UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-36120

ANTERO RESOURCES CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	**80-0162034** (IRS Employer Identification No.)
1615 Wynkoop Street, Denver, Colorado (Address of principal executive offices)	**80202** (Zip Code)

(303) 357-7310

(Registrant's telephone number, including area code)

Securities registered pursuant to section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01	AR	New York Stock Exchange

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☒	Accelerated Filer ☐
Non-accelerated Filer ☐	Smaller Reporting Company ☐
Emerging Growth Company ☐	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) ☐ Yes ☒ No

The registrant had 268,390,401 shares of common stock outstanding as of April 24, 2020.

TABLE OF CONTENTS

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS		2
PART I—FINANCIAL INFORMATION		4
Item 1.	Financial Statements (Unaudited)	4
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	40
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	56
Item 4.	Controls and Procedures	58
PART II—OTHER INFORMATION		59
Item 1.	Legal Proceedings	59
Item 1A.	Risk Factors	59
Item 2.	Unregistered Sales of Equity Securities	61
Item 5.	Other Information	61
Item 6.	Exhibits	62
SIGNATURES		63

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Some of the information in this Quarterly Report on Form 10-Q may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements, other than statements of historical fact included in this Quarterly Report on Form 10-Q, regarding our strategy, future operations, financial position, estimated revenues and losses, projected costs, prospects, plans and objectives of management are forward-looking statements. Words such as "may," "assume," "forecast," "position," "predict," "strategy," "expect," "intend," "plan," "estimate," "anticipate," "believe," "project," "budget," "potential," or "continue," and similar expressions are used to identify forward-looking statements, although not all forward-looking statements contain such identifying words. These forward-looking statements are based on our current expectations and assumptions about future events and are based on currently available information as to the outcome and timing of future events. When considering these forward-looking statements, investors should keep in mind the risk factors and other cautionary statements in this Quarterly Report on Form 10-Q. These forward-looking statements are based on management's current belief, based on currently available information, as to the outcome and timing of future events. Factors that could cause our actual results to differ materially from the results contemplated by such forward-looking statements include:

- our ability to execute our business strategy;
- our production and oil and gas reserves;
- our financial strategy, liquidity, and capital required for our development program;
- our ability to obtain debt or equity financing on satisfactory terms to fund additional acquisitions, expansion projects, working capital requirements and the repayment or refinancing of indebtedness;
- natural gas, natural gas liquids ("NGLs"), and oil prices;
- timing and amount of future production of natural gas, NGLs, and oil;
- our hedging strategy and results;
- our ability to execute our debt repurchase program and/or our asset sale program;
- our ability to meet minimum volume commitments and to utilize or monetize our firm transportation commitments;
- our future drilling plans;
- our projected well costs and cost savings initiatives, including with respect to water handling and treatment services provided by Antero Midstream Corporation;
- competition and government regulations;
- pending legal or environmental matters;
- marketing of natural gas, NGLs, and oil;
- leasehold or business acquisitions;
- costs of developing our properties;
- operations of Antero Midstream Corporation;
- general economic conditions;
- credit markets;
- expectations regarding the amount and timing of jury awards;
- uncertainty regarding our future operating results; and

- our other plans, objectives, expectations and intentions contained in this Quarterly Report on Form 10-Q.

We caution investors that these forward-looking statements are subject to all of the risks and uncertainties incidental to our business, most of which are difficult to predict and many of which are beyond our control. These risks include, but are not limited to, commodity price volatility, inflation, availability of drilling, completion, and production equipment and services, environmental risks, drilling and completion and other operating risks, marketing and transportation risks, regulatory changes, the uncertainty inherent in estimating natural gas, NGLs, and oil reserves and in projecting future rates of production, cash flows and access to capital, the timing of development expenditures, conflicts of interest among our stockholders, impacts of world health events, including the COVID-19 pandemic, potential shut-ins of production due to lack of downstream demand or storage capacity, and the other risks described under the heading "Item 1A. Risk Factors" in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2019 (the "2019 Form 10-K") on file with the Securities and Exchange Commission ("SEC").

Reserve engineering is a process of estimating underground accumulations of natural gas, NGLs, and oil that cannot be measured in an exact manner. The accuracy of any reserve estimate depends on the quality of available data, the interpretation of such data, and the price and cost assumptions made by reservoir engineers. In addition, the results of drilling, testing, and production activities, or changes in commodity prices, may justify revisions of estimates that were made previously. If significant, such revisions would change the schedule of any further production and development drilling. Accordingly, reserve estimates may differ significantly from the quantities of natural gas, NGLs, and oil that are ultimately recovered.

Should one or more of the risks or uncertainties described in this Quarterly Report on Form 10-Q or the 2019 Form 10-K occur, or should underlying assumptions prove incorrect, our actual results and plans could differ materially from those expressed in any forward-looking statements.

All forward-looking statements, expressed or implied, included in this Quarterly Report on Form 10-Q are expressly qualified in their entirety by this cautionary statement. This cautionary statement should also be considered in connection with any subsequent written or oral forward-looking statements that we or persons acting on our behalf may issue.

Except as otherwise required by applicable law, we disclaim any duty to update any forward-looking statements to reflect events or circumstances after the date of this Quarterly Report on Form 10-Q.

Table of Contents

PART I—FINANCIAL INFORMATION
ANTERO RESOURCES CORPORATION
Condensed Consolidated Balance Sheets
December 31, 2019 and March 31, 2020
(In thousands)

	December 31, 2019	(Unaudited) March 31, 2020
Assets		
Current assets:		
Accounts receivable	$ 46,419	91,944
Accounts receivable, related parties	125,000	—
Accrued revenue	317,886	201,320
Derivative instruments	422,849	816,444
Other current assets	10,731	10,313
Total current assets	922,885	1,120,021
Property and equipment:		
Oil and gas properties, at cost (successful efforts method):		
Unproved properties	1,368,854	1,289,770
Proved properties	11,859,817	12,154,162
Gathering systems and facilities	5,802	5,802
Other property and equipment	71,895	72,312
	13,306,368	13,522,046
Less accumulated depletion, depreciation, and amortization	(3,327,629)	(3,527,306)
Property and equipment, net	9,978,739	9,994,740
Operating leases right-of-use assets	2,886,500	2,814,539
Derivative instruments	333,174	284,461
Investment in unconsolidated affiliate	1,055,177	291,989
Other assets	21,094	20,039
Total assets	$ 15,197,569	14,525,789
Liabilities and Equity		
Current liabilities:		
Accounts payable	$ 14,498	37,909
Accounts payable, related parties	97,883	88,894
Accrued liabilities	400,850	367,444
Revenue distributions payable	207,988	174,654
Derivative instruments	6,721	—
Short-term lease liabilities	305,320	295,658
Other current liabilities	6,879	7,315
Total current liabilities	1,040,139	971,874
Long-term liabilities:		
Long-term debt	3,758,868	3,707,787
Deferred income tax liability	781,987	672,002
Derivative instruments	3,519	215
Long-term lease liabilities	2,583,678	2,520,939
Other liabilities	58,635	60,432
Total liabilities	8,226,826	7,933,249
Commitments and contingencies (Notes 13 and 14)		
Equity:		
Stockholders' equity:		
Preferred stock, $0.01 par value; authorized - 50,000 shares; none issued	—	—
Common stock, $0.01 par value; authorized - 1,000,000 shares; 295,941 shares and 268,926 shares issued and outstanding at December 31, 2019 and March 31, 2020, respectively	2,959	2,689
Additional paid-in capital	6,130,365	6,091,242
Accumulated earnings	837,419	498,609
Total equity	6,970,743	6,592,540
Total liabilities and equity	$ 15,197,569	14,525,789

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION
Condensed Consolidated Statements of Operations and Comprehensive Income (Loss)
Three Months Ended March 31, 2019 and 2020
(Unaudited)
(In thousands, except per share amounts)

	Three Months Ended March 31,	
	2019	2020
Revenue and other:		
Natural gas sales	$ 657,266	411,082
Natural gas liquids sales	313,685	257,673
Oil sales	48,052	35,646
Commodity derivative fair value gains (losses)	(77,368)	565,833
Gathering, compression, water handling and treatment	4,479	—
Marketing	91,186	46,073
Other income	107	798
Total revenue and other	1,037,407	1,317,105
Operating expenses:		
Lease operating	41,732	25,644
Gathering, compression, processing, and transportation	424,529	588,624
Production and ad valorem taxes	35,678	25,699
Marketing	163,084	93,273
Exploration	126	210
Impairment of oil and gas properties	81,244	89,220
Impairment of midstream assets	6,982	—
Depletion, depreciation, and amortization	240,201	199,677
Accretion of asset retirement obligations	976	1,104
General and administrative (including equity-based compensation expense of $8,903 and $3,329 in 2019 and 2020, respectively)	68,202	31,221
Contract termination and rig stacking	8,360	—
Total operating expenses	1,071,114	1,054,672
Operating income (loss)	(33,707)	262,433
Other income (expenses):		
Equity in earnings (loss) of unconsolidated affiliates	14,081	(128,055)
Impairment of equity investment	—	(610,632)
Gain on deconsolidation of Antero Midstream Partners LP	1,406,042	—
Interest expense, net	(71,950)	(53,102)
Gain on early extinguishment of debt	—	80,561
Total other income (expenses)	1,348,173	(711,228)
Income (loss) before income taxes	1,314,466	(448,795)
Provision for income tax (expense) benefit	(288,710)	109,985
Net income (loss) and comprehensive income (loss) including noncontrolling interests	1,025,756	(338,810)
Net income and comprehensive income attributable to noncontrolling interests	46,993	—
Net income (loss) and comprehensive income (loss) attributable to Antero Resources Corporation	$ 978,763	(338,810)
Income (loss) per share—basic	$ 3.17	(1.19)
Income (loss) per share—diluted	$ 3.17	(1.19)
Weighted average number of shares outstanding:		
Basic	308,694	284,227
Diluted	308,788	284,227

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION

Condensed Consolidated Statement of Equity
Three Months Ended March 31, 2019
(Unaudited)
(In thousands)

	Common Stock		Additional paid-in capital	Accumulated earnings	Noncontrolling interests	Total equity
	Shares	Amount				
Balances, December 31, 2018	308,594	$ 3,086	6,485,174	1,177,548	821,669	8,487,477
Issuance of common stock upon vesting of equity-based compensation awards, net of shares withheld for income taxes	147	1	(451)	—	—	(450)
Issuance of common units in Antero Midstream Partners LP upon vesting of equity-based compensation awards, net of units withheld for income taxes	—	—	(85)	—	56	(29)
Equity-based compensation	—	—	7,801	—	1,102	8,903
Net income and comprehensive income	—	—	—	978,763	46,993	1,025,756
Distributions to noncontrolling interests	—	—	—	—	(85,076)	(85,076)
Effect of deconsolidation of Antero Midstream Partners LP	—	—	(359,039)	—	(784,744)	(1,143,783)
Balances, March 31, 2019	308,741	$ 3,087	6,133,400	2,156,311	—	8,292,798

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION
Condensed Consolidated Statement of Equity
Three Months Ended March 31, 2020
(Unaudited)
(In thousands)

	Common Stock		Additional paid-in capital	Accumulated earnings	Total equity
	Shares	Amount			
Balances, December 31, 2019	295,941	$ 2,959	6,130,365	837,419	6,970,743
Issuance of common stock upon vesting of equity-based compensation awards, net of shares withheld for income taxes	178	2	(34)	—	(32)
Repurchases and retirements of common stock	(27,193)	(272)	(42,418)	—	(42,690)
Equity-based compensation	—	—	3,329	—	3,329
Net loss and comprehensive loss	—	—	—	(338,810)	(338,810)
Balances, March 31, 2020	268,926	$ 2,689	6,091,242	498,609	6,592,540

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION
Condensed Consolidated Statements of Cash Flows
Three Months Ended March 31, 2019 and 2020
(Unaudited)
(In thousands)

	Three Months Ended March 31,	
	2019	2020
Cash flows provided by (used in) operating activities:		
Net income (loss) including noncontrolling interests	$ 1,025,756	(338,810)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depletion, depreciation, amortization, and accretion	241,177	200,781
Impairment of oil and gas properties	81,244	89,220
Impairment of midstream assets	6,982	—
Commodity derivative fair value (gains) losses	77,368	(565,833)
Gains on settled commodity derivatives	97,092	210,926
Equity-based compensation expense	8,903	3,329
Deferred income tax expense (benefit)	287,854	(109,985)
Gain on early extinguishment of debt	—	(80,561)
Equity in (earnings) loss of unconsolidated affiliates	(14,081)	128,055
Impairment of equity investment	—	610,632
Gain on deconsolidation of Antero Midstream Partners LP	(1,406,042)	—
Distributions/dividends of earnings from unconsolidated affiliates	12,605	42,756
Other	11,081	2,440
Changes in current assets and liabilities:		
Accounts receivable	42,168	(54,514)
Accrued revenue	109,677	116,566
Other current assets	1,364	(583)
Accounts payable including related parties	(21,370)	(1,251)
Accrued liabilities	(14,965)	(19,593)
Revenue distributions payable	(9,761)	(33,333)
Other current liabilities	1,952	435
Net cash provided by operating activities	539,004	200,677
Cash flows provided by (used in) investing activities:		
Additions to unproved properties	(27,463)	(10,357)
Drilling and completion costs	(368,687)	(300,483)
Additions to water handling and treatment systems	(24,416)	—
Additions to gathering systems and facilities	(48,239)	—
Additions to other property and equipment	(3,128)	(771)
Settlement of water earnout	—	125,000
Investments in unconsolidated affiliates	(25,020)	—
Proceeds from the Antero Midstream Partners LP Transactions	296,611	—
Change in other assets	(4,475)	(70)
Net cash used in investing activities	(204,817)	(186,681)
Cash flows provided by (used in) financing activities:		
Repurchases of common stock	—	(42,690)
Issuance of senior notes	650,000	—
Repayment of senior notes	—	(300,835)
Borrowings (repayments) on bank credit facilities, net	(270,000)	330,000
Payments of deferred financing costs	(8,259)	—
Distributions to noncontrolling interests in Antero Midstream Partners LP	(85,076)	—
Employee tax withholding for settlement of equity compensation awards	(479)	(32)
Other	(841)	(439)
Net cash provided by (used in) financing activities	285,345	(13,996)
Effect of deconsolidation of Antero Midstream Partners LP	(619,532)	—
Net decrease in cash and cash equivalents	—	—
Cash and cash equivalents, beginning of period	—	—
Cash and cash equivalents, end of period	$ —	—
Supplemental disclosure of cash flow information:		
Cash paid during the period for interest	$ 37,081	30,089
Increase (decrease) in accounts payable and accrued liabilities for additions to property and equipment	$ (22,825)	10,767

See accompanying notes to unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

(1) Organization

Antero Resources Corporation (individually referred to as "Antero") and its consolidated subsidiaries (collectively referred to as "Antero Resources," the "Company," "we," "us" or "our") are engaged in the exploration, development, and acquisition of natural gas, NGLs, and oil properties in the Appalachian Basin in West Virginia and Ohio. The Company targets large, repeatable resource plays where horizontal drilling and advanced fracture stimulation technologies provide the means to economically develop and produce natural gas, NGLs, and oil from unconventional formations. The Company's corporate headquarters are located in Denver, Colorado.

(2) Summary of Significant Accounting Policies

(a) Basis of Presentation

These unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC") applicable to interim financial information and should be read in the context of the Company's December 31, 2019 consolidated financial statements and notes thereto for a more complete understanding of the Company's operations, financial position, and accounting policies. The Company's December 31, 2019 consolidated financial statements were included in Antero Resources' 2019 Annual Report on Form 10-K, which was filed with the SEC.

These unaudited condensed consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information, and, accordingly, do not include all of the information and footnotes required by GAAP for complete consolidated financial statements. In the opinion of management, these unaudited condensed consolidated financial statements include all adjustments (consisting of normal and recurring accruals) considered necessary to present fairly the Company's financial position as of December 31, 2019 and March 31, 2020, and the results of its operations and its cash flows for the three months ended March 31, 2019 and 2020. The Company has no items of other comprehensive income or loss; therefore, its net income or loss is equal to its comprehensive income or loss. Operating results for the period ended March 31, 2020 are not necessarily indicative of the results that may be expected for the full year because of the impact of fluctuations in prices received for natural gas, NGLs, and oil, natural production declines, the uncertainty of exploration and development drilling results, fluctuations in the fair value of derivative instruments, the impacts of COVID-19 and other factors.

(b) Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements include the accounts of Antero Resources Corporation, its wholly owned subsidiaries, any entities in which the Company owns a controlling interest, and variable interest entities ("VIEs") for which the Company is the primary beneficiary.

Through March 12, 2019, Antero Midstream Partners LP ("Antero Midstream Partners"), a publicly traded limited partnership, was included in the consolidated financial statements of Antero. Prior to the Closing (defined in Note 3 to the unaudited condensed consolidated financial statements), our ownership of Antero Midstream Partners common units represented approximately a 53% limited partner interest in Antero Midstream Partners, and we consolidated Antero Midstream Partners' financial position and results of operations into our consolidated financial statements. The Transactions (defined in Note 3 to the unaudited condensed consolidated financial statements) resulted in the exchange of the limited partner interest we owned in Antero Midstream Partners for common stock of Antero Midstream Corporation, par value $0.01 per share (the "Antero Midstream Corporation common stock"), representing an approximate 31% interest in Antero Midstream Corporation. As a result, our controlling interest in Antero Midstream Partners was converted to an interest in Antero Midstream Corporation that provides significant influence, but not control, over Antero Midstream Corporation. Thus, effective March 13, 2019, Antero no longer consolidates Antero Midstream Partners in its consolidated financial statements and accounts for its interest in Antero Midstream Corporation using the equity method of accounting. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions.

All significant intercompany accounts and transactions have been eliminated in the Company's unaudited condensed consolidated financial statements. The noncontrolling interest in the Company's unaudited condensed consolidated financial statements for the three months ended March 31, 2019 represents the interests in Antero Midstream Partners that were owned by the public prior to the Transactions, and the incentive distribution rights in Antero Midstream Partners.

Investments in entities for which the Company exercises significant influence, but not control, are accounted for under the equity method. The Company's judgment regarding the level of influence over its equity investments includes considering key factors such as Antero's ownership interest, representation on the board of directors and participation in the policy-making decisions of equity method investees. Such investments are included in Investment in unconsolidated affiliate on the Company's unaudited condensed consolidated balance sheets. Income (loss) from investees that are accounted for under the equity method is included in Equity in earnings (loss) of unconsolidated affiliates on the Company's unaudited condensed consolidated statements of operations and cash flows. When Antero records its proportionate share of net income or net loss, it is recorded in equity in earnings (loss) of unconsolidated affiliates in the statements of operations and the carrying value of that investment on the Company's balance sheet. When a distribution is received, it is recorded as a reduction to the carrying value of that investment on the Company's balance sheet. The Company's equity in earnings of unconsolidated affiliates is adjusted for intercompany transactions and the basis differences recognized due to the difference between the cost of the equity investment in Antero Midstream Corporation and the amount of underlying equity in the net assets of Antero Midstream Partners as of the date of deconsolidation.

The Company accounts for distributions received from equity method investees under the "nature of the distribution" approach. Under this approach, distributions received from equity method investees are classified on the basis of the nature of the activity or activities of the investee that generated the distribution as either a return on investment, which is classified as cash inflows from operating activities, or a return of investment, which is classified as cash inflows from investing activities.

(c) Use of Estimates

The preparation of the unaudited condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect revenues, expenses, assets, liabilities and the disclosure of contingent assets and liabilities. Changes in facts and circumstances or discovery of new information may result in revised estimates, and actual results could differ from those estimates.

The Company's unaudited condensed consolidated financial statements are based on a number of significant estimates, including estimates of natural gas, NGLs, and oil reserve quantities, which are the basis for the calculation of depletion and impairment of oil and gas properties. Reserve estimates, by their nature, are inherently imprecise. Other items in the Company's unaudited condensed consolidated financial statements that involve the use of significant estimates include derivative assets and liabilities, accrued revenue, deferred and current income taxes, equity-based compensation, asset retirement obligations, depreciation, amortization, and commitments and contingencies.

(d) Risks and Uncertainties

The markets for natural gas, NGLs, and oil have, and continue to, experience significant price fluctuations. Price fluctuations can result from variations in weather, levels of production, availability of storage capacity and transportation to other regions of the country, the level of imports to and exports from the United States, and various other factors. Increases or decreases in the prices the Company receives for its production could have a significant impact on the Company's future results of operations and reserve quantities.

(e) Cash and Cash Equivalents

The Company considers all liquid investments purchased with an initial maturity of three months or less to be cash equivalents. The carrying value of cash and cash equivalents approximates fair value due to the short-term nature of these instruments. From time to time, the Company may be in the position of a "book overdraft" in which outstanding checks exceed cash and cash equivalents. The Company classifies book overdrafts in accounts payable and revenue distributions payable within its unaudited condensed consolidated balance sheets, and classifies the change in accounts payable and revenue distributions payable associated with book overdrafts as an operating activity within its unaudited condensed consolidated statements of cash flows. As of December 31, 2019, the book overdraft included within accounts payable and revenue distributions payable were $7 million and $18 million, respectively. As of March 31, 2020, the book overdraft included within accounts payable and revenue distributions payable were $5 million and $21 million, respectively.

(f) Oil and Gas Properties

The Company accounts for its natural gas, NGLs, and oil exploration and development activities under the successful efforts method of accounting. Under the successful efforts method, the costs incurred to acquire, drill, and complete productive wells, development wells, and undeveloped leases are capitalized. Oil and gas lease acquisition costs are also capitalized. Exploration costs, including personnel and other internal costs, geological and geophysical expenses, delay rentals for gas and oil leases, and costs associated with unsuccessful lease acquisitions are charged to expense as incurred. Exploratory drilling costs are initially capitalized, but charged to expense if the Company determines that the well does not contain reserves in commercially viable quantities. The Company reviews exploration costs related to wells-in-progress at the end of each quarter and makes a determination, based on known results of drilling at that time, whether the costs should continue to be capitalized pending further well testing and results, or charged to expense. The Company incurred no such charges to expense during the three months ended March 31, 2019 and 2020. The sale of a partial interest in a proved property is accounted for as a cost recovery, and no gain or loss is recognized as long as this treatment does not significantly affect the units-of-production amortization rate. A gain or loss is recognized for all other sales of producing properties.

Unproved properties are assessed for impairment on a property-by-property basis, and any impairment in value is charged to expense. Impairment is assessed based on remaining lease terms, commodity price outlooks, and future plans to develop acreage, as well as drilling results, and reservoir performance of wells in the area. Unproved properties and the related costs are transferred to proved properties when reserves are discovered on, or otherwise attributed to, the property. Proceeds from sales of partial interests in unproved properties are accounted for as a recovery of cost without recognition of any gain or loss until the cost has been recovered. Impairment of oil and gas properties was $81 million and $89 million for the three months ended March 31, 2019 and 2020, respectively.

The Company evaluates the carrying amount of its proved natural gas, NGLs, and oil properties for impairment on a geological reservoir basis whenever events or changes in circumstances indicate that a property's carrying amount may not be recoverable. If the carrying amount exceeds the estimated undiscounted future cash flows, the Company would estimate the fair value of its properties and record an impairment charge for any excess of the carrying amount of the properties over the estimated fair value of the properties. Factors used to estimate fair value may include estimates of proved reserves, estimated future commodity prices, future production estimates, and anticipated capital expenditures, using a commensurate discount rate.

(g) Derivative Financial Instruments

In order to manage its exposure to natural gas, NGLs, and oil price volatility, the Company enters into derivative transactions from time to time, which may include commodity swap agreements, basis swap agreements, collar agreements, and other similar agreements related to the price risk associated with the Company's production. To the extent legal right of offset exists with a counterparty, the Company reports derivative assets and liabilities on a net basis. The Company has exposure to credit risk to the extent that the counterparty is unable to satisfy its settlement obligations. The Company actively monitors the creditworthiness of counterparties and assesses the impact, if any, on its derivative positions.

The Company records derivative instruments on the unaudited condensed consolidated balance sheets as either assets or liabilities measured at fair value and records changes in the fair value of derivatives in current earnings as they occur. Changes in the fair value of commodity derivatives, including gains or losses on settled derivatives, are classified as revenues on the Company's unaudited condensed consolidated statements of operations. The Company's derivatives have not been designated as hedges for accounting purposes.

(h) Asset Retirement Obligations

The Company is obligated to dispose of certain long-lived assets upon their abandonment. The Company's asset retirement obligations ("AROs") relate primarily to its obligation to plug and abandon oil and gas wells at the end of their lives. AROs are recorded at estimated fair value, measured by reference to the expected future cash outflows required to satisfy the retirement obligations, which is then discounted at the Company's credit-adjusted, risk-free interest rate. Revisions to estimated AROs often result from changes in retirement cost estimates or changes in the estimated timing of abandonment. The fair value of the liability is added to the carrying amount of the associated asset, and this additional carrying amount is depreciated over the life of the asset. The liability is accreted at the end of each period through charges to operating expense.

(i) Natural Gas, NGLs, and Oil Revenues

Our revenues are primarily derived from the sale of natural gas and oil production, as well as the sale of NGLs that are extracted from our natural gas. Sales of natural gas, NGLs, and oil are recognized when we satisfy a performance obligation by transferring control of a product to a customer. Payment is generally received in the month following the sale.

Under our natural gas sales contracts, we deliver natural gas to the purchaser at an agreed upon delivery point. Natural gas is transported from our wellheads to delivery points specified under sales contracts. To deliver natural gas to these points, Antero Midstream Corporation or other third parties gather, compress, process and transport our natural gas. We maintain control of the natural gas during gathering, compression, processing, and transportation. Our sales contracts provide that we receive a specific index price adjusted for pricing differentials. We transfer control of the product at the delivery point and recognize revenue based on the contract price. The costs incurred to gather, compress, process and transport natural gas are recorded as Gathering, compression, processing and transportation expense.

NGLs, which are extracted from natural gas through processing, are either sold by us directly or by the processor under processing contracts. For NGLs sold by us directly, our sales contracts provide that we deliver the product to the purchaser at an agreed upon delivery point and that we receive a specific index price adjusted for pricing differentials. We transfer control of the product to the purchaser at the delivery point and recognize revenue based on the contract price. The costs incurred to process and transport NGLs are recorded as Gathering, compression, processing, and transportation expense. For NGLs sold by the processor, our processing contracts provide that we transfer control to the processor at the tailgate of the processing plant and we recognize revenue based on the price received from the processor.

Under our oil sales contracts, we generally sell oil to purchasers and collect a contractually agreed upon index price, net of pricing differentials. We recognize revenue based on the contract price when we transfer control of the product to a purchaser. When applicable, the costs incurred to transport oil to a purchaser are recorded as Gathering, compression, processing and transportation expense.

(j) Marketing Revenues and Expenses

Marketing revenues are derived from activities to purchase and sell third-party natural gas and NGLs and to market excess firm transportation capacity to third parties. We retain control of the purchased natural gas and NGLs prior to delivery to the purchaser. We have concluded that we are the principal in these arrangements and therefore we recognize revenue on a gross basis, with costs to purchase and transport natural gas and NGLs presented as marketing expenses. Contracts to sell third party gas and NGLs are generally subject to similar terms as contracts to sell our produced natural gas and NGLs. We satisfy performance obligations to the purchaser by transferring control of the product at the delivery point and recognize revenue based on the contract price received from the purchaser. Fees generated from the sale of excess firm transportation marketed to third parties are included in Marketing revenue.

Marketing expenses include the cost of purchased third-party natural gas and NGLs. The Company classifies firm transportation costs related to capacity contracted for in advance of having sufficient production and infrastructure to fully utilize the capacity (excess capacity) as marketing expenses since it is marketing this excess capacity to third parties. Firm transportation for which the Company has sufficient production capacity (even though it may not use the transportation capacity because of alternative delivery points with more favorable pricing) is considered unutilized capacity and is charged to transportation expense.

(k) Gathering, compression, water handling and treatment revenue

Substantially all revenues from the gathering, compression, water handling and treatment operations were derived from transactions for services Antero Midstream Partners provided to our exploration and production operations through March 12, 2019 and were eliminated in consolidation. Effective March 13, 2019, Antero Midstream Partners is no longer consolidated in Antero's results. See Note 3 to the consolidated financial statements for further discussion on the Transactions and Note 17 to the consolidated financial statements for disclosures on the Company's reportable segments. The portion of such fees shown in our consolidated financial statements prior to March 13, 2019 represent amounts charged to interest owners in Antero-operated wells, as well as fees charged to other third parties for water handling and treatment services provided by Antero Midstream Partners or usage of Antero Midstream Partners' gathering and compression systems. For gathering and compression revenue, Antero Midstream Partners

satisfied its performance obligations and recognized revenue when low pressure volumes were delivered to a compressor station, high pressure volumes were delivered to a processing plant or transmission pipeline, and compression volumes were delivered to a high pressure line. Revenue was recognized based on the per Mcf gathering or compression fee charged by Antero Midstream Partners in accordance with the gathering and compression agreement. For water handling and treatment revenue, Antero Midstream Partners satisfied its performance obligations and recognized revenue when the fresh water volumes were delivered to the hydration unit of a specified well pad and the wastewater volumes were delivered to its wastewater treatment facility. For services contracted through third-party providers, Antero Midstream Partners' performance obligation was satisfied when the services performed by the third-party providers were completed. Revenue was recognized based on the per barrel fresh water delivery or wastewater treatment fee charged by Antero Midstream Partners in accordance with the water services agreement.

(l) Industry Segments and Geographic Information

Management has evaluated how the Company is organized and managed and has identified the following segments: (1)the exploration, development, and production of natural gas, NGLs, and oil; (2) marketing and utilization of excess firm transportation capacity; and (3) our equity method investment in Antero Midstream Corporation. Through March 12, 2019, the results of Antero Midstream Partners were included in the consolidated financial statements of Antero. Effective March 13, 2019, the results of Antero Midstream Partners are no longer consolidated in Antero's results; however, the Company's segment disclosures include our equity method investment in Antero Midstream Corporation due to its significance to the Company's operations. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions and Note 17 to the unaudited condensed consolidated financial statements for disclosures on the Company's reportable segments.

All of the Company's assets are located in the United States and substantially all of its production revenues are attributable to customers located in the United States; however, some of the Company's production revenues are attributable to customers who then transport the Company's production to foreign countries for resale or consumption.

(m) Earnings (loss) Per Common Share

Earnings (loss) per common share—basic for each period is computed by dividing net income (loss) attributable to Antero by the basic weighted average number of shares outstanding during the period. Earnings (loss) per common share—assuming dilution for each period is computed after giving consideration to the potential dilution from outstanding equity awards, calculated using the treasury stock method. The Company includes performance share unit awards in the calculation of diluted weighted average shares outstanding based on the number of common shares that would be issuable if the end of the period was also the end of the performance period required for the vesting of the awards. During periods in which the Company incurs a net loss, diluted weighted average shares outstanding are equal to basic weighted average shares outstanding because the effect of all equity awards is anti-dilutive.

