVAL FOR THE UCTION OF AN IMPOUNDMENT OR PIT		
Deli	Delivery method pursuant to West Virginia Code § 22-6A-10(b)				
	PERSONAL SERVICE	REGISTERED MAIL	METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION		
certi	ficate of approval for	the construction of an imp	the filing date of the application, the applicant for a permit for any well work or for a oundment or pit as required by this article shall deliver, by personal service or by ures a receipt or signature confirmation, copies of the application, the erosion and		

service or by ies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

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

☑ SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: Robert F. & Rita K. Scardina	Name: NO DECLARATIONS ON RECORD WITH COUNTY
Address: 1185 Pitts Run Road	Address:
Alma, WV 26320	
Name: Neil R. Stebbins	COAL OPERATOR
Address: 61 Hillcrest Acres	Name: NO DECLARATIONS ON RECORD WITH COUNTY
Sistersville, WV 26175	Address:
□ SURFACE OWNER(s) (Road and/or Other Disturbance)	
Name:	□ WATER PURVEYOR(s)/OWNER(s) OF WATER WELL,
Address:	JSPRING OR OTHER WATER SUPPLY SOURCE
	Name: NONE IDENTIFIED
Name:	Address:
Address:	
	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name:	Address:
Address:	
	*Please attach additional forms if necessary

4709502872 API NO. 47-095

OPERATOR WELL NO. Starkey Unit 5V Well Pad Name: Starkey 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. SEP 2 8 2023

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 of purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. Environmental Protection

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oiland-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

API NO. 47-095 OPERATOR WELL NO. Starkey Unit 5V Well Pad Name: Starkey 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 Gisample 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:

WV Department of Environmental Protection

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

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

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)

4709502872

API NO. 47- 095 -OPERATOR WELL NO. Starkey Unit 5V Well Pad Name: Starkey 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 <u>http://www.dep.wv.gov/oil-and-gas/Horizontal-</u> <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) SEP 2 8 2023

- (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.

JLI 20 LULJ

WV Department of Environmental Protection

WW-6A (8-13) Notice is hereby given by:	API NO. 47-099-502872 OPERATOR WELL NO. <u>Starkey Unit 5V</u> Well Pad Name: <u>Starkey Pad</u>
Well Operator: Antero Resources Corporation	Address: 1615 Wynkoop Street
Telephone: (303) 357-7373	Denver, CO 80202
Email: cmarvel@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 <u>depprivacyofficer@wv.gov</u>.

CARLY RAYNE MARVEL	Subscribed and sworn b
Notary Public	
State of Colorado	(avant 10
Notary ID # 20224038743	- CURVY R
My Commission Expires 10-05-2026	
	My Commission Expire

7

Subscribed and sworn before me this 25 day of Sep.,	2.023.
Carry Rayne Marver	Notary Public
My Commission Expires 10-5-210	

RECEIVED Office of Oil and Gas

SEP 2 8 2023

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:
 07/19/2023

 Date Permit Application Filed:
 09/27/2023

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.

		RECEIVED Office of Oil and Gas
Notice is hereby provided to the SURFACE OWNER(s):		
Name: Robert F. & Rita K. Scardina V	Name: Neil R. Stebbins	SEP 2 8 2023
Address: 1185 Pitts Run Road	Address: 61 Hillcrest Acres	
Alma, WV 26320	Sistersville, WV 26175	
		Environmental Protection

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virginia	UTM NAD 83	Easting:	506024.03m	
County:	Tyler	UIM NAD 83	Northing:	4379853.82m	
District:	Lincoln	Public Road Acc	cess:	Hamilton Drive	
Quadrangle:	Paden City 7.5'	Generally used f	àrm name:	Robert F. & Rita K. Scardina	
Watershed:	Outlet Middle Island 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 <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Notice is hereby given by:

Well Operator:	Antero Resources Corporation	Authorized Representative:	Mallory Turco
Address:	1615 Wynkoop St.	Address:	1615 Wynkoop St.
	Denver, CO 80202		Denver, CO 80202
Telephone:	303-357-7182	Telephone:	303-357-7182
Email:	mturco@anteroresources.com	Email:	mturco@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 <u>depprivacyofficer@wv.gov</u>.

