

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

ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET

DENVER, CO 80202

Re:

Permit approval for Cobb Unit 1H

47-103-03657-00-00

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

Operator's Well Number: Cobb Unit 1H

Farm Name: Dallison Lumber, Inc.

U.S. WELL NUMBER: 47-103-03657-00-00

Horizontal 6A New Drill

Date Issued: 5/20/2024

API Number: 47-103-03657

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

- 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.
- 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.
- 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.
- 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.
- 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) API NO. 47- 103 OPERATOR WELL NO. Cobb Unit 1H
Well Pad Name: Galmish Pad

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

1) Well Operator: Antero Rese	ources Corporat		103 - Wetze		Pine Grove 7.5'
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: Co	bb Unit 1H	Well Pad	Name: Galmi	sh Pad	
3) Farm Name/Surface Owner:	Dallison Lumber	Inc. Public Road	d Access: McK	immie Rid	lge Road
4) Elevation, current ground:	As-Built 1160.7 Ele	evation, proposed p	oost-construction	on:	
5) Well Type (a) Gas X Other	Oil	Unde	rground Storag	е	
, ,	llow X izontal X	Deep			
6) Existing Pad: Yes or No Yes	-				
7) Proposed Target Formation(s) Marcellus Shale: 7600' TVD, A					
B) Proposed Total Vertical Depth	h: 7600' TVD				
9) Formation at Total Vertical D	epth: Marcellus				
10) Proposed Total Measured De	epth: 12300' MI	D			
11) Proposed Horizontal Leg Le	ngth: 500' *O	pen to modification	n at a later da	te	
12) Approximate Fresh Water St	rata Depths:	45', 130'			
13) Method to Determine Fresh	Water Depths: _4	7103025550000 Offset well	records. Depths have	been adjusted a	ccording to surface elevations.
14) Approximate Saltwater Dept	hs: 1961'				
15) Approximate Coal Seam Dep	oths: N/A				
6) Approximate Depth to Possi	ble Void (coal min	ne, karst, other): _	None Anticipat	ed	
17) Does Proposed well location directly overlying or adjacent to		Yes	No	X	RECEIVED ffice of Oil and Gas
(a) If Yes, provide Mine Info:	Name:				MAY 1 3 2024
	Depth:			M	N Denostre
	Seam:			Envir	onmental Protection
	Owner:				

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

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	100'	100'	CTS, 96 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	300'	300'	CTS, 313 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#	12300'	12300'	CTS, 2172 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#			
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	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							
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			
Liners							

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Office of Oil and Gas

PACKERS

MAY 13 2024

Kind:	N/A	WV Department of Environmental Protectio
Sizes:	N/A	
Depths Set:	N/A	

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4710303657

OPERATOR WELL NO. Cobb Unit 1H

Well Pad Name: Galmish 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): 64.40 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 17.53 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.

Office of Oil and Gas

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

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

WV Department of Environmental Protection

MAY 13 20

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

25) Proposed borehole conditioning procedures:

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

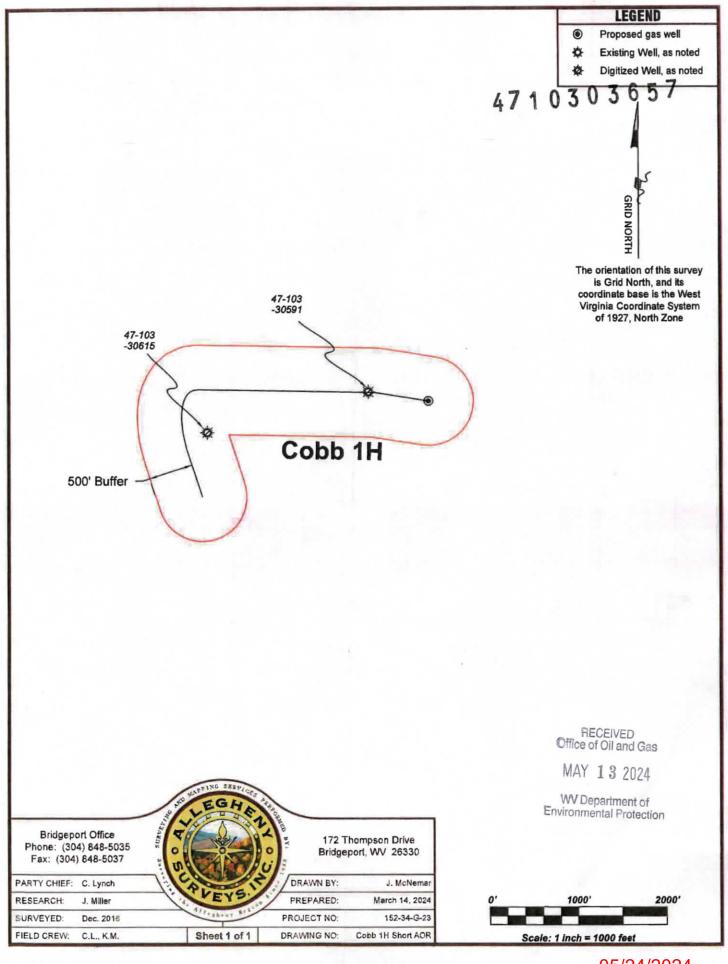
Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