The following is a reconciliation of the Company's basic weighted average shares outstanding to diluted weighted average shares outstanding during the periods presented (in thousands):

	Three months ended March 31,	
	2019	2020
Basic weighted average number of shares outstanding	308,694	284,227
Add: Dilutive effect of restricted stock units	80	—
Add: Dilutive effect of outstanding stock options	—	—
Add: Dilutive effect of performance stock units	14	—
Diluted weighted average number of shares outstanding	308,788	284,227
Weighted average number of outstanding equity awards excluded from calculation of diluted earnings per common share [(1)]:		
Restricted stock units	1,445	5,952
Outstanding stock options	570	459
Performance stock units	1,721	1,621

(1) The potential dilutive effects of these awards were excluded from the computation of earnings (loss) per common share—assuming dilution because the inclusion of these awards would have been anti-dilutive.

(n) Treasury Share Retirement

The Company retires treasury shares acquired through share repurchases and returns those shares to the status of authorized but unissued. When treasury shares are retired, the Company's policy is to allocate the excess of the repurchase price over the par value of shares acquired first, to additional paid-in capital, and then to accumulated earnings. The portion allocable to additional paid-in capital is determined by applying a percentage, determined by dividing the number of shares to be retired by the number of shares outstanding, to the balance of additional paid-in capital as of retirement.

(3) Deconsolidation of Antero Midstream Partners LP

On March 12, 2019, Antero Midstream GP LP and Antero Midstream Partners completed (the "Closing") the transactions contemplated by the Simplification Agreement (the "Simplification Agreement"), dated as of October 9, 2018, by and among Antero Midstream GP LP, Antero Midstream Partners and certain of their affiliates, pursuant to which (i) Antero Midstream GP LP was converted from a limited partnership to a corporation under the laws of the State of Delaware and changed its name to Antero Midstream Corporation, and (ii) an indirect, wholly owned subsidiary of Antero Midstream Corporation was merged with and into Antero Midstream Partners, with Antero Midstream Partners surviving the merger as an indirect, wholly owned subsidiary of Antero Midstream Corporation (together, along with the other transactions contemplated by the Simplification Agreement, the "Transactions"). In connection with the Closing, Antero received $297 million in cash and 158.4 million shares of Antero Midstream Corporation common stock in consideration for 98,870,335 common units representing limited partnership interests in Antero Midstream Partners.

The Company recorded a gain on deconsolidation of $1.4 billion calculated as the sum of (i) the cash proceeds received, (ii) the fair value of the Antero Midstream Corporation common stock received at the Closing, and (iii) the elimination of the noncontrolling interest less the carrying amount of the investment in Antero Midstream Partners. The fair value of Antero's retained equity method investment on March 13, 2019 in Antero Midstream Corporation was $2.0 billion based on the market price of the shares received on March 12, 2019. See Note 5 to the unaudited condensed consolidated financial statements for further discussion on equity method investments.

Antero Midstream Partners' results of operations are no longer consolidated in the Company's unaudited consolidated statement of operations and comprehensive income (loss) beginning March 13, 2019. Because Antero Midstream Partners does not meet the requirements of a discontinued operation, Antero Midstream Partners' results of operations continue to be included in the Company's consolidated unaudited statement of operations and comprehensive income (loss) through March 12, 2019.

(4) Revenue

(a) Disaggregation of Revenue

Revenue is disaggregated by type in the following table. The table also identifies which reportable segment that the disaggregated revenues relate. For more information on reportable segments, see Note 17— Segment Information.

(in thousands)	Three months ended March 31, 2019	Three months ended March 31, 2020	Segment to which revenues relate
Revenues from contracts with customers:			
Natural gas sales	$ 657,266	411,082	Exploration and production
Natural gas liquids sales (ethane)	35,516	26,796	Exploration and production
Natural gas liquids sales (C3+ NGLs)	278,169	230,877	Exploration and production
Oil sales	48,052	35,646	Exploration and production
Gathering and compression (1)	3,972	—	Equity method investment in AMC
Water handling and treatment (1)	507	—	Equity method investment in AMC
Marketing	91,186	46,073	Marketing
Total revenue from contracts with customers	1,114,668	750,474	
Income (loss) from derivatives and other sources:	(77,261)	566,631	
Total revenue and other	$ 1,037,407	1,317,105	

(1) Gathering and compression and water handling and treatment revenues were included through March 12, 2019. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions.

(b) Transaction Price Allocated to Remaining Performance Obligations

For our product sales that have a contract term greater than one year, we have utilized the practical expedient, which does not require the disclosure of the transaction price allocated to remaining performance obligations if the variable consideration is allocated entirely to a wholly unsatisfied performance obligation. Under our product sales contracts, each unit of product delivered to the customer represents a separate performance obligation; therefore, future volumes are wholly unsatisfied and disclosure of the transaction price allocated to remaining performance obligations is not required. For our product sales that have a contract term of one year or less, we have utilized the practical expedient, which does not require the disclosure of the transaction price allocated to remaining performance obligations if the performance obligation is part of a contract that has an original expected duration of one year or less.

(c) Contract Balances

Under our sales contracts, we invoice customers after our performance obligations have been satisfied, at which point payment is unconditional. Accordingly, our contracts do not give rise to contract assets or liabilities. At December 31, 2019 and March 31, 2020, our receivables from contracts with customers were $318 million and $201 million, respectively.

(5) Equity Method Investments

At March 31, 2020, the Company owned approximately 29% of Antero Midstream Corporation's common stock, which is reflected in Antero's consolidated financial statements using the equity method of accounting. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions.

The following table is a reconciliation of investments in unconsolidated affiliates for the three months ended March 31, 2020 (in thousands):

	Antero Midstream Corporation
Balance at December 31, 2019	$ 1,055,177
Equity in loss of unconsolidated affiliates	(128,055)
Distributions/dividends from unconsolidated affiliates	(42,756)
Impairment [(1)]	(610,632)
Elimination of intercompany profit	18,255
Balance at March 31, 2020	$ 291,989

(1) Other-than-temporary impairment in Antero Midstream Corporation recorded as of March 31, 2020 to reduce the carrying value to fair value.

Summarized Financial Information of Antero Midstream Corporation

The following tables present summarized financial information of Antero Midstream Corporation.

Balance Sheet

(in thousands)	December 31, 2019	March 31, 2020
Current assets	$ 108,558	151,372
Noncurrent assets	6,174,320	5,629,987
Total assets	$ 6,282,878	5,781,359
Current liabilities	$ 242,084	83,560
Noncurrent liabilities	2,897,380	3,108,844
Stockholders' equity	3,143,414	2,588,955
Total liabilities and equity	$ 6,282,878	5,781,359

Statement of Operations

(in thousands)	For the period March 13, 2019 through March 31, 2019	Three months ended March 31, 2020
Revenues	$ 54,108	243,708
Operating expenses	30,029	762,872
Income (loss) from operations	$ 24,079	(519,164)
Net income (loss) attributable to the equity method investment	$ 23,197	(392,933)

(6) Accrued Liabilities

Accrued liabilities as of December 31, 2019 and March 31, 2020 consisted of the following items (in thousands):

	December 31, 2019	March 31, 2020
Capital expenditures	$ 105,706	85,363
Gathering, compression, processing, and transportation expenses	134,153	154,039
Marketing expenses	52,612	28,014
Interest expense, net	30,834	51,281
Other	77,545	48,747
Total accrued liabilities	$ 400,850	367,444

(7) Long-Term Debt

Long-term debt as of December 31, 2019 and March 31, 2020 consisted of the following items (in thousands):

	December 31, 2019	March 31, 2020
Credit Facility [(a)]	$ 552,000	882,000
5.375% senior notes due 2021 [(b)]	952,500	730,283
5.125% senior notes due 2022 [(c)]	923,041	761,337
5.625% senior notes due 2023 [(d)]	750,000	750,000
5.00% senior notes due 2025 [(e)]	600,000	600,000
Net unamortized premium	791	600
Net unamortized debt issuance costs	(19,464)	(16,433)
Long-term debt	$ 3,758,868	3,707,787

(a) Senior Secured Revolving Credit Facility

Antero Resources has a senior secured revolving credit facility (the "Credit Facility") with a consortium of bank lenders. On April 29, 2020, Antero Resources entered into a Third Amendment to the Credit Facility, pursuant to which certain terms of the Credit Facility were amended, as further described herein. Borrowings under the Credit Facility are subject to borrowing base limitations based on the collateral value of Antero Resources' assets and are subject to regular semi-annual redeterminations. The borrowing base was adjusted to $2.85 billion and lender commitments were reaffirmed at $2.64 billion in the redetermination in April 2020. The next redetermination of the borrowing base is scheduled to occur in October 2020. The maturity date of the Credit Facility is the earlier of (i) October 26, 2022 and (ii) the date that is 91 days prior to the earliest stated redemption date of any series of Antero Resources' senior notes then outstanding.

Under the Credit Facility, "Investment Grade Period" is a period that, as long as no event of default has occurred, commences when Antero Resources elects to give notice to the Administrative Agent that Antero Resources has received at least one of (i) a BBB- or better rating from S&P Global Ratings ("S&P") and (ii) a Baa3 or better rating from Moody's (an "Investment Grade Rating"). An Investment Grade Period can end at Antero Resources' election.

During any period that is not an Investment Grade Period, the Credit Facility is ratably secured by mortgages on substantially all of Antero Resources' properties, Antero Resources' and Antero Subsidiary Holdings LLC's ownership interests in Antero Midstream Corporation, Antero Resources' ownership interest in Antero Subsidiary Holdings LLC and Monroe Pipeline LLC, and guarantees from Antero Resources' restricted subsidiaries, as applicable. During an Investment Grade Period, the liens securing the obligations under the Credit Facility shall be automatically released (subject to the provisions of the Credit Facility). The Credit Facility contains certain covenants, including restrictions on indebtedness and dividends, and requirements with respect to working capital and interest coverage ratios. During any period that is not an Investment Grade Period, interest is payable at a variable rate based on (i) LIBOR or (ii) the Alternate Base Rate, in each case, determined by Antero Resources' election at the time of borrowing, plus an applicable margin based on Antero Resources' borrowing base utilization which ranges from 75 basis points to 275 basis points. Alternate Base Rate is defined as the greatest of (a) the prime rate, (b) the NYFRB rate plus ½ of 1%, and (c) LIBOR plus 1%.

During an Investment Grade Period, interest is payable at a variable rate based on LIBOR or the Alternate Base Rate determined by Antero Resources' election at the time of borrowing, plus an applicable margin based on Antero Resources' credit rating which ranges from 62.5 basis points to 225 basis points. In each case, the credit facility further provides a 1% floor for LIBOR and a 2% floor for the Alternate Base Rate. Antero Resources was in compliance with all of the financial covenants under the Credit Facility as of December 31, 2019 and March 31, 2020.

As of March 31, 2020, Antero Resources had an outstanding balance under the Credit Facility of $882 million, with a weighted average interest rate of 2.57%, and outstanding letters of credit of $730 million. As of December 31, 2019, Antero Resources had an outstanding balance under the Credit Facility of $552 million, with a weighted average interest rate of 3.28%, and outstanding letters of credit of $623 million. Commitment fees on the unused portion of the Credit Facility are due quarterly at rates ranging from (i) 0.300% to 0.375% (during any period that is not an Investment Grade Period) of the unused portion based on utilization and (ii) 0.150% to 0.300% (during an Investment Grade Period) of the unused portion based on Antero Resources' credit rating.

(b) 5.375% Senior Notes Due 2021

On November 5, 2013, Antero Resources issued $1 billion of 5.375% senior notes due November 1, 2021 (the "2021 notes") at par. The 2021 notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2021 notes rank pari passu to Antero Resources' other outstanding senior notes. The 2021 notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' wholly owned subsidiaries and certain of its future restricted subsidiaries. Interest on the 2021 notes is payable on May 1 and November 1 of each year. Antero may redeem all or part of the 2021 notes at any time at a redemption price of 100.00%. If Antero Resources undergoes a change of control followed by a rating decline, the holders of the 2021 notes will have the right to require Antero Resources to repurchase all or a portion of the notes at a price equal to 101% of the principal amount of the 2021 notes, plus accrued and unpaid interest.

(c) 5.125% Senior Notes Due 2022

On May 6, 2014, Antero Resources issued $600 million of 5.125% senior notes due December 1, 2022 (the "2022 notes") at par. On September 18, 2014, Antero Resources issued an additional $500 million of the 2022 notes at 100.5% of par. The 2022 notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2022 notes rank pari passu to Antero Resources' other outstanding senior notes. The 2022 notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' wholly owned subsidiaries and certain of its future restricted subsidiaries. Interest on the 2022 notes is payable on June 1 and December 1 of each year. Antero Resources may redeem all or part of the 2022 notes at any time at redemption prices ranging from 101.281% currently to 100.00% on or after June 1, 2020. If Antero Resources undergoes a change of control followed by a rating decline, the holders of the 2022 notes will have the right to require Antero Resources to repurchase all or a portion of the notes at a price equal to 101% of the principal amount of the 2022 notes, plus accrued and unpaid interest.

(d) 5.625% Senior Notes Due 2023

On March 17, 2015, Antero Resources issued $750 million of 5.625% senior notes due June 1, 2023 (the "2023 notes") at par. The 2023 notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral securing the Credit Facility. The 2023 notes rank pari passu to Antero Resources' other outstanding senior notes. The 2023 notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' wholly owned subsidiaries and certain of its future restricted subsidiaries. Interest on the 2023 notes is payable on June 1 and December 1 of each year. Antero Resources may redeem all or part of the 2023 notes at any time at redemption prices ranging from 102.813% currently to 100.00% on or after June 1, 2021. If Antero Resources undergoes a change of control followed by a rating decline, the holders of the 2023 notes will have the right to require Antero Resources to repurchase all or a portion of the notes at a price equal to 101% of the principal amount of the 2023 notes, plus accrued and unpaid interest.

(e) 5.00% Senior Notes Due 2025

On December 21, 2016, Antero Resources issued $600 million of 5.00% senior notes due March 1, 2025 (the "2025 notes") at par. The 2025 notes are unsecured and effectively subordinated to the Credit Facility to the extent of the value of the collateral

securing the Credit Facility. The 2025 notes rank pari passu to Antero Resources' other outstanding senior notes. The 2025 notes are guaranteed on a full and unconditional and joint and several senior unsecured basis by Antero Resources' wholly owned subsidiaries and certain of its future restricted subsidiaries. Interest on the 2025 notes is payable on March 1 and September 1 of each year. Antero Resources may redeem all or part of the 2025 notes at any time at redemption prices ranging from 103.750% currently to 100.00% on or after March 1, 2023. If Antero Resources undergoes a change of control followed by a rating decline, the holders of the 2025 notes will have the right to require Antero Resources to repurchase all or a portion of the notes at a price equal to 101% of the principal amount of the 2025 notes, plus accrued and unpaid interest.

(f) Treasury Management Facility

Antero Resources has a revolving note with a lender that is also part of the Credit Facility lending consortium that provides for up to $25 million of cash management obligations in order to facilitate Antero Resources' daily treasury management. Borrowings under the revolving note are secured by the collateral for the Credit Facility. Borrowings under the revolving note bear interest at the lender's prime rate plus 1.0%. The note matures on June 1, 2020. There were no outstanding borrowings under the revolving note at December 31, 2019 and March 31, 2020, respectively.

(g) Debt Repurchase Program

During the first quarter of 2020, Antero Resources repurchased $383 million principal amount of debt at a 21% weighted average discount, including a portion of the 2021 notes and the 2022 notes. The Company recognized a gain of approximately $81 million on the early extinguishment of the debt repurchased.

(8) Asset Retirement Obligations

The following is a reconciliation of the Company's asset retirement obligations for the three months ended March 31, 2020 (in thousands):

Asset retirement obligations—December 31, 2019	$	54,845
Obligations incurred		773
Accretion expense		1,104
Asset retirement obligations—March 31, 2020	$	56,722

Asset retirement obligations are included in other liabilities on the Company's unaudited condensed consolidated balance sheets.

(9) Equity-Based Compensation

Antero Resources is authorized to grant up to 16,906,500 shares of common stock to employees and directors of the Company under the Antero Resources Corporation Long-Term Incentive Plan (the "Plan"). The Plan allows equity-based compensation awards to be granted in a variety of forms, including stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, dividend equivalent awards, and other types of awards. The terms and conditions of the awards granted are established by the Compensation Committee of Antero Resources' Board of Directors. A total of 1,742,720 shares were available for future grant under the Plan as of March 31, 2020.

Antero Midstream Partners' general partner was authorized to grant up to 10,000,000 common units representing limited partner interests in Antero Midstream Partners under the Antero Midstream Partners LP Long-Term Incentive Plan (the "AMP Plan") to non-employee directors of its general partner and certain officers, employees, and consultants of Antero Midstream Partners and its affiliates (which includes Antero Resources). As part of the Transactions, each outstanding phantom unit award under the AMP Plan, was assumed by Antero Midstream Corporation and converted into 1.8926 restricted stock units under the Antero Midstream Corporation Long Term Incentive Plan (the "AMC Plan"). Each restricted stock unit award under the AMC Plan represents a right to receive one share of Antero Midstream Corporation common stock.

The Company's equity-based compensation expense, by type of award, was as follows for the three months ended March 31, 2019 and 2020 (in thousands):

	Three months ended March 31,	
	2019	2020
Restricted stock unit awards	$ 3,972	1,878
Stock options	344	—
Performance share unit awards	2,959	922
Antero Midstream Partners phantom unit awards[(1)]	1,125	160
Equity awards issued to directors	503	369
Total expense	$ 8,903	3,329

(1) Antero Resources recognized compensation expense for equity awards granted under both the Plan and the AMP Plan because the awards under the AMP Plan are accounted for as if they are distributed by Antero Midstream Partners to Antero Resources. Antero Resources allocates a portion of equity-based compensation expense related to grants prior to the Transactions to Antero Midstream Partners based on its proportionate share of Antero Resources' labor costs. Through March 12, 2019, the total amount of equity-based compensation is included in the consolidated financial statements of Antero Resources; and effective March 13, 2019 (date of deconsolidation), the amount allocated to Antero Midstream Partners is no longer reflected in Antero Resources consolidated financial statements. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions.

Restricted Stock Unit Awards

A summary of restricted stock unit award activity for the three months ended March 31, 2020 is as follows:

	Number of shares	Weighted average grant date fair value	Aggregate intrinsic value (in thousands)
Total awarded and unvested—December 31, 2019	2,370,575	$ 12.81	$ 6,756
Granted	4,644,934	$ 2.39	
Vested	(191,216)	$ 5.04	
Forfeited	(69,293)	$ 13.07	
Total awarded and unvested—March 31, 2020	6,755,000	$ 5.86	$ 4,816

Intrinsic values are based on the closing price of Antero Resources' common stock on the referenced dates. As of March 31, 2020, there was $27 million of unamortized equity-based compensation expense related to unvested restricted stock units. That expense is expected to be recognized over a weighted average period of approximately 2.3 years.

Stock Options

A summary of stock option activity for the three months ended March 31, 2020 is as follows:

	Stock options	Weighted average exercise price	Weighted average remaining contractual life	Intrinsic value (in thousands)
Outstanding at December 31, 2019	467,633	$ 50.64	5.05	$ —
Granted	—	$ —		
Exercised	—	$ —		
Forfeited	(8,339)	$ 52.36		
Expired	—	$ —		
Outstanding at March 31, 2020	459,294	$ 50.61	4.77	$ —
Vested or expected to vest as of March 31, 2020	459,294	$ 50.61	4.77	$ —
Exercisable at March 31, 2020	459,294	$ 50.61	4.77	$ —

Intrinsic values are based on the exercise price of the options and the closing price of Antero Resources' common stock on the referenced dates.

As of March 31, 2020, all stock options were fully vested resulting in no unamortized equity-based compensation expense.

Performance Share Unit Awards

The Company did not have any activities with regards to its performance share units ("PSUs") during the three months ended March 31, 2020, and the number of PSUs outstanding at March 31, 2020 remained 2,537,283 at a weighted average grant date fair value of $16.74.

As of March 31, 2020, there was $14 million of unamortized equity-based compensation expense related to unvested PSUs. That expense is expected to be recognized over a weighted average period of approximately 1.6 years.

Cash Awards

During the three months ended March 31, 2020, the Company granted cash awards of approximately $3.3 million to certain executives under the Plan. Compensation expense for these awards is recognized ratably over the vesting period for each of three tranches through January 20, 2023. As of March 31, 2020, the Company has accrued approximately $0.6 million in Other liabilities in the unaudited condensed consolidated balance sheet related to such cash awards.

Antero Midstream Partners Phantom Unit Awards and Antero Midstream Corporation Restricted Stock Unit Awards

A summary of Antero Midstream Corporation restricted stock unit awards for the three months ended March 31, 2020 is as follows:

	Number of units	Weighted average grant date fair value	Aggregate intrinsic value (in thousands)
Total awarded and unvested—December 31, 2019	657,757	$ 14.71	$ 4,992
Granted	—	$ —	
Vested	(10,120)	$ 15.81	
Forfeited	(9,496)	$ 13.75	
Total awarded and unvested—March 31, 2020	638,141	$ 14.70	$ 1,340

Intrinsic values are based on the closing price of shares of Antero Midstream Corporation common stock. As of March 31, 2020, there was $5 million of unamortized equity-based compensation expense related to unvested phantom unit awards. That expense is expected to be recognized over a weighted average period of approximately 1.5 years.

(10) Financial Instruments

The carrying values of accounts receivable and accounts payable at December 31, 2019 and March 31, 2020 approximated market values because of their short-term nature. The carrying values of the amounts outstanding under the Credit Facility at December 31, 2019 and March 31, 2020 approximated fair value because the variable interest rates are reflective of current market conditions.

Based on Level 2 market data inputs, the fair value of senior notes was approximately $2.8 billion and $1.5 billion at December 31, 2019 and March 31, 2020, respectively.

See Note 11 to the unaudited condensed consolidated financial statements for information regarding the fair value of derivative financial instruments.

(11) Derivative Instruments

(a) Commodity Derivative Positions

The Company periodically enters into natural gas, NGLs, and oil derivative contracts with counterparties to hedge the price risk associated with its production. These derivatives are not entered into for trading purposes. To the extent that changes occur in the market prices of natural gas, NGLs, and oil, the Company is exposed to market risk on these open contracts. This market risk exposure is generally offset by the change in market prices of natural gas, NGLs, and oil recognized upon the ultimate sale of the Company's production.

The Company was party to various fixed price commodity swap contracts that settled during the three months ended March 31, 2019 and 2020. The Company enters into these swap contracts when management believes that favorable future sales prices for the Company's production can be secured. Under these swap agreements, when actual commodity prices upon settlement exceed the fixed price provided by the swap contracts, the Company pays the difference to the counterparty. When actual commodity prices upon settlement are less than the contractually provided fixed price, the Company receives the difference from the counterparty. In addition, the Company has entered into basis swap contracts in order to hedge the difference between the New York Mercantile Exchange ("NYMEX") index price and a local index price.

The Company also entered into NGL derivative contracts, which establish a contractual price for the settlement month as a fixed percentage of the West Texas Intermediate Crude Oil index ("WTI") price for the settlement month. When the percentage of the contractual price is above the contracted percentage, the Company pays the difference to the counterparty. When it is below the contracted percentage, the Company receives the difference from the counterparty.

In addition, the Company has also entered into a call option agreement that gives the counterparty the right, but not the obligation, to enter into a fixed price swap agreement on a specified future date for a specific amount of production for a specified future period.

The Company's derivative contracts have not been designated as hedges for accounting purposes; therefore, all gains and losses are recognized in the Company's statements of operations.

As of March 31, 2020, the Company's fixed price natural gas, oil and NGL swap positions from April 1, 2020 through December 31, 2023 were as follows (abbreviations in the table refer to the index to which the swap position is tied, as follows: NYMEX=Henry Hub; NYMEX-WTI=West Texas Intermediate; ARA Propane =European Propane CIF ARA):

	Natural gas MMBtu/day	Natural Gas Liquids Bbls/day	Oil Bbls/day	Weighted average index price
Nine months ending December 31, 2020:				
NYMEX ($/MMBtu)	2,227,500		—	$ 2.87
ARA Propane ($/Gal)	—	10,352	—	0.65
NYMEX-WTI ($/Bbl)	—	—	26,000	55.63
Total	2,227,500	10,352	26,000	
Year ending December 31, 2021:				
NYMEX ($/MMBtu)	2,400,000		—	$ 2.80
NYMEX-WTI ($/Bbl)	—		3,000	55.16
Total	2,400,000		3,000	
Year ending December 31, 2022:				
NYMEX ($/MMBtu)	687,500			$ 2.48
Year ending December 31, 2023:				
NYMEX ($/MMBtu)	50,000			$ 2.39

A portion of the NYMEX-WTI ($/Bbl) in 2020 combined with the Mont Belvieu Natural Gasoline to NYMEX-WTI are intended to fix the price of Natural Gasoline.

In addition, we have a call option agreement, which entitles the holder the right, but not the obligation, to enter into a fixed price swap agreement on December 21, 2023 to purchase 427,500 MMBtu per day at a price of $2.77 per MMBtu for the year ending December 31, 2024.

As of March 31, 2020, the Company's natural gas basis swap positions, which settle on the pricing index to basis differential of the Columbia Gas Transmission pipeline ("TCO") to the NYMEX Henry Hub natural gas price, and NGL basis swap positions, which settle on the pricing index to basis differential of Mont Belvieu Butane to the European Butane CIF ARA natural gas liquids price, were as follows:

	Natural gas MMBtu/day	Natural Gas Liquids Bbls/day	Weighted average hedged differential
Three months ending June 30, 2020:			
ARA to Mont Belvieu Non-TET ($/Gal)	—	1,602	$ 0.22
Nine months ending December 31, 2020:			
NYMEX to TCO ($/MMBtu)	60,000		$ 0.353
Year ending December 31, 2021:			
NYMEX to TCO ($/MMBtu)	40,000		$ 0.414
Year ending December 31, 2022:			
NYMEX to TCO ($/MMBtu)	60,000		$ 0.515
Year ending December 31, 2023:			
NYMEX to TCO ($/MMBtu)	50,000		$ 0.525
Year ending December 31, 2024:			
NYMEX to TCO ($/MMBtu)	50,000		$ 0.530

As of March 31, 2020, the Company had NGL contracts for April 1, 2020 through December 31, 2021 that fix the Mont Belvieu index price for natural gasoline to percentages of WTI as follows:

	Gas Liquids Bbls/day	Weighted average Payout Ratio
Nine months ending December 31, 2020:		
Mont Belvieu Natural Gasoline to NYMEX-WTI	18,800	80 %
Year ending December 31, 2021:		
Mont Belvieu Natural Gasoline to NYMEX-WTI	18,650	78 %

A portion of the Mont Belvieu Natural Gasoline to NYMEX-WTI combined with the NYMEX-WTI ($/Bbl) in 2020 are intended to fix the price of Natural Gasoline.

(b) Summary

The following table presents a summary of the fair values of the Company's derivative instruments and where such values are recorded in the consolidated balance sheets as of December 31, 2019 and March 31, 2020. None of the Company's derivative instruments are designated as hedges for accounting purposes and the fair value of derivative instruments was determined using Level 2 inputs.

	December 31, 2019		March 31, 2020	
	Balance sheet location	Fair value (In thousands)	Balance sheet location	Fair value (In thousands)
Asset derivatives not designated as hedges for accounting purposes:				
Commodity derivatives—current	Derivative instruments	$ 422,849	Derivative instruments	$ 816,444
Commodity derivatives—noncurrent	Derivative instruments	333,174	Derivative instruments	284,461
Total asset derivatives		756,023		1,100,905
Liability derivatives not designated as hedges for accounting purposes:				
Commodity derivatives—current	Derivative instruments	6,721	Derivative instruments	—
Commodity derivatives—noncurrent	Derivative instruments	3,519	Derivative instruments	215
Total liability derivatives		10,240		215
Net derivatives		$ 745,783		$ 1,100,690

The following table presents the gross values of recognized derivative assets and liabilities, the amounts offset under master netting arrangements with counterparties, and the resulting net amounts presented in the consolidated balance sheets as of the dates presented, all at fair value (in thousands):

	December 31, 2019			March 31, 2020		
	Gross amounts on balance sheet	Gross amounts offset on balance sheet	Net amounts of assets (liabilities) on balance sheet	Gross amounts on balance sheet	Gross amounts offset on balance sheet	Net amounts of assets (liabilities) on balance sheet
Commodity derivative assets	$ 882,817	(126,794)	756,023	$ 1,193,046	(92,141)	1,100,905
Commodity derivative liabilities	$ (137,034)	126,794	(10,240)	$ (92,356)	92,141	(215)

The following is a summary of derivative fair value gains and losses and where such values are recorded in the unaudited condensed consolidated statements of operations for the three months ended March 31, 2019 and 2020 (in thousands):

	Statement of operations location	Three months ended March 31, 2019	2020
Commodity derivative fair value gains (losses)	Revenue	$ (77,368)	565,833

(12) Leases

The Company leases certain office space, processing plants, drilling rigs and completion services, gas gathering lines, compressor stations, and other office and field equipment. Leases with an initial term of 12 months or less are considered short-term and are not recorded on the balance sheet. Instead, the short-term leases are recognized in expense on a straight-line basis over the lease term.

Most leases include one or more options to renew, with renewal terms that canextend the lease from one to 20 years or more. The exercise of the lease renewal options are at the Company's sole discretion. The depreciable lives of the leased assets are limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise.

Certain of the Company's lease agreements include minimum payments based on a percentage of produced volumes over contractual levels and others include rental payments adjusted periodically for inflation.

The Company considers all contracts that have assets specified in the contract, either explicitly or implicitly, that the Company has substantially all of the capacity of the asset, and has the right to obtain substantially all of the economic benefits of that asset, without the lessor's ability to have a substantive right to substitute that asset, as leased assets. For any contract deemed to include a leased asset, that asset is capitalized on the balance sheet as a right-of-use asset and a corresponding lease liability is recorded at the present value of the known future minimum payments of the contract using a discount rate on the date of commencement. The leased asset classification is determined at the date of recording as either operating or financing, depending upon certain criteria of the contract.

The discount rate used for present value calculations is the discount rate implicit in the contract. If an implicit rate is not determinable, a collateralized incremental borrowing rate is used at the date of commencement. As new leases commence or previous leases are modified the discount rate used in the present value calculation is the current period applicable discount rate.

The Company has made an accounting policy election to adopt the practical expedient for combining lease and non-lease components on an asset class basis. This expedient allows the Company to combine non-lease components such as real estate taxes, insurance, maintenance, and other operating expenses associated with the leased premises with the lease component of a lease agreement on an asset class basis when the non-lease components of the agreement cannot be easily bifurcated from the lease payment. Currently, the Company is only applying this expedient to certain office space agreements.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

Supplemental Balance Sheet Information Related to Leases

The Company's lease assets as of December 31, 2019 and March 31, 2020 consisted of the following items (in thousands):

	December 31, 2019		March 31, 2020	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Right-of-use Assets:				
Processing plants	$ 1,460,770	—	$ 1,440,110	—
Drilling rigs and completion services	71,662	—	56,353	—
Gas gathering lines and compressor stations [1]	1,308,428	—	1,273,200	—
Office space	40,491	—	39,631	—
Vehicles	4,983	2,328	4,232	2,058
Other office and field equipment	166	170	1,013	—
Total right-of-use assets	$ 2,886,500	2,498	$ 2,814,539	2,058 [2]

(1) Gas gathering lines and compressor stations leases includes $1.1 billion related to Antero Midstream Corporation as of December 31, 2019 and March 31, 2020. See "—Related party lease disclosure" for additional discussion.