STATE OF WEST VIRGINIA 4709502872 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

 Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

 Date of Notice:
 07/19/2023

 Date Permit Application Filed:
 09/27/2023

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 sex-boot 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. SEP 2 8 2023

Notice is hereby provided to the SURFACE OV (at the address listed in the records of the sheriff at		WV Department of Environmental Protection
Name: Robert F. & Rita K. Scardina	Name: Neil R. Stebbins	
Address: 1185 Pitts Run Road	Address: 61 Hillcrest Acres	
Alma, WV 26320	Sistersville, WV 26175	

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virginia	LITM NIAD 92	Easting:	506024m	
County:	Tyler	UTM NAD 83	Northing:	4379854m	
District:	Lincoln	Public Road A	ccess:	Hamilton Drive	
Quadrangle:	Paden City 7.5'	Generally used	farm name:	Robert F. & Rita K. Scardina	
Watershed:	Outlet Middle Island Creek				

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Well Operator:	Antero Resources Corporation	Address:	1615 Wynkoop Street
Telephone:	303-357-7373		Denver, CO 80202
Email:	cmarvel@anteroresources.com	Facsimile:	303-357-7310

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>.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

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

September 26, 2023

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 Pad, Tyler County Starkey Unit 5V Well Site RECEIVED Office of Oil and Gas

Jimmy Wriston, P. E.

Secretary of Transportation Commissioner of Highways

SEP 2 8 2023

WV Department of Environmental Protection

Dear Mr. Martin,

This well site will be accessed from a DOH encroachment permit which has been applied for by Antero Resources for access to the State Road for a well site located off Tyler County Route 3/1 SLS MP 1.39 and 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,

Dary K. Clayton

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

Cc: Carly Marvel Antero Resources OM, D-6 File

E.E.O./AFFIRMATIVE ACTION EMPLOYER

List of Anticipated Additives Used for Fracturing or Stimulating Well 4709502872

Additives	Chemical Abstract Service Number
Fresh Water	(CAS #)
2 Phosphobutane 1,2,4 tricarboxylic acid	7732-18-5
Ammonium Persulfate	37971-36-1
	7727-54-0
Anionic copolymer	Proprietary
Anionic polymer	Proprietary
BTEX Free Hydrotreated Heavy Naphtha	64742-48-9
Cellulase enzyme	Proprietary
Demulsifier Base	Proprietary
Ethoxylated alcohol blend	Mixture
Ethoxylated Nonylphenol	68412-54-4
Ethoxylated oleylamine	26635-93-8
Ethylene Glycol	107-21-1
Glycol Ethers	111-76-2
Guar gum	9000-30-0
Hydrogen Chloride	7647-01-0
Hydrotreated light distillates, non-aromatic, BTEX free	64742-47-8
Isopropyl alcohol	67-63-0
liquid, 2,2-dibromo-3-nitrilopropionamide	10222-01-2
Microparticle	Proprietary
Petroleum Distillates (BTEX Below Detect)	64742-47-8
Polyacrylamide	57-55-6
Propargyl Alcohol	107-19-7
Propylene Glycol	57-55-6
Quartz	14808-60-7
Sillica, crystalline quartz	7631-86-9
Sodium Chloride	7647-14-5
Sodium Hydroxide	1310-73-2
Sugar	57-50-1
Surfactant	68439-51-0
Suspending agent (solid)	14808-60-7
Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7
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
2-Propenoic acid, polymer with 2 propenamide	9003-06-9
Hexamethylene diamine penta (methylene phosphonic acid)	23605-74-5
Diethylene Glycol	111-46-6
Methenamine	100-97-0
Polyethylene polyamine	68603-67-8
Coco amine	61791-14-8
2-Propyn-1-olcompound with methyloxirane	38172-91-7
	50172-51-7

WW-6A7 (6-12)	4/09502872
OPERATOR: Antero Resources Corp.	WELL NO: Starkey Unit 5V
PAD NAME: Starkey Pad	
REVIEWED BY: Mallory Turco	SIGNATURE: May Tu
WELL RESTRICTIO	ONS CHECKLIST
HORIZONTAL	A GA WELL Office of Oil and Gas
	SEP 2 8 2023
Well Restrictions	WV Department of Environmental Protection
At Least 100 Feet from Pad and LOD (in Perennial Stream, Lake, Pond, Reservoir	ncluding any E&S Control Feature) to any or Wetland; OR
DEP Waiver and Permit Conditio	ns
At Least 300 Feet from Pad and LOD (ir Naturally Producing Trout Stream; OR	ncluding any E&S Control Feature) to any
DEP Waiver and Permit Condition	ns
At Least 1000 Feet from Pad and LOD (Groundwater Intake or Public Water Sup	including any E&S Control Feature) to any oply; OR
DEP Waiver and Permit Condition	ons
At Least 250 Feet from an Existing Wate Drilled; OR	er Well or Developed Spring to Well Being
Surface Owner Waiver and Reco	rded with County Clerk, OR
DEP Variance and Permit Condit	ions
At Least 625 Feet from an Occupied Dw	elling Structure to Center of the Pad; OR
Surface Owner Waiver and Record	rded with County Clerk, OR
DEP Variance and Permit Condit	ions
At Least 625 Feet from Agricultural Buil of the Pad; OR	ldings Larger than 2500 Square Feet to the Center
Surface Owner Waiver and Record	rded with County Clerk, OR
DEP Variance and Permit Condit	ions