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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WI (APINum)	Well Name	Well Number	Operator	Historical Operator	T OI	Perforated Interval (shallowest, dee	pest) Perforated Formation(s)	(s) Producible Formation(s) not perf'd
03306150000	IOHN C MCELDOWNEY 1	1678	PITTSBURGH&W VA GAS	PITTSBURGH&W VA GAS	2,837		Gordon Stray	Weir, Benson, Alexander
03305910000	C F GRIM 1	5235	UNKNOWN	UNKNOWN	2,896		Big Injun, Gordon Stray	Weir, Benson, Alexander

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MAY 13 20: 1

April 12, 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 Cobb 1H, Walshin 1H, Pine 1H-2H, Harlan 1H-2H, Teocalli 1H, & Shenango 1H 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 (Cobb 1H, Walshin 1H, Pine 1H-2H, Harlan 1H-2H, Teocalli 1H, & Shenango 1H) on the Galmish 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

Office Of Oil and Gas

APR 1 7 2024



west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, SE Charleston, WV 25304 Phone (304) 926-0450 Harold D. Ward, Cabinet Secretary dcp.wv.gov

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

IN THE MATTER OF A VARIANCE FROM)		
LEGISLATIVE RULE 35CSR4)	ORDER NO.	2022-14
SECTION 11.5 AND LEGISLATIVE RULE)		
35CSR8 SECTION 9.2.h.8.,)		
RELATING TO THE CEMENTING)		
OF OIL AND GAS WELLS)		

In response to industry requests, the West Virginia Department of Environmental ion, Office of Oil and Gas has reviewed the proposed use of A ---- NPE drawn and Class L cement to be used in a Protection, Office of Oil and Gas has reviewed the proposed use of American Petroleum Institute (API) Class L cement to be used in place of API Class A cement for well construction. Environn

FINDINGS OF FACT

- 1. On July 14, 2022, Northeast Natural Energy (NNE) submitted a variance request from Legislative Rule 35CSR8 Section 9.2.h.8., for the use of API Class L cement in place of API Class A cement, relating to the construction of horizontal wells.
- 2. Laboratory analysis submitted by NNE on July 14, 2022, indicates API Class L cement is comparable to API Class A cement and thereby satisfies the requirements of the West Virginia Code.
- 3. Contemporaneously, the Chief of the Office of Oil and Gas also chose to consider a variance to Legislative Rule 35CSR4 Section 11.5., for the use of API Class L cement in place of API Class A cement, relating to the construction of vertical wells.

On August 18, 2022, the Office of Oil and Gas provided public notice of acceptance of
public comments on the variance consideration. During the 20-day public comment
period, no comments were received.

CONCLUSIONS OF LAW

Pursuant to Article 6 and Article 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to Legislative Rule 35CSR4, Section 18 and Legislative Rule 35CSR8, Section 14, the Chief of the Office of Oil and Gas may grant a variance from any requirement of these rules.

ORDER

It is ordered that the Class L cement product approved and monogramed by API is approved for use in place of API Class A cement for well construction subject to the provisions of Legislative Rule 35CSR4 and Legislative Rule 35CSR8.

Dated this, the 13th day of September, 2022.

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

James Martin, Chief Office of Oil and Gas

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WW-9 (4/16)

API Number 47 -	103	-	
Operator's	Well No	Cobb 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 complete the proposed well work? Yes Vo
Will a pit be used? Yes No V
If so, please describe anticipated pit waste: No pit will be 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:
Land Application Underground Injection (UIC Permit Number *UIC Permit # will be provided on Form WR-34 Reuse (at API Number Future permitted well locations when applicable. API# will be provided on Form WR-34 Off Site Disposal (Supply form WW-9 for disposal location) (Meadowfill Landfill Permit #SWF-1032-98) Other (Explain Northwestern Landfill Permit #SWF-1025/
WV0109410 Wetzel County Landfill (Permit #SWF-1021)
Will closed loop system be used? If so, describe: Yes, fluids stored in tanks, cuttings removed offsite and taken to landfill. Surface - Air/Freshwater, Intermediate -
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.
-If oil based, what type? Synthetic, petroleum, etc. Synthetic
Additives to be used in drilling medium? Please See Attachment
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Drill cuttings stored in tanks, removed offsite and taken to landfill.
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? Meadowfill Landfill (Permit #SWF-1032-98), Northwestern Landfill (Permit #SWF-1025/WV0109410)
Wetzel County Landfill (Permit #SWF-1021) Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar with the onformation submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Company Official Signature Gretchen Kohler Company Official (Typed Name) Gretchen Kohler
Company Official Title Director Environmental & Regulatory Compliance
Subscribed and sworn before me this 15 th day of April , 20 24 Stefan Gas Par Notary Public
Stifan Gas Par My commission expires Notary Public STEFAN GAS PAR NOTARY PUBLIC STORY PUBLIC S