(2) Financing lease assets are recorded net of accumulated amortization of $9 million and $3 million as of December 31, 2019 and March 31, 2020, respectively.

The Company's lease liabilities as of December 31, 2019 and March 31, 2020 consisted of the following items (in thousands):

	December 31, 2019		March 31, 2020	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Location on the balance sheet:				
Short-term lease liabilities	$ 304,397	923	$ 294,535	1,123
Long-term lease liabilities	2,582,103	1,575	2,520,004	935
Total lease liabilities	$ 2,886,500	2,498	$ 2,814,539	2,058

The processing plants, gathering lines and compressor stations that are classified as lease liabilities are classified as such under ASC 842 because Antero is the sole customer of the assets and because Antero makes the decisions that most impact the economic performance of the assets.

Supplemental Information Related to Leases

Costs associated with operating leases were included in the statement of operations and comprehensive income (loss) for the three months ended March 31, 2019 and 2020 (in thousands):

	Three months ended	
Statement of Operations Location	March 31, 2019	March 31, 2020
Gathering, compression, processing, and transportation	$ 187,847	352,643
General and administrative	2,726	2,881
Contract termination and rig stacking	8,019	—
Total lease expense	$ 198,592	355,524

Costs associated with finance leases of less than $1 million for each of the three months ended March 31, 2019 and 2020 were included in interest expense.

We capitalized $55 million and $33 million, respectively, of costs related to operating leases and less than $1 million of costs related to finance leases during each of the three months ended March 31, 2019 and 2020.

Short-term lease costs that are more than one month but less than 12 months are excluded from the above amounts and total $5 million and $63 million, respectively, for the three months ended March 31, 2019 and 2020.

Supplemental Cash Flow Information Related to Leases

The following is the Company's supplemental cash flow information related to leases for the three months ended March 31, 2019 and March 31, 2020 (in thousands):

	Three months ended March 31, 2019		Three months ended March 31, 2020	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash out flows related to operating leases	$ 150,320	—	$ 358,039	—
Investing cash out flows related to operating leases	52,366	—	27,534	—
Financing cash out flows related to financing leases	—	791	—	439
	$ 202,686	791	$ 385,573	439
Noncash activities:				
Right of use assets obtained in exchange for operating lease liabilities	$ 3,345,549	—	$ 9,382	—
Right of use assets obtained in exchange for financing lease liabilities	$ —	—	$ —	—

Maturities of Lease Liabilities

The table below is a schedule of future minimum payments for operating and financing lease liabilities as of March 31, 2020 (in thousands):

(in thousands)	Operating Leases	Financing Leases	Total
Remainder of 2020	$ 464,093	978	465,071
2021	558,241	844	559,085
2022	543,326	321	543,647
2023	538,771	7	538,778
2024	530,003	—	530,003
2025	457,326	—	457,326
Thereafter	1,394,412	—	1,394,412
Total lease payments	4,486,172	2,150	4,488,322
Less: imputed interest	(1,671,633)	(92)	(1,671,725)
Total	$ 2,814,539	2,058	2,816,597

Lease Term and Discount Rate

The table below is the Company's weighted-average remaining lease term and discount rate as of March 31, 2020:

	Operating Leases	Finance Leases
Weighted-average remaining lease term:	8.5 years	2.0 years
Weighted-average discount rate:	11.6 %	6.1 %

Related party lease disclosure

The Company has a gathering and compression agreement with Antero Midstream Corporation, whereby Antero Midstream Corporation receives a low-pressure gathering fee per Mcf, a high-pressure gathering fee per Mcf, and a compression fee per Mcf, in each case subject to adjustments based on the consumer price index. If and to the extent we request that Antero Midstream Corporation construct new high pressure lines and compressor stations, the gathering and compression agreement contains minimum volume commitments that require Antero Resources to utilize or pay for 75% and 70%, respectively, of the requested capacity of such new construction for 10 years. In December 2019, the Company and Antero Midstream Corporation agreed to extend the initial term of the gathering and compression agreement to 2038 and established a growth incentive fee program whereby low pressure gathering fees will be reduced from 2020 through 2023 to the extent the Company achieves certain volumetric targets at certain points during such time. Upon completion of the initial contract term, the gathering and compression agreement will continue in effect from year to year until such time as the agreement is terminated, effective upon an anniversary of the effective date of the agreement, by either the Company or Antero Midstream Corporation on or before the 180th day prior to the anniversary of such effective date. The Company achieved the volumetric targets for the three months ended March 31, 2020, and Antero Midstream Corporation provided a rebate of $12 million.

For the three months ended March 31, 2019 and 2020, gathering and compression fees paid by Antero related to this agreement were $152 million and $156 million, respectively. As of March 31, 2020, $60 million was included within Accounts payable, related parties on the Condensed Consolidated Balance Sheet as due to Antero Midstream Corporation related to this agreement.

(13) Commitments

The table below is a schedule of future minimum payments for firm transportation, drilling rig and completion services, processing, gathering and compression, and office and equipment agreements, which include leases that have remaining lease terms in excess of one year as of March 31, 2020 (in thousands).

	Firm transportation (a)	Processing, gathering and compression (b)	Land payment obligations (c)	Operating and Financing Leases (d)	Imputed Interest for Leases (d)	Total
Remainder of 2020	$ 832,753	42,144	2,411	228,796	236,275	1,342,379
2021	1,076,995	55,780	2,859	269,661	289,424	1,694,719
2022	1,034,275	53,606	328	284,665	258,982	1,631,856
2023	1,057,150	58,565	—	313,475	225,303	1,654,493
2024	1,017,104	58,687	—	342,348	187,655	1,605,794
2025	977,891	47,385	—	308,465	148,861	1,482,602
Thereafter	6,930,640	105,138	—	1,069,187	325,225	8,430,190
Total	$ 12,926,808	421,305	5,598	2,816,597	1,671,725	17,842,033

(a) Firm Transportation

The Company has entered into firm transportation agreements with various pipelines in order to facilitate the delivery of its production to market. These contracts commit the Company to transport minimum daily natural gas or NGLs volumes at negotiated rates or pay for any deficiencies at specified reservation fee rates. The amounts in this table are based on the Company's minimum daily volumes at the reservation fee rate. The values in the table represent the gross amounts that the Company is committed to pay; however, the Company will record in the consolidated financial statements its proportionate share of costs based on its working interest.

(b) Processing, Gathering, and Compression Service Commitments

The Company has entered into various long-term gas processing, gathering and compression service agreements. Certain of these agreements were determined to be leases. The minimum payment obligations under the agreements that are not leases are presented in this column.

The values in the table represent the gross amounts that the Company is committed to pay; however, the Company will record in the consolidated financial statements its proportionate share of costs based on its working interest.

(c) Land Payment Obligations

The Company has entered into various land acquisition agreements. Certain of these agreements contain minimum payment obligations over various terms. The values in the table represent the minimum payments due under these arrangements. None of these agreements were determined to be leases.

(d) Leases, including imputed interest

The Company has obligations under contracts for services provided by drilling rigs and completion fleets, processing, gathering, and compression services agreements, and office and equipment leases. The values in the table represent the gross amounts that we are committed to pay; however, we will record in our financial statements our proportionate share of costs based on our working interests. Refer to Note 12 to the unaudited condensed consolidated financial statements for more information on the Company's operating and finance leases.

(14) Contingencies

Environmental

In June 2018, following site inspections conducted in September 2017 at certain of our facilities located in Doddridge County, Tyler County, and Ritchie County, West Virginia, we received a Notice of Violation ("NOV") from the U.S. Environmental Protection Agency ("EPA") Region III for alleged violations of the federal Clean Air Act and the West Virginia State Implementation Plan relating to permitting and control requirements for emissions of regulated pollutants at several of our natural gas production facilities. The NOV alleges that combustion devices at these facilities did not meet applicable air permitting requirements. Separately, in June 2018, we received an information request from EPA Region III pursuant to Section 114(a) of the Clean Air Act relating to the facilities that were inspected in September 2017 as well as additional Antero Resources facilities for the purpose of determining if the additional facilities have the same alleged compliance issues that were identified during the September 2017 inspections. We have separately received an NOV from West Virginia Department of Environmental Protection ("WVDEP") alleging violations relating to the same issues being investigated by the EPA. We continue to negotiate with EPA and WVDEP to resolve the issues alleged in the NOVs and the information request; however, we believe that there is a reasonable possibility that these actions may result in monetary sanctions exceeding $100,000. Our operations at these facilities are not suspended, and management does not expect these matters to have a material adverse effect on our financial condition, results of operations, or cash flows.

WGL

The Company and Washington Gas Light Company and WGL Midstream, Inc. (collectively, "WGL") were involved in a pricing dispute involving firm gas sales contracts executed June 20, 2014 (the "Contracts") that the Company began delivering gas under in January 2016. From January 2016 through July 2017 and from December 2017 through January 2018, the aggregate daily gas volumes contracted for under the Contracts was 500,000 MMBtu/day, with the aggregate daily contracted volumes having increased to 600,000 MMBtu/day from August through November 2017. The Company invoiced WGL based on the natural gas index price specified in the Contracts and WGL paid the Company based on that invoice price. However, WGL asserted that the index price was no longer appropriate under the Contracts and claimed that an undefined alternative index was more appropriate for the delivery point of the gas. In July 2016, the matter was referred to arbitration by the Colorado district court. In January 2017, the arbitration panel ruled in the Company's favor. As a result, the index price has remained as specified in the Contracts and there will be no adjustments to the invoices that have been paid by WGL, nor will future invoices to WGL be adjusted based on the same claim rejected by the arbitration panel. The arbitration panel's award was confirmed by the Colorado district court on April 14, 2017.

In March of 2017, WGL filed a second legal proceeding against the Company in Colorado district court alleging breach of contract and seeking damages of more than $30 million. In this lawsuit, WGL claimed that the Company breached its contractual obligations under the Contracts by failing to deliver "TCO pool" gas. In subsequent filings, WGL explained that its claims were based on an alleged obligation that the Company must deliver gas to the Columbia IPP Pool ("IPP Pool"). WGL asserted this exact same issue in the arbitration and it was rejected by the arbitration panel. The arbitration panel specifically found that the Delivery Point under the Contracts was at a specific geographic point in Braxton County, West Virginia, not the IPP Pool. On August 24, 2017, the Colorado district court dismissed with prejudice WGL's claims against the Company in its new lawsuit and found that the Company had not breached its Contracts with WGL by allegedly failing to deliver to the IPP Pool. The Court dismissed WGL's lawsuit because WGL had not adequately pled a claim against Antero Resources for the alleged failure to deliver "TCO pool" gas under the Contracts. WGL has appealed this decision to the Colorado Court of Appeals and on October 11, 2018 the Colorado Court of Appeals reversed the Colorado district court's decision finding that WGL had adequately pled a claim for relief and remanded the case back to the district court for further proceedings.

The Company is also actively engaged in pursuing cover damages against WGL based on WGL's failure to take receipt of all of the agreed quantities of gas required under the Contracts. WGL's failure to take the gas volumes specified in the Contracts is directly related to WGL's lack of primary firm transportation rights at the Delivery Point. The failures by WGL to take the full contracted volumes of gas began in April 2017 and continued each month through December 2017 in varying quantities. In defense of its conduct, WGL asserted to the Company that their failure to receive gas is excused by (1) the Company's failure to deliver gas to the IPP Pool or (2) alleged instances of Force Majeure under the Contracts. However, as stated above, the alleged obligation that the Company must deliver gas to the IPP Pool was already rejected by the arbitration panel. Further, the Contracts expressly prohibit a Force Majeure claim in circumstances in which the gas purchaser does not have primary firm transportation agreements in place to transport the purchased gas. In each instance that WGL failed to receive the quantity of gas required under the Contracts, the Company resold the quantities not taken and invoiced WGL for cover damages pursuant to the terms of the Contracts. WGL refused to pay for the invoiced cover damages as required by the Contracts and also short paid the Company for, among other things, certain amounts of gas received by WGL. The Company filed a lawsuit against WGL in Colorado district court on October 24, 2017 to recover its cover damages, other unpaid amounts, and interest. WGL's claims have been consolidated with Antero Resources' claims in the same district court and trial began on June 10, 2019. WGL quantified its damages claim for the alleged failure to deliver TCO Pool gas and sought approximately $40 million from Antero Resources.

On June 20, 2019, the Company was awarded a jury verdict of approximately $96 million in damages after the jury found that WGL breached the Contracts with the Company. In addition, the jury rejected WGL's claim against the Company, finding that the Company did not breach the Contracts by allegedly failing to deliver TCO Pool gas and awarding no damages in favor of WGL. On August 16, 2019, WGL appealed the judgment and the appeal is currently pending before the Colorado Court of Appeals.

Effective February 1, 2018, as a result of a recent amendment to its firm gas sales contract with WGL Midstream, Inc. that was executed on December 28, 2017, the total aggregate volumes to be delivered to WGL at the Braxton delivery point were reduced from 500,000 MMBtu/day to 200,000 MMBtu/day and in November 2018, the total aggregate contract volumes to be delivered to WGL at a delivery point in Loudoun County, Virginia increased by 330,000 MMBtu/day. This increase of 330,000 MMBtu/day is in effect for the remaining term of our gas sale contract with WGL Midstream, which expires in 2038, and these increased volumes are subject to NYMEX-based pricing. Following this increase, the aggregate contract volumes delivered to WGL total 530,000 MMBtu/day.

Other

The Company is party to various other legal proceedings and claims in the ordinary course of its business. The Company believes that certain of these matters will be covered by insurance and that the outcome of other matters will not have a material adverse effect on the Company's consolidated financial position, results of operations, or cash flows.

(15) Contract Termination and Rig Stacking

The Company incurred costs associated with the delay or cancellation of drilling and completion contracts with third-party contractors of approximately $8 million for the three months ended March 31, 2019. No such costs were incurred during the three months ended March 31, 2020.

(16) Related Parties

Antero Midstream Partners' operations comprised substantially all of the operations reflected in the gathering and processing, and water handling and treatment, results through March 12, 2019. Effective March 13, 2019, Antero Resources accounts for Antero Midstream Corporation as an equity method investment. See Note 3 to the unaudited condensed consolidated financial statements for more discussion on the Transactions.

Substantially all of the revenues for gathering and processing and water handling and treatment were derived from transactions with Antero Resources. See Note 17 to the unaudited condensed consolidated financial statements for the operating results of the Company's reportable segments.

(17) Segment Information

See Note 2(l) to the unaudited condensed consolidated financial statements for a description of the Company's determination of its reportable segments. Revenues from gathering and processing and water handling and treatment operations were primarily derived from intersegment transactions for services provided to the Company's exploration and production operations prior to the closing of the Transactions. Through March 12, 2019, the results of Antero Midstream Partners were included in the consolidated financial statements of Antero Resources. Effective March 13, 2019, the results of Antero Midstream Partners are no longer consolidated in Antero Resources' results; however, the Company's segment disclosures include the results of our unconsolidated affiliates due to their significance to the Company's operations. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions. Marketing revenues are primarily derived from activities to purchase and sell third-party natural gas and NGLs and to market excess firm transportation capacity to third parties.

Operating segments are evaluated based on their contribution to consolidated results, which is primarily determined by the respective operating income (loss) of each segment. General and administrative expenses were allocated to the midstream segment based on the nature of the expenses and on a combination of the segments' proportionate share of the Company's consolidated property and equipment, capital expenditures, and labor costs, as applicable. General and administrative expenses related to the marketing segment are not allocated because they are immaterial. Other income, income taxes, and interest expense are primarily managed and evaluated on a consolidated basis. Intersegment sales were transacted at prices which approximate market. Accounting policies for each segment are the same as the Company's accounting policies described in Note 2 to the unaudited condensed consolidated financial statements.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

The operating results and assets of the Company's reportable segments were as follows for the three months ended March 31, 2019 and 2020 (in thousands):

	Exploration and production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of intersegment transactions and unconsolidated affiliates	Consolidated total
Three months ended March 31, 2019:					
Sales and revenues:					
Third-party	$ 941,635	91,186	4	—	1,032,825
Intersegment	1,758	—	54,104	(51,280)	4,582
Total	$ 943,393	91,186	54,108	(51,280)	1,037,407
Operating expenses:					
Lease operating	$ 42,969	—	11,815	(13,052)	41,732
Gathering, compression, processing, and transportation	535,015	—	2,935	(113,421)	424,529
Impairment of oil and gas properties	81,244	—	—	—	81,244
Impairment of midstream assets	—	—	6,982	—	6,982
Depletion, depreciation, and amortization	218,494	—	7,650	14,057	240,201
General and administrative	49,908	—	2,184	16,110	68,202
Other	44,137	163,084	1,291	(288)	208,224
Total	971,767	163,084	32,857	(96,594)	1,071,114
Operating income (loss)	$ (28,374)	(71,898)	21,251	45,314	(33,707)
Equity in earnings of unconsolidated affiliates	$ 1,817	—	2,880	9,384	14,081
Investments in unconsolidated affiliates	$ 1,989,612	—	1,153,943	(1,153,943)	1,989,612
Segment assets	$ 17,263,369	25,361	6,660,325	(6,660,325)	17,288,730
Capital expenditures for segment assets	$ 399,278	—	16,005	56,650	471,933

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

		Exploration and production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of intersegment transactions and unconsolidated affiliates	Consolidated total
Three months ended March 31, 2020:						
Sales and revenues:						
Third-party	$	1,270,234	46,073	—	—	1,316,307
Intersegment		798	—	243,708	(243,708)	798
Total	$	1,271,032	46,073	243,708	(243,708)	1,317,105
Operating expenses:						
Lease operating	$	25,644	—	—	—	25,644
Gathering, compression, processing, and transportation		588,624	—	55,908	(55,908)	588,624
Impairment of oil and gas properties		89,220	—	—	—	89,220
Impairment of midstream assets		—	—	664,544	(664,544)	—
Depletion, depreciation, and amortization		199,677	—	27,343	(27,343)	199,677
General and administrative		31,221	—	10,199	(10,199)	31,221
Other		27,013	93,273	4,878	(4,878)	120,286
Total		961,399	93,273	762,872	(762,872)	1,054,672
Operating income (loss)	$	309,633	(47,200)	(519,164)	519,164	262,433
Equity in earnings (loss) of unconsolidated affiliates	$	(128,055)	—	19,077	(19,077)	(128,055)
Investments in unconsolidated affiliates	$	291,989	—	716,778	(716,778)	291,989
Segment assets	$	14,516,150	9,639	5,781,359	(5,781,359)	14,525,789
Capital expenditures for segment assets	$	311,611	—	67,983	(67,983)	311,611

(18) Subsidiary Guarantors

Each of the Company's wholly owned subsidiaries has fully and unconditionally guaranteed Antero Resources' senior notes. In the event a subsidiary guarantor is sold or disposed of (whether by merger, consolidation, the sale of a sufficient amount of its capital stock so that it no longer qualifies as a "Subsidiary" of Antero (as defined in the indentures governing the notes) or the sale of all or substantially all of its assets (other than by lease)) and whether or not the subsidiary guarantor is the surviving entity in such transaction to a person that is not Antero or a restricted subsidiary of Antero, such subsidiary guarantor will be released from its obligations under its subsidiary guarantee if the sale or other disposition does not violate the covenants set forth in the indentures governing the notes.

In addition, a subsidiary guarantor will be released from its obligations under the indentures and its guarantee, upon the release or discharge of the guarantee of other Indebtedness (as defined in the indentures governing the notes) that resulted in the creation of such guarantee, except a release or discharge by or as a result of payment under such guarantee; if Antero designates such subsidiary as an unrestricted subsidiary and such designation complies with the other applicable provisions of the indentures governing the notes or in connection with any covenant defeasance, legal defeasance or satisfaction and discharge of the notes.

The following Condensed Consolidating Balance Sheets at December 31, 2019 and March 31, 2020, and the related Condensed Consolidating Statements of Operations and Comprehensive Income (Loss) for the three months ended March 31, 2019 and 2020, and Condensed Consolidating Statements of Cash Flows for the three months ended March 31, 2019 and 2020 present financial information for Antero Resources on a stand-alone basis (carrying its investment in subsidiaries using the equity method), financial information for the subsidiary guarantors, financial information for the non-guarantor subsidiaries, and the consolidation and elimination entries necessary to arrive at the information for the Company on a consolidated basis. The Company's wholly owned subsidiaries are not restricted from making distributions to the Company.

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

Condensed Consolidating Balance Sheet
December 31, 2019
(In thousands)

	Parent (Antero)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Assets					
Current assets:					
Accounts receivable, net	$ 46,419	—	—	—	46,419
Accounts receivable, related parties	125,000	299,450	—	(299,450)	125,000
Accrued revenue	317,886	—	—	—	317,886
Derivative instruments	422,849	—	—	—	422,849
Other current assets	10,731	—	—	—	10,731
Total current assets	922,885	299,450	—	(299,450)	922,885
Property and equipment:					
Oil and gas properties, at cost (successful efforts method):					
Unproved properties	1,368,854	—	—	—	1,368,854
Proved properties	11,859,817	—	—	—	11,859,817
Gathering systems and facilities	5,802	—	—	—	5,802
Other property and equipment	71,895	—	—	—	71,895
	13,306,368	—	—	—	13,306,368
Less accumulated depletion, depreciation, and amortization	(3,327,629)	—	—	—	(3,327,629)
Property and equipment, net	9,978,739	—	—	—	9,978,739
Operating leases right-of-use assets	2,886,500	—	—	—	2,886,500
Derivative instruments	333,174	—	—	—	333,174
Investments in unconsolidated affiliates	243,048	812,129	—	—	1,055,177
Investments in consolidated affiliates	812,129	—	—	(812,129)	—
Other assets	21,094	—	—	—	21,094
Total assets	$ 15,197,569	1,111,579	—	(1,111,579)	15,197,569
Liabilities and Equity					
Current liabilities:					
Accounts payable	$ 14,498	—	—	—	14,498
Accounts payable, related parties	397,333	—	—	(299,450)	97,883
Accrued liabilities	400,850	—	—	—	400,850
Revenue distributions payable	207,988	—	—	—	207,988
Derivative instruments	6,721	—	—	—	6,721
Short-term lease liabilities	305,320	—	—	—	305,320
Other current liabilities	6,879	—	—	—	6,879
Total current liabilities	1,339,589	—	—	(299,450)	1,040,139
Long-term liabilities:					
Long-term debt	3,758,868	—	—	—	3,758,868
Deferred income tax liability	781,987	—	—	—	781,987
Derivative instruments	3,519	—	—	—	3,519
Long-term lease liabilities	2,583,678	—	—	—	2,583,678
Other liabilities	58,635	—	—	—	58,635
Total liabilities	8,526,276	—	—	(299,450)	8,226,826
Equity:					
Stockholders' equity:					
Common stock	2,959	—	—	—	2,959
Additional paid-in capital	5,600,714	1,341,780	—	(812,129)	6,130,365
Accumulated earnings	1,067,620	(230,201)	—	—	837,419
Total stockholders' equity	6,671,293	1,111,579	—	(812,129)	6,970,743
Total liabilities and equity	$ 15,197,569	1,111,579	—	(1,111,579)	15,197,569

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

Condensed Consolidating Balance Sheet
March 31, 2020
(In thousands)

	Parent (Antero)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Assets					
Current assets:					
Accounts receivable	$ 91,944	—	—	—	91,944
Accounts receivable, related parties	—	332,353	—	(332,353)	—
Accrued revenue	201,320	—	—	—	201,320
Derivative instruments	816,444	—	—	—	816,444
Other current assets	10,313	—	—	—	10,313
Total current assets	1,120,021	332,353	—	(332,353)	1,120,021
Property and equipment:					
Oil and gas properties, at cost (successful efforts method):					
Unproved properties	1,289,770	—	—	—	1,289,770
Proved properties	12,154,162	—	—	—	12,154,162
Gathering systems and facilities	5,802	—	—	—	5,802
Other property and equipment	72,312	—	—	—	72,312
	13,522,046	—	—	—	13,522,046
Less accumulated depletion, depreciation, and amortization	(3,527,306)	—	—	—	(3,527,306)
Property and equipment, net	9,994,740	—	—	—	9,994,740
Operating leases right-of-use assets	2,814,539	—	—	—	2,814,539
Derivative instruments	284,461	—	—	—	284,461
Investments in unconsolidated affiliates	67,289	224,700	—	—	291,989
Investments in consolidated affiliates	224,700	—	—	(224,700)	—
Other assets	20,039	—	—	—	20,039
Total assets	$ 14,525,789	557,053	—	(557,053)	14,525,789
Liabilities and Equity					
Current liabilities:					
Accounts payable	$ 37,909	—	—	—	37,909
Accounts payable, related parties	421,247	—	—	(332,353)	88,894
Accrued liabilities	367,444	—	—	—	367,444
Revenue distributions payable	174,654	—	—	—	174,654
Short-term lease liabilities	295,658	—	—	—	295,658
Other current liabilities	7,315	—	—	—	7,315
Total current liabilities	1,304,227	—	—	(332,353)	971,874
Long-term liabilities:				—	
Long-term debt	3,707,787	—	—	—	3,707,787
Deferred income tax liability	672,002	—	—	—	672,002
Derivative instruments	215	—	—	—	215
Long-term lease liabilities	2,520,939		—	—	2,520,939
Other liabilities	60,432	—	—	—	60,432
Total liabilities	8,265,602	—	—	(332,353)	7,933,249
Equity:					
Stockholders' equity:				—	
Common stock	2,689	—	—	—	2,689
Additional paid-in capital	4,974,162	1,341,780	—	(224,700)	6,091,242
Accumulated earnings	1,283,336	(784,727)	—	—	498,609
Total stockholders' equity	6,260,187	557,053	—	(224,700)	6,592,540
Total liabilities and equity	$ 14,525,789	557,053	—	(557,053)	14,525,789

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

Condensed Consolidating Statement of Operations and Comprehensive Income
Three Months Ended March 31, 2019
(In thousands)

	Parent (Antero)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Revenue and other:					
Natural gas sales	$ 657,266	—	—	—	657,266
Natural gas liquids sales	313,685	—	—	—	313,685
Oil sales	48,052	—	—	—	48,052
Commodity derivative fair value losses	(77,368)	—	—	—	(77,368)
Gathering, compression, water handling and treatment	—	—	218,360	(213,881)	4,479
Marketing	91,186	—	—	—	91,186
Other income	1,758	—	—	(1,651)	107
Total revenue and other	1,034,579	—	218,360	(215,532)	1,037,407
Operating expenses:					
Lease operating	42,969	—	64,818	(66,055)	41,732
Gathering, compression, processing, and transportation	535,015	—	—	(110,486)	424,529
Production and ad valorem taxes	34,738	—	—	940	35,678
Marketing	163,084	—	—	—	163,084
Exploration	126	—	—	—	126
Impairment of oil and gas properties	81,244	—	—	—	81,244
Impairment of midstream assets	—	—	6,982	—	6,982
Depletion, depreciation, and amortization	218,494	—	21,707	—	240,201
Accretion of asset retirement obligations	913	—	63	—	976
General and administrative	49,908	—	18,793	(499)	68,202
Contract termination and rig stacking	8,360	—	—	—	8,360
Accretion of contingent acquisition consideration	—	—	1,928	(1,928)	—
Total operating expenses	1,134,851	—	114,291	(178,028)	1,071,114
Operating income (loss)	(100,272)	—	104,069	(37,504)	(33,707)
Other income (expenses):					
Equity in earnings of unconsolidated affiliates	589	1,228	12,264	—	14,081
Equity in earnings of affiliates	15,021	—	—	(15,021)	—
Interest expense, net	(55,135)	—	(16,815)	—	(71,950)
Gain on deconsolidation of Antero Midstream Partners LP	1,205,705	200,337	—	—	1,406,042
Total other expenses	1,166,180	201,565	(4,551)	(15,021)	1,348,173
Income before income taxes	1,065,908	201,565	99,518	(52,525)	1,314,466
Provision for income tax expense	(288,710)	—	—	—	(288,710)
Net income and comprehensive income including noncontrolling interests	777,198	201,565	99,518	(52,525)	1,025,756
Net income and comprehensive income attributable to noncontrolling interests	—	—	—	46,993	46,993
Net income and comprehensive income attributable to Antero Resources Corporation	$ 777,198	201,565	99,518	(99,518)	978,763

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Three Months Ended March 31, 2020
(In thousands)

	Parent (Antero)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Revenue and other:					
Natural gas sales	$ 411,082	—	—	—	411,082
Natural gas liquids sales	257,673	—	—	—	257,673
Oil sales	35,646	—	—	—	35,646
Commodity derivative fair value gains	565,833	—	—	—	565,833
Marketing	46,073	—	—	—	46,073
Other income	798	—	—	—	798
Total revenue and other	1,317,105	—	—	—	1,317,105
Operating expenses:					
Lease operating	25,644	—	—	—	25,644
Gathering, compression, processing, and transportation	588,624	—	—	—	588,624
Production and ad valorem taxes	25,699	—	—	—	25,699
Marketing	93,273	—	—	—	93,273
Exploration	210	—	—	—	210
Impairment of oil and gas properties	89,220	—	—	—	89,220
Depletion, depreciation, and amortization	199,677	—	—	—	199,677
Accretion of asset retirement obligations	1,104	—	—	—	1,104
General and administrative	31,221	—	—	—	31,221
Total operating expenses	1,054,672	—	—	—	1,054,672
Operating income	262,433	—	—	—	262,433
Other income (expenses):					
Equity in earnings of unconsolidated affiliate	(40,312)	(87,743)	—	—	(128,055)
Impairment of equity investment	(143,849)	(466,783)	—	—	(610,632)
Interest expense, net	(53,102)	—	—	—	(53,102)
Gain on early extinguishment of debt	80,561	—	—	—	80,561
Total other expenses	(156,702)	(554,526)	—	—	(711,228)
Income (loss) before income taxes	105,731	(554,526)	—	—	(448,795)
Provision for income tax benefit	109,985	—	—	—	109,985
Net income (loss) and comprehensive income (loss)	$ 215,716	(554,526)	—	—	(338,810)

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

Condensed Consolidating Statement of Cash Flows
Three Months Ended March 31, 2019
(In thousands)

