



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

Wednesday, May 29, 2024
PERMIT MODIFICATION APPROVAL
Horizontal 6A / Plugging

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for POSTLETHWAIT 1M
47-103-03157-00-00

Updated WR-35

ANTERO RESOURCES CORPORATION

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

A handwritten signature in blue ink, appearing to read "James A. Martin", is written over a blue circular stamp. The stamp contains some illegible text and a date.

Operator's Well Number: POSTLETHWAIT 1M
Farm Name: MASON, KENNETH & JENNIFER
U.S. WELL NUMBER: 47-103-03157-00-00
Horizontal 6A Plugging
Date Modification Issued: 05/29/2024

Promoting a healthy environment.

05/31/2024

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-103-03157 County Wetzel District Center
Quad Wileyville 7.5' Pad Name Rock Camp Field/Pool Name ----
Farm name Kenneth R. & Jennifer L. Mason Well Number Postlethwait Unit 1H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4387377.10m Easting 532373.63m
Landing Point of Curve Northing m Easting m
Bottom Hole Northing m Easting m

Elevation (ft) 1396' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine


Mud Type(s) and Additive(s)
Air - Foam & 4% KCL

Mud - Polymer

Date permit issued 9/9/2016 Date drilling commenced _____ Date drilling ceased _____
Date completion activities began _____ Date completion activities ceased _____
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 120, 630' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 2057' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 680, 1235' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:

05/31/2024

API 47-103 - 03157 Farm name Kenneth R. & Jennifer L. Mason Well number Postlethwait Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	26"	20"	40'	New	85#/J-55		Cemented to Surface
Surface	18-5/8"	17.75"	720'	New	48#/H-40		Cemented to Surface
Coal							
Intermediate 1	13 3/8"	12.715"	1697'	New	36#/J-55		Cemented to Surface
Intermediate 2	9 5/8"	8.921"	2778'	New	36#/J-55		Cemented to Surface
Intermediate 3							
Production							
Tubing							
Packer type and depth set		N/A					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 2778' MD Loggers TD (ft) _____
 Deepest formation penetrated _____ Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Conductor - 0
 Surface - 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface
 Intermediate - 1 above float joint, 1 above float collar, 1 every 4th joint to surface
 Production - 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED N/A

05/31/2024 

API 47-103 - 03157 Farm name Kenneth R. & Jennifer L. Mason Well number Postlethwait Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)

Please insert additional pages as applicable.

05/31/2024 

API 47- 103 - 03157 Farm name Kenneth R. & Jennifer L. Mason Well number Postlethwait Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
	' (TOP) TVD	' (TOP) MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd
GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	

Please insert additional pages as applicable.

Drilling Contractor H & P Drilling
Address 912 N Eagle Valley Rd City Howard State PA Zip 16841

Logging Company _____
Address _____ City _____ State _____ Zip _____


Cementing Company Halliburton Energy Services
Address 3000 W. Sam Houston Pkwy City Houston State TX Zip 76114

Stimulating Company _____
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by Carly Marvel Telephone 303-357-7373
Signature Carly Marvel Title Permitting Agent Date 3/22/2024

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

05/31/2024 



Kennedy, James P <james.p.kennedy@wv.gov>

Plugging mods approved 4710303157 03158

1 message

Kennedy, James P <james.p.kennedy@wv.gov>

Wed, May 29, 2024 at 9:58 AM


To: Stephen E McCoy <stephen.e.mccoy@wv.gov>, Mallory Turco <mturco@anteroresources.com>, Dani Devito <ddevito@shalepro.com>, slenley@wvassessor.com


To whom it may concern, Mods for plugging permits 4710303157 03158 have been issued.

James Kennedy

WVDEP OOG

2 attachments

 **MOD 4710302157.pdf**
892K

 **MOD 4710303158.pdf**
893K

05/31/2024