Form WW-9

Proposed Revegetation Treatment:	Acres Disturbed 64.40 a	cres Prevegetation	nH
	Fons/acre or to correct to pH		pi1
	w or Wood Fiber (will be used		
Fertilizer amount 500	1b	s/acre	
Mulch 2-3 Grav's Peak Spoil Pil	Tons/s k Access Road (19.82 acres) + Access R le 2 (2.06 acres) + Spoil Pile 3 (2.57 acre	acres) + Well Pad (17.53 acres) + Spo es) + Spoil Pile 4 (4.02 acres) + Topsoil/Strippin = 64.40 acres	il Pile 1 (3.00 acres) + g Pile (5.53 acres)
Tempora	ary	Peri	manent
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	Crownvetch	10-15
Field Bromegrass	40	Tall Fescue	30
Field Bromegrass See attached Table IV-3 for additional seed		Tall Fescue See attached Table IV-4A for addition	
*or type of grass seed request Attach: Maps(s) of road, location, pit and p provided). If water from the pit will acreage, of the land application area	ted by surface owner roposed area for land applic l be land applied, include dir	*or type of grass seed req	nal seed type Galmish Pad Design uested by surface owner
*or type of grass seed request Attach: Maps(s) of road, location, pit and p provided). If water from the pit will acreage, of the land application are Photocopied section of involved 7.	ted by surface owner roposed area for land applic l be land applied, include dir	*or type of grass seed requation (unless engineered plans incomensions (L x W x D) of the pit, a	nal seed type Galmish Pad Design uested by surface owner

Form WW-9 Additives Attachment

SURFACE INTERVAL

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

INTERMEDIATE INTERVAL

STIFF FOAM RECIPE:

- 1) 1 ppb Soda Ash / Sodium Carbonate-Alkalinity Control Agent
- 2) 1 ppb Conqor 404 (11.76 ppg) / Corrosion Inhibitor
- 3) 4 ppb KLA-Gard (9.17 ppg) / Amine Acid Complex-Shale Stabilizer
- 4) 1ppb Mil Pac R / Sodium Carboxymethylcellulose-Filtration Control Agent
- 5) 12 ppb KCL / Potassium Chloride-inorganic Salt
- 6) Fresh Water 80 bbls
- 7) Air

PRODUCTION INTERVAL

1. Alpha 1655

Salt Inhibitor

2. Mil-Carb

Calcium Carbonate

3. Cottonseed Hulls

Cellulose-Cottonseed Pellets – LCM

4. Mil-Seal

Vegetable, Cotton & Cellulose-Based Fiber Blend – LCM

Clay-Trol

Amine Acid Complex – Shale Stabilizer

Xan-Plex

7. Mil-Pac (All Grades)

8. New Drill

Sodium Carboxymethylcellulose – Filtration Control Agent 17 West Anionic Polyacrylamide Copolymer Emulsion – Shale Stabilize rotects Soda Environme

9. Caustic Soda

Sodium Hydroxide – Alkalinity Control

10. Mil-Lime

Calcium Hydroxide - Lime

11. LD-9

Polyether Polyol – Drilling Fluid Defoamer

12. Mil Mica

Hydro-Biotite Mica – LCM

13. Escaid 110

Drilling Fluild Solvent - Aliphatic Hydrocarbon

14. Ligco

Highly Oxidized Leonardite - Filteration Control Agent

15. Super Sweep

Polypropylene - Hole Cleaning Agent

16. Sulfatrol K

Drilling Fluid Additive - Sulfonated Asphalt Residuum

17. Sodium Chloride, Anhydrous

Inorganic Salt

18. D-D

Drilling Detergent - Surfactant

19. Terra-Rate

Organic Surfactant Blend

20. W.O. Defoam

Alcohol-Based Defoamer

21. Perma-Lose HT

Fluid Loss Reducer For Water-Based Muds

22. Xan-Plex D

Polysaccharide Polymer - Drilling Fluid Viscosifier

23. Walnut Shells

Ground Cellulosic Material - Ground Walnut Shells - LCM

24. Mil-Graphite

Natural Graphite - LCM

25. Mil Bar

Barite - Weighting Agent

26. X-Cide 102

Biocide

27. Soda Ash

Sodium Carbonate – Alkalinity Control Agent

28. Clay Trol

Amine Acid complex - Shale Stabilizer

29. Sulfatrol

Sulfonated Asphalt – Shale Control Additive

30. Xanvis

Viscosifier For Water-Based Muds

31. Milstarch

Starch - Fluid Loss Reducer For Water Based Muds

32. Mil-Lube

Drilling Fluid Lubricant

Office Or Oil and Gast

APR 1 7

WV Department of Environmental Protection



911 Address 2080 McKimmie Ridge Road, Reader, WV 26167

Well Site Safety Plan Antero Resources

Well Name: GALMISH UNIT 5V, COBB UNIT 1H, HARLAN UNIT 1H-2H, PINE UNIT 1H-2H, TEOCALLI UNIT 1H, SHENANGO UNIT 1H, WALSHIN UNIT 1H

Pad Location: GALMISH PAD

Wetzel County/Green District

GPS Coordinates:

Entrance - Lat 39.586601 /Long -80.704527 (NAD83) Pad Center - Lat 39.577676 /Long -80.695615 (NAD83)