	Parent (Antero)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash flows provided by (used in) operating activities:					
Net income including noncontrolling interests	$ 777,198	201,565	99,518	(52,525)	1,025,756
Adjustments to reconcile net income to net cash provided by operating activities:					
Depletion, depreciation, amortization, and accretion	219,407	—	21,770	—	241,177
Impairments	81,244	—	6,982	—	88,226
Commodity derivative fair value losses	77,368	—	—	—	77,368
Gains on settled commodity derivatives	97,092	—	—	—	97,092
Deferred income tax expense	287,854	—	—	—	287,854
Equity-based compensation expense	6,426	—	2,477	—	8,903
Equity in earnings of consolidated subsidiaries	(15,021)	—	—	15,021	—
Equity in earnings of unconsolidated affiliates	(589)	(1,228)	(12,264)	—	(14,081)
Distributions of earnings from unconsolidated affiliates	—	—	12,605	—	12,605
Gain on deconsolidation of Antero Midstream Partners LP	(1,205,705)	(200,337)	—	—	(1,406,042)
Distributions from Antero Midstream Partners LP	46,469	—	—	(46,469)	—
Other	10,331	—	750	—	11,081
Changes in current assets and liabilities	102,830	—	(10,573)	16,808	109,065
Net cash provided by operating activities	484,904	—	121,265	(67,165)	539,004
Cash flows provided by (used in) investing activities:					
Additions to unproved properties	(27,463)	—	—	—	(27,463)
Drilling and completion costs	(389,252)	—	—	20,565	(368,687)
Additions to water handling and treatment systems	—	—	(24,547)	131	(24,416)
Additions to gathering systems and facilities	—	—	(48,239)	—	(48,239)
Additions to other property and equipment	(2,066)	—	(1,062)	—	(3,128)
Investments in unconsolidated affiliates	—	—	(25,020)	—	(25,020)
Proceeds from the Antero Midstream Partners LP Transactions	296,611	—	—	—	296,611
Change in other assets	(1,118)	—	(3,357)	—	(4,475)
Net cash used in investing activities	(123,288)	—	(102,225)	20,696	(204,817)
Cash flows provided by (used in) financing activities:					
Issuance of senior notes	—	—	650,000	—	650,000
Borrowings (repayments) on bank credit facility, net	(360,379)	—	90,379	—	(270,000)
Payments of deferred financing costs	(791)	—	(7,468)	—	(8,259)
Distributions to noncontrolling interests in Antero Midstream Partners LP	—	—	(131,545)	46,469	(85,076)
Employee tax withholding for settlement of equity compensation awards	(450)	—	(29)	—	(479)
Other	4	—	(845)	—	(841)
Net cash provided by (used in) financing activities	(361,616)	—	600,492	46,469	285,345
Effect of deconsolidation of Antero Midstream Partners LP	—	—	(619,532)	—	(619,532)
Net increase (decrease) in cash and cash equivalents	—	—	—	—	—
Cash and cash equivalents, beginning of period	—	—	—	—	—
Cash and cash equivalents, end of period	$ —	—	—	—	—

ANTERO RESOURCES CORPORATION

Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2019 and March 31, 2020

Condensed Consolidating Statement of Cash Flows
Three Months Ended March 31, 2020
(In thousands)

	Parent (Antero)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash flows provided by (used in) operating activities:					
Net income (loss) including noncontrolling interests	$ 215,716	(554,526)	—	—	(338,810)
Adjustment to reconcile net income (loss) to net cash provided by operating activities:					
Depletion, depreciation, amortization, and accretion	200,781	—	—	—	200,781
Impairment of oil and gas properties	89,220	—	—	—	89,220
Commodity derivative fair value gains	(565,833)	—	—	—	(565,833)
Gains on settled commodity derivatives	210,926	—	—	—	210,926
Equity-based compensation expense	3,329	—	—	—	3,329
Deferred income tax benefit	(109,985)	—	—	—	(109,985)
Gain on early extinguishment of debt	(80,561)	—	—	—	(80,561)
Equity in loss of unconsolidated affiliates	40,312	87,743	—	—	128,055
Impairment of equity investment	143,849	466,783	—	—	610,632
Distributions/dividends of earnings from unconsolidated affiliates	42,756	—	—	—	42,756
Other	2,440	—	—	—	2,440
Changes in current assets and liabilities	7,727	—	—	—	7,727
Net cash provided by operating activities	200,677	—	—	—	200,677
Cash flows provided by (used in) investing activities:					
Additions to unproved properties	(10,357)	—	—	—	(10,357)
Drilling and completion costs	(300,483)	—	—	—	(300,483)
Additions to other property and equipment	(771)	—	—	—	(771)
Settlement of water earnout	125,000	—	—	—	125,000
Change in other assets	(70)	—	—	—	(70)
Net cash used in investing activities	(186,681)	—	—	—	(186,681)
Cash flows provided by (used in) financing activities:					
Repurchases of common stock	(42,690)	—	—	—	(42,690)
Repayment of senior notes	(300,835)	—	—	—	(300,835)
Borrowings on bank credit facility, net	330,000	—	—	—	330,000
Employee tax withholding for settlement of equity compensation awards	(32)	—	—	—	(32)
Other	(439)	—	—	—	(439)
Net cash used in financing activities	(13,996)	—	—	—	(13,996)
Net increase in cash and cash equivalents	—	—	—	—	—
Cash and cash equivalents, beginning of period	—	—	—	—	—
Cash and cash equivalents, end of period	$ —	—	—	—	—

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q. The following discussion contains "forward-looking statements" that reflect our future plans, estimates, beliefs and expected performance. We caution that assumptions, expectations, projections, intentions, or beliefs about future events may, and often do, vary from actual results, and the differences can be material. Some of the key factors that could cause actual results to vary from our expectations include changes in natural gas, NGLs, and oil prices, the timing of planned capital expenditures, our ability to fund our development programs, uncertainties in estimating proved reserves and forecasting production results, operational factors affecting the commencement or maintenance of producing wells, the condition of the capital markets generally, as well as our ability to access them, impacts of world health events, including the COVID-19 pandemic, potential shut-ins of production due to lack of downstream demand or storage capacity, and uncertainties regarding environmental regulations or litigation and other legal or regulatory developments affecting our business, as well as those factors discussed below, all of which are difficult to predict. In light of these risks, uncertainties and assumptions, the forward-looking events discussed may not occur. See "Cautionary Statement Regarding Forward-Looking Statements." Also, see the risk factors and other cautionary statements described under the heading "Item 1A. Risk Factors." We do not undertake any obligation to publicly update any forward-looking statements except as otherwise required by applicable law.

In this section, references to "Antero," the "Company," "we," "us," and "our" refer to Antero Resources Corporation and its subsidiaries, unless otherwise indicated or the context otherwise requires.

Our Company

We are an independent oil and natural gas company engaged in the exploration, development and production of natural gas, NGLs, and oil properties located in the Appalachian Basin. We focus on unconventional reservoirs, which can generally be characterized as fractured shale formations. Our management team has worked together for many years and has a successful track record of reserve and production growth as well as significant expertise in unconventional resource plays. Our strategy is to leverage our team's experience delineating and developing natural gas resource plays to profitably grow our reserves and production, primarily on our existing multi-year inventory of drilling locations.

We have assembled a portfolio of long-lived properties that are characterized by what we believe to be low geologic risk and repeatability. Our drilling opportunities are focused in the Marcellus Shale and Utica Shale of the Appalachian Basin. As of March 31, 2020, we held approximately 536,000 net acres of rich gas and dry gas properties located in the Appalachian Basin in West Virginia and Ohio. Our corporate headquarters are in Denver, Colorado.

We operate in the following industry segments: (i) the exploration, development, and production of natural gas, NGLs, and oil; (ii) marketing of excess firm transportation capacity; and (iii) our equity method investment in Antero Midstream Corporation. All of our operations are conducted in the United States. As described below and elsewhere in this Quarterly Report on Form 10-Q, effective March 13, 2019, the results of Antero Midstream Partners are no longer consolidated in Antero's results.

Address, Internet Website and Availability of Public Filings

Our principal executive offices are located at 1615 Wynkoop Street, Denver, Colorado 80202, and our telephone number is (303)357-7310. Our website is located at *www.anteroresources.com*.

We furnish or file with the SEC our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, and our Current Reports on Form 8-K. We make these documents available free of charge at *www.anteroresources.com* under the "Investors–SEC Filings" section as soon as reasonably practicable after they are furnished or filed with the SEC. Information on our website is not incorporated into this Quarterly Report on Form 10-Q or any of our other filings with the SEC.

2020 Developments and Highlights

COVID-19 Pandemic

In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. Governments have tried to slow the spread of the virus by imposing social distancing guidelines, travel restrictions and stay-at-home orders, which have caused a significant decrease in activity in the global economy and the demand for oil and to a lesser extent natural gas and NGLs. Also in March 2020, Saudi Arabia and Russia failed to agree to cut production of oil along with the Organization of the Petroleum Exporting Countries ("OPEC"), and Saudi Arabia significantly reduced the price at which it sells oil and announced plans to increase production, which contributed to a sharp drop in the price of oil. While OPEC, Russia and other allied producers reached an agreement in April 2020 to reduce production, oil prices have remained low. The imbalance between the supply of and demand for oil, as well as the uncertainty around the extent and timing of an economic recovery, have caused extreme market volatility and a substantial adverse effect on commodity prices in March and April.

As a producer of natural gas, NGLs and oil, we are recognized as an essential business under various federal, state and local regulations related to the COVID-19 pandemic. We have continued to operate as permitted under these regulations while taking steps to protect the health and safety of our workers. We have implemented protocols to reduce the risk of an outbreak within our field operations, and these protocols have not reduced production or efficiency in a significant manner. A substantial portion of our non-field level employees have transitioned temporarily to remote work from home arrangements, and we have been able to maintain a consistent level of effectiveness through these arrangements, including maintaining our day-to-day operations, our financial reporting systems and our internal control over financial reporting. To date, we have had no confirmed cases of COVID-19 within our employee group at any of our locations.

Our natural gas, NGLs and oil producing properties are located in the liquids-rich Appalachian Basin. Although the decline in oil prices has negatively impacted our oil revenue, oil sales represented approximately 3% and 4% of our total revenue for the three months ended March 31, 2020 and the year ended December 31, 2019, respectively. While natural gas prices also declined during the first quarter of 2020, the decline in natural gas prices has been far less significant than the decline in oil prices. In addition, we have hedged through fixed price contracts the sale of 2.2 Bcf per day of natural gas at a weighted average price of $2.87 per MMBtu for the remainder of 2020. Our hedges cover a substantial majority of our expected natural gas production in 2020. We also have fixed priced contracts for the sale of 10,352 barrels per day of propane at a weighted average price of $0.65 per gallon and 26,000 barrels per day of oil at a weighted average price of $55.63 per barrel for the remainder of 2020. These fixed price contracts resulted in total commodity derivative fair value gains of $566 million, including settled commodity derivative gains of $211 million, during the three months ended March 31, 2020. All of our hedges are financial hedges and do not have physical delivery requirements. As such, any decreases in anticipated production, whether as a result of decreased development activity or shut-ins, will not impact our ability to realize the benefits of the hedges. Our natural gas and NGLs are primarily used in manufacturing, power generation and heating rather than transportation. While we have seen a decrease in the overall demand for these products, demand for natural gas and NGLs has not declined as much as demand for oil, and there has not been as substantial an oversupply of natural gas and NGLs as there has been of oil. Furthermore, the decrease in demand for oil has significantly reduced the number of rigs drilling for oil in the continental U.S. and, as a result, estimates of future gas supply associated with oil production have declined. Additionally, the restart of economic activity in Asia, coupled with lower refinery liquefied petroleum gas ("LPG") production in the U.S., Europe, and other markets such as India, has led to strengthening prices for international LPG.

Our supply chain also has not thus far experienced any significant interruptions. The industry overall is experiencing storage capacity constraints with respect to oil and certain NGL products, and we may become subject to those constraints if we are not able to sell our production, or certain components of our production, or enter into additional storage arrangements. The lack of a market or available storage for any one NGL product or oil could result in us having to delay or discontinue well completions and commercial production or shut in production for other products as we cannot curtail the production of individual products in a meaningful way without reducing the production of other products. Potential impacts of these constraints may include partial shut-in of production, although we are not able to determine the extent of or for how long any shut-ins may occur. However, because some of our wells produce rich gas, which is processed, and some produce dry gas, which does not require processing, we have the ability to change the mix of products that we produce and wells that we complete to adjust our production to address takeaway capacity constraints for certain products better than if we had only rich gas or dry gas wells. We have the ability to shut-in rich gas wells and still produce from our dry gas wells if processing or storage capacity of NGL products becomes further limited or constrained. Also, prior to the COVID-19 pandemic, we had developed a diverse set of buyers and destinations, as well as in-field and off-site storage capacity for our condensate volumes. Since the outbreak of the pandemic, we have expanded our customer base and doubled our condensate storage capacity within the basin.

In addition, as discussed below in "—2020 Capital Budget and Capital Spending," we have reduced our drilling and completion capital budget for 2020 by approximately 34% since the beginning of the year. We will continue to monitor our five-year drilling plan throughout the year and will make further revisions if deemed necessary. Reductions in the 2020 capital budget may impact production levels in 2021 and forward to the extent fewer wells will be brought online.

During the three months ended March 31, 2020 and during the two previous quarters, we have recognized various impairment charges related to the decline in commodity prices and the value of our investment in Antero Midstream Corporation. At this time, we do not anticipate any further impairment charges in our equity method investment in Antero Midstream Corporation, as the value of our equity method investment has increased since March 31, 2020. Additional impairment charges related to our assets may occur if we experience disruptions in production, additional or sustained declines in the forward commodity price strip from March 31, 2020, unresolved storage capacity restraints or other consequences of the COVID-19 pandemic.

In April 2020, the borrowing base supporting our Credit Facility was subject to its annual redetermination. The bank prices used in our redetermination were materially lower than the bank prices used in our April 2019 redetermination and were lower than strip prices as of April 27, 2020. As a result, the lenders under our Credit Facility reduced our borrowing base from the previous level. Lender commitments remained unchanged at $2.64 billion, providing us with a consistent amount of available borrowings. Our borrowing base is now subject to a semi-annual redetermination and, therefore, our available borrowings and liquidity could be impacted by an additional redetermination in 2020. In addition, our borrowing capacity is directly impacted by the amount of financial assurance we are required to provide in the form of letters of credit to third parties, primarily pipeline capacity providers. Our ability to limit the financial assurance we are required to provide, while also protecting ourselves from the counterparty risk of our financial hedges, may be impacted by the ongoing effects of the COVID-19 pandemic.

The COVID-19 pandemic, commodity market volatility and resulting financial market instability are variables beyond our control, which can adversely impact our generation of funds from operating cash flows, distributions from unconsolidated affiliates, available borrowings under our Credit Facility and our ability to access the capital markets. In addition, our plan to strengthen our balance sheet through significant absolute debt reduction depends upon our ability to identify and successfully execute our previously announced asset monetization program. Instability in the financial markets and uncertainty in the general business environment resulting from the COVID-19 pandemic may impact our ability to execute our asset monetization program on the terms and the timeframe previously anticipated. To the extent we are not able to execute our asset monetization plan or access the capital markets, we may have to delay or reduce our planned capital expenditures in order to address our upcoming debt obligations.

Production and Financial Results

For the three months ended March 31, 2020, our net production totaled 306 Bcfe, or 3,366 MMcfe per day, a 9% increase in daily combined production compared to 279 Bcfe, or 3,099 MMcfe per day, for the three months ended March 31, 2019. Production increases resulted from an increase in the number of producing wells as a result of our drilling and completion activity. Our average price received for production, before the effects of gains on settled commodity derivatives for the three months ended March 31, 2020 was $2.30 per Mcfe compared to $3.65 per Mcfe for the three months ended March 31, 2019. Our average realized price after the effects of gains on settled commodity derivatives was $2.99 per Mcfe for the three months ended March 31, 2020 compared to $4.00 per Mcfe for the three months ended March 31, 2019.

For the three months ended March 31, 2020, we generated consolidated cash flows from operations of $201 million, net loss attributable to Antero of $339 million, and Adjusted EBITDAX of $244 million. This compares to consolidated cash flows from operations of $539 million, consolidated net income attributable to Antero Resources of $979 million, and Adjusted EBITDAX of $443 million for the three months ended March 31, 2019. See "—Non-GAAP Financial Measures" for a definition of Adjusted EBITDAX and a reconciliation of Adjusted EBITDAX to net cash provided by operating activities and net income (loss).

Cash flows from operations decreased by $338 million for the three months ended March31, 2020 compared to the prior year period primarily due to decreases in commodity prices both before and after the effects of settled commodity derivatives and increases in gathering, compression and transportation costs. Consolidated net loss attributable to Antero Resources of $339 million for the three months ended March 31, 2020 decreased from consolidated net income attributable to Antero Resources of $979 million for the three months ended March 31, 2019 primarily due to the gain on deconsolidation of Antero Midstream Partners in 2019 partially offset by commodity derivative realized and fair value gains in 2020. The three months ended March 31, 2020 was also impacted by an Impairment of equity investment due to the decline in Antero Midstream Corporation's fair value and Antero Midstream Corporation's earnings changing from earnings to a loss.

Adjusted EBITDAX decreased from $443 million for the three months ended March 31, 2019 to $244 million for the three months ended March 31, 2020, a decrease of 45%, primarily due to the decrease in commodity prices of 37% per Mcfe before and

26% per Mcfe after the effects of settled commodity derivatives, and increased gathering, compression and transportation costs discussed above. A portion of the cost increases are the result of the deconsolidation of Antero Midstream Partners as costs that were previously eliminated in consolidation are now expensed.

2020 Capital Budget and Capital Spending

Our drilling and completion capital budget for2020 has been reduced to $750 million from $1.15 billion. Reductions in the 2020 capital budget may impact production in 2021 and forward to the extent fewer wells will be brought online. We do not include acquisitions in our capital budget. We periodically review our capital expenditures and adjust our budget and its allocation based on commodity prices, takeaway constraints, operating cash flow and liquidity.

For the three months ended March 31, 2020, our capital expenditures were approximately $312 million, including drilling and completion costs of $300 million, leasehold acquisitions of $10 million, and other capital expenditures of $2 million. Our capital expenditures for the three months ended March 31, 2019 of approximately $472 million included drilling and completion costs of $369 million, leasehold acquisitions of $27 million, and other capital expenditures of $3 million. In addition, consolidated capital expenditures for the three months ended March 31, 2019, included gathering and compression expenditures of $48 million and water handling and treatment expenditures of $24 million. Antero Midstream Partners also invested $25 million in a joint venture. These expenditures relate to the period prior to deconsolidation of Antero Midstream Partners on March 12. 2019.

For the three months ended March 31, 2020, our exploration and production capital expenditures decreased by $87 million from the three month period ended March 31, 2019. This 22% reduction in capital costs was a result of our well cost savings initiatives, which include savings resulting from service cost deflation, sand and water logistics optimization, as well as operational efficiency gains.

Hedge Position

At March 31, 2020, we had fixed price natural gas swap contracts on NYMEX Henry Hub for the period from April 2020 through December 2023 covering 1.8 Tcf of our projected natural gas production at a weighted average index price of $2.77 per MMBtu, including contracts for the remainder of 2020 of approximately 613 Bcf of natural gas at a weighted average index price of $2.87 per MMBtu. At March 31, 2020, we also had basis swaps for the period from April 2020 through December 2024 for approximately 89.5 Bcf of our projected natural gas production with pricing differentials ranging from $0.35 to $0.53 per MMBtu that hedge the difference between TCO and the NYMEX Henry Hub. In addition, we have a call option agreement, which entitles the holder, if exercised, to enter into a fixed price swap agreement for approximately 428 MMBtu per day at a price of $2.77 per MMBtu in 2024.

We believe our hedge position provides some certainty to cash flows supporting our future operations and capital spending plans. As of March 31, 2020, the estimated fair value of our commodity derivative contracts was approximately $1.1 billion.

Credit Facility

Our borrowing base was reduced to $2.85 billion and lender commitments remained at $2.64 billion at the redetermination in April 2020. The borrowing base under our Credit Facility is redetermined semi-annually and is based on the estimated future cash flows from our proved oil and gas reserves, the value of our ownership interest in Antero Midstream Corporation and our commodity derivative positions. The next redetermination is scheduled to occur in October 2020. The maturity date of the Credit Facility is the earlier of (i) October 26, 2022 and (ii) the date that is 91 days prior to the earliest stated redemption date of any series of our senior notes then outstanding. At March 31, 2020, we had an outstanding balance under the Credit Facility of $882 million, with a weighted average interest rate of 2.57%, and letters of credit of $730 million. See "—Debt Agreements and Contractual Obligations—Senior Secured Revolving Credit Facility" for a description of the Credit Facility.

Share Repurchase Program

During the three months ended March 31, 2020, pursuant to our share repurchase program, we repurchased 27,193,237 shares of our common stock (approximately 9% of total shares outstanding at commencement of the program) at an average cost of $1.57 for a total cost of approximately $43 million. During the term of this program, we repurchased an aggregate of approximately $215 million of our shares of common stock. At March 31, 2020, Antero had 268,926,481 shares outstanding.

Results of Operations

We have three operating segments: (1) the exploration, development and production of natural gas, NGLs, and oil; (2)marketing and utilization of excess firm transportation capacity gathering and processing; and (3) equity method investment in Antero Midstream Corporation. Revenues from Antero Midstream Corporation's operations were primarily derived from intersegment transactions for services provided to our exploration and production operations by Antero Midstream Partners. All intersegment transactions were eliminated upon consolidation, including revenues from water handling and treatment services provided by Antero Midstream Partners, which we capitalized as proved property development costs. Through March 12, 2019, the results of Antero Midstream Partners were included in our consolidated financial statements. Effective March 13, 2019, the results of Antero Midstream Partners are no longer included in our results; however, our disclosures include the segments of our unconsolidated affiliates due to their significance to our operations. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions and Note 17 to the unaudited condensed consolidated financial statements for disclosures on our reportable segments. Marketing revenues are primarily derived from activities to purchase and sell third-party natural gas and NGLs and to market and utilize excess firm transportation capacity.

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2020

The operating results of our reportable segments were as follows for the three months ended March 31, 2019 and 2020 (in thousands):

	Exploration and production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of intersegment transactions and unconsolidated affiliates	Consolidated total
Three months ended March 31, 2019:					
Revenue and other:					
Natural gas sales	$ 657,266	—	—	—	657,266
Natural gas liquids sales	313,685	—	—	—	313,685
Oil sales	48,052	—	—	—	48,052
Commodity derivative fair value losses	(77,368)	—	—	—	(77,368)
Gathering, compression, and water handling and treatment	—	—	55,889	(51,410)	4,479
Marketing	—	91,186	—	—	91,186
Other income	1,758	—	(1,781)	130	107
Total	$ 943,393	91,186	54,108	(51,280)	1,037,407
Operating expenses:					
Lease operating	42,969	—	11,815	(13,052)	41,732
Gathering and compression	212,833	—	2,935	(113,421)	102,347
Processing	169,999	—	—	—	169,999
Transportation	152,183	—	—	—	152,183
Production and ad valorem taxes	34,738	—	232	708	35,678
Marketing	—	163,084	—	—	163,084
Exploration	126	—	—	—	126
Impairment of oil and gas properties	81,244	—	—	—	81,244
Impairment of midstream assets	—	—	6,982	—	6,982
Accretion of asset retirement obligations	913	—	10	53	976
Depletion, depreciation, and amortization	218,494	—	7,650	14,057	240,201
General and administrative (excluding equity-based compensation)	43,482	—	1,594	14,223	59,299
Equity-based compensation	6,426	—	590	1,887	8,903
Change in fair value of contingent acquisition consideration	—	—	1,049	(1,049)	—
Contract termination and rig stacking	8,360	—	—	—	8,360
Total	971,767	163,084	32,857	(96,594)	1,071,114
Operating income (loss)	$ (28,374)	(71,898)	21,251	45,314	(33,707)
Equity in earnings of unconsolidated affiliates	$ 1,817	—	2,880	9,384	14,081

	Exploration and production	Marketing	Equity Method Investment in Antero Midstream Corporation	Elimination of intersegment transactions and unconsolidated affiliates	Consolidated total
Three months ended March 31, 2020:					
Revenue and other:					
Natural gas sales	$ 411,082	—	—	—	411,082
Natural gas liquids sales	257,673	—	—	—	257,673
Oil sales	35,646	—	—	—	35,646
Commodity derivative fair value gains	565,833	—	—	—	565,833
Gathering, compression, water handling and treatment	—	—	261,314	(261,314)	—
Marketing	—	46,073	—	—	46,073
Other income	798	—	(17,606)	17,606	798
Total	$ 1,271,032	46,073	243,708	(243,708)	1,317,105
Operating expenses:					
Lease operating	$ 25,644	—	—	—	25,644
Gathering and compression	193,008	—	55,908	(55,908)	193,008
Processing	210,236	—	—	—	210,236
Transportation	185,380	—	—	—	185,380
Production and ad valorem taxes	25,699	—	1,498	(1,498)	25,699
Marketing	—	93,273	—	—	93,273
Exploration	210	—	—	—	210
Impairment of oil and gas properties	89,220	—	—	—	89,220
Impairment of midstream assets	—	—	664,544	(664,544)	—
Depletion, depreciation, and amortization	199,677	—	27,343	(27,343)	199,677
Accretion of asset retirement obligations	1,104	—	42	(42)	1,104
General and administrative (excluding equity-based compensation)	27,892	—	10,199	(10,199)	27,892
Equity-compensation	3,329	—	3,338	(3,338)	3,329
Total	961,399	93,273	762,872	(762,872)	1,054,672
Operating income (loss)	$ 309,633	(47,200)	(519,164)	519,164	262,433
Equity in loss of unconsolidated affiliates	$ 128,055	—	—	—	128,055

Exploration and Production Segment Results for the Three Months Ended March 31, 2019 Compared to the Three Months Ended March 31, 2020

The following table sets forth selected operating data of the exploration and production segment for the three months ended March 31, 2019 compared to the three months ended March 31, 2020:

	Three months ended March 31, 2019	Three months ended March 31, 2020	Amount of Increase (Decrease)	Percent Change
Production data:				
Natural gas (Bcf)	199	208	9	5 %
C2 Ethane (MBbl)	3,509	4,604	1,095	31 %
C3+ NGLs (MBbl)	8,794	10,833	2,039	23 %
Oil (MBbl)	1,017	938	(79)	(8)%
Combined (Bcfe)	279	306	27	10 %
Daily combined production (MMcfe/d)	3,099	3,366	267	9 %
Average prices before effects of derivative settlements[1]:				
Natural gas (per Mcf) [2]	$ 3.30	$ 1.98	$ (1.32)	(40)%
C2 Ethane (per Bbl)	$ 10.12	$ 5.82	$ (4.30)	(42)%
C3+ NGLs (per Bbl)	$ 31.63	$ 21.31	$ (10.32)	(33)%
Oil (per Bbl)	$ 47.23	$ 38.02	$ (9.21)	(20)%
Weighted Average Combined (per Mcfe)	$ 3.65	$ 2.30	$ (1.35)	(37)%
Average realized prices after effects of derivative settlements[1]:				
Natural gas (per Mcf)	$ 3.79	$ 2.88	$ (0.91)	(24)%
C2 Ethane (per Bbl)	$ 10.12	$ 5.82	$ (4.30)	(42)%
C3+ NGLs (per Bbl)	$ 31.59	$ 22.56	$ (9.03)	(29)%
Oil (per Bbl)	$ 47.23	$ 47.29	$ 0.06	0 %
Weighted Average Combined (per Mcfe)	$ 4.00	$ 2.99	$ (1.01)	(25)%
Average costs (per Mcfe):				
Lease operating	$ 0.15	$ 0.08	$ (0.07)	(47)%
Gathering and compression	$ 0.76	$ 0.63	$ (0.13)	(17)%
Processing	$ 0.61	$ 0.69	$ 0.08	13 %
Transportation	$ 0.55	$ 0.61	$ 0.06	11 %
Production and ad valorem taxes	$ 0.12	$ 0.08	$ (0.04)	(33)%
Depletion, depreciation, amortization, and accretion	$ 0.78	$ 0.66	$ (0.12)	(15)%
General and administrative (excluding equity-based compensation)	$ 0.16	$ 0.09	$ (0.07)	(44)%

[1] Average sales prices shown in the table reflect both the before and after effects of our settled commodity derivatives. Our calculation of such after effects includes gains on settlements of commodity derivatives, which do not qualify for hedge accounting because we do not designate or document them as hedges for accounting purposes. Oil and NGLs production was converted at 6 Mcf per Bbl to calculate total Bcfe production and per Mcfe amounts. This ratio is an estimate of the equivalent energy content of the products and does not necessarily reflect their relative economic value.

Natural gas sales. Revenues from production of natural gas decreased from $657 million for the three months ended March 31, 2019 to $411 million for the three months ended March 31, 2020, a decrease of $246 million, or 37% (calculated as the change in year-over-year volumes times the change in year-to-year average price). Increased natural gas production volumes accounted for an approximate $30 million increase in year-over-year natural gas revenues (calculated as the change in year-to-year volumes times the prior year average price), and changes in our prices, excluding the effects of derivative settlements, accounted for an approximate $276 million decrease in year-over-year revenues (calculated as the change in the year-to-year average price times current year production volumes).

NGLs sales. Revenues from production of NGLs decreased from $314 million for the three months ended March 31, 2019 to $258 million for the three months ended March 31, 2020, a decrease of $56 million, or 18% (calculated as the change in year-over-year volumes times the change in year-to-year average price). Increased NGLs production volumes accounted for an approximate $76 million increase in year-over-year NGL revenues (calculated as the change in year-to-year volumes times the prior year average price), and changes in our prices, excluding the effects of derivative settlements, accounted for an approximate $132 million decrease in year-over-year revenues (calculated as the change in the year-to-year average price times current year production volumes).

Oil sales. Revenues from production of oil decreased from $48 million for the three months ended March 31, 2019 to $36 million for the three months ended March 31, 2020, a decrease of $12 million, or 26% (calculated as the change in year-over-year volumes times the change in year-to-year average price). Decreased oil production volumes accounted for an approximate $4 million decrease in year-over-year oil revenues (calculated as the change in year-to-year volumes times the prior year average price), and changes in our prices, excluding the effects of derivative settlements, accounted for an approximate $8 million decrease in year-over-year revenues (calculated as the change in the year-to-year average price times current year production volumes).

Commodity derivative fair value gains (losses). To achieve more predictable cash flows, and to reduce our exposure to price fluctuations, we enter into fixed for variable price swap contracts, basis swap contracts and collar contracts when management believes that favorable future sales prices for our production can be secured. Because we do not designate these derivatives as accounting hedges, they do not receive hedge accounting treatment. Consequently, all mark-to-market gains or losses, as well as cash receipts or payments on settled derivative instruments, are recognized in our statements of operations. For the three months ended March 31, 2019 and 2020, our commodity hedges resulted in derivative fair value losses of $77 million and gains of $566 million, respectively. The commodity derivative fair value gains (losses) included $97 million and $211 million of gains on cash settled derivatives for the three months ended March 31, 2019 and March 31, 2020, respectively.

Commodity derivative fair value gains or losses vary based on future commodity prices and have no cash flow impact until the derivative contracts are settled or monetized prior to settlement. Derivative asset or liability positions at the end of any accounting period may reverse to the extent future commodity prices increase or decrease from their levels at the end of the accounting period, or as gains or losses are realized through settlement. We expect continued volatility in commodity prices and the related fair value of our derivative instruments in the future.

Other income. Other income decreased from $2 million for the three months ended March 31, 2019 to $1 million for the three months ended March 31, 2020.