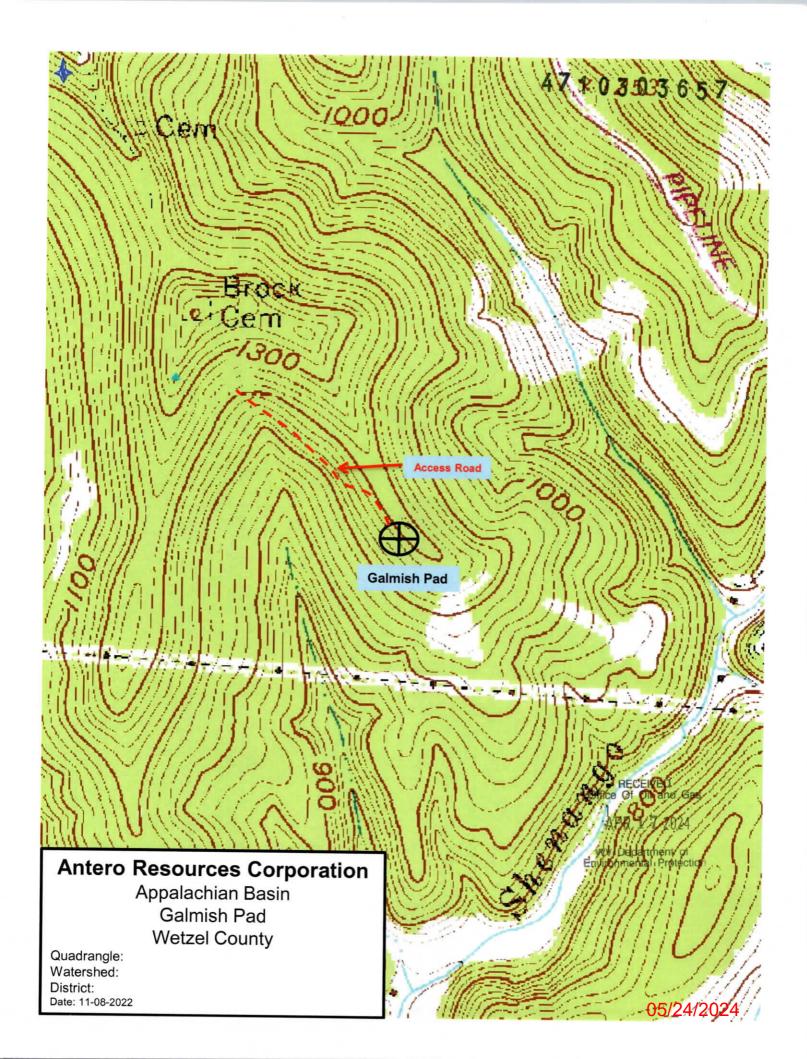
Driving Directions:

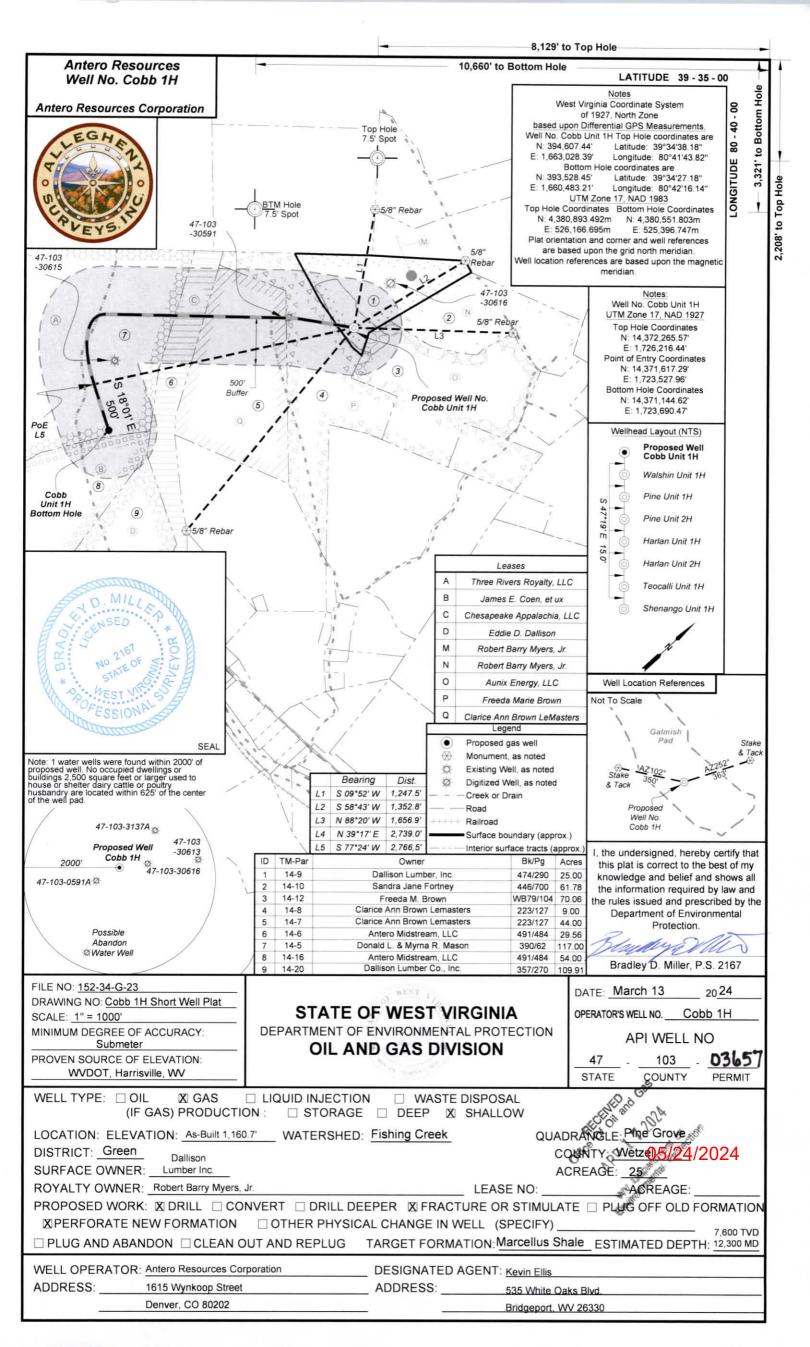
- 1. From WV-20, turn east onto North Fork Road.
- 2. Immediately turn left onto CO. 15/17 (N Fork Rd) and travel for 2.2 miles
- 3. Turn left onto WV-17(Barker Run Rd) and continue for 2.3 miles.
- 4. Turn left onto CO. 17/1 (Morgan Ashland Ridge Rd) and continue for 2.7 miles.
- 5. Turn left onto CO. 52 (McKimmie Ridge Rd) and travel for 1.3 miles.
- 6. The Galmish Lease Road will be on the left.