Lease operating expense. Lease operating expense decreased from $43 million for the three months ended March 31, 2019 to $26 million for the three months ended March 31, 2020, a decrease of $17 million, or 40%. On a per unit basis, lease operating expenses decreased from $0.15 for the three months ended March 31, 2019 to $0.08 for the three months ended March 31, 2020. This decrease is primarily due to decreased water handling costs resulting from improved operating efficiencies and cost reductions.

Gathering, compression, processing, and transportation expense. Gathering, compression, processing, and transportation expense increased from $535 million for the three months ended March 31, 2019 to $589 million for the three months ended March 31, 2020. This is primarily a result of the increase in production. Gathering and compression costs decreased from $0.76 per Mcfe to $0.63 per Mcfe primarily as a result of decreased costs associated with fuel as a result of a decrease in natural gas prices and a $12 million incentive fee rebate from Antero Midstream Corporation. Processing costs increased from $0.61 to $0.69 per Mcfe as a result of increased NGL production. Processing costs remained relatively unchanged per NGL barrel. Our transportation costs increased from $0.55 per Mcfe to $0.61 per Mcfe due to increased demand charges for Mountaineer Xpress pipeline, which came on line in February 2019.

Production and ad valorem tax expense. Production and ad valorem taxes decreased from $35 million for the three months ended March 31, 2019 to $26 million for the three months ended March 31, 2020, a decrease of $9 million, or 26%. This decrease is primarily as a result of decreases in commodity prices. Production and ad valorem taxes as a percentage of natural gas revenues increased slightly from 5% in the three months ended March 31, 2019, to 6% for the three months ended March 31, 2020.

Impairment of oil and gas properties. Impairment of oil and gas properties increased from $81 million for the three months ended March 31, 2019 to $89 million for the three months ended March 31, 2020, an increase of $8 million, or 10%. We recognized impairments primarily related to expiring leases and to design and initial costs related to pads we no longer plan to place into service. We charge impairment expense for expiring leases when we determine they are impaired based on factors such as remaining lease terms, reservoir performance, commodity price outlooks, and future plans to develop the acreage.

Depletion, depreciation, and amortization expense ("DD&A"). DD&A expense decreased from $218 million for the three months ended March 31, 2019 to $200 million for the three months ended March 31, 2020, a decrease of $18 million, or 9%. DD&A per Mcfe decreased from $0.78 per Mcfe during the three months ended March 31, 2019 to $0.66 per Mcfe during the three months ended March 31, 2020, as our depletable reserve volumes at March 31, 2020 increased slightly due to increased production and our depletable cost base decreased from March 31, 2019 due to an impairment in the value of our Utica properties of $881 million in the three months ended September 30, 2019.

General and administrative expense. General and administrative expense (excluding equity-based compensation expense) related to the exploration and production segment decreased from $43 million for the three months ended March 31, 2019 to $28 million for the three months ended March 31, 2020, a decrease of $15 million, or 36%. This decrease was primarily due to approximately $6.3 million in legal and other expenses related to the Transactions in the three months ended March 31, 2019 as well as decreases in employee related expenses in the three months ended March 31, 2020 as a result of ongoing cost savings initiatives. We had 619 employees as of March 31, 2019 and 531 employees as of March 31, 2020. On a per-unit basis, general and administrative expense excluding equity-based compensation decreased by 44%, from $0.16 per Mcfe during the three months ended March 31, 2019 to $0.09 per Mcfe during the three months ended March 31, 2020 as the expense decreased while production increased.

Equity-based compensation expense. Noncash equity-based compensation expense decreased from $6 million for the three months ended March 31, 2019 to $3 million for the three months ended March 31, 2020, a decrease of $3 million, or 48%. This decrease was the result of equity award forfeitures, as well as a decrease in the total value of awards to officers and employees in 2019, which impacts future expense recognition. When an equity award is forfeited, expense previously recognized for the award is reversed. See Note 9 to the unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for more information on equity-based compensation awards.

Contract termination and rig stacking. We incurred contract termination and rig stacking costs of $8 million during the three months ended March 31, 2019 compared to no expense for the three months ended March 31, 2020. Contract termination and rig stacking costs represent fees incurred upon the delay or cancellation of drilling and completion contracts with third-party contractors in order to align our drilling and completion activity level with our capital budget.

Discussion of the Marketing Segment for the Three Months Ended March 31, 2019 Compared to the Three Months Ended March 31, 2020

Marketing. We have entered into long-term firm transportation agreements for our current and expected future production in order to secure guaranteed capacity to favorable markets. Where feasible, we purchase and sell third-party natural gas and NGLs to utilize our excess firm transportation capacity, or release capacity to third parties to conduct these activities on our behalf, in order to reduce our net costs related to the unused capacity under these transportation agreements.

Operating losses on our marketing activities, or our net marketing expense, decreased from $72 million, or $0.26 per Mcfe, for the three months ended March 31, 2019 to $47 million, or $0.15 per Mcfe, for the three months ended March 31, 2020. The decrease was driven by higher volumes and the mitigation of some of our excess firm transportation expense.

Marketing revenues decreased from $91 million for the three months ended March 31, 2019 to $46 million for the three months ended March 31, 2020, a decrease of $45 million, or 49%. The decreases in revenues is due to lower excess firm transportation capacity and decreases in commodity prices in the three months ended March 31, 2020 compared to the three months ended March 31, 2019.

Marketing expenses decreased from $163 million for the three months ended March 31, 2019 to $93 million for the three months ended March 31, 2020, a decrease of $70 million, or 43%. Marketing expenses include firm transportation costs related to current excess firm capacity as well as the cost of third-party purchased gas and NGLs. Firm transportation costs included in the expenses above were $68 million and $47 million for the three months ended March 31, 2019 and 2020, respectively.

Discussion of Antero Midstream Corporation Segment for the Three Months Ended March 31, 2019 Compared to the Three Months Ended March 31, 2020

Through March 12, 2019, the results of Antero Midstream Partners are included in our consolidated financial statements. Effective March 13, 2019, we no longer consolidate the results of Antero Midstream Partners in our results. As such, the three months ended March 31, 2019 include the results of Antero Midstream Partners through March 12, 2019. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions.

Antero Midstream Corporation. Revenue from the Antero Midstream Corporation segment increased from $54 million for the three months ended March 31, 2019 to $244 million for the three months ended March 31, 2020, an increase of $190 million, or 350%. The increase in operating revenue was primarily due to the three months ended March 31, 2019 only including Antero Midstream Corporation's results following the closing of the Transactions on March 12, 2019. Total operating expenses related to the segment increased from $33 million for the three months ended March 31, 2019 to $763 million for the three months ended March 31,

2020. The increase was primarily due to impairments by Antero Midstream Corporation of $89 million on its freshwater pipelines and equipment, and an impairment charge of $575 million on its goodwill.

Discussion of Items Not Allocated to Segments for the Three Months Ended March 31, 2019 Compared to the Three Months Ended March 31, 2020

Impairment of equity investment. At March 31, 2020, we determined that events and circumstances indicated that the carrying value of our equity method investment in Antero Midstream Corporation had experienced an other-than-temporary decline and we recorded an impairment of $611 million. The fair value of the equity method investment in Antero Midstream Corporation was based on the quoted market share price of Antero Midstream Corporation at March 31, 2020.

Interest expense. Our interest expense exclusive of interest expense related to Antero Midstream Partners' indebtedness decreased from $55 million in the three months ended March 31, 2019 to $53 million in the three months ended March 31, 2020, a decrease of $2 million, or 3%. This decrease is due to a decrease in total indebtedness resulting from repurchases of our unsecured senior notes at prices below their stated value.

Consolidated interest expense decreased from $72 million for the three months ended March 31, 2019 to $53 million for the three months ended March 31, 2020, a decrease of $19 million, or 26%. During the three months ended March 31, 2019, interest related to Antero Midstream Partners' debt through March 12, 2019 is included consolidated interest expense.

Interest expense includes approximately $3.1 million and $2.5 million of non-cash amortization of deferred financing costs for the three months ended March 31, 2019 and 2020, respectively.

Income tax expense/benefit. Income tax expense decreased from a deferred tax expense of $288 million and $1 million of current tax expense, with an effective tax rate of 22%, for the three months ended March 31, 2019 to a deferred tax benefit of $110 million, with an effective tax rate of 25%, for the three months ended March 31, 2020. The change was primarily a result of the increase in book income due to the Transactions and the associated deconsolidation of Antero Midstream Partners for the three months ended March 31, 2019, offset by the decrease in book income resulting from the impairment of our investment in Antero Midstream Corporation for the three months ended March 31, 2020.

Capital Resources and Liquidity

Our primary sources of liquidity have been through net cash provided by operating activities including proceeds from derivatives, borrowings under the Credit Facility, issuances of debt and equity securities, and distributions/dividends from unconsolidated affiliates. Our primary use of cash has been for the exploration, development, and acquisition of oil and natural gas properties. As we develop our reserves, we continually monitor what capital resources, including equity and debt financings, are available to meet our future financial obligations, planned capital expenditure activities, and liquidity requirements. Our future success in growing our proved reserves and production will be highly dependent on net cash provided by operating activities and the capital resources available to us.

In addition, we may from time to time repurchase shares of our common stock. Under our prior share repurchase program, we repurchased and retired 27,193,237 common shares at a weighted average price per share of $1.57 for approximately $43 million during the three months ended March 31, 2020. During the term of this program, we repurchased approximately $215 million of our shares of common stock.

We may also seek to retire or purchase our outstanding debt securities from time to time through cash purchases, in open market purchases, privately negotiated transactions or otherwise. Any such repurchases will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors.

During the three months ended March 31, 2020, we repurchased $383 million principal amount of debt at a 21% weighted average discount, including a portion of both our 2021 notes and our 2022 notes. We recognized a gain of approximately $81 million on the early extinguishment of the debt repurchased. These repurchases, at a discount, have resulted in a net reduction in total debt outstanding and interest expense.

As of March 31, 2020, we believe that funds from operating cash flows, distributions from unconsolidated affiliates, available borrowings under the Credit Facility, or capital market transactions will be sufficient to meet our cash requirements, including normal operating needs, debt service obligations, capital expenditures, and commitments and contingencies for at least the next 12 months. Our 2021 notes are due November 1, 2021 and our Credit Facility will become due 91 days prior to that date, or on August 1, 2021, if the 2021 notes are not repaid prior to August 1, 2021. If the 2021 notes remain outstanding as of August 1, 2020, the Credit Facility will be classified as a current liability as of September 30, 2020 and both the Credit Facility and the 2021 notes will be classified as current liabilities as of December 31, 2020 if still outstanding at that time. The classification of the Credit Facility as a current liability does not impact any of our financial covenants. In addition, we believe we have the ability to address the maturity of the 2021 Notes with proceeds from potential asset sales, free cash flow from operations, and available borrowings under the Credit Facility.

For more information on our outstanding indebtedness, see Note 7 to the unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q. For information about the impacts of COVID-19 on our capital resources and liquidity, see "—COVID-19 Pandemic."

The following table summarizes our cash flows for the three months ended March 31, 2019 and 2020:

(in thousands)	Three Months Ended March 31, 2019	Three Months Ended March 31, 2020	Increase (Decrease)
Net cash provided by operating activities	$ 539,004	200,677	(338,327)
Net cash used in investing activities	(204,817)	(186,681)	18,136
Net cash provided by (used in) financing activities	285,345	(13,996)	(299,341)
Effect of deconsolidation of Antero Midstream Partners LP	(619,532)	—	619,532
Net decrease in cash and cash equivalents	$ —	—	—

The Company's condensed consolidated cash flow statements for the three months ended March31, 2019 includes the cash flows related to Antero Midstream Partners for periods prior to March 13, 2019. Effective March 13, 2019, the Company's cash flows include only the operating, investing and financing activities related to Antero and; therefore, the cash flows for the three months ended March 31, 2019 are not representative of our expected future cash flows. See Note 3 to the unaudited condensed consolidated financial statements for more information.

Cash Flows Provided by Operating Activities

Net cash provided by operating activities was $539 million and $201 million for the three months ended March31, 2019 and 2020, respectively. Cash flow from operations decreased primarily due to decreases in commodity prices both before and after the effects of settled commodity derivatives and increases in gathering, compression and transportation costs.

Our net operating cash flows are sensitive to many variables, the most significant of which is the volatility of natural gas, NGLs, and oil prices, as well as volatility in the cash flows attributable to settlement of our commodity derivatives. Prices for natural gas, NGLs, and oil are primarily determined by prevailing market conditions. Regional and worldwide economic activity, weather, infrastructure capacity to reach markets, storage capacity and other variables influence the market conditions for these products. For example, the impact of the COVID-19 outbreak has reduced domestic and international demand for natural gas, NGLs, and oil. These factors are beyond our control and are difficult to predict.

Cash Flows Used in Investing Activities

During the three months ended March 31, 2019 and 2020, we used cash flows in investing activities of $205 million and $187 million, respectively, primarily as a result of our capital expenditures for drilling, development, and acquisitions. In addition, cash flows in investing activities included expenditures of Antero Midstream Partners related to construction of midstream and water handling and treatment infrastructure and investments in joint ventures through March 12, 2019. Effective March 13, 2019, these expenditures are no longer consolidated in our results.

Cash flows used in investing activities decreased from $205 million for the three months ended March 31, 2019 to $187 million for the three months ended March 31, 2020, primarily due to a decrease in capital expenditures of $160 million during the three months ended March 31, 2020 as compared to the same period in 2019, $297 million in proceeds received in connection with the Transactions impacting the three months ended March 31, 2019 and $125 million in settlement of the water earnout impacting the three months ended March 31, 2020. See Note 3 to the unaudited condensed consolidated financial statements for further discussion on the Transactions.

Total capital expenditures for oil and gas properties decreased from $396 million during the three months ended March 31, 2019 to $311 million during the three months ended March 31, 2020 primarily due to a decrease in drilling and completion activity, increased drilling and completion efficiencies and service cost deflation.

The three months ended March 31, 2019 included Antero Midstream Partners' investments in joint ventures of $25 million and capital expenditures for water handling and treatment systems and gas gathering and compression systems of $73 million. Due to the deconsolidation of Antero Midstream Partners on March 12, 2019, cash flows used in investing activities for the three months ended March 31, 2020 do not include costs attributable to Antero Midstream Partner's investing activity.

Our drilling and completion capital budget for 2020 has been reduced to $750 million from $1.15 billion. Our capital budget may be adjusted as business conditions warrant as the amount, timing, and allocation of capital expenditures is largely discretionary and within our control. If natural gas, NGLs, and oil prices decline to levels that do not generate an acceptable level of corporate returns, or costs increase to levels that do not generate an acceptable level of corporate returns, we may defer a significant portion of our budgeted capital expenditures until later periods to achieve the desired balance between sources and uses of liquidity, and to prioritize capital projects that we believe have the highest expected returns and potential to generate near-term cash flows. We routinely monitor and adjust our capital expenditures in response to changes in commodity prices, availability of financing, drilling and acquisition costs, industry conditions, the timing of regulatory approvals, the availability of rigs, the relative success in drilling activities, contractual obligations, internally generated cash flows, and other factors both within and outside our control.

Cash Flows Provided by Financing Activities

During the three months ended March 31, 2019 and 2020, net cash flows provided by financing activities decreased from a source of $285 million to a use of $14 million primarily as a result of the issuance of senior notes by Antero Midstream Partners prior to the Transactions and the associated deconsolidation of Antero Midstream Partners, partially offset by net repayments on our Credit Facility and Antero Midstream Partners' credit facility.

Net borrowings (repayments) on our Credit Facility and Antero Midstream Partners' credit facility changed from net payments of $270 million during the three months ended March 31, 2019 to net borrowings of $330 million during the three months ended March 31, 2020. Approximately $302 million of borrowings on our Credit Facility in the three months ended March 31, 2020 was used to repurchase a portion of our 2021 and 2022 unsecured notes. In addition, we repurchased and retired 27,193,237 common shares for approximately $43 million during the three months ended March 31, 2020. We did not repurchase any of our unsecured notes or shares during the three months ended March 31, 2019.

Debt Agreements and Contractual Obligations

Senior Secured Revolving Credit Facility. Our Credit Facility is with a consortium of bank lenders. On April 29, 2020, Antero Resources entered into a Third Amendment to the Credit Facility, pursuant to which certain terms of the Credit Facility were amended, as further described herein. Borrowings under the Credit Facility are subject to borrowing base limitations based on the collateral value of our assets and are subject to regular redeterminations. The borrowing base was adjusted to $2.85 billion and lender commitments were reaffirmed at $2.64 billion in the scheduled redetermination in April 2020. The next redetermination of the borrowing base is scheduled to occur in October 2020. The maturity date of the Credit Facility is the earlier of (i) October 26, 2022 and (ii) the date that is 91 days prior to the earliest stated redemption date of any series of our senior notes then outstanding.

At December 31, 2019, we had $552 million of borrowings under the Credit Facility with a weighted average interest rate of 3.28% and $623 million of letters of credit outstanding. At March 31, 2020, we had $882 million of borrowings and $730 million of letters of credit outstanding under the Credit Facility. The average annualized interest rate incurred on the Credit Facility during the three months ended March 31, 2020 was approximately 3.28%. Our Credit Facility provides for borrowing under either LIBOR or an Alternative Rate of Interest.

Under the Credit Facility, "Investment Grade Period" is a period that, as long as no event of default has occurred, commences when Antero elects to give notice to the Administrative Agent that Antero has received at least one of either (i) a BBB- or better rating from S&P or (ii) a Baa3 or better rating from Moody's (an "Investment Grade Rating"). An Investment Grade Period can end at Antero's election. During any period that is not an Investment Grade Period, the Credit Facility requires Antero and its restricted subsidiaries to maintain the following two financial ratios as of the end of each fiscal quarter:

- a current ratio, which is the ratio of our current assets (including any unused borrowing base under the facilities and excluding derivative assets) to our current liabilities (excluding derivative liabilities and lease liabilities), of not less than 1.0 to 1.0; and

- an interest coverage ratio, which is the ratio of EBITDAX (as defined by the credit facility agreement) to interest expense over the most recent four quarters, of not less than 2.5 to 1.0.

During an Investment Grade Period, the Credit Facility requires Antero and its restricted subsidiaries to maintain the following three financial ratios as of the end of each fiscal quarter

- a current ratio, which is the ratio of our current assets (including any unused borrowing base under the facilities and excluding derivative assets) to our current liabilities (excluding derivative liabilities), of not less than 1.0 to 1.0;
- a ratio of total Indebtedness (as defined by the credit facility agreement) to EBITDAX (as defined by the credit facility agreement) of not more than 4.25 to 1.00; and
- a ratio of PV-9 reflected in the most recently delivered reserve report to its total Indebtedness of not less than 1.50 to 1.00, but only if Antero does not have both (i) an unsecured rating from Moody's of Baa3 or better and (ii) an unsecured rating from S&P of BBB- or better.

We were in compliance with the applicable covenants and ratios as of December 31, 2019 and March31, 2020. The actual borrowing capacity available to us may be limited by the financial ratio covenants. At March 31, 2020, our current ratio was 2.28 to 1.0 and our interest coverage ratio was 5.06 to 1.0.

For more information on the terms, conditions, and restrictions under the Credit Facility, please refer to our 2019 Form 10-K.

Senior Notes. Please refer to Note 7 to the unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q and to "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Form 10-K for information on our senior notes.

We may, from time to time, seek to retire or purchase our outstanding debt through cash purchases and/or exchanges for equity securities, in open market purchases, privately negotiated transactions, or otherwise. Such repurchases, if any, will depend on prevailing market conditions, our liquidity requirements, contractual restrictions, and other factors. The amounts involved could be material. During the three months ended March 31, 2020, we repurchased $383 million principal amount of debt at a 21% weighted average discount, including a portion of our 2021 notes and our 2022 notes.

Contractual Obligations. A summary of our contractual obligations as of March 31, 2020 is provided in the table below. Future capital contributions to unconsolidated affiliates are excluded from the table as neither the amounts nor the timing of the obligations can be determined in advance.

(in millions)	Remainder of 2020	Year ended December 31, 2021	2022	2023	2024	2025	Thereafter	Total
Recorded contractual obligations:								
Credit Facility[1]	$ —	882	—	—	—	—	—	882
Antero senior notes—principal[2]	—	730	761	750	—	600	—	2,841
Antero senior notes—interest[2]	135	151	111	51	30	15	—	493
Operating leases[3]	228	269	285	313	342	309	1,069	2,815
Finance leases[3]	1	1	—	—	—	—	—	2
Imputed interest for leases[3]	236	289	259	225	188	149	326	1,672
Asset retirement obligations[4]	—	—	—	—	—	—	57	57
Unrecorded contractual obligations:								
Firm transportation[5]	833	1,077	1,034	1,057	1,017	978	6,931	12,927
Processing, gathering, and compression services[6]	42	56	54	59	59	47	105	422
Drilling and completion	19	—	—	—	—	—	—	19
Land payment obligations[7]	2	3	—	—	—	—	—	5
Total	$ 1,496	3,458	2,504	2,455	1,636	2,098	8,488	22,135

(1) Includes outstanding principal amounts at March 31, 2020. This table does not include future commitment fees, interest expense, or other fees on our Credit Facility because they are floating rate instruments and we cannot determine with accuracy the timing of future loan advances, repayments, or future interest rates to be charged. The maturity date of the Credit Facility is the earlier of (i) October 26, 2022 and (ii) the date that is 91 days prior to the earliest stated redemption of any series of Antero's senior notes then outstanding.

(2) Our senior notes include our 2021 notes, our 2022 notes, our 5.625% notes due 2023, and our 5.00% notes due 2025.

(3) Includes contracts for services provided by drilling rigs and completion fleets, processing, gathering and compression services agreements and office and equipment leases accounted for as leases. The values in the table represent the gross amounts that we are committed to pay; however, we will record in our financial statements our proportionate share of costs based on our working interests. See Note 12 to the unaudited condensed consolidated financial statements for more information on the Company's operating and finance leases.

(4) Represents the present value of our estimated asset retirement obligations. Neither the ultimate settlement amounts nor the timing of our asset retirement obligations can be precisely determined in advance; however, we believe it is likely that a very small amount of these obligations will be settled within the next five years.

(5) Includes firm transportation agreements with various pipelines in order to facilitate the delivery of our production to market. These contracts commit us to transport minimum daily natural gas or NGLs volumes at negotiated rates, or pay for any deficiencies at specified reservation fee rates. The amounts in this table reflect our minimum daily volumes at the reservation fee rates. The values in the table represent the gross amounts that we are committed to pay; however, we will record in our financial statements our proportionate share of costs based on our working interests and net of any fees for excess firm transportation marketed to third parties. None of these agreements were determined to be leases.

(6) Contractual commitments for processing, gathering, and compression services agreements represent minimum commitments under long-term agreements not accounted for as leases. The obligations determined to be leases are included within finance and operating leases in the table above.

(7) Includes contractual commitments for land acquisition agreements. The values in the table represent the minimum payments due under these arrangements. None of these agreements were determined to be leases.

Non-GAAP Financial Measures

Adjusted EBITDAX is a non-GAAP financial measure that we define as net income (loss), including noncontrolling interests, before interest expense, interest income, gains or losses from commodity derivatives and marketing derivatives, but including net cash receipts or payments on derivative instruments included in derivative gains or losses other than proceeds from derivative monetizations, income taxes, impairments, depletion, depreciation, amortization, and accretion, exploration expense, equity-based compensation, gain or loss on early extinguishment of debt, contract termination and rig stacking costs, loss on sale of equity investment shares, equity in earnings or loss of unconsolidated affiliates, water earnout, simplification transaction fees, gain or loss on sale of assets and Antero Midstream Partners related adjustments.

Through March 12, 2019, the financial results of Antero MidstreamPartners were included in our consolidated results. Effective March 13, 2019, we no longer consolidate Antero Midstream Partners and account for our interest in Antero Midstream using the equity method of accounting. See Note 5 to the unaudited condensed consolidated financial statements for more information on our equity investments. Adjusted EBITDAX includes distributions received with respect to limited partner interests in Antero Midstream Partners common units through March 12, 2019.

Adjusted EBITDAX as used and defined by us, may not be comparable to similarly titled measures employed by other companies and is not a measure of performance calculated in accordance with GAAP. Adjusted EBITDAX should not be considered in isolation or as a substitute for operating income or loss, net income or loss, cash flows provided by operating, investing, and financing activities, or other income or cash flow statement data prepared in accordance with GAAP. Adjusted EBITDAX provides no information regarding our capital structure, borrowings, interest costs, capital expenditures, working capital movement, or tax position. Adjusted EBITDAX does not represent funds available for discretionary use because those funds may be required for debt service, capital expenditures, working capital, income taxes, exploration expenses, and other commitments and obligations. However, our management team believes Adjusted EBITDAX is useful to an investor in evaluating our financial performance because this measure:

- is widely used by investors in the oil and natural gas industry to measure operating performance without regard to items excluded from the calculation of such term, which may vary substantially from company to company depending upon accounting methods and the book value of assets, capital structure and the method by which assets were acquired, among other factors;
- helps investors to more meaningfully evaluate and compare the results of our operations from period to period by removing the effect of our capital and legal structure from our operating structure;
- is used by our management team for various purposes, including as a measure of our operating performance, in presentations to our Board of Directors, and as a basis for strategic planning and forecasting; and
- is used by our Board of Directors as a performance measure in determining executive compensation.

There are significant limitations to using Adjusted EBITDAX as a measure of performance, including the inability to analyze the effects of certain recurring and non-recurring items that materially affect our net income or loss, the lack of comparability of results of operations of different companies, and the different methods of calculating Adjusted EBITDAX reported by different companies.

The following table represents a reconciliation of our net income (loss), including noncontrolling interest, to Adjusted EBITDAX and a reconciliation of our Adjusted EBITDAX to net cash provided by operating activities per our unaudited condensed consolidated statements of cash flows, in each case, for the three months ended March 31, 2019 and 2020. Adjusted EBITDAX also excludes the results of Antero Midstream Partners in order to provide comparability with the current structure of Antero Resources as effective March 13, 2019, we no longer consolidate Antero Midstream Partners results. These adjustments are disclosed in the table below as Antero Midstream Partners related adjustments.

(in thousands)	Three months ended March 31, 2019	2020
Reconciliation of net income (loss) to Adjusted EBITDAX:		
Net income (loss) and comprehensive income (loss) attributable to Antero Resources Corporation	$ 978,763	(338,810)
Net income and comprehensive income attributable to noncontrolling interests	46,993	—
Depletion, depreciation, amortization, and accretion	241,177	200,781
Impairment of oil and gas properties	81,244	89,220
Impairment of midstream assets	6,982	—
Commodity derivative fair value (gains) losses [1]	77,368	(565,833)
Gains on settled commodity derivatives [1]	97,092	210,926
Equity-based compensation expense	8,903	3,329
Provision for income tax expense (benefit)	288,710	(109,985)
Gain on early extinguishment of debt	—	(80,561)
Equity in (earnings) loss of unconsolidated affiliates	(14,081)	128,055
Impairment of equity investment	—	610,632
Gain on deconsolidation of Antero Midstream Partners LP	(1,406,042)	—
Distributions/dividends from unconsolidated affiliates	12,605	42,756
Interest expense, net	71,950	53,102
Exploration expense	126	210
Gain on sale of assets	—	(31)
Contract termination and rig stacking	8,360	—
Simplification transaction fees	15,482	—
	515,632	243,791
Net income and comprehensive income attributable to noncontrolling interests	(46,993)	—
Antero Midstream Partners interest expense, net [2]	(16,815)	—
Antero Midstream Partners depreciation, accretion of ARO and accretion of contingent consideration [2]	(21,770)	—
Antero Midstream Partners impairment	(6,982)	—
Antero Midstream Partners equity-based compensation expense [2]	(2,477)	—
Antero Midstream Partners equity in earnings of unconsolidated affiliates [2]	12,264	—
Antero Midstream Partners distributions from unconsolidated affiliates [2]	(12,605)	—
Equity in earnings of Antero Midstream Partners [2]	(15,021)	—
Distributions from Antero Midstream Partners [2]	46,469	—
Antero Midstream Partners Simplification transaction fees	(9,185)	—
Antero Midstream Partners related adjustments	(73,115)	—
Adjusted EBITDAX	$ 442,517	243,791
Reconciliation of our Adjusted EBITDAX to net cash provided by operating activities:		
Adjusted EBITDAX	$ 442,517	243,791
Antero Midstream Partners related adjustments	73,115	—
Interest expense, net	(71,950)	(53,102)
Exploration expense	(126)	(210)
Gain on asset sale	—	31
Changes in current assets and liabilities	109,065	7,727
Simplification transaction fees	(15,482)	—
Other non-cash items	1,865	2,440
Net cash provided by operating activities	$ 539,004	200,677

(1) The adjustments for the derivative fair value gains and losses and gains on settled derivatives have the effect of adjusting net income (loss) from operations for changes in the fair value of unsettled derivatives, which are recognized at the end of each accounting period. As a result, derivative gains included in the calculation Adjusted EBITDAX only reflect derivatives that settled during the period.

(2) Amounts reflected are net of any elimination adjustments for intercompany activity and include activity related to AnteroMidstream Partners through March 12, 2019 (date of the Closing). Effective March 13, 2019, Antero accounts for its

unconsolidated investment in Antero Midstream Corporation using the equity method of accounting. See Note 5 to the unaudited condensed consolidated financial statements for further discussion on equity method investments.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. Certain accounting policies involve judgments and uncertainties to such an extent that there is reasonable likelihood that materially different amounts could have been reported under different conditions, or if different assumptions had been used. We evaluate our estimates and assumptions on a regular basis. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates and assumptions used in preparation of our consolidated financial statements. Our more significant accounting policies and estimates include the successful efforts method of accounting for our production activities, estimates of natural gas, NGLs, and oil reserve quantities and standardized measures of future cash flows, and impairment of proved properties. We provide an expanded discussion of our more significant accounting policies, estimates and judgments in our 2019 Form 10-K. We believe these accounting policies reflect our more significant estimates and assumptions used in the preparation of our consolidated financial statements. Also, see Note 2 to the consolidated financial statements, included in our 2019 Form 10-K, for a discussion of additional accounting policies and estimates made by management.

We evaluate the carrying amount of our proved natural gas, NGLs, and oil properties for impairment for the Utica and Marcellus Shale properties, by property, when events or changes in circumstances indicate that a property's carrying amount may not be recoverable. Under GAAP for successful efforts accounting, if the carrying amount exceeds the estimated undiscounted future net cash flows (measured using future prices), we estimate the fair value of our proved properties and record an impairment charge for any excess of the carrying amount of the properties over the estimated fair value of the properties.

The estimated future net cash flows have been impacted by the COVID-19 pandemic and the decision in March 2020 by Saudi Arabia to reduce the price at which it sells oil and announcing plans to increase production. These events have caused, and continue to cause, significant volatility in future prices which are used in this evaluation. Based on future prices at March 31, 2020, the estimated undiscounted future net cash flows exceeded the carrying amount and no further evaluation was required. We have not recorded any impairment expenses associated with our proved properties during the three months ended March 31, 2019 and 2020. We recorded an impairment charge of $881 million related to the Utica Shale properties during the three months ended September 30, 2019.