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

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MAY 13 2024





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

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

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

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
M: Robert Barry Myers, Jr. Lease Robert Barry Myers, Jr.	Antero Resources Corporation	1/8+	300A/0634
<u>P: Freeda Marie Brown Lease</u> Freeda Marie Brown	Antero Resources Corporation	1/8+	308A/0508
Q: Clarice Ann Brown LeMasters Lease Clarice Ann Brown LeMasters	Antero Resources Corporation	1/8+	308A/0488
C: Chesapeake Appalachia, LLC Lease Chesapeake Appalachia, LLC SWN Production Company LLC Antero Exchange Properties LLC	SWN Production Company LLC Antero Exchange Properties LLC Antero Resources Corporation	1/8 Assignment Merger	157A/0640 177A/0533 0013/0311

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APR 17 2024

^{*}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.

WW-6A1 (5/13)

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

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
A: Three Rivers Royalty, LLC Lease				
	Three Rivers Royalty, LLC CNX Gas Company LLC	CNX Gas Company LLC Antero Resources Corporation	1/8+ Assignment	293A/0373 300A/0159

*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.

ing the Co-tenancy Modernization and Majority Protection Act to p

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/enceded permits/approvals should be acquired from the appropriate authority before the affected activity is initiated Gas

> Well Operator: Antero Resources Corporation Environmental Protection

By: Max Green

Its: Vice President of Land

Page 1 of 1

April 11, 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:

Cobb 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 Cobb 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 Cobb Unit 1H horizontal lateral will drill through including any and all roads crossed under as identified on the attached survey plat.

Sincerely,

Kelsey Silipo Staff Landman

KelsefeSlipe

Office RECEIVED Of Oil and Gas

APR 1 7 2024

WV Department of Environmental Protection

Date of Notice Certification: 04/12/2024

4710303657

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

API No. 47- 103

		Operator's Well No. Cobb Unit 1H				
Notice has been given:		Well Pad Name: Galmish Pad				
Pursuant to the	been given: ne provisions in West Virginia Code tract of land as follows:	§ 22-6A, the Operator has prov	vided the rec	quired parties	with the Notice Forms listed	
State:	West Virginia	LITE AND OR	Easting:	526166.695m		
County:	Wetzel	UTM NAD 83	Northing:	4380893.492m		
District: Green		Public Road Acc	ess:	McKimmie Ridge Road		
Quadrangle:	Pine Grove 7.5'	Generally used fa	arm name:	Dallison Lumber Inc.		
Watershed:	Fishing Creek					
it has provide information re of giving the requirements Virginia Code	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and sed the owners of the surface described equired by subsections (b) and (c), surface owner notice of entry to subsection (b), section sixteen of \$22-6A-11(b), the applicant shall have been completed by the applicant	shall contain the following info- ibed in subdivisions (1), (2) an ection sixteen of this article; (ii urvey pursuant to subsection (of this article were waived in tender proof of and certify to the	ormation: (14) nd (4), substitute the real (4), section to writing by	4) A certification (b), se quirement was ten of this article.	ion from the operator that (i) ction ten of this article, the deemed satisfied as a result icle six-a; or (iii) the notice	
that the Ope	West Virginia Code § 22-6A, the Or rator has properly served the require CCK ALL THAT APPLY	perator has attached proof to the ded parties with the following:	nis Notice C	ertification	OOG OFFICE USE ONLY	
□ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIR SEISMIC ACTIVITY WAS			☐ RECEIVED/ NOT REQUIRED	
☐ 2. NOT	TICE OF ENTRY FOR PLAT SURV	VEY or 🔳 NO PLAT SURVE	EY WAS CO	NDUCTED	☐ received	
■ 3. NOT	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIR NOTICE OF ENTRY FOR PWAS CONDUCTED or			RECEIVED/ NOT REQUIRED	
		☐ WRITTEN WAIVER E (PLEASE ATTACH)	SY SURFAC	CE OWNER		
■ 4. NOT	TICE OF PLANNED OPERATION				RECEIVED	
5. PUB	LIC NOTICE			:	RECEIVED	
■ 6. NOT	TICE OF APPLICATION	0	RECEIVE ffice Of Oil a	ED and Gas	RECEIVED	
Required At	tachmonta		#PR 17	2024	- 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications off Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the metal 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.