Estimated undiscounted future net cash flows are very sensitive to commodity price swings at current commodity price levels and a relatively small decline in prices could result in the carrying amount exceeding the estimated undiscounted future net cash flows at the end of a future reporting period, which would require us to further evaluate if an impairment charge would be necessary. If future prices decline further from March 31, 2020, the fair value of our properties may be below their carrying amounts and an impairment charge may be necessary. We are unable, however, to predict future commodity prices with any reasonable certainty.

Off-Balance Sheet Arrangements

As of March 31, 2020, we did not have any off balance sheet arrangements other than contractual commitments for firm transportation, gas processing and fractionation, gathering, and compression services and land payment obligations. See "—Debt Agreements and Contractual Obligations—Contractual Obligations" for our commitments under these agreements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

The primary objective of the following information is to provide forward-looking quantitative and qualitative information about our potential exposure to market risk. The term "market risk" refers to the risk of loss arising from adverse changes in natural gas, NGLs, and oil prices, as well as interest rates. These disclosures are not meant to be precise indicators of expected future losses, but rather indicators of reasonably possible losses. This forward-looking information provides indicators of how we view and manage our ongoing market risk exposures.

Commodity Hedging Activities

Our primary market risk exposure is in the price we receive for our natural gas, NGLs, and oil production. Pricing is primarily driven by spot regional market prices applicable to our U.S. natural gas production and the prevailing worldwide price for oil. Pricing for natural gas, NGLs, and oil has, historically, been volatile and unpredictable, and we expect this volatility to continue in the future. The prices we receive for our production depend on many factors outside of our control, including volatility in the differences between commodity prices at sales points and the applicable index price.

To mitigate some of the potential negative impact on our cash flows caused by changes in commodity prices, we enter into financial derivative instruments for a portion of our natural gas, NGLs, and oil production when management believes that favorable future prices can be secured.

Our financial hedging activities are intended to support natural gas, NGLs, and oil prices at targeted levels and to manage our exposure to natural gas, NGLs, and oil price fluctuations. These contracts may include commodity price swaps whereby we will receive a fixed price and pay a variable market price to the contract counterparty, collars that set a floor and ceiling price for the hedged production, or basis differential swaps. These contracts are financial instruments, and do not require or allow for physical delivery of the hedged commodity. At March 31, 2020, our commodity derivatives included fixed price swaps and basis differential swaps at index-based pricing.

At March 31, 2020, we had in place natural gas swaps covering portions of our projected production through 2024. Our commodity hedge position as of March 31, 2020 is summarized in Note 11 to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q. Under the Credit Facility, we are permitted to hedge up to 75% of our projected production for the next 60 months. We may enter into hedge contracts with a term greater than 60 months, and for no longer than 72 months, for up to 65% of our estimated production. Based on our production and our fixed price swap contracts that settled during the three months ended March 31, 2020, our revenues would have decreased by approximately $12 million for each $0.10 decrease per MMBtu in natural gas prices and $1.00 decrease per Bbl in oil and NGLs prices, excluding the effects of changes in the fair value of our derivative positions which remain open at March 31, 2020.

All derivative instruments, other than those that meet the normal purchase and normal sale scope exception, are recorded at fair market value in accordance with GAAP and are included in our consolidated balance sheets as assets or liabilities. The fair values of our derivative instruments are adjusted for non-performance risk. Because we do not designate these derivatives as accounting hedges, they do not receive hedge accounting treatment; therefore, all mark-to-market gains or losses, as well as cash receipts or payments on settled derivative instruments, are recognized in our statements of operations. We present total gains or losses on commodity derivatives (for both settled derivatives and derivative positions which remain open) within operating revenues as "Commodity derivative fair value gains (losses)."

Mark-to-market adjustments of derivative instruments cause earnings volatility but have no cash flow impact relative to changes in market prices until the derivative contracts are settled or monetized prior to settlement. We expect continued volatility in the fair value of our derivative instruments. Our cash flows are only impacted when the associated derivative contracts are settled or monetized by making or receiving payments to or from the counterparty. At March 31, 2020, the estimated fair value of our commodity derivative instruments was a net asset of $1.1 billion comprised of current assets and noncurrent assets and liabilities. At December 31, 2019, the estimated fair value of our commodity derivative instruments was a net asset of $746 million comprised of current and noncurrent assets and liabilities.

By removing price volatility from a portion of our expected production through December2024, we have mitigated, but not eliminated, the potential negative effects of changing prices on our operating cash flows for those periods. While mitigating the negative effects of falling commodity prices, these derivative contracts also limit the benefits we would receive from increases in commodity prices above the fixed hedge prices.

Counterparty and Customer Credit Risk

Our principal exposures to credit risk are through receivables resulting from the following: commodity derivative contracts ($1.1 billion at March 31, 2020); and the sale of our natural gas, NGLs and oil production ($192 million at March 31, 2020), which we market to energy companies, end users, and refineries.

By using derivative instruments that are not traded on an exchange to hedge exposures to changes in commodity prices, we expose ourselves to the credit risk of our counterparties. Credit risk is the potential failure of a counterparty to perform under the terms of a derivative contract. When the fair value of a derivative contract is positive, the counterparty is expected to owe us, which

creates credit risk. To minimize the credit risk in derivative instruments, it is our policy to enter into derivative contracts only with counterparties that are creditworthy financial institutions that management deems to be competent and competitive market makers. The creditworthiness of our counterparties is subject to periodic review. We have commodity hedges in place with 14 different counterparties, 12 of which are lenders under our Credit Facility. The fair value of our commodity derivative contracts of approximately $1.1 billion at March 31, 2020 included the following derivative assets by bank counterparty: Wells Fargo - $238 million; Citigroup - $232 million; Canadian Imperial Bank of Commerce - $200 million; JP Morgan - $143 million; Morgan Stanley - $125 million; Scotiabank - $59 million; PNC - $34 million; BNP Paribas - $19 million; Bank of Montreal - $18 million; TD Energy - $14 million; Natixis - $9 million; SunTrust - $6 million and Merrill Lynch - $4 million. The estimated fair value of our commodity derivative assets has been risk-adjusted using a discount rate based upon the counterparties' respective published credit default swap rates (if available, or if not available, a discount rate based on the applicable Reuters bond rating) at March 31, 2020 for each of the European and American banks. We believe that all of these institutions, currently, are acceptable credit risks. Other than as provided by the Credit Facility, we are not required to provide credit support or collateral to any of our counterparties under our derivative contracts, nor are they required to provide credit support to us. As of March 31, 2020, we did not have any past-due receivables from, or payables to, any of the counterparties to our derivative contracts.

We are also subject to credit risk due to the concentration of our receivables from several significant customers for sales of natural gas, NGLs, and oil. We generally do not require our customers to post collateral. The inability or failure of our significant customers to meet their obligations to us, or their insolvency or liquidation, may adversely affect our financial results.

Interest Rate Risks

Our primary exposure to interest rate risk results from outstanding borrowings under the Credit Facility, which has a floating interest rate. The average annualized interest rate incurred on the Credit Facility during the three months ended March 31, 2020 was approximately 3.28%. We estimate that a 1.0% increase in the applicable average interest rates for the three months ended March 31, 2020 would have resulted in an estimated $1.6 million increase in interest expense.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Exchange Act, we have evaluated, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be disclosed by us in reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures and is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. Based upon that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of March 31, 2020 at a level of reasonable assurance.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended March 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

The information required by this item is included in Note 14 to our unaudited condensed consolidated financial statements and is incorporated herein.

Item 1A. Risk Factors.

We are subject to certain risks and hazards due to the nature of the business activities we conduct. For a discussion of these risks, see "Item 1A. Risk Factors" in the 2019 Form 10-K in addition to the risks described below. Other than as described below, there have been no material changes to the risks described in the 2019 10-K. We may experience additional risks and uncertainties not currently known to us. Furthermore, as a result of developments occurring in the future, conditions that we currently deem to be immaterial may also materially and adversely affect us. Any such risk, in addition to those described below and in the 2019 Form 10-K, may materially and adversely affect our business, financial condition, cash flows and results of operations.

The imbalance between the supply of and demand for oil, natural gas and NGLs has caused extreme market volatility and may result in increased costs and decreased availability of storage capacity. The lack of a market or available storage for certain of our products could cause interruptions in our operations, including temporary curtailments or shut-ins, which could adversely affect our financial condition and results of operations.

The marketing of our natural gas, NGLs, and oil production is substantially dependent upon the existence of adequate markets for our products. In response to the COVID-19 pandemic, governments have tried to slow the spread of the virus by imposing social distancing guidelines, travel restrictions and stay-at-home orders, which have caused a significant decrease in the demand for natural gas, NGLs and oil. The imbalance between the supply of and demand for these products, as well as the uncertainty around the extent and timing of an economic recovery, have caused extreme market volatility and a substantial adverse effect on commodity prices in March and April. Also as a result of this imbalance, the industry is experiencing storage capacity constraints with respect to certain NGL products and oil. If we are unable to sell our production or enter into additional storage arrangements on commercially reasonable terms or at all, we could be forced to temporarily shut in a portion of our production or delay or discontinue drilling plans and commercial production following a discovery of hydrocarbons. Although our production is more heavily weighted to natural gas, the lack of a market or available storage for any one NGL product or oil could result in temporary shut-ins as we may be unable to curtail the production of individual products in a meaningful way without reducing the production of other products. Based on our expectation of available storage and overall demand, we believe we may begin temporarily constraining our production, which may include partial shut-ins. We are unable to determine the extent or duration of any such shut-in. Any such shut in or curtailment, or any inability to obtain favorable terms for delivery of the natural gas, NGLs and oil we produce, could adversely affect our financial condition and results of operations.

A pandemic, epidemic or outbreak of an infectious disease, such as COVID-19, may materially adversely affect our business.

The global or national outbreak of an infectious disease, such as COVID-19, may cause disruptions to our business and operational plans, which may include (i) shortages of employees, (ii) unavailability of contractors and subcontractors, (iii) interruption of supplies from third parties upon which we rely, (iv) recommendations of, or restrictions imposed by, government and health authorities, including quarantines, to address the COVID-19 outbreak and (v) restrictions that we and our contractors and subcontractors impose, including facility shutdowns, to ensure the safety of employees and others. While it is not possible to predict their extent or duration, these disruptions may have a material adverse effect on our business, financial condition and results of operations.

Further, the effects of COVID-19 and concerns regarding its global spread have negatively impacted domestic and international demand for crude oil and natural gas, which has and could continue to contribute to price volatility, impact the price we receive for natural gas, NGLs, and oil and materially and adversely affect the demand for and marketability of our production, as well as lead to temporary curtailment of production due to lack of downstream demand or storage capacity. Additionally, to the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks set forth in "Item 1A. Risk Factors" in our 2019 Form 10-K.

Our future tax liability may be greater than expected if our net operating loss ("NOL") carryforwards are limited, we do not generate expected deductions, or tax authorities challenge certain of our tax positions.

As of December 31, 2019, we have U.S. federal and state NOL carryforwards of $2.2 billion and $2.0 billion, respectively, some of which expire at various dates from 2032 to 2038 while others have no expiration date. We currently expect to be able to utilize these NOL carryforwards and generate deductions to offset our future taxable income. This expectation is based upon assumptions we have made regarding, among other things, our income, capital expenditures and net working capital, and upon our NOL carryforwards not becoming subject to future limitation under Section 382 of the Internal Revenue Code of 1986, as amended ("Section 382"), or otherwise.

Section 382 generally imposes an annual limitation on the amount of NOL carryforwards that may be used to offset taxable income when a corporation has undergone an "ownership change" (as determined under Section 382). An ownership change generally occurs if one or more stockholders (or groups of stockholders) who are each deemed to own at least 5% of such corporation's stock change their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. In the event that we were to undergo an ownership change, utilization of our NOL carryforwards would be subject to an annual limitation under Section 382, determined by multiplying the value of our stock at the time of the ownership change by the applicable long-term tax-exempt rate in effect during the month in which the ownership change occurs, subject to certain adjustments, which could result in a portion of our NOL carryforwards expiring prior to their utilization. Any unused annual limitation may be carried over to later years. Any limitation on our ability to utilize our NOL carryforwards against income or gain we generate in the future could result in future income tax expense that could adversely affect our operating results and cash flows.

Furthermore, any significant variance in our interpretation of current income tax laws, including as result of the release of final Treasury Regulations or other interpretive guidance implementing the Tax Cuts and Jobs Act, or a challenge of one or more of our tax positions by the IRS or other tax authorities could affect our tax position. While we expect to be able to utilize our NOL carryforwards and generate deductions to offset our future taxable income, in the event that deductions are not generated as expected, one or more of our tax positions are successfully challenged by the IRS (in a tax audit or otherwise), or our NOL carryforwards are subject to future limitation (including due to an ownership change under Section 382), our future tax liability may be greater than expected.

Item 2. Unregistered Sales of Equity Securities

Issuer Purchases of Equity Securities

The following table sets forth our share purchase activity for each period presented:

Period	Total Number of Shares Purchased [1]	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans [2]	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan [2]
January 1, 2020 - January 31, 2020	3,960,990	$ 1.87	3,948,719	$ 420,144,052
February 1, 2020 - February 28, 2020	14,244,658	$ 1.78	14,244,658	$ 394,807,709
March 1, 2020 - March 31, 2020	8,999,860	$ 1.11	8,999,860	$ —
Total	27,205,508	$ 1.57	27,193,237	

(1) The total number of shares purchased includes 12,271 shares repurchased in January representing shares of our common stock transferred to us in order to satisfy tax withholding obligations incurred upon the vesting of restricted stock and restricted stock units held by our employees. There were no share repurchases in February or March relating to shares transferred to satisfy tax withholding obligations.

(2) In October 2018, the Company's Board of Directors authorized a $600 million share repurchase program, which expired on March 31, 2020. During the three months ended March 31, 2020, we repurchased 27,193,237 shares under this program for approximately $43 million, or a weighted average of $1.57 per share.

Item 5. Other Information

On April 29, 2020, Antero Resources Corporation, certain of its subsidiaries, as guarantors, the lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent entered into a Third Amendment (the "Third Amendment") to our Credit Facility. The Third Amendment amends our Credit Facility to, among other things, (i) evidence the decrease in the borrowing base to $2.85 billion and (ii) amend other provisions to our Credit Facility as described in Note 7 to the unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

Item 6. Exhibits

Exhibit Number	Description of Exhibit
3.1	Amended and Restated Certificate of Incorporation of Antero Resources Corporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (Commission File No. 001-36120) filed on October 17, 2013).
3.2	Amended and Restated Bylaws of Antero Resources Corporation (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K (Commission File No. 001-36120) filed on October 17, 2013).
10.1*	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement (Form for Special Retention Awards) under the Antero Resources Corporation Long-Term Incentive Plan.
10.2*	Form of Retention Award Grant Notice and Retention Award Agreement under the Antero Resources Corporation Long-Term Incentive Plan.
10.3*	Third Amendment to Fifth Amended and Restated Credit Agreement, dated as of April 29, 2020, among Antero Resources Corporation, as Borrower, certain subsidiaries of the Borrower, as Guarantors, the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent.
31.1*	Certification of the Company's Chief Executive Officer Pursuant to Section 302 of the Sarbanes Oxley Act of 2002 (18 U.S.C. Section 7241).
31.2*	Certification of the Company's Chief Financial Officer Pursuant to Section 302 of the Sarbanes Oxley Act of 2002 (18 U.S.C. Section 7241).
32.1*	Certification of the Company's Chief Executive Officer Pursuant to Section 906 of the Sarbanes Oxley Act of 2002 (18 U.S.C. Section 1350).
32.2*	Certification of the Company's Chief Financial Officer Pursuant to Section 906 of the Sarbanes Oxley Act of 2002 (18 U.S.C. Section 1350).
101*	The following financial information from this Quarterly Report on Form 10-Q of Antero Resources Corporation for the quarter ended March 31, 2020 formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations and Comprehensive Income (Loss), (iii) Condensed Consolidated Statements of Equity, (iv) Condensed Consolidated Statements of Cash Flows, and (v) Notes to the Condensed Consolidated Financial Statements, tagged as blocks of text.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

The exhibits marked with the asterisk symbol (*) are filed or furnished with this Quarterly Report on Form 10-Q.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ANTERO RESOURCES CORPORATION

By: /s/ GLEN C. WARREN, JR.
Glen C. Warren, Jr.
President, Chief Financial Officer and Secretary

Date: April 29, 2020

Exhibit 10.1

Form for Special Retention Awards

ANTERO RESOURCES CORPORATION
LONG-TERM INCENTIVE PLAN

RESTRICTED STOCK UNIT GRANT NOTICE

Pursuant to the terms and conditions of the Antero Resources Corporation Long-Term Incentive Plan, as amended from time to time (the "Plan"), Antero Resources Corporation (the "Company") hereby grants to the individual listed below ("you" or the "Participant") the number of Restricted Stock Units (the "RSUs") set forth below. This award of RSUs (this "Award") is subject to the terms and conditions set forth herein and in the Restricted Stock Unit Agreement attached hereto as Exhibit A (the "Agreement") and the Plan, each of which is incorporated herein by reference. Capitalized terms used but not defined herein shall have the meanings set forth in the Plan.

Participant:	[___________]
Date of Grant:	[___________]
Total Number of Restricted Stock Units:	[___________]
Vesting Schedule:	[___________]

By your signature below, you agree to be bound by the terms and conditions of the Plan, the Agreement and this Restricted Stock Unit Grant Notice (this "Grant Notice"). You acknowledge that you have reviewed the Agreement, the Plan and this Grant Notice in their entirety and fully understand all provisions of the Agreement, the Plan and this Grant Notice. You hereby agree to accept as binding, conclusive and final all decisions or interpretations of the Committee regarding any questions or determinations arising under the Agreement, the Plan or this Grant Notice. This Grant Notice may be executed in one or more counterparts (including portable document format (.pdf) and facsimile counterparts), each of which shall be deemed to be an original, but all of which together shall constitute one and the same agreement.

[Remainder of Page Intentionally Blank; Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Grant Notice to be executed by an officer thereunto duly authorized, and the Participant has executed this Grant Notice, effective for all purposes as provided above.

ANTERO RESOURCES CORPORATION

By: ______________________________

Alvyn A. Schopp
Chief Administrative Officer and Regional
Senior Vice President

PARTICIPANT

____
[Name of Participant]

SIGNATURE PAGE TO
RESTRICTED STOCK UNIT GRANT NOTICE

EXHIBIT A

RESTRICTED STOCK UNIT AGREEMENT

This Restricted Stock Unit Agreement (this "Agreement") is made as of the Date of Grant set forth in the Grant Notice to which this Agreement is attached (the "Date of Grant") by and between Antero Resources Corporation, a Delaware corporation (the "Company"), and [___________] ("Employee").Capitalized terms used but not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.

1. **Award**. In consideration of Employee's past and/or continued employment with, or service to, the Company or a Subsidiary and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, effective as of the Date of Grant, the Company hereby grants to Employee the number of RSUs set forth in the Grant Notice on the terms and conditions set forth in the Grant Notice, this Agreement and the Plan, which is incorporated herein by reference as a part of this Agreement. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control. To the extent vested, each RSU represents the right to receive one share of Stock ("Common Stock"), subject to the terms and conditions set forth in the Grant Notice, this Agreement and the Plan. Unless and until the RSUs have become vested in the manner set forth in the Grant Notice, Employee will have no right to receive any Common Stock or other payments in respect of the RSUs. Prior to settlement of this Award, the RSUs and this Award represent an unsecured obligation of the Company, payable only from the general assets of the Company.

2. **Vesting of RSUs**. The RSUs shall vest in accordance with the vesting schedule set forth in the Grant Notice. Unless and until the RSUs have vested in accordance with such vesting schedule, Employee will have no right to receive any dividends or other distribution with respect to the RSUs. In the event of the termination of Employee's employment prior to the vesting of all of the RSUs (but after giving effect to any accelerated vesting pursuant to the Grant Notice), any unvested RSUs (and all rights arising from such RSUs and from being a holder thereof) will terminate automatically without any further action by the Company and will be forfeited without further notice and at no cost to the Company.

3. **Settlement of RSUs**. As soon as administratively practicable following the vesting of RSUs pursuant to Section 2, but in no event later than 30 days after such vesting date, the Company shall deliver to Employee (or Employee's permitted transferee, if applicable) a number of shares of Common Stock equal to the number of RSUs subject to this Award that become vested on the applicable vesting date and cash equal to any DERs credited with respect to such vested RSUs or, at the discretion of the Committee, shares of Common Stock having a Fair Market Value equal to such DERs as of the applicable vesting date. Any fractional RSU that becomes vested hereunder shall be rounded down at the time shares of Common Stock are issued in settlement of such RSU. No fractional shares of Common Stock, nor the cash value of any fractional shares of Common Stock, will be issuable or payable to Employee pursuant to this Agreement. All shares of Common Stock issued hereunder shall be delivered either by delivering one or more certificates for such shares to Employee or by entering such shares in book-entry form, as determined by the Committee in its sole discretion. The value of shares of Common Stock shall not bear any interest owing to the passage of time. Neither this Section 3

nor any action taken pursuant to or in accordance with this Agreement shall be construed to create a trust or a funded or secured obligation of any kind.

4 . **Dividend Equivalent Rights**. Each RSU subject to this Award is hereby granted in tandem with a corresponding Dividend Equivalent ("DER"), which DER shall remain outstanding from the Date of Grant until the earlier of the settlement or forfeiture of the RSU to which it corresponds. Each vested DER shall entitle Employee to receive payments, subject to and in accordance with this Agreement, in an amount equal to any dividends paid by the Company in respect of the shares of Common Stock underlying the RSUs to which such DER relates. The Company shall establish, with respect to each RSU, a separate DER bookkeeping account for such RSU (a "DER Account"), which shall be credited (without interest) on the applicable dividend payment dates with an amount equal to any dividends paid during the period that such RSU remains outstanding with respect to the shares of Common Stock underlying the RSU to which such DER relates. Upon the vesting of an RSU, the DER (and the DER Account) with respect to such vested RSU shall also become vested. Similarly, upon the forfeiture of an RSU, the DER (and the DER Account) with respect to such forfeited RSU shall also be forfeited. DERs shall not entitle Employee to any payments relating to dividends paid after the earlier to occur of the applicable RSU settlement date or the forfeiture of the RSU underlying such DER.

5. **Rights as Stockholder**. Neither Employee nor any person claiming under or through Employee shall have any of the rights or privileges of a holder of shares of Common Stock in respect of any shares that may become deliverable hereunder unless and until certificates representing such shares have been issued or recorded in book entry form on the records of the Company or its transfer agents or registrars, and delivered in certificate or book entry form to Employee or any person claiming under or through Employee.

6 . **Tax Withholding**. Upon any taxable event arising in connection with the RSUs, the Company shall have the authority and the right to deduct or withhold (or cause one of its Affiliates to deduct or withhold), or to require Employee to remit to the Company (or one of its Affiliates), an amount sufficient to satisfy all applicable federal, state and local taxes required by law to be withheld with respect to such event. In satisfaction of the foregoing requirement, unless otherwise determined by the Committee, the Company or one of its Affiliates shall withhold, or cause to be surrendered, from any cash or equity remuneration (including any of the shares of Common Stock that may be issuable under this Agreement) then or thereafter payable to Employee an amount equal to the aggregate amount of taxes required to be withheld with respect to such event. The amount of such withholding shall be limited to the aggregate amount of taxes required to be withheld based on the minimum statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes that are applicable to such taxable income; *provided, however*, that such withholding may be based on rates in excess of the minimum statutory withholding rates if (x) the Committee (i) determines that such withholding would not result in adverse accounting, tax or other consequences to the Company or any of its Affiliates (other than immaterial administrative, reporting or similar consequences) and (ii) authorizes such withholding at such greater rates and (y) Employee consents to such withholding at such greater rates. Employee acknowledges and agrees that none of the Board, the Committee, the Company or any of its Affiliates have made any representation or warranty as to the tax consequences to Employee as a result of the receipt of the RSUs, the vesting of the RSUs or the forfeiture of any of the RSUs. Employee represents that he is in no manner relying on the

Board, the Committee, the Company or any of its Affiliates or any of their respective managers, directors, officers, employees or authorized representatives (including, without limitation, attorneys, accountants, consultants, bankers, lenders, prospective lenders and financial representatives) for tax advice or an assessment of such tax consequences. Employee represents that he has consulted with any tax consultants that Employee deems advisable in connection with the RSUs.

7 . **Non-Transferability**. During the lifetime of Employee, the RSUs may not be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until the shares of Common Stock underlying the RSUs have been issued, and all restrictions applicable to such shares have lapsed. Neither the RSUs nor any interest or right therein shall be liable for the debts, contracts or engagements of Employee or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

8 . **Compliance with Securities Law**. Notwithstanding any provision of this Agreement to the contrary, the issuance of shares of Common Stock hereunder will be subject to compliance with all applicable requirements of applicable law with respect to such securities and with the requirements of any stock exchange or market system upon which the Common Stock may then be listed. No shares of Common Stock will be issued hereunder if such issuance would constitute a violation of any applicable law or regulation or the requirements of any stock exchange or market system upon which the Common Stock may then be listed. In addition, shares of Common Stock will not be issued hereunder unless (a) a registration statement under the Securities Act is in effect at the time of such issuance with respect to the shares to be issued or (b) in the opinion of legal counsel to the Company, the shares to be issued are permitted to be issued in accordance with the terms of an applicable exemption from the registration requirements of the Securities Act. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary for the lawful issuance and sale of any shares of Common Stock hereunder will relieve the Company of any liability in respect of the failure to issue such shares as to which such requisite authority has not been obtained. As a condition to any issuance of Common Stock hereunder, the Company may require Employee to satisfy any requirements that may be necessary or appropriate to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect to such compliance as may be requested by the Company.

9 . **Legends**. If a stock certificate is issued with respect to shares of Common Stock delivered hereunder, such certificate shall bear such legend or legends as the Committee deems appropriate in order to reflect the restrictions set forth in this Agreement and to ensure compliance with the terms and provisions of this Agreement, the rules, regulations and other requirements of the Securities and Exchange Commission, any applicable laws or the requirements of any stock exchange on which the Common Stock is then listed. If the shares of

Common Stock issued hereunder are held in book-entry form, then such entry will reflect that the shares are subject to the restrictions set forth in this Agreement.

10. **Execution of Receipts and Releases**. Any payment of cash or any issuance or transfer of shares of Common Stock or other property to Employee or Employee's legal representative, heir, legatee or distributee, in accordance with this Agreement shall be in full satisfaction of all claims of such person hereunder. As a condition precedent to such payment or issuance, the Company may require Employee or Employee's legal representative, heir, legatee or distributee to execute a release and receipt therefor in such form as it shall determine appropriate; provided, however, that any review period under such release will not modify the date of settlement with respect to vested RSUs.

11. **No Right to Continued Employment or Awards**.

(a) For purposes of this Agreement, Employee shall be considered to be employed by the Company as long as Employee remains an Employee, or an employee of a corporation or other entity (or a parent or subsidiary of such corporation or other entity) assuming or substituting a new award for this Award. Without limiting the scope of the preceding sentence, it is specifically provided that Employee shall be considered to have terminated employment with the Company at the time of the termination of the "Affiliate" status of the entity or other organization that employs Employee. Nothing in the adoption of the Plan, nor the award of the RSUs thereunder pursuant to the Grant Notice and this Agreement, shall confer upon Employee the right to continued employment by, or a continued service relationship with, the Company or any such Affiliate, or any other entity, or affect in any way the right of the Company or any such Affiliate, or any other entity to terminate such employment at any time. Unless otherwise provided in a written employment agreement or by applicable law, Employee's employment by the Company, or any such Affiliate, or any other entity shall be on an at-will basis, and the employment relationship may be terminated at any time by either Employee or the Company, or any such Affiliate, or other entity for any reason whatsoever, with or without cause or notice. Any question as to whether and when there has been a termination of such employment, and the cause of such termination, shall be determined by the Committee or its delegate, and such determination shall be final, conclusive and binding for all purposes.

(b) The grant of the RSUs is a one-time benefit and does not create any contractual or other right to receive a grant of Awards or benefits in lieu of Awards in the future. Future plans will be at the sole discretion of the Company.

12. **Notices**. Any notices or other communications provided for in this Agreement shall be sufficient if in writing. In the case of Employee, such notices or communications shall be effectively delivered if hand delivered to Employee at Employee's principal place of employment or if sent by registered or certified mail to Employee at the last address Employee has filed with the Company. In the case of the Company, such notices or communications shall be effectively delivered if sent by registered or certified mail to the Company at its principal executive offices.

13. **Agreement to Furnish Information**. Employee agrees to furnish to the Company all information requested by the Company to enable it to comply with any reporting or other requirement imposed upon the Company by or under any applicable statute or regulation.

14. **Entire Agreement; Amendment**. This Agreement constitutes the entire agreement of the parties with regard to the subject matter hereof, and contains all the covenants, promises, representations, warranties and agreements between the parties with respect to the RSUs granted hereby; provided, however, that the terms of this Agreement shall not modify and shall be subject to the terms and conditions of any employment and/or severance agreement between the Company (or an Affiliate or other entity) and Employee in effect as of the date a determination is to be made under this Agreement. Without limiting the scope of the preceding sentence, except as provided therein, all prior understandings and agreements, if any, among the parties hereto relating to the subject matter hereof are hereby null and void and of no further force and effect. The Committee may, in its sole discretion, amend this Agreement from time to time in any manner that is not inconsistent with the Plan; provided, however, that except as otherwise provided in the Plan or this Agreement, any such amendment that materially reduces the rights of Employee shall be effective only if it is in writing and signed by both Employee and an authorized officer of the Company.

15. **Governing Law**. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without regard to conflicts of law principles thereof.

16. **Successors and Assigns**. The Company may assign any of its rights under this Agreement without Employee's consent. This Agreement will be binding upon and inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth herein and in the Plan, this Agreement will be binding upon Employee and Employee's beneficiaries, executors, administrators and the person(s) to whom the RSUs may be transferred by will or the laws of descent or distribution.

17. **Clawback**. Notwithstanding any provision in this Agreement, the Grant Notice or the Plan to the contrary, to the extent required by (a) applicable law, including, without limitation, the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, any Securities and Exchange Commission rule or any applicable securities exchange listing standards and/or (b) any policy that may be adopted or amended by the Board from time to time, all shares of Common Stock issued hereunder shall be subject to forfeiture, repurchase, recoupment and/or cancellation to the extent necessary to comply with such law(s) and/or policy.

18. **Counterparts**. The Grant Notice may be executed in one or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. Delivery of an executed counterpart of the Grant Notice by facsimile or pdf attachment to electronic mail shall be effective as delivery of a manually executed counterpart of the Grant Notice.

19. **Severability**. If a court of competent jurisdiction determines that any provision of this Agreement is invalid or unenforceable, then the invalidity or unenforceability of such

provision shall not affect the validity or enforceability of any other provision of this Agreement, and all other provisions shall remain in full force and effect.