4710303657

Certification of Notice is hereby given:

THEREFORE, I Tom Waltz , 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

By: Tom Waltz

VP of Completions

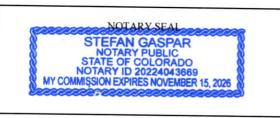
Telephone: 303-357-7310

 Address:
 1615 Wynkoop Street

 Denver, CO 80202

 Facsimile:
 303-357-7315

 Email:
 mturco@anteroresources.com



Subscribed and sworn before me this 15 day of April 2024.

Stefan 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.

Office Of Oil and Gas

APR 17 2024

WV Department of Environmental Protection

WW-6A (9-13) API NO. 477 103 0 3 0 3 6 5 7

OPERATOR WELL NO. Cobb Unit 1H

Well Pad Name: Galmish Pad

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 4/15/2024 Date Permit Application Filed: 4/15/2024 Notice of: ☑ PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ PERSONAL REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL. RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice ☐ Well Plat Notice is hereby provided to: ☐ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: PLEASE SEE ATTACHMENT Name: NO DECLARATIONS ON RECORD WITH COUNTY Address: Address: Name: _____ COAL OPERATOR Address: Name: NO DECLARATIONS ON RECORD WITH COUNTY Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Antero Midstream LLC ☐ SURFACE OWNER OF WATER WELL Address: 1615 Wynkoop St AND/OR WATER PURVEYOREGEIVED Name: NONE WITHIN 1500' Office Of Oil and Gas Denver, CO 80202 Name: Address: _____APR 1 7 2024 OPERATOR OF ANY NATURAL GAS TORAGE FIELD Name: Environmental Protection ☐ SURFACE OWNER(s) (Impoundments or Pits) Address: _____ Address: *Please attach additional forms if necessary

WW-6A (8-13)

API NO. 47-7031 0 3 0 3 6 5 7 OPERATOR WELL NO. Cobb Unit 1H

Well Pad Name: Galmish 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 complete area capable of and qualified to test water supplies in accordance with standard acceptable methods.

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

Well Location Restrictions

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

WW-6A (8-13)

API NO. 4/41/2 1.0303657

OPERATOR WELL NO. Cobb Unit 1H

Well Pad Name: Galmish Pad

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

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

Written Comment:

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

API NO. 4771031 0 3 0 3 6 5 7 OPERATOR WELL NO. Cobb Unit 1H Well Pad Name: Galmish Pad

Well Pad Nan

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

RECEIVED
Office Of Oil and Gas

APR 1 7 2024

API NO. 47- 103

OPERATOR WELL NO. Cobb Unit 1H

Well Pad Name: Galmish Pad

Notice is hereby given by:

Well Operator: Antero Resources Corporation

Telephone: (303) 357-7310

Email: mturcp@anteroresources.com Address: 1615 Wynkoop Street

Denver, CO 80202

Facsimile: 303-357-7315

Oil and Gas Privacy Notice:

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

Subscribed and sworn before me this 15 day of April, 2024

Stefan Gaspar Notary Public My Commission Expires November 15, 2026

RECEIVED Office Of Oil and Gas

APR 1 7 2024

WW-6A Attachment - Notice of Application:

4710303657

Surface Owners:

TM 5-14-9

Owner:

Dallison Lumber Inc.

Address:

PO Box 159

Jacksonburg, WV 26377

TM 5-14-12

Owner:

Freeda M. Brown

Address:

PO Box 235

Pine Grove, WV 26419

TM 5-14-8

Owner:

Clarice Ann Brown LeMasters

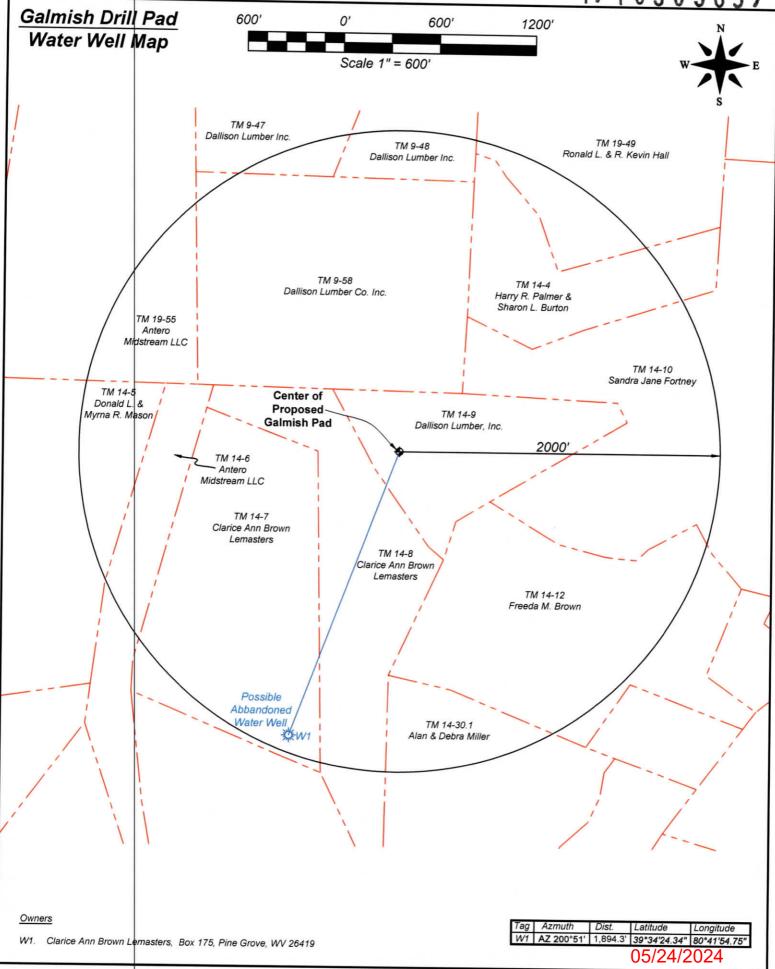
Address:

P∮ Box 175

Pine Grove, WV 26419

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Office Of Oil and Gas

APR 1 7 2024



Operator Well No. Cobb Unit 1H
Multiple Wells on Galmish Pad

710303657

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: 02/02/2024 Date Permit Application Filed: 04/15/2024 Delivery method pursuant to West Virginia Code § 22-6A-16(b) ☐ HAND CERTIFIED MAIL **DELIVERY** RETURN RECEIPT REQUESTED Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: Provided, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: Provided, however, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Notice is hereby provided to the SURFACE OWNER(s): Name: PLEASE SEE ATTACHMENT Address: Address: Notice is hereby given: Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows: State: West Virginia Easting: 526166.695m UTM NAD 83 County: Wetze Northing: 4380893.492m District: Green Public Road Access: McKimmie Ridge Rd Quadrangle: Pine Grove 7.5' Generally used farm name: Dallison Lumber Inc. Watershed: Fishing Creek This Notice Shall Include: Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.delevor.php. HECEIVED www.delevor.p Notice is hereby given by: APR 1 7 2024 Well Operator: Antero Resources Corporation Authorized Representative: Mallory Stanton WV Department of Environmental Profesti Address: 1615 Wynkoop St. Address: Denver, CO 80202 Denver, CO 80202 Telephone: 303-357-7310 Telephone: 303-357-7310 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 depprivacyofficer@wv.gov.

WW-6A4 Attachment - Notice of Intent to Drill:

Surface Owners:

TM 5-14-9

Owner:

Dallison Lumber Inc.

Address:

PO Box 159

Jacksonburg, WV 26377

TM 5-14-12

Owner:

Freeda M. Brown

Address:

PO Box 235

Pine Grove, WV 26419

TM 5-14-8

Owner:

Clarice Ann Brown LeMasters

Address:

PO Box 175

Pine Grove, WV 26419

Office Of Oil and Gas

APR 1 7 2024

WW-6A5 (1/12)

Operator Well No. Cobb Unit 1H

4710303657 STATE OF WEST VIRGINIA

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 03/20/2024 Date Permit Application Filed: 04/15/2024							
Delivery method pursuant to West Virginia Code § 22-6A-16(c)							
CERTIFIED MAIL HAND RETURN RECEIPT REQUESTED DELIVERY							
Pursuant to W. Va Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.							
Notice is hereby provided to the SURFACE OWNER(s) (at the address listed in the records of the sheriff at the time of notice):							
Name: PLEASE SEE ATTACHMENT Name:							
Address: Address:							
Notice is hereby given: Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows: State: West Virginia UTM NAD 83 Easting: Northing: 4380893.492m							
District: Green Public Road Access: McKimmie Ridge Road							
Quadrangle: Pine Gove 7.5' Watershed: Fishing Creek Generally used farm name: Dallison Lumber Inc.							
This Notice Shall Include: Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx .							
Well Operator: Antero Resources Corporation Address: 1615 Wynkoop Street							
Telephone: (303) 357-7310 Denver, CO 80202							
Email: mturco@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 Actorequests. 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. WV Department of Environmental Protection							

WW-6A5 Attachment - Notice of Planned Operation:

Surface Owners:

TM 5-14-9

Owner:

Dallison Lumber Inc.