20. **Code Section 409A**. None of the RSUs, DERs or any amounts payable pursuant to this Agreement are intended to constitute or provide for a deferral of compensation that is subject to Section 409A of the Code and the Treasury regulations and other interpretive guidance issued thereunder (collectively, "Section 409A"). Nevertheless, to the extent that the Committee determines that the RSUs or DERs may not be exempt from Section 409A, then, if Employee is deemed to be a "specified employee" within the meaning of Section 409A, as determined by the Committee, at a time when Employee becomes eligible for settlement of the RSUs upon his "separation from service" within the meaning of Section 409A, then to the extent necessary to prevent any accelerated or additional tax under Section 409A, such settlement will be delayed until the earlier of: (a) the date that is six months following Employee's separation from service and (b) Employee's death. Notwithstanding the foregoing, the Company makes no representations that the payments provided under this Agreement are exempt from or compliant with Section 409A and in no event shall the Company be liable for all or any portion of any taxes, penalties, interest or other expenses that may be incurred by Employee on account of non-compliance with Section 409A.

[Remainder of Page Intentionally Blank]

Exhibit 10.2

ANTERO RESOURCES CORPORATION
LONG-TERM INCENTIVE PLAN

RETENTION AWARD GRANT NOTICE

Pursuant to the terms and conditions of the Antero Resources Corporation Long-Term Incentive Plan, as amended from time to time (the "Plan"), Antero Resources Corporation (the "Company") hereby grants to the individual listed below ("you" or the "Participant") the cash award (the "Retention Award") set forth below under Section 6(h) of the Plan. This Retention Award (this "Award") is subject to the terms and conditions set forth herein and in the Retention Award Agreement attached hereto as Exhibit A (the "Agreement") and the Plan, each of which is incorporated herein by reference. Capitalized terms used but not defined herein shall have the meanings set forth in the Plan.

Participant:	[___________]
Date of Grant:	[___________]
Total Amount of the Retention Award:	[___________]
Vesting Schedule:	[___________]

By your signature below, you agree to be bound by the terms and conditions of the Plan, the Agreement and this Retention Award Grant Notice (this "Grant Notice"). You acknowledge that you have reviewed the Agreement, the Plan and this Grant Notice in their entirety and fully understand all provisions of the Agreement, the Plan and this Grant Notice. You hereby agree to accept as binding, conclusive and final all decisions or interpretations of the Committee regarding any questions or determinations arising under the Agreement, the Plan or this Grant Notice. This Grant Notice may be executed in one or more counterparts (including portable document format (.pdf) and facsimile counterparts), each of which shall be deemed to be an original, but all of which together shall constitute one and the same agreement.

[Remainder of Page Intentionally Blank;
Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Grant Notice to be executed by an officer thereunto duly authorized, and the Participant has executed this Grant Notice, effective for all purposes as provided above.

ANTERO RESOURCES CORPORATION

By: ______________________________

Alvyn A. Schopp
Chief Administrative Officer and Regional
Vice President

PARTICIPANT

____
[Name of Participant]

SIGNATURE PAGE TO
RETENTION AWARD GRANT NOTICE

EXHIBIT A

RETENTION AWARD AGREEMENT

This Retention Award Agreement (this "Agreement") is made as of the Date of Grant set forth in the Grant Notice to which this Agreement is attached by and between Antero Resources Corporation, a Delaware corporation (the "Company"), and [___________] ("Employee"). Capitalized terms used but not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.

1. **Award**. In consideration of Employee's past and/or continued employment with, or service to, the Company or a Subsidiary and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, effective as of the Date of Grant set forth in the Grant Notice (the "Date of Grant"), the Company hereby grants to Employee the Retention Award set forth in the Grant Notice on the terms and conditions set forth in the Grant Notice, this Agreement and the Plan, which is incorporated herein by reference as a part of this Agreement. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control. Unless and until the Retention Award has become vested in the manner set forth in the Grant Notice, Employee will have no right to receive any payments in respect of the Retention Award. Prior to settlement of this Award, this Award represents an unsecured obligation of the Company, payable only from the general assets of the Company.

2. **Vesting of the Retention Award**.

(a) Except as otherwise set forth in this Section 2, the Retention Award shall vest in accordance with the vesting schedule set forth in the Grant Notice. In the event of the termination of Employee's employment prior to the vesting of all of the Retention Award (but after giving effect to any accelerated vesting pursuant to this Section 2), any unvested portion of the Retention Award will be forfeited without further notice and at no cost to the Company.

(b) [___________]

3. **Settlement of the Retention Award**. As soon as administratively practicable following the vesting of the Retention Award (or any portion thereof) pursuant to Section 2, but in no event later than 30 days after such vesting date, the Company shall deliver to Employee (or Employee's permitted transferee, if applicable) an amount in cash equal to the portion of the Retention Award that has become vested on the applicable vesting date. Neither this Section 3 nor any action taken pursuant to or in accordance with this Agreement shall be construed to create a trust or a funded or secured obligation of any kind.

4. **Tax Withholding**. The Company or any Affiliate may withhold and deduct from any payments made or to be made pursuant to this Agreement all federal, state, local and other taxes as the Company or any Affiliate deems to be required pursuant to any law, ordinance or governmental regulation or ruling.

5. **Non-Transferability**. During the lifetime of Employee, the Retention Award may not be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until the cash underlying the Retention Award has been paid. Neither

the Retention Award nor any interest or right therein shall be liable for the debts, contracts or engagements of Employee or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

6 . **Execution of Receipts and Releases**. Any payment of cash to Employee or Employee's legal representative, heir, legatee or distributee, in accordance with this Agreement shall be in full satisfaction of all claims of such person hereunder. As a condition precedent to such payment or issuance, the Company may require Employee or Employee's legal representative, heir, legatee or distributee to execute a release of claims and receipt therefor in such form as it shall determine appropriate; provided, however, that any review period under such release will not modify the date of settlement with respect to any vested portion of the Retention Award.

7. **No Right to Continued Employment or Awards**.

(a) For purposes of this Agreement, Employee shall be considered to be employed by the Company as long as Employee remains an Employee, or an employee of a corporation or other entity (or a parent or subsidiary of such corporation or other entity) assuming or substituting a new award for this Award. Without limiting the scope of the preceding sentence, it is specifically provided that Employee shall be considered to have terminated employment with the Company at the time of the termination of the "Affiliate" status of the entity or other organization that employs Employee. Nothing in the adoption of the Plan, nor the Retention Award thereunder pursuant to the Grant Notice and this Agreement, shall confer upon Employee the right to continued employment by, or a continued service relationship with, the Company or any such Affiliate, or any other entity, or affect in any way the right of the Company or any such Affiliate, or any other entity to terminate such employment at any time. Unless otherwise provided in a written employment agreement or by applicable law, Employee's employment by the Company, or any such Affiliate, or any other entity shall be on an at-will basis, and the employment relationship may be terminated at any time by either Employee or the Company, or any such Affiliate, or other entity for any reason whatsoever, with or without cause or notice. Any question as to whether and when there has been a termination of such employment, and the cause of such termination, shall be determined by the Committee or its delegate, and such determination shall be final, conclusive and binding for all purposes.

(b) The grant of the Retention Award is a one-time benefit and does not create any contractual or other right to receive a grant of Awards or benefits in lieu of Awards in the future. Future Awards will be at the sole discretion of the Company.

8 . **Notices**. Any notices or other communications provided for in this Agreement shall be sufficient if in writing. In the case of Employee, such notices or communications shall be effectively delivered if hand delivered to Employee at Employee's principal place of employment or if sent by registered or certified mail to Employee at the last address Employee has filed with

the Company. In the case of the Company, such notices or communications shall be effectively delivered if sent by registered or certified mail to the Company at its principal executive offices.

9. **Agreement to Furnish Information**. Employee agrees to furnish to the Company all information requested by the Company to enable it to comply with any reporting or other requirement imposed upon the Company by or under any applicable statute or regulation.

10. **Entire Agreement; Amendment**. This Agreement constitutes the entire agreement of the parties with regard to the subject matter hereof, and contains all the covenants, promises, representations, warranties and agreements between the parties with respect to the Retention Award granted hereby; provided, however, that the terms of this Agreement shall not modify and shall be subject to the terms and conditions of any employment and/or severance agreement between the Company (or an Affiliate or other entity) and Employee in effect as of the date a determination is to be made under this Agreement. Without limiting the scope of the preceding sentence, except as provided therein, all prior understandings and agreements, if any, among the parties hereto relating to the subject matter hereof are hereby null and void and of no further force and effect. The Committee may, in its sole discretion, amend this Agreement from time to time in any manner that is not inconsistent with the Plan; provided, however, that except as otherwise provided in the Plan or this Agreement, any such amendment that materially reduces the rights of Employee shall be effective only if it is in writing and signed by both Employee and an authorized officer of the Company.

11. **Governing Law**. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without regard to conflicts of law principles thereof.

12. **Successors and Assigns**. The Company may assign any of its rights under this Agreement without Employee's consent. This Agreement will be binding upon and inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth herein and in the Plan, this Agreement will be binding upon Employee and Employee's beneficiaries, executors, administrators and the person(s) to whom the Retention Award may be transferred by will or the laws of descent or distribution.

13. **Clawback**. Notwithstanding any provision in this Agreement, the Grant Notice or the Plan to the contrary, to the extent required by (a) applicable law, including, without limitation, the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, any Securities and Exchange Commission rule or any applicable securities exchange listing standards and/or (b) any policy that may be adopted or amended by the Board from time to time, all amounts paid hereunder shall be subject to forfeiture, repurchase, recoupment and/or cancellation to the extent necessary to comply with such law(s) and/or policy.

14. **Counterparts**. The Grant Notice may be executed in one or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. Delivery of an executed counterpart of the Grant Notice by facsimile or pdf attachment to electronic mail shall be effective as delivery of a manually executed counterpart of the Grant Notice.

15. **Severability**. If a court of competent jurisdiction determines that any provision of this Agreement is invalid or unenforceable, then the invalidity or unenforceability of such provision shall not affect the validity or enforceability of any other provision of this Agreement, and all other provisions shall remain in full force and effect.

16. **Code Section 409A**. None of the Retention Award or any amounts payable pursuant to this Agreement are intended to constitute or provide for a deferral of compensation that is subject to Section 409A of the Code and the Treasury regulations and other interpretive guidance issued thereunder (collectively, "Section 409A"). Nevertheless, to the extent that the Committee determines that the Retention Award may not be exempt from Section 409A, then, if Employee is deemed to be a "specified employee" within the meaning of Section 409A, as determined by the Committee, at a time when Employee becomes eligible for settlement of the Retention Award upon Employee's "separation from service" within the meaning of Section 409A, then to the extent necessary to prevent any accelerated or additional tax under Section 409A, such settlement will be delayed until the earlier of: (a) the date that is six months following Employee's separation from service and (b) Employee's death. Notwithstanding the foregoing, the Company makes no representations that the payments provided under this Agreement are exempt from or compliant with Section 409A and in no event shall the Company be liable for all or any portion of any taxes, penalties, interest or other expenses that may be incurred by Employee on account of non-compliance with Section 409A.

[Remainder of Page Intentionally Blank]

Execution Version

THIRD AMENDMENT TO FIFTH AMENDED AND RESTATED CREDIT AGREEMENT

This THIRD AMENDMENT TO FIFTH AMENDED AND RESTATED CREDIT AGREEMENT (this "Amendment") is made as of April 29, 2020, by and among ANTERO RESOURCES CORPORATION, a Delaware corporation (the "Borrower"), CERTAIN SUBSIDIARIES OF BORROWER, as Guarantors, the LENDERS party hereto, and JPMORGAN CHASE BANK, N.A., as Administrative Agent (in such capacity, the "Administrative Agent"). Unless otherwise expressly defined herein, capitalized terms used but not defined in this Amendment have the meanings assigned to such terms in the Credit Agreement (as defined below).

WITNESSETH:

WHEREAS, Borrower, the Guarantors, the Administrative Agent and the Lenders have entered into that certain Fifth Amended and Restated Credit Agreement, dated as of October 26, 2017 (as the same has been amended, restated, amended and restated, supplemented or otherwise modified from time to time prior to the date hereof, the "Existing Agreement" and as further amended by this Amendment, the "Credit Agreement"); and

WHEREAS, Borrower has requested that Administrative Agent and the Lenders enter into this Amendment to amend certain terms of the Existing Agreement as set forth herein; and

WHEREAS, Administrative Agent, the Lenders, Borrower and Guarantors desire to amend the Existing Agreement as provided herein upon the terms and conditions set forth herein.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and confessed, Borrower, the Guarantors, the Administrative Agent and the Majority Lenders hereby agree as follows:

SECTION 1. Amendments to Credit Agreement. Subject to the satisfaction or waiver in writing of each condition precedent set forth in Section 3 of this Amendment, and in reliance on the representations, warranties, covenants and agreements contained in this Amendment, the Existing Agreement shall be amended, effective as of the Third Amendment Effective Date, in the manner provided in this Section 1.

1.1 Added Definitions. The following definitions are hereby added to Section 1.01 of the Credit Agreement in the appropriate alphabetical order to read in their entirety as follows:

"Consolidated Cash Balance" means, at any time, the aggregate amount of cash and Permitted Investments, of the Borrower and its Restricted Subsidiaries.

"Consolidated Cash Balance Threshold" means $100,000,000.

"Excess Cash" means, at any time, the amount of the Consolidated Cash Balance in excess of the Consolidated Cash Balance Threshold (other than (i) any cash set aside (including cash held in suspense or trust accounts) to pay royalty obligations, working interest obligations, production payments, severance taxes, payroll, payroll taxes, other taxes, employee wage and benefit payments and trust and fiduciary obligations and similar obligations of the Borrower or any Restricted Subsidiary, (ii) any cash set aside to pay in the ordinary course of business amounts of the Borrower or any Restricted Subsidiary then due and owing to Antero Midstream or any of its subsidiaries or any unaffiliated third parties and, in each case, for which the Borrower or such Restricted Subsidiary has issued checks or has initiated wires or ACH transfers in order to pay such amounts (or will issue checks or initiate wires or ACH transfers within five (5) Business Days) in order to pay such obligations and (iii) any cash or cash equivalents of the Borrower or any Restricted Subsidiary constituting purchase price deposits held in escrow by an unaffiliated third party pursuant to a binding and enforceable purchase and sale agreement or other similar agreements with an unaffiliated third party containing customary provisions regarding the payment and refunding of such deposits).

"Midstream Dividend Value" means the Engineered Value (as determined by the Administrative Agent) attributed to the dividend payable with respect to Equity Interests issued by Antero Midstream owned by the Borrower or any of its Restricted Subsidiaries.

"Production Payment" means a production payment obligation (whether volumetric or dollar denominated) of the Borrower or any of its Restricted Subsidiaries which are payable from a specified share of proceeds received from production from specified Oil and Gas Interests, together with all undertakings and obligations in connection therewith.

"Third Amendment Effective Date" means April 29, 2020.

1.2 Amended and Restated Definitions. The following definitions in Section 1.01 of the Credit Agreement are hereby amended and restated to read in their entirety as follows:

"Alternate Base Rate" means, for any day, a rate per annum equal to the greatest of (a) the Prime Rate in effect on such day, (b) the NYFRB Rate in effect on such day plus ½ of 1%, and (c) the Adjusted LIBO Rate for a one month Interest Period on such day (or if such day is not a Business Day, the immediately preceding Business Day) plus 1%, provided that, for the purpose of this definition, the Adjusted LIBO Rate for any day shall be based on the LIBO Screen Rate (or if the LIBO Screen Rate is not available for such one month Interest Period, the Interpolated Rate) at approximately 11:00 a.m. London time on such day. Any change in the Alternate Base Rate due to a change in the Prime Rate, the NYFRB Rate or the Adjusted LIBO Rate shall be effective from and including the effective date of such change in the Prime Rate, the NYFRB Rate or the Adjusted

LIBO Rate, respectively. If the Alternate Base Rate is being used as an alternate rate of interest pursuant to Section 2.14 (for the avoidance of doubt, only until any amendment has become effective pursuant to Section 2.14(c) or Section 2.14(d)), then the Alternate Base Rate shall be the greater of clause (a) and (b) above and shall be determined without reference to clause (c) above. For the avoidance of doubt, if the Alternate Base Rate as determined pursuant to the foregoing would be less than 2.00%, such rate shall be deemed to be 2.00% for purposes of this Agreement.

"<u>Applicable Rate</u>" shall mean, for any day, with respect to any ABR Loan, Eurodollar Loan, or Unused Commitment Fee, as the case may be,

(a) at any time other than during an Investment Grade Period, the rate per annum set forth in the grid below based upon the Borrowing Base Usage in effect on such day:

Borrowing Base Usage Grid

Borrowing Base Usage	X < 25%	¤ 25% X <50%	¤ 50% X <75%	¤ 75% X <90%	X ¤ 90%
Eurodollar Loans Rate	1.75%	2.00%	2.25%	2.50%	2.75%
ABR Loans Rate	0.75%	1.00%	1.25%	1.50%	1.75%
Unused Commitment Fee Rate	0.300%	0.300%	0.350%	0.375%	0.375%

and (b) at any time during an Investment Grade Period, the rate per annum set forth in the grid below based upon the higher of the ratings assigned to the Borrower by Moody's or S&P in effect on such day:

Ratings Grid

Credit Rating	¤ Baa1/BBB+	Baa2/BBB	Baa3/BBB-	◉ Ba1/BB+
Eurodollar Loans Rate	1.625%	1.75%	2.00%	2.25%
ABR Loans Rate	0.625%	0.75%	1.00%	1.25%
Unused Commitment Fee Rate	0.150%	0.200%	0.250%	0.300%

Each change in the Applicable Rate shall apply during the period commencing on the effective date of such change and ending on the date immediately preceding the effective date of the next change.

"<u>Borrowing Base Properties</u>" means the Oil and Gas Interests which have been evaluated by the Lenders and the Equity Interests issued by Antero Midstream, in each case, to which Lenders have given value for purposes of establishing the Borrowing Base.

"<u>Disposition</u>" or "<u>Dispose</u>" means the sale, transfer, license, lease, exchange or other disposition (including any disposition in respect of Production Payments, any sale and leaseback transaction and any forfeiture) of any property by any Person, including any sale, assignment, transfer or other disposal, with or without recourse, of any notes or accounts receivable or any rights and claims associated therewith; <u>provided</u> that, any modification of the dividend payable by Antero Midstream that results in a reduction of Midstream Dividend Value shall be deemed to be a Disposition of Borrowing Base Properties hereunder.

"<u>Interpolated Rate</u>" means, at any time, for any Interest Period, the rate per annum (rounded to the same number of decimal places as the LIBO Screen Rate) determined by the Administrative Agent (which determination shall be conclusive and binding absent manifest error) to be equal to the rate that results from interpolating on a linear basis between: (a) the LIBO Screen Rate for the longest period (for which the LIBO Screen Rate is available) that is shorter than the Impacted Interest Period and (b) the LIBO Screen Rate for the shortest period (for which the LIBO Screen Rate is available) that exceeds the Impacted Interest Period, in each case, at such time; <u>provided</u>, that if any Interpolated rate shall be less than 1.00%, such rate shall be deemed to be 1.00% for purposes of this Agreement.

"<u>LIBO Screen Rate</u>" means, for any day and time, with respect to any Eurodollar Borrowing for any Interest Period or for any ABR Borrowing, the London interbank offered rate as administered by ICE Benchmark Administration (or any other Person that takes over the administration of such rate for Dollars) for a period equal in length to such Interest Period as displayed on such day and time on pages LIBOR01 or LIBOR02 of the Reuters screen that displays such rate (or, in the event such rate does not appear on a Reuters page or screen, on any successor or substitute page on such screen that displays such rate, or on the appropriate page of such other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion); <u>provided</u> that if the LIBO Screen Rate shall be less than 1.00%, such rate shall be deemed to be 1.00% for the purposes of this Agreement.

"<u>Minimum Collateral Amount</u>" means ninety percent (90%) of the Engineered Value of the Borrowing Base Properties included in (a) for the period from the Effective Date until the first Redetermination after the Effective Date, the Initial Borrowing Base and (b) at any time thereafter, the most recent Borrowing Base determined pursuant to Article III.

"<u>Redetermination Date</u>" means each date on which the Borrowing Base is redetermined pursuant to the terms hereof, which shall be (a) with respect to any Scheduled Redetermination following the Third Amendment Effective Date, on or about April 15 and October 15 of each year, commencing October 15, 2020, (b) with respect to any Special Redetermination requested by the Borrower pursuant to Section 3.04, the first day of the first month which is not less than twenty (20)

Business Days following the date of a request by the Borrower for a Special Redetermination and (c) with respect to any Special Redetermination requested by the Required Lenders pursuant to Section 3.04, the date notice of such Redetermination is delivered to the Borrower pursuant to Section 3.05.

"Restricted Subsidiary" means any Subsidiary that is not an Unrestricted Subsidiary

"Security Agreement" means that certain Sixth Amended and Restated Security Agreement, dated as of April 29, 2020, made by Borrower and the other grantors party thereto in favor of the Administrative Agent for the benefit of the Secured Parties covering, among other things, the rights and interests of the Grantors (as defined in the Security Agreement) in certain personal property.

"Unrestricted Subsidiary" means (a) any Subsidiary of the Borrower that is formed or acquired after the Third Amendment Closing Date; provided that at such time (or promptly thereafter) the Borrower designates such Subsidiary an Unrestricted Subsidiary in a written notice to the Administrative Agent, (b) any Restricted Subsidiary subsequently designated as an Unrestricted Subsidiary by the Borrower in a written notice to the Administrative Agent; provided that in the case of (a) and (b), (i) such designation shall be deemed to be an Investment on the date of such designation, (ii) in the case of clause (b), such designation shall be deemed to be a Disposition of the assets owned by such Restricted Subsidiary on the date of such designation for the purposes of Section 7.05 and (iii) no Default or Event of Default would result from such designation after giving pro forma effect thereto and (c) each Subsidiary of an Unrestricted Subsidiary; provided further that, for the avoidance of doubt and notwithstanding anything to the contrary herein, Antero Midstream and any of its subsidiaries shall be deemed to be Unrestricted Subsidiaries under this Agreement. No Subsidiary may be designated as an Unrestricted Subsidiary if (x) it guarantees, or is a primary obligor of, any indebtedness, liabilities, or other obligations under any now existing or hereafter outstanding Senior Notes (or any Permitted Refinancing thereof) or (y) after such designation, it would be a "Restricted Subsidiary" for the purpose of any Permitted Refinancing in respect of any of the foregoing in clause (b) of this paragraph. The Borrower may, by written notice to the Administrative Agent, re-designate any Unrestricted Subsidiary as a Restricted Subsidiary, and thereafter, such Subsidiary shall no longer constitute an Unrestricted Subsidiary, but only if (A) to the extent such Subsidiary has outstanding Indebtedness on the date of such designation, immediately after giving effect to such designation, the Borrower shall be in compliance, on a pro forma basis after giving effect to the incurrence of such Indebtedness, with the financial covenants set forth in Section 7.11 and Section 7.12 as of the last day of the most recently ended fiscal quarter for which the financial statements and compliance certificate required under Section 6.01 have been delivered to the Administrative Agent and the Lenders as if such incurrence (and any concurrent repayment of Indebtedness) had occurred on such day (and, as a condition

precedent to the effectiveness of any such designation, the Borrower shall deliver to the Administrative Agent a certificate setting forth in reasonable detail the calculations demonstrating satisfaction of such test) and (B) no Default or Event of Default would result from such re-designation.

1.3 Amendments to Definition of Indebtedness. The definition of "Indebtedness" in Section 1.01 of the Credit Agreement is hereby amended by amending and restating the proviso therein to read in full and follows:

provided, however, that the "Indebtedness" of any Person shall not include (i) obligations or liabilities that were incurred by such Person on ordinary trade terms to vendors, suppliers, or other Persons providing goods and services for use by such Person in the ordinary course of its business, unless and until such obligations or liabilities are outstanding more than ninety (90) days past the original invoice or billing date therefor or (ii) with respect to each Credit Party, any obligations or liabilities of such Credit Party in connection with any Production Payment.

1.4 Cash Collateralization. Section 2.06(j)(i) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

(i) If any Event of Default shall occur and be continuing, on the Business Day that the Borrower receives notice from the Administrative Agent or the Required Lenders (or, if the maturity of the Loans has been accelerated, Lenders with LC Exposure representing greater than sixty-six and two-thirds percent (66⅔%) of the total LC Exposure) demanding the deposit of cash collateral pursuant to this paragraph, the Borrower shall deposit in the Cash Collateral Account an amount in cash equal to one hundred five percent (105%) of the total LC Exposure as of such date plus any accrued and unpaid interest thereon, if any; provided that the obligation to deposit such cash collateral shall become effective immediately, and such deposit shall become immediately due and payable, without demand or other notice of any kind, upon the occurrence of any Event of Default with respect to Borrower described in paragraph (h) or (i) of Article IX.

1.5 Excess Cash. Section 2.11 of the Credit Agreement is hereby amended by relabeling the existing clause (d) as a new clause (e), and adding a new clause (d) to read as follows:

(d) If any Excess Cash exists as of the last Business Day of any calendar week, the Borrower shall prepay the Loans (and after all Loans are repaid in full, provide cash collateral in accordance with Section 2.06(j)) in an aggregate amount equal to such Excess Cash. The Borrower shall be obligated to make such prepayment and/or deposit of cash collateral on the Business Day immediately following the last Business Day of each such calendar week.

1.6 Reserve Report. Section 3.02 of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

> *Section 3.02 Reserve Report. Following the Third Amendment Effective Date, as soon as available and in any event by March 15 and September 15 of each calendar year, commencing September 15, 2020, the Borrower shall deliver to the Administrative Agent and each Lender a Reserve Report, prepared as of the first day of the month immediately preceding the date such report is due, in form and substance reasonably satisfactory to the Administrative Agent and (solely with respect to the Reserve Report due on March 15 of each year) audited by an Approved Petroleum Engineer (or, in the case of any Reserve Report due on any date other than March 15 of each year, prepared by petroleum engineers employed by the Borrower or an Approved Petroleum Engineer), said Reserve Report to utilize economic and pricing parameters established from time to time by the Administrative Agent, together with such other information, reports and data concerning the value of the Borrowing Base Properties as the Administrative Agent shall deem reasonably necessary to determine the value of such Borrowing Base Properties. Simultaneously with the delivery to the Administrative Agent and the Lenders of each Reserve Report, the Borrower shall submit to the Administrative Agent and each Lender the Borrower's requested amount of the Borrowing Base as of the next Redetermination Date. Promptly after the receipt by the Administrative Agent of such Reserve Report and the Borrower's requested amount for the Borrowing Base, the Administrative Agent shall submit to the Lenders a recommended amount of the Borrowing Base to become effective for the period commencing on the next Redetermination Date.*

1.7 Representations and Warranties regarding Excess Cash. Section 5.02 of the Credit Agreement is hereby amended by (i) adding a new clause (e), and (ii) restating the last paragraph of the existing Section 5.02 in its entirety, each to read as follows:

> *(e) At the time of and immediately after giving effect to such Borrowing or the issuance, amendment, renewal or extension of such Letter of Credit, as applicable, there shall be no Excess Cash.*
>
> *Each Borrowing and each issuance, amendment, renewal or extension of a Letter of Credit shall be deemed to constitute a representation and warranty by the Borrower on the date thereof as to the matters specified in paragraphs (a), (b), (c), (d) and (e) of this Section.*

1.8 Covenant Regarding Semi-annual Scheduled Redeterminations. The first sentence of Section 6.01(g) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

> *following the Third Amendment Effective Date, as soon as available, and in any event no later than March 15 and September 15 of each calendar year, and promptly following notice of a Special Redetermination requested by the*

Borrower under Section 3.04, the Reserve Report required on such date pursuant to Section 3.02.

1.9 Title Data. Section 6.10 of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

Section 6.10 Title Data. Borrower will, and will cause each Guarantor to, deliver to the Administrative Agent such existing opinions of counsel and other evidence of title as the Administrative Agent shall deem reasonably necessary or appropriate to verify the title of the Credit Parties to not less than ninety percent (90%) of the Minimum Collateral Amount.

1.10 Consolidated Cash Balance Information. A new Section 6.18 is hereby added to the Credit Agreement to read in its entirety as follows:

Section 6.18Consolidated Cash Balance Information. Upon the request of the Administrative Agent, and on the last Business Day of any calendar week (or, if a Default, Event of Default or Borrowing Base Deficiency has occurred and is continuing, on any Business Day) on which the Borrower has any Excess Cash on such Business Day, the Borrower shall provide to the Administrative Agent, within one (1) Business Day of any such day, summary and balance statements, in a form reasonably acceptable to the Administrative Agent, for each account in which any Consolidated Cash Balance is held or to which any Consolidated Cash Balance is credited, together with a written statement setting forth a reasonably detailed calculation of amounts excluded from the definition of Excess Cash pursuant to the parenthetical set forth in the definition thereof.