Address:

PO Box 159

Jacksonburg, WV 26377

TM 5-14-12

Owner:

Freeda M. Brown

Address:

PO Box 235

Pine Grove, WV 26419

TM 5-14-8

Owner:

Clarice Ann Brown LeMasters

Address:

PO Box 175

Pine Grove, WV 26419

RECEIVED Office Of Oil and Gas

APR 17 2024

API NO. 47- 103 OPERATOR WELL NO. Cobb Unit 1H
Wall Park Name: Galmish Park

Well Pad Name: Galmish Pad

STATE OF WEST VIRGINIA

4710303657

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION , hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through , including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows: State: West Virginia UTM NAD 83 Easting: 526166.695m County: Wetzel 4380893.492m Public Road Access: Generally used farm name. Dallison Lumber Inc. District: Green Quadrangle: Pine Grove 7.5' I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials Watershed: Fishing Creek issued on those materials. *Please check the box that applies FOR EXECUTION BY A NATURAL PERSON SURFACE OWNER Signature: Print Name: ■ SURFACE OWNER (Road and/or Other Disturbance) Date: ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. ☐ COAL OWNER OR LESSEE Company: Antero Midstream LLC By: Tom Waltz ☐ COAL OPERATOR Its: VP of Completions □ WATER PURVEYOR Signature: Date: 03/18/2024 ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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.

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 (CAS #)
1.	Fresh Wat		7732-18-5
2.	2 Phospho	butane 1,2,4 tricarboxylic acid	37971-36-1
3.		n Persulfate	7727-54-0
4.	Anionic co	polymer	Proprietary
5.	Anionic po	•	Proprietary
6.		Hydrotreated Heavy Naphtha	64742-48-9
7.			(Proprietary)
8.	Demulsifie	Base	(Proprietary)
9.	Ethoxylate	alcohol blend	Mixture
10.	. Ethoxylate	Nonylphenol	68412-54 FIE CEIVED
	. Ethoxylate	•	266 Stigg St Oil and Gas
	. Ethylene G	! *	107-21-1 111-76-2 PR 1 7
	Glycol Ethe	rs	
	Guar gum	6.1 · 1	9000-30-0 ераппест ок
	Hydrogen (764Engitoomental Protection
		ed light distillates, non-aromatic, BTEX free	64742-47-8
	Isopropyl a		67-63-0
		dibromo-3- nitrilopropionamide	10222-01-2
	Microparti		Proprietary
		Distillates (BTEX Below Detect)	64742-47-8
	Polyacrylan		57-55-6
	Propargyl A		107-19-7
	Propylene	ыусоі	57-55-6
	Quartz	0:	14808-60-7
	Sillica cryst Sodium Chi	•	7631-86-9
		· -	7647-14-5
	Sodium Hyd	roxide	1310-73-2
	Sugar		57-50-1
	Surfactant		68439-51-0
		agent (solid)	14808-60-7
		uinolone derivs, benzyl chloride-quarternized	72480-70-7
	Soybean Oi	tha, petroleum, heavy aliph	64742-96-7
		of Maleic and Acrylic Acid	67784-80-9
	DETA Phosp		52255-49-9
	-	ene Triamine Penta	15827-60-8
		Carboxylic acid polymer	34690-00-1
		ene diamine penta	71050-62-9
	• • • • • • • • • • • • • • • • • • • •	acid, polymer with 2 propenamide	23605-74-5
		ene diamine penta (methylene phosphonic aci	9003-06-9
	Diethylene		
	Methenami		111-46-6
		e polyamine	100-97-0
	Coco amine		68603-67-8
		olcompound with methyloxirane	61791-14-8
-∓ਹ.	Z-T TOPYII-1-	осотроино with methyloxизле	38172-91-7



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

March 11, 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 Galmish Well Pad, Wetzel County Cobb Unit 1H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2022-0075 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 2.08.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a \$TATEWIDE 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,

Stephen G. Johnson, P.Eoffice Of Oil and Gas

Director of Operations

APR 1 7 2024

WV Department of Environmental Protection

Cc: Stefan Gaspar Antero Resources OM, D-6

File

OPERATOR	Antero Resources Corporation	WELL NO: Cobb Unit 1H				
PAD NAME	Galmish Pad					
REVIEWED	BY: Stefan Gaspar	SIGNATURE: Squ				
	WELL RESTRICTIONS CHECKLIST					
	HORIZONTAL 6A WELL					
Well Restr	ictions					
√	At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR					
	DEP Waiver and Permit Conditions					
✓	At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR					
	DEP Waiver and Permit Conditions					
\checkmark	At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR					
	DEP Waiver and Permit Condition	as				
\checkmark	At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR					
	Surface Owner Waiver and Recorded with County Clerk, OR					
	DEP Variance and Permit Condition	ons				
\checkmark	At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR					
	Surface Owner Waiver and Record	RECEIVED led with County Clerk, Office Of Oil and Gas				
	DEP Variance and Permit Condition	APR 17 2024				
\checkmark	At Least 625 Feet from Agricultural Build of the Pad; OR	WV Department of Environmental Protestion Center Square Feet to the Center				
	Surface Owner Waiver and Record	led with County Clerk, OR				
	DEP Variance and Permit Condition	ons				