1.11 Limitations on Hedge Modifications. Section 7.03(d) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

(d) If any Credit Party enters into any Hedge Modification, the Borrower shall provide the Administrative Agent with written notice of such Hedge Modification within three (3) Business Days thereafter, setting forth, in reasonable detail, the terms of such Hedge Modification; provided that no Hedge Modification may be made by any Credit Party if the economic effect on the Borrowing Base (as determined by the Administrative Agent) of all Hedge Modifications entered into since the most recent Scheduled Redetermination, after giving effect to any Engineered Value (as determined by the Administrative Agent) attributable to Hedging Contracts entered into since the most recent Scheduled Redetermination, exceeds, in the aggregate for all Credit Parties, an amount equal to five percent (5.0%) of the Borrowing Base then in effect or ten percent (10%) of the Borrowing Base then in effect when aggregated with any reduction in Midstream Dividend Value during such period and any Disposition of Borrowing Base Properties in accordance with Section 7.05(h), unless (x) in the event such economic effect is less than an amount equal to fifteen percent (15%) of the Borrowing Base then in effect, (i) such Credit Party shall have received the prior written consent of the Administrative Agent, (ii) the Borrowing

Base is adjusted in accordance with *clause (z)(ii)* *below and (iii) the Borrower prepays the Loans or provides cash collateral to the extent required by* *Section 2.11(c)* *as a result of such Hedge Modifications, or (y) such Credit Party shall have received the prior written consent of the Required Lenders, o r (z)(i) at the time of and after giving effect to any such Hedge Modification, no Default exists, (ii) the Borrowing Base is adjusted by an amount determined by the Required Lenders (or in the event the Engineered Value (as determined by the Administrative Agent) of all Hedge Modifications (and reduction in Midstream Dividend Value and Borrowing Base Properties Disposed of, if applicable) entered into by the Credit Parties since the most recent Scheduled Redetermination is less than an amount equal to fifteen percent (15%) of the Borrowing Base then in effect, as determined by the Administrative Agent), in each case, with any such Borrowing Base adjustment to be determined by the Required Lenders or the Administrative Agent, as applicable, after giving effect to any adjustments to Engineered Value since the most recent Scheduled Redetermination of (1) any Borrowing Base Properties constituting proved undeveloped reserves or proved developed non-producing reserves in the Reserve Report delivered in connection with the most recent Scheduled Redetermination that have become proved developed producing reserves and (2) all Borrowing Base Properties Disposed of (and reduction in Midstream Dividend Value and Hedge Modifications, if applicable), in each case, based on updated Reserve Reports or other engineering reports provided to the Administrative Agent in connection with such Disposition, and (iii) the Borrower prepays the Loans or provides cash collateral to the extent required by* *Section 2.11(c)* *as a result of such Hedge Modifications.*

1.12 Limitations on Dispositions. Section 7.05(h) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

(h) the Disposition of any Borrowing Base Property or any interest therein (whether pursuant to a Disposition of all, but not less than all, of the Equity Interests of any Restricted Subsidiary, a Disposition in respect of Production Payments, or otherwise), which is Disposed of for fair consideration to a Person; *provided* *that no Borrowing Base Property may be Disposed of by any Credit Party (whether pursuant to a Disposition of all, but not less than all, of the Equity Interests of any Restricted Subsidiary, a Disposition in respect of Production Payments, or otherwise) if the Engineered Value (as determined by the Administrative Agent) of all Borrowing Base Properties Disposed of since the most recent Scheduled Redetermination (including any reduction in Midstream Dividend Value during such period), after giving effect to any Engineered Value (as determined by the Administrative Agent) attributable to Hedging Contracts entered into since the most recent Scheduled Redetermination, exceeds, in the aggregate for all Credit Parties, an amount equal to five percent (5.0%) of the Borrowing Base then in effect or ten percent (10%) of the Borrowing Base then in effect when aggregated with any Hedge Modification in accordance with Section 7.03(d), unless (x) in the event such Engineered Value (as determined by the*

Administrative Agent) is less than an amount equal to fifteen percent (15%) of the Borrowing Base then in effect, (i) such Credit Party shall have received the prior written consent of the Administrative Agent, (ii) the Borrowing Base is adjusted in accordance with clause (z)(v) below and (iii) the Borrower prepays the Loans or provides cash collateral to the extent required by Section 2.11(b) as a result of such Dispositions, or (y) such Credit Party shall have received the prior written consent of the Required Lenders, or (z) (i) at the time of and after giving effect to any such Disposition, no Default exists, (ii) the Borrower provides the Administrative Agent with at least fifteen (15) days prior written notice of such Disposition, setting forth in reasonable detail the Borrowing Base Properties that are subject to such Disposition, and such Disposition is consummated prior to the next Redetermination of the Borrowing Base, (iii) the consideration received from any such Disposition is at least equal to the fair market value of the Borrowing Base Properties subject to such Disposition, as reasonably determined in good faith by the board of directors of such Credit Party and, if requested by the Administrative Agent, the Borrower shall deliver to the Administrative Agent a certificate of a Financial Officer of such Credit Party certifying to that effect, (iv) at least 80% of the consideration received by the Credit Parties in respect of any such Disposition is cash or cash equivalents, (v) the Borrowing Base is adjusted by an amount determined by the Required Lenders (or in the event the Engineered Value (as determined by the Administrative Agent) of all Borrowing Base Properties Disposed of (and reduction in Midstream Dividend Value and Hedge Modifications, if applicable) by the Credit Parties since the most recent Scheduled Redetermination is less than an amount equal to fifteen percent (15%) of the Borrowing Base then in effect, determined by the Administrative Agent), in each case, with any such Borrowing Base adjustment to be determined by the Required Lenders or the Administrative Agent, as applicable, after giving effect to any adjustments to Engineered Value since the most recent Scheduled Redetermination of (1) any Borrowing Base Properties constituting proved undeveloped reserves or proved developed non-producing reserves in the Reserve Report delivered in connection with the most recent Scheduled Redetermination that have become proved developed producing reserves and (2) all Borrowing Base Properties Disposed of (and reduction in Midstream Dividend Value and Hedge Modifications, if applicable), in each case, based on updated Reserve Reports or other engineering reports provided to the Administrative Agent in connection with such Disposition, and (vi) the Borrower prepays the Loans or provides cash collateral to the extent required by Section 2.11(b) as a result of such Dispositions.

1.13 Additional Amendments to Credit Agreement. The additional amendments to the Credit Agreement contained in Annex A attached hereto are hereby made to the Credit Agreement.

SECTION 2. Redetermination of Borrowing Base. This Amendment shall constitute notice of the Redetermination of the Borrowing Base pursuant to Section 3.05 of the Credit Agreement, and the Administrative Agent, Lenders constituting at least the Required Lenders,

Borrower and the Guarantors hereby acknowledge that effective as of the Third Amendment Effective Date, the Borrowing Base is $2,850,000,000, and such redetermined Borrowing Base shall remain in effect until the earlier of (i) the Scheduled Redetermination to occur on or about October 15, 2020 pursuant to Section 3.03 of the Credit Agreement and (ii) the date such Borrowing Base is otherwise adjusted pursuant to the terms of the Credit Agreement. For the avoidance of doubt, the redetermination of the Borrowing Base contained in this Section 2 constitutes the Scheduled Redetermination, which otherwise would have occurred on or about April 15, 2020 pursuant to Section 3.03 of the Credit Agreement

SECTION 3. Conditions to Effectiveness. The amendments to the Existing Agreement contained in Section 1 of this Amendment shall be effective upon the date each of the conditions set forth in this Section 3 is satisfied (the "Third Amendment Effective Date")

3.1 Execution and Delivery. Each Credit Party, at least the Majority Lenders and the Administrative Agent shall have executed and delivered this Amendment.

3.2 Security Agreement. Each Credit Party and the Administrative Agent shall have executed and delivered the amended and restated Security Agreement, in form and substance satisfactory to the Administrative Agent.

3.3 Certificates. The Administrative Agent shall have received such documents and certificates as the Administrative Agent or its counsel may reasonably request relating to the organization, existence and good standing of each Credit Party, the authorization of this Amendment and the transactions contemplated hereby and any other legal matters relating to the Credit Parties, this Amendment or the transactions contemplated hereby, all in form and substance reasonably satisfactory to the Administrative Agent and its counsel.

3.4 Other Documents. The Administrative Agent shall have received such other instruments and documents incidental and appropriate to the transactions provided for herein as the Administrative Agent or its special counsel may reasonably request, and all such documents shall be in form and substance reasonably satisfactory to the Administrative Agent.

3.5 Representations and Warranties. Each of the representations and warranties contained in the Credit Agreement and in each of the other Loan Documents shall be true and correct in all material respects on and as of the Third Amendment Effective Date (except to the extent such representations and warranties relate solely to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects as of such date and any representation or warranty which is qualified by reference to "materiality" or "Material Adverse Effect" is true and correct in all respects).

3.6 No Default. No Default shall have occurred and be continuing as of the Third Amendment Effective Date.

3.7 Fees. The Borrower shall have paid all fees, charges and disbursements of counsel to the Administrative Agent (directly to such counsel if requested by the Administrative Agent) to the extent invoiced prior to or on the Third Amendment Effective Date.

SECTION 4. Post-Closing Covenants.

4.1 Mortgage and Title. On or before the date that is thirty (30) days following the Third Amendment Effective Date (or such later date as the Administrative Agent may agree), the Borrower shall and shall cause each other Credit Party to (a) execute and deliver Mortgages, amendments to Mortgages, or amendments and restatements of Mortgages, in form and substance reasonably satisfactory to the Administrative Agent, as the Administrative Agent may reasonably require to comply with the requirements of Section 6.09 of the Credit Agreement and (b) deliver title information required to comply with Section 6.10 of the Credit Agreement.

4.2 Control Agreements. On or before the date that is thirty (30) days following the Third Amendment Effective Date (or such later date as Administrative Agent may agree), the Borrower shall and shall cause each other Credit Party to execute and deliver all deposit account control agreements and any other control agreements required pursuant to the Security Agreement.

SECTION 5. Representations and Warranties of Credit Parties. To induce the Lenders to enter into this Amendment, each Credit Party hereby represents and warrants to the Lenders as follows:

5.1 Reaffirmation of Representations and Warranties/Further Assurances. Both before and after giving effect to the amendments herein, each representation and warranty of such Credit Party contained in the Credit Agreement and in each of the other Loan Documents is true and correct in all material respects as of the date hereof (except to the extent such representations and warranties relate solely to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects as of such date and any representation or warranty which is qualified by reference to “materiality” or “Material Adverse Effect” is true and correct in all respects).

5.2 Corporate Authority; No Conflicts. The execution, delivery and performance by each Credit Party of this Amendment are within such Credit Party’s corporate or other organizational powers, have been duly authorized by necessary action, require no action by or in respect of, or filing with, any Governmental Authority and do not violate or constitute a default under any provision of any applicable law or other agreements binding upon any Credit Party or result in the creation or imposition of any Lien upon any of the assets of any Credit Party except for Permitted Liens and otherwise as permitted in the Credit Agreement.

5.3 Enforceability. This Amendment constitutes the valid and binding obligation of Borrower and each other Credit Party enforceable in accordance with its terms, except as (i) the enforceability thereof may be limited by bankruptcy, insolvency or similar laws affecting creditor’s rights generally, and (ii) the availability of equitable remedies may be limited by equitable principles of general application.

5.4 No Default. As of the date hereof, both before and immediately after giving effect to this Amendment, no Default has occurred and is continuing.

SECTION 6. Miscellaneous.

6.1 Reaffirmation of Loan Documents and Liens. Any and all of the terms and provisions of the Credit Agreement and the Loan Documents shall, except as amended and modified hereby, remain in full force and effect and are hereby in all respects ratified and confirmed by each Credit Party. Borrower and each Guarantor hereby agrees that the amendments and modifications herein contained shall in no manner affect or impair the liabilities, duties and obligations of any Credit Party under the Credit Agreement and the other Loan Documents or the Liens securing the payment and performance thereof.

6.2 Parties in Interest. All of the terms and provisions of this Amendment shall bind and inure to the benefit of the parties hereto and their respective successors and assigns.

6.3 Legal Expenses. Each Credit Party hereby agrees to pay all reasonable fees and expenses of special counsel to the Administrative Agent incurred by the Administrative Agent in connection with the preparation, negotiation and execution of this Amendment and all related documents.

6.4 Counterparts. This Amendment may be executed in one or more counterparts and by different parties hereto in separate counterparts each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument; signature pages may be detached from multiple separate counterparts and attached to a single counterpart so that all signature pages are physically attached to the same document. Delivery of photocopies of the signature pages to this Amendment by facsimile or electronic mail shall be effective as delivery of manually executed counterparts of this Amendment.

6.5 Complete Agreement. THIS AMENDMENT, THE CREDIT AGREEMENT, AND THE OTHER LOAN DOCUMENTS REPRESENT THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS OR ORAL AGREEMENTS OF THE PARTIES. THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES.

6.6 Headings. The headings, captions and arrangements used in this Amendment are, unless specified otherwise, for convenience only and shall not be deemed to limit, amplify or modify the terms of this Amendment, nor affect the meaning thereof.

6.7 Governing Law. This Amendment shall be construed in accordance with and governed by the laws of the State of New York.

6.8 Reference to and Effect on the Loan Documents.

(a) This Amendment shall be deemed to constitute a Loan Document for all purposes and in all respects. Each reference in the Existing Agreement to “this Agreement,” “hereunder,” “hereof,” “herein” or words of like import, and each reference

in the Existing Agreement or in any other Loan Document, or other agreements, documents or other instruments executed and delivered pursuant to the Existing Agreement to the "Credit Agreement", shall mean and be a reference to the Existing Agreement as amended by this Amendment.

(b) The execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of any Lender or Administrative Agent under any of the Loan Documents, nor constitute a waiver of any provision of any of the Loan Documents.

[*Signature pages follow.*]

IN WITNESS WHEREOF, the parties have caused this Amendment to be duly executed by their respective authorized officers to be effective as of the date first above written.

BORROWER:

ANTERO RESOURCES CORPORATION

By: /s/ Alvyn A. Schopp
Name: Alvyn A. Schopp
Title: Chief Administrative Officer and Regional Senior Vice President

GUARANTOR:

ANTERO SUBSIDIARY HOLDINGS LLC
MONROE PIPELINE LLC

By: /s/ Alvyn A. Schopp
Name: Alvyn A. Schopp
Title: Chief Administrative Officer and Regional Senior Vice President

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent, Issuing Bank and a Lender

By: /s/ David Morris
Name: David Morris
Title: Authorized Officer

WELLS FARGO BANK, N.A.,
as Issuing Bank and a Lender

By: /s/ Jonathan Herrick
Name: Jonathan Herrick
Title: Director

BARCLAYS BANK PLC,
as a Lender

By: /s/ Sydney G. Dennis
Name: Sydney G. Dennis
Title: Director

BMO HARRIS BANK N.A.,
as a Lender

By: /s/ Matthew L. Davis
Name: Matthew L. Davis
Title: Director

CITIBANK, N.A.,
as a Lender

By: /s/ Phil Ballard
Name: Phil Ballard
Title: Vice President

CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK,
as a Lender

By: /s/ Michael Willis
Name: Michael Willis
Title: Managing Director

By: /s/ Ting Lee
Name: Ting Lee
Title: Director

ABN AMRO CAPITAL USA LLC,
as a Lender

By: /s/ David Montgomery
Name: David Montgomery
Title: Managing Director

By: /s/ Darrell Holley
Name: Darrell Holley
Title: Managing Director

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
as a Lender

By: /s/ Nupur Kumar
Name: Nupur Kumar
Title: Authorized Signatory

By: /s/ Andrew Griffin
Name: Andrew Griffin
Title: Authorized Signatory

DNB CAPITAL LLC,
as a Lender

By: /s/ Mita Zalavadia
Name: Mita Zalavadia
Title: Assistant Vice President

By: /s/ Samantha Stone
Name: Samantha Stone
Title: Vice President

ING CAPITAL LLC,
as a Lender

By: /s/ Juli Bieser
Name: Juli Bieser
Title: Managing Director

By: /s/ Scott Lamoreaux
Name: Scott Lamoreaux
Title: Director

NATIXIS, NEW YORK BRANCH,
as a Lender

By: /s/ Vikram Nath
Name: Vikram Nath
Title: Director

By: /s/ Brian O'Keefe
Name: Brian O'Keefe
Title: Vice President

SUMITOMO MITSUI BANKING CORPORATION,
as a Lender

By: /s/ Michael Maguire
Name: Michael Maguire
Title: Managing Director

TRUIST BANK, formerly known as BRANCH BANKING AND TRUST COMPANY,
as a Lender

By: /s/ Greg Krablin
Name: Greg Krablin
Title: Senior Vice President

COMERICA BANK,
as a Lender

By: /s/ Caroline M. McClurg
Name: Caroline M. McClurg
Title: Senior Vice President

MORGAN STANLEY BANK, N.A.,
as a Lender

By: /s/ Jake Dowden
Name: Jake Dowden
Title: Authorized Signatory

TRUIST BANK, as successor by merger to SUNTRUST BANK,
as a Lender

By: /s/ Greg Krablin
Name: Greg Krablin
Title: Senior Vice President

ROYAL BANK OF CANADA,
as a Lender

By: /s/ Katelyn Berkemeyer
Name: Katelyn Berkemeyer
Title: Authorized Signatory

Annex A

Amendments to Credit Agreement

1.1 Added Definitions. The following definitions are hereby added to Section 1.01 of the Credit Agreement in the appropriate alphabetical order to read in their entirety as follows:

"Affected Financial Institution" means (a) any EEA Financial Institution or (b) any UK Financial Institution.

"Benchmark Replacement" means the sum of: (a) the alternate benchmark rate (which may be a SOFR-Based Rate) that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body and/or (ii) any evolving or then-prevailing market convention for determining a rate of interest as a replacement to the LIBO Rate for U.S. dollar-denominated syndicated credit facilities and (b) the Benchmark Replacement Adjustment; provided that, if the Benchmark Replacement as so determined would be less than 1.00%, the Benchmark Replacement will be deemed to be 1.00% for the purposes of this Agreement; provided further that any such Benchmark Replacement shall be administratively feasible as determined by the Administrative Agent in its sole discretion.

"Benchmark Replacement Adjustment" means the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the LIBO Rate with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body and/or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the LIBO Rate with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated syndicated credit facilities at such time (for the avoidance of doubt, such Benchmark Replacement Adjustment shall not be in the form of a reduction to the Applicable Rate).

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "Interest Period," timing and frequency of determining rates and making payments of interest and other administrative matters) that the Administrative Agent decides in its reasonable discretion may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent

determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement).

"Benchmark Replacement Date" means the earlier to occur of the following events with respect to the LIBO Rate:

(1) in the case of clause (1) or (2) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the LIBO Screen Rate permanently or indefinitely ceases to provide the LIBO Screen Rate; or

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the LIBO Rate:

(1) a public statement or publication of information by or on behalf of the administrator of the LIBO Screen Rate announcing that such administrator has ceased or will cease to provide the LIBO Screen Rate, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the LIBO Screen Rate;

(2) a public statement or publication of information by the regulatory supervisor for the administrator of the LIBO Screen Rate, the U.S. Federal Reserve System, an insolvency official with jurisdiction over the administrator for the LIBO Screen Rate, a resolution authority with jurisdiction over the administrator for the LIBO Screen Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the LIBO Screen Rate, in each case which states that the administrator of the LIBO Screen Rate has ceased or will cease to provide the LIBO Screen Rate permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the LIBO Screen Rate; and/or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of the LIBO Screen Rate announcing that the LIBO Screen Rate is no longer representative.

"Benchmark Transition Start Date" means (a) in the case of a Benchmark Transition Event, the earlier of (i) the applicable Benchmark Replacement Date and (ii) if such Benchmark Transition Event is a public statement or publication of information of a prospective event, the 90th day prior to the expected date of such event as of such public statement or publication of information (or if the

expected date of such prospective event is fewer than 90 days after such statement or publication, the date of such statement or publication) and (b) in the case of an Early Opt-in Election, the date specified by the Administrative Agent or the Required Lenders, as applicable, by notice to the Borrower, the Administrative Agent (in the case of such notice by the Required Lenders) and the Lenders.

"Benchmark Unavailability Period" means, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the LIBO Rate and solely to the extent that the LIBO Rate has not been replaced with a Benchmark Replacement, the period (x) beginning at the time that such Benchmark Replacement Date has occurred if, at such time, no Benchmark Replacement has replaced the LIBO Rate for all purposes hereunder in accordance with Section 2.14 and (y) ending at the time that a Benchmark Replacement has replaced the LIBO Rate for all purposes hereunder pursuant to Section 2.14.

"BHC Act Affiliate" of a party means an "affiliate" (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

"Compounded SOFR" means the compounded average of SOFRs for the applicable Corresponding Tenor, with the rate, or methodology for this rate, and conventions for this rate (which may include compounding in arrears with a lookback and/or suspension period as a mechanism to determine the interest amount payable prior to the end of each Interest Period) being established by the Administrative Agent in accordance with:

(1) the rate, or methodology for this rate, and conventions for this rate selected or recommended by the Relevant Governmental Body for determining compounded SOFR; provided that:

(2) if, and to the extent that, the Administrative Agent determines that Compounded SOFR cannot be determined in accordance with clause (1) above, then the rate, or methodology for this rate, and conventions for this rate that the Administrative Agent determines in its reasonable discretion are substantially consistent with any evolving or then-prevailing market convention for determining compounded SOFR for U.S. dollar-denominated syndicated credit facilities at such time;

provided, further, that if the Administrative Agent decides that any such rate, methodology or convention determined in accordance with clause (1) or clause (2) is not administratively feasible for the Administrative Agent, then Compounded SOFR will be deemed unable to be determined for purposes of the definition of "Benchmark Replacement."

"Corresponding Tenor" with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the applicable Interest Period with respect to the LIBO Rate.

"Covered Entity" means any of the following:

- *(i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);*
- *(ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or*
- *(iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).*

"Covered Party" has the meaning assigned to it in Section 11.23.

"Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"Early Opt-in Election" means the occurrence of:

(1) (i) a determination by the Administrative Agent or (ii) a notification by the Required Lenders to the Administrative Agent (with a copy to the Borrower) that the Required Lenders have determined that U.S. dollar-denominated syndicated credit facilities being executed at such time, or that include language similar to that contained in Section 2.14 are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace the LIBO Rate, and

(2) (i) the election by the Administrative Agent or (ii) the election by the Required Lenders to declare that an Early Opt-in Election has occurred and the provision, as applicable, by the Administrative Agent of written notice of such election to the Borrower and the Lenders or by the Required Lenders of written notice of such election to the Administrative Agent.

"Federal Reserve Bank of New York's Website" means the website of the NYFRB at http://www.newyorkfed.org, or any successor source.

"IBA" has the meaning assigned to such term in Section 1.06.

"Overnight Bank Funding Rate" means, for any day, the rate comprised of both overnight federal funds and overnight Eurodollar borrowings by U.S.-managed banking offices of depository institutions (as such composite rate shall be determined by the NYFRB as set forth on the Federal Reserve Bank of New York's Website from time to time) and published on the next succeeding Business Day by the NYFRB as an overnight bank funding rate.

"QFC" has the meaning assigned to the term "qualified financial contract" in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D).

"QFC Credit Support" has the meaning assigned to it in Section 11.23.

"Relevant Governmental Body" means the Federal Reserve Board and/or the NYFRB, or a committee officially endorsed or convened by the Federal Reserve Board and/or the NYFRB or, in each case, any successor thereto.

"Requirement of Law" means, as to any Person, the Certificate of Incorporation and By-Laws or other organizational or governing documents of such Person, and any law, treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"SOFR" with respect to any day means the secured overnight financing rate published for such day by the NYFRB, as the administrator of the benchmark (or a successor administrator), on the Federal Reserve Bank of New York's Website.

"SOFR-Based Rate" means SOFR, Compounded SOFR or Term SOFR.

"Supported QFC" has the meaning assigned to it in Section 11.23.

"Term SOFR" means the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body.

"UK Financial Institution" means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended form time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

"UK Resolution Authority" means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment; provided that, if the Unadjusted Benchmark Replacement as so determined would be less than 1.00%, the Unadjusted Benchmark Replacement will be deemed to be 1.00% for the purposes of this Agreement.

"U.S. Special Resolution Regimes" has the meaning assigned to it in Section 11.23.

1.2 Amendments to Definitions. The following definitions in Section 1.01 of the Credit Agreement are hereby amended and restated to read in their entirety as follows:

"Bail-In Action" means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

"Bail-In Legislation" means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

"Federal Funds Effective Rate" means, for any day, the rate calculated by the NYFRB based on such day's federal funds transactions by depositary institutions, as determined in such manner as shall be set forth on the Federal Reserve Bank of New York's Website from time to time, and published on the next succeeding Business Day by the NYFRB as the effective federal funds rate, provided that, if the Federal Funds Effective Rate as so determined would be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

"Write-Down and Conversion Powers" means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

1.3 Interest Rates; LIBOR Notification. A new Section 1.06 is hereby added to the Credit Agreement to read in its entirety as follows:

Section 1.06. Interest Rates; LIBOR Notification. The interest rate on Eurodollar Loans is determined by reference to the LIBO Rate, which is derived from the London interbank offered rate. The London interbank offered rate is intended to represent the rate at which contributing banks may obtain short-term borrowings from each other in the London interbank market. In July 2017, the U.K. Financial Conduct Authority announced that, after the end of 2021, it would no longer persuade or compel contributing banks to make rate submissions to the

ICE Benchmark Administration (together with any successor to the ICE Benchmark Administrator, the "IBA") for purposes of the IBA setting the London interbank offered rate. As a result, it is possible that commencing in 2022, the London interbank offered rate may no longer be available or may no longer be deemed an appropriate reference rate upon which to determine the interest rate on Eurodollar Loans. In light of this eventuality, public and private sector industry initiatives are currently underway to identify new or alternative reference rates to be used in place of the London interbank offered rate. Upon the occurrence of a Benchmark Transition Event or an Early Opt-In Election, Section 2.14(c) provides a mechanism for determining an alternative rate of interest. The Administrative Agent will promptly notify the Borrower, pursuant to Section 2.14(e), of any change to the reference rate upon which the interest rate on Eurodollar Loans is based. However, the Administrative Agent does not warrant or accept any responsibility for, and shall not have any liability with respect to, the administration, submission or any other matter related to the London interbank offered rate or other rates in the definition of "LIBO Rate" or with respect to any alternative or successor rate thereto, or replacement rate thereof (including, without limitation, (i) any such alternative, successor or replacement rate implemented pursuant to Section 2.14(c), whether upon the occurrence of a Benchmark Transition Event or an Early Opt-in Election, and (ii) the implementation of any Benchmark Replacement Conforming Changes pursuant to Section 2.14(d)), including without limitation, whether the composition or characteristics of any such alternative, successor or replacement reference rate will be similar to, or produce the same value or economic equivalence of, the LIBO Rate or have the same volume or liquidity as did the London interbank offered rate prior to its discontinuance or unavailability.

1.4 Alternate Rate of Interest. Section 2.14 of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

Section 2.14. Alternate Rate of Interest; Illegality.

(a) If prior to the commencement of any Interest Period for a Eurodollar Borrowing:

(i) the Administrative Agent determines (which determination shall be conclusive absent manifest error) that adequate and reasonable means do not exist for ascertaining the Adjusted LIBO Rate or the LIBO Rate, as applicable (including, without limitation, by means of an Interpolated Rate or because the LIBO Screen Rate is not available or published on a current basis) for such Interest Period; provided that no Benchmark Transition Event shall have occurred at such time; or

(ii) the Administrative Agent is advised by the Required Lenders (or, in the case of a Eurodollar Loan, the Lender that is required to make such Loan) that the Adjusted LIBO Rate or the LIBO Rate, as applicable, for such Interest Period will not adequately and fairly reflect the cost to such Lenders (or Lender) of making or maintaining their Loans (or its Loan) included in such Borrowing for such Interest Period;

then the Administrative Agent shall give notice thereof to the Borrower and the Lenders by telephone or telecopy as promptly as practicable thereafter and, until the Administrative Agent notifies the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist, (A) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective and any such Eurodollar Borrowing shall be repaid or converted into an ABR Borrowing on the last day of the then current Interest Period applicable thereto, and (B) if any Borrowing Request requests a Eurodollar Borrowing, such Borrowing shall be made as an ABR Borrowing.

(b) If any Lender determines that any Requirement of Law has made it unlawful, or if any Governmental Authority has asserted that it is unlawful, for any Lender or its applicable lending office to make, maintain, fund or continue any Eurodollar Borrowing, or any Governmental Authority has imposed material restrictions on the authority of such Lender to purchase or sell, or to take deposits of, dollars in the London interbank market, then, on notice thereof by such Lender to the Borrower through the Administrative Agent, any obligations of such Lender to make, maintain, fund or continue Eurodollar Loans or to convert ABR Borrowings to Eurodollar Borrowings will be suspended until such Lender notifies the Administrative Agent and the Borrower that the circumstances giving rise to such determination no longer exist. Upon receipt of such notice by the Borrower, the Borrower will upon demand from such Lender (with a copy to the Administrative Agent), either prepay or convert all Eurodollar Borrowings of such Lender to ABR Borrowings, either on the last day of the Interest Period therefor, if such Lender may lawfully continue to maintain such Eurodollar Borrowings to such day, or immediately, if such Lender may not lawfully continue to maintain such Loans. Upon any such prepayment or conversion, the Borrower will also pay accrued interest on the amount so prepaid or converted.

(c) Notwithstanding anything to the contrary herein or in any other Loan Document, upon the occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, the Administrative Agent and the Borrower may amend this Agreement to replace the LIBO Rate with a Benchmark Replacement. Any such amendment with respect to a Benchmark Transition Event will become effective at 5:00 p.m. on the fifth (5th) Business Day after the Administrative Agent has posted such proposed amendment to all Lenders and the Borrower, so long as the Administrative Agent has not received, by such time, written notice of objection to such proposed amendment from Lenders comprising the Required Lenders of each Class; provided that, with respect to any proposed amendment containing any SOFR-Based Rate, the Lenders shall be entitled to object only to the Benchmark Replacement Adjustment contained therein. Any such amendment with respect to an Early Opt-in Election will become effective on the date that Lenders comprising the Required Lenders of each Class have delivered to the Administrative Agent written notice that such Required Lenders accept such amendment. No replacement of LIBO Rate with a Benchmark Replacement will occur prior to the applicable Benchmark Transition Start Date.

(d) In connection with the implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything

to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement.

(e) The Administrative Agent will promptly notify the Borrower and the Lenders of (i) any occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes and (iv) the commencement or conclusion of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or Lenders pursuant to this Section 2.14, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section 2.14.

(f) Upon the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, (i) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective and any such Eurodollar Borrowing shall be repaid or converted into an ABR Borrowing on the last day of the then current Interest Period applicable thereto, and (ii) if any Borrowing Request requests a Eurodollar Borrowing, such Borrowing shall be made as an ABR Borrowing.

1.5 Amendment to Section 11.22. Section 11.22 of the Credit Agreement is hereby amended by (i) replacing the phrase "*EEA Financial Institution*" in each instance it occurs with the phrase "*Affected Financial Institution*" and (ii) replacing the phrases "*an EEA Resolution Authority*" and "*any EEA Resolution Authority*" in each instance they occur with the phrase "the applicable Resolution Authority".

1.6 Acknowledgement Regarding Any Supported QFCs. A new Section 11.23 is hereby added to the Credit Agreement to read in its entirety as follows::

Section 11.23 Acknowledgement Regarding Any Supported QFCs. To the extent that the Loan Documents provide support, through a guarantee or otherwise, for Hedging Contracts or any other agreement or instrument that is a QFC (such support "QFC Credit Support" and each such QFC a "Supported QFC"), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the " U.S. Special Resolution Regimes") in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of New York and/or of the United States or any other state of the United States):

In the event a Covered Entity that is party to a Supported QFC (each, a "Covered Party") becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Paul M. Rady, Chairman and Chief Executive Officer of Antero Resources Corporation, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020 of Antero Resources Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; and

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; and

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 29, 2020

/s/ Paul M. Rady
Paul M. Rady
Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Glen C. Warren, Jr., President and Chief Financial Officer of Antero Resources Corporation, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020 of Antero Resources Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; and

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; and

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 29, 2020

/s/ Glen C. Warren, Jr.
Glen C. Warren, Jr.
Chief Financial Officer

Exhibit 32.1

**CERTIFICATION OF
CHIEF EXECUTIVE OFFICER
OF ANTERO RESOURCES CORPORATION
PURSUANT TO 18 U.S.C. SECTION 1350**

In connection with this Quarterly Report on Form 10-Q of Antero Resources Corporation for the quarter ended March 31, 2020, I, Paul M. Rady, Chief Executive Officer of Antero Resources Corporation, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. This Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in this Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 fairly presents, in all material respects, the financial condition and results of operations of Antero Resources Corporation for the periods presented therein.

Date: April 29, 2020

/s/ Paul M. Rady
Paul M. Rady
Chief Executive Officer

Exhibit 32.2

CERTIFICATION OF
CHIEF FINANCIAL OFFICER
OF ANTERO RESOURCES CORPORATION
PURSUANT TO 18 U.S.C. SECTION 1350

In connection with this Quarterly Report on Form 10-Q of Antero Resources Corporation for the quarter ended March 31, 2020, I, Glen C. Warren, Jr., Chief Financial Officer of Antero Resources Corporation, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. This Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in this Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 fairly presents, in all material respects, the financial condition and results of operations of Antero Resources Corporation for the periods presented therein.

Date: April 29, 2020

/s/ Glen C. Warren, Jr.
Glen C. Warren, Jr.
Chief Financial